COMPULSOR

FIRE PROTECTION - EDITION N°9

aldes

Compulsor Fire Protection

Edition No. 9

Since its takeover of SGEI in 1984, Aldes has been constantly developing and updating its range of fire protection products, proposing innovative, high performance compartmentalisation & smoke extraction solutions.

Compulsor Edition 9 contains all the technical and regulatory information you need to make informed choices in the selection of fire dampers, air inlets, smoke exhaust dampers, relay boxes and smoke exhaust fans.

The final sections of this work covers older products, some of which have been operational for decades, helping you find spare parts or equivalent products.

Aldes, France's leading manufacturer of fire dampers and smoke exhaust dampers is at your service, with its 18 agencies and its new version of the CONCEPTOR SMOKE EXHAUST software.

It should also be noted that this year we have created the new SMOKE EXHAUST - RESIDENTIAL CONCEPTOR, which, in 36 pages, covers all the products needed to install smoke exhaust systems in 3 & 4 bedroom family dwellings.

NEW: You can download 2D and 3D models of our products on our dedicated website:

http://cad.aldes.com

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Smoke exhaust relay units and fans

VELONE roof fan
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CYCLONE F casing F 400
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Smoke exhaust dampers and air inlets

OXYTONE PANNEAU 2012
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New

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CIRCULAR ISONE
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2013 bladed air inlet **p. 83**

New

OPTONE smoke exhaust shutter
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New

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RECTANGULAR ISONE
flush-mounted
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ISONE 1500 sleeved
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MINISONE
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CF1 / CF2
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Did you know that in a fire accident, ***80%*** *of deaths are caused by smoke inhalation? Smoke can contain up to* ***100*** *different chemical compounds, including some that are toxic even in small doses.*

13 minutes *is the average time it takes firefighters to arrive at a fire location.*

For all these reasons, smoke management and compartmentation of the fire are essential as soon as it breaks out.

Aldes,

the leading provider of fire protection solutions, will assist you in protecting lives.

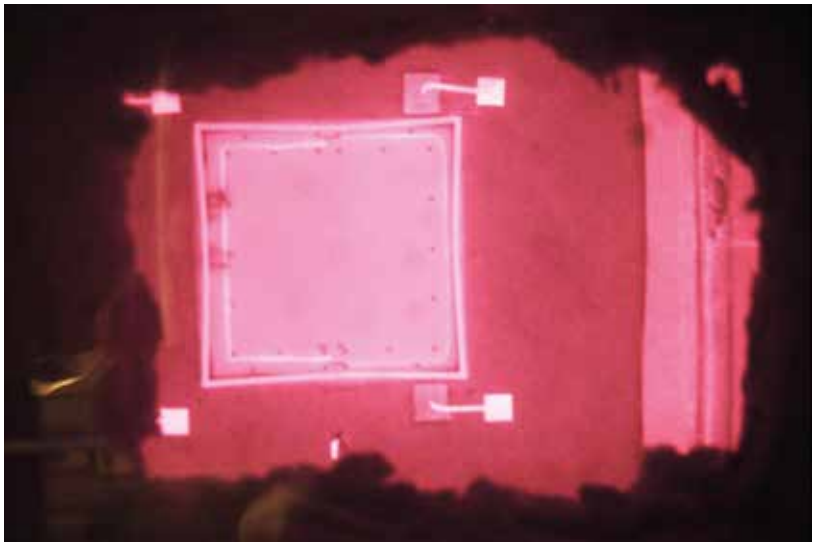
Know-how of a French manufacturer.

Aldes has designed and built its ranges of products since 1925. As a historical market player, Aldes has acquired expertise in fire protection technologies and regulatory compliance. This has enabled the company to develop a vast range of smoke exhaust and building compartmentation products to meet the needs of the market. The safety of people inside buildings is one of the Group's main vocations.

Our solutions meet the needs of installers, emergency fire services and building users.

Aldes has designed a range of standard products to satisfy French and European regulations (CE, NF). These products are subjected to in-house testing and external testing by independent bodies. The Aldes range covers all the fire protection needs of commercial buildings:

- Fans and relay boxes for mechanical smoke exhaust
- Smoke exhaust casements and dampers
- Fire dampers



Test centre

Aldes also provides its expertise on more specific projects that require custom solutions. Aldes can therefore support the most demanding projects through its research centre and conduct tests under special conditions, such as for refurbishment projects or nuclear sites.

A network of local technical sales representatives at your service.

The 200 representatives in the Aldes technical sales network are spread amongst 18 agencies around France. ALDES is also present in more than 60 countries (see p177 for more information).
Their know-how is available to customers to support them at each stage of a project:

Toulouse agency

- Diagnostic: analysis of buildings to identify the most suitable solution to your needs
- Design: dimensioning of systems and products selected
- Installation: Aldes teams are on hand in the field and our agencies to support you in ensuring high quality installation of the equipment
- Maintenance: replacement parts management, standard maintenance contracts for certain products, etc.

Lastly, Aldes operates an integrated, flexible supply chain. Our logistics hub in Mions (69) and an efficient ERP system ensure Aldes can meet the needs of our customers at competitive prices and in short deadlines.

Some prestigious references

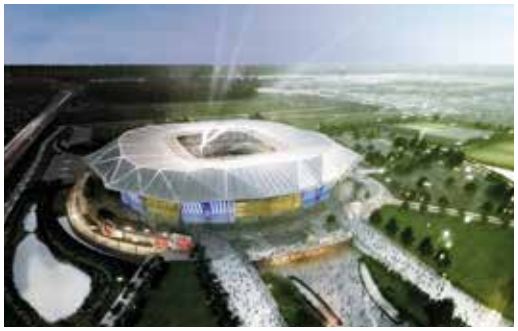
Aldes is involved in most large-scale projects around the world. Our numerous references include the stade des Lumières in Lyon, the Philharmonie and the Louvre in Paris etc. Aldes is also involved in over 2,500,000 houses and more than 3,000,000 collective housing apartments equipped with ventilation.

Arche de la Défense
Paris, France.

EPR Nuclear Power Plant in Flamanville - France.

International Airport - Lomé, Togo.

Tour Majunga
Paris, France.



Stade des Lumières - Lyon, France.

Philharmonie - Paris, France.

Fondation Louis Vitton, Paris, France.

The Rhône-Alpes Pavilion, Universal Exhibition 2010 - Shanghai, China.

Ecole-Tournefeuille, France.

Tour InCity - Lyon, France.

Le Louvre - Paris, France.

Nantes Hospital,
France.

Aldes training offers:

1 team of specialised trainers

3 training centres*

18 Aldes agencies

30 training programmes

600 m² of practical workshops

800 trainees being trained each year

1500 m² of space dedicated to training

A full range:

- ***General training courses***
- ***CMEV***
- ***Multi-functional systems***
- ***Thermodynamic DHW***
- ***Heating and DHW, heat pumps, aerothermics***
- ***Heating and DHW, heat pumps, geothermics***
- ***Smoke exhaust / compartmentation***

Something for everyone:

- ***Installers***
- ***Maintenance firms***
- ***Distributors***
- ***Design offices***
- ***Project managers***
- ***Prime contractors***
- ***Assembly technicians***

Aldes Formation is certified to engineer, facilitate and for the quality of its training programmes for the construction industry:

- ***Ventilation, air distribution and management***
- ***Thermal comfort***
- ***Fire protection***
- ***Central vacuum cleaning***

Mechanical Smoke Extraction

This MECHANICAL SMOKE EXTRACTION section includes the various types of fire-resistant smoke exhaust fans and associated electrical equipment available.
We have already coded all product ranges to improve their presentation, but please feel free to contact your Aldes Agency if you have any specific requests or requirements.

Market leader in relay units and inventor of the ALL-IN-ONE solution where an AXONE relay unit is coupled to the smoke exhaust fan, Aldes also offers progressive start-up relay boxes.

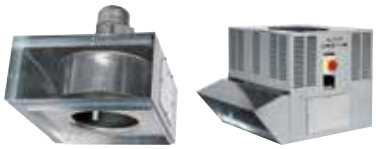
It should be noted that you can find the supply fans in the price list and the Casings and Heat-Recovery Unit Compulsor.

Smoke exhaust roof fan

VELONE F400
p. 8

Smoke exhaust casings

CYCLONE F400 - **p. 24**



EXONE F400 - **p. 46**

Axial fan units

HELIONE
p. 62

Electrical Accessories

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Smoke extraction range - residential

36 pages of Aldes solutions & products in the new Compulsor Residential Smoke Extraction

VELONE smoke exhaust roof fan

Presentation of the 'new VELONE' F400°-120 Min range

New VELONE

With the 'All-In-One' option

Made in France

Compliance

- Conformity of markings CE.
- F400°-120 min classification as per EN 12101-3.
- Compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Up to 27,000 m³/h.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- (Go for Exclusive!) : Aeraulic connection for pressure switch established in the factory.
- (Go for Exclusive!) : IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

FIELD OF APPLICATION

- Smoke extraction from commercial premises (public buildings, high-rises, commercial & industrial premises, etc.) and multi-family housing (principally 3rd & 4th Family B dwellings).
- Ventilation in commercial premises where a fire classification is required (professional kitchens, sports halls, workshops, etc.).

INSTALLATION

- Exterior - directly to the duct or onto a floor stack base (accessory).

DESCRIPTION

- 10 sizes of roof fan: for flow rates of between 500 & 27,000m³/h.
- Base & motor support in galvanised steel, hat in ABS, attached using four quick-fit screws.
- BackWard curve impellor in galvanised steel.
- Class F, IP55 electric motor.
- Galvanised steel protective grille.
- 60 Hz product range, ask for details.

FIRE PROTECTION RATING

- VELONE has been granted F400°-120 Min. classification. The 'All-in-One' option (integrated relay box), the backdraft damper and the rain-guard kit have all been validated by fire resistance tests.
- CE - as per EN 12101-3.

AVAILABLE OPTIONS

- Adjustable pressure switch mounted inside to protect it from shocks and weather. EXCLUSIVE: the pressure switch is aeraulically connected (Note: for two-speed smoke extraction operations, two pressure switches should be used).
- Proximity switch hard-wired and mounted inside to protect it from shocks and weather.
- **ALL-IN-ONE OPTION.**
- Ideal solution when the relay box is mounted within 2 m of the VELONE roof fan.
- Saves time when wiring, operational guarantee and on-site wiring simplified.
- The wiring for the relay box is installed in the factory, as per NF-S-61932.
- Always includes the relay box, pressure switch and switch.
- AXONE 1V cabinet mounted inside to protect it from shocks and weather.

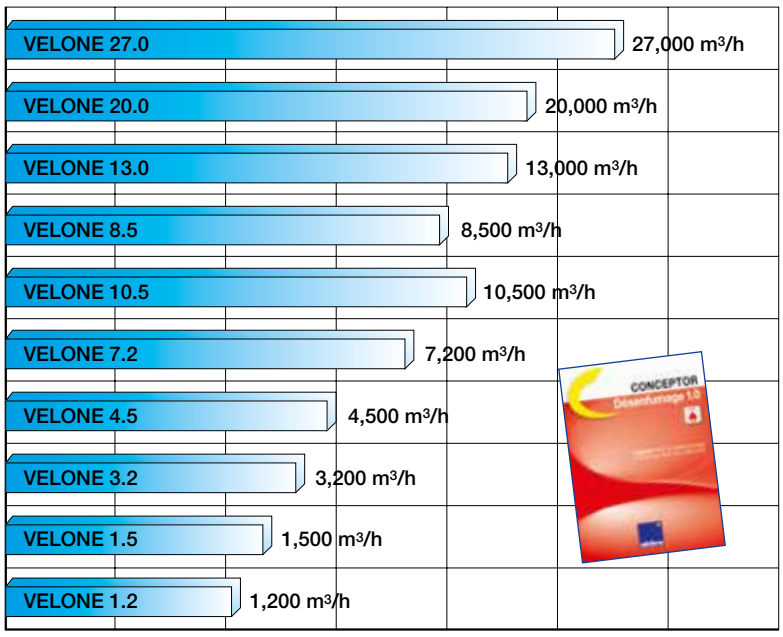
ACCESSORIES

- Rain-guard kit, tested in the laboratory for IP x 4 = proof against rainfall from all directions.
- Backdraft damper tested for fire resistance.
- Vertical outlet kit: incompatible with the All-in-One solution.
- Sealed frame or duct-mounted frame.
- Pivot pin.
- Roof or floor stack base (with slopes).

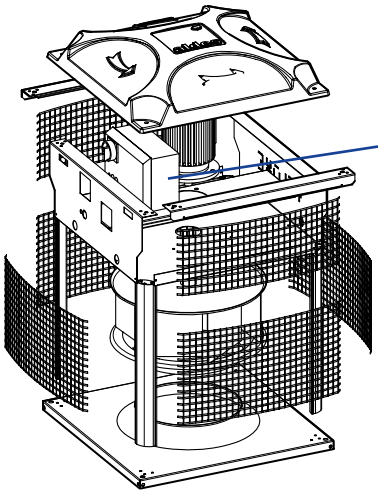
ELECTRICAL ACCESSORIES

- Frequency controller.
- 2-speed comfort control box.

PRE-SELECTION OF VELONE MODELS



DESIGN



Possibility of integrating the switch, pressure switch & AXONE-1 speed cabinet.

Presentation of the advantages of a VELONE

AIRFLOW OF UP TO 27,000 m³/h

- Aldes has taken great care in the design of this new VELONE, to offer a range of smoke exhaust roof fans that comply with CE marking requirements, with a flow rate of up to 27,000 m³/hour without increasing unit dimensions.

COMPACT, TO PROVIDE PROTECTION AGAINST SHOCKS AND WEATHER CONDITIONS

- We preferred to strengthen the motor support using galvanised steel rather that plastic, as we consider that in the long term, electrical accessories such as relay boxes, pressure switches and proximity switches should be protected against impacts and weather conditions.
- The motor mount is well ventilated.

AERAULIC CONNECTION FOR PRESSURE SWITCH ESTABLISHED IN THE FACTORY

- Inventor of the 'All-in-One' system (relay box hardwired in the factory), we can exclusively offer this new range with aeraulic connections for pressure switches.
- This option minimises the labour on-site: no more drilling ducts on-site!

RAIN GUARD KIT - AN ALDES EXCLUSIVE

- Smoke extraction roof fans which are only used for smoke extraction are permanently on standby, ready to start in the event of a fire or for a test. A smoke extraction roof fan on standby presents a risk of rain water penetration in the event of a storm and violent winds.
- The new VELONE design means we can offer you a new accessory: the Rain Guard Kit. Made up of four components, to be assembled on-site, the rain guard kit has passed all necessary fire tests and has a protection level of IP x4, validated by the CETIAT laboratory. This classifications guarantees that the equipment will be leak-proof, under a rainfall of 600l/h, from all directions.

COMPLIANT BACKDRAFT DAMPER

- The backdraft damper is used to prevent heat loss and has successfully passed its regulatory fire tests.

EASY REPLACEMENT

- This new range of roof fan can replace any new VELONE delivered between 1998 & 2007. In fact, we designed this new range without modifying the basic dimensions. In addition, for the equivalent base dimensions, the new range has better aeraulic performance levels.
- 'Transformation kits designed to replace “old ⇨ for new roof fans” are available page 175.

New VELONE

With the 'All-In-One' option, hat removed

With the 'All-In-One' option

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 1.2 - 3-P/Single-phase

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 100 and 1200 m^3/h.

RANGE with choice of options

Designation	Code
VELONE 1-speed	
VELONE 1.2M 0.24 kW (Mono)	11021390
VELONE 1.2 - 4T 0.37 kW (3-P)	11021340

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
1-speed switch -7.5 kW + contacts	OPT21281
All-in-One 1-speed smoke extraction	OPT21273

ACCESSORIES

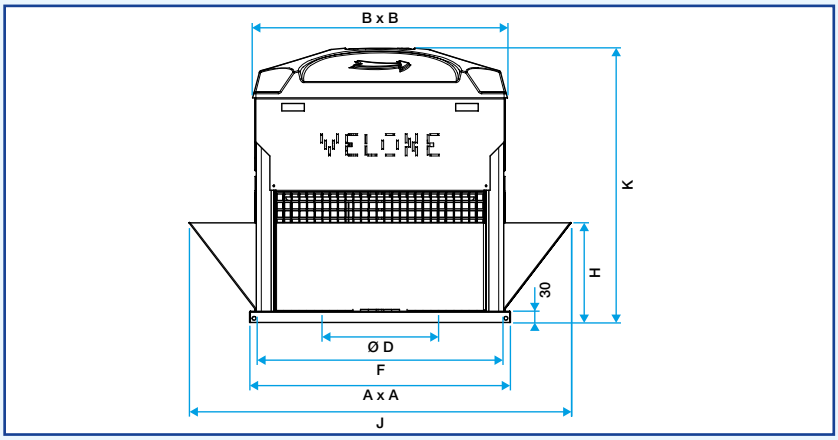
Description on following pages

Description	Code
Rain guard kit IPx4 1.2/1.5/3.2	11021285
Vertical kit 1.2/1.5/3.2	11021366
Sealed frame 1.2/1.5/3.2	11021290
Pivot pin 1.2/1.5/3.2	11021069
Backdraft damper 1.2/1.5/3.2	11021260
Duct-mounted frame 1.2/1.5/3.2	11021295
Floor stack base 1.2/1.5/3.2	11021080
Roof stack base 1.2/1.5/3.2	11021085

ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.

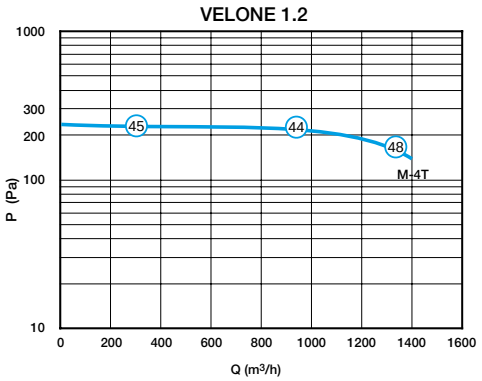
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
1.2	533	519	185	493	580	36	707	190	41

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 250 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
1.2 M	4	230	0.25	50	2.2	6.2
1.2 T	4	230/400	0.37	50/60	1.03	5

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 1.5 - 3-P/Single-phase

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 100 and 1500 m^3/h.

RANGE with choice of options

Description	Code
NEW : VELONE STOCK 1-speed	
VELONE 1.5-6T 0.18kW+IP (stock)	11021256
VELONE 1.5M 0.24kW+IP (stock)	11021395
VELONE 1-speed	
VELONE 1.5M 0.24 kW (Mono)	11021391
VELONE 1.5 - 4T 0.37 kW (3-P)	11021341
VELONE 1.5 - 6T 0.18 kW (3-P)	11021342
VELONE 2-speed	
VELONE 1.5 - 4/8T 0.6/0.15 kW	11021371

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

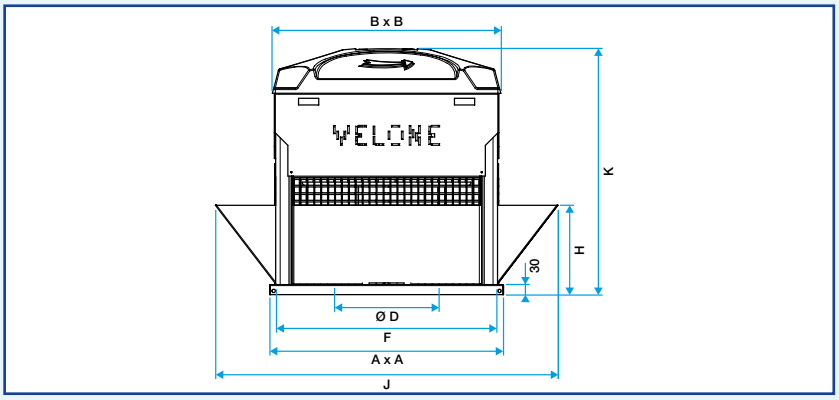
Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extract ion	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276

Description	Code
Rain guard kit IPx4 1.2/1.5/3.2	11021285
Vertical kit 1.2/1.5/3.2	11021366
Sealed frame 1.2/1.5/3.2	11021290
Pivot pin 1.2/1.5/3.2	11021069
Backdraft damper 1.2/1.5/3.2	11021260
Duct-mounted frame 1.2/1.5/3.2	11021295
Floor stack base 1.2/1.5/3.2	11021080
Roof stack base 1.2/1.5/3.2	11021085

ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

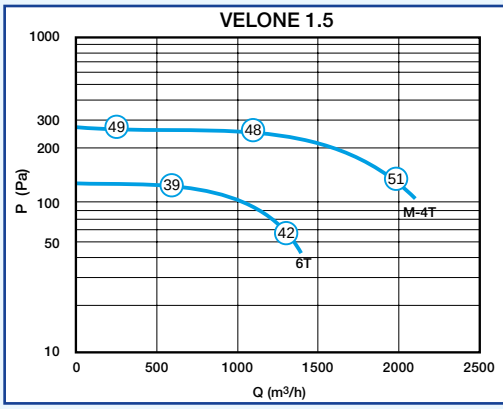
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
1.5	533	519	209	493	607	38	707	190	43

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 250 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
1.5 M	4	230	0.25	50	2.2	6.2
1.5 4T	4	230/400	0.37	50/60	1.03	5
1.5 6T	6	230/400	0.18	50/60	0.71	3.5
1.5- 4/8T	4/8	400	0.6/0.15	50	1.87/0.9	5.2/2.8

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 4/8 = Dahlander motor.

VELONE smoke exhaust roof fan

New VELONE F400 - 3.2 - 3-P/Single-phase

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 100 and 3200 m³/h.

RANGE with choice of options

Description	Code
NEW : VELONE STOCK 1-speed	
VELONE 3.2-6T 0.18kW+IP (stock)	11021257
VELONE 3.2-4T 0.55kW+IP (stock)	11021386
VELONE 3.2M 0.37kW+IP (stock)	11021396
VELONE 1-speed	
VELONE 3.2M 0.37 kW (Mono)	11021392
VELONE 3.2 - 4T 0.55 kW (3-P)	11021344
VELONE 3.2 - 6T 0.18 kW (3-P)	11021345
VELONE 2-speed	
VELONE 3.2 - 4/8T 0.6/0.15 kW	11021373

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
1-speed switch-7.5 kW + contacts	OPT21281
2-speed switch-7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276

It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

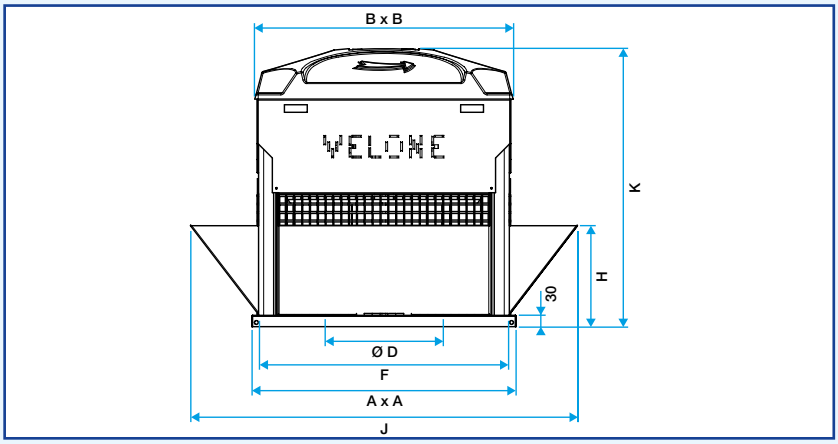
Description on following pages

Description	Code
Rain guard kit IPx4 1.2/1.5/3.2	11021285
Vertical kit 1.2/1.5/3.2	11021366
Sealed frame 1.2/1.5/3.2	11021290
Pivot pin 1.2/1.5/3.2	11021069
Backdraft damper 1.2/1.5/3.2	11021260
Duct-mounted frame 1.2/1.5/3.2	11021295
Floor stack base 1.2/1.5/3.2	11021080
Roof stack base 1.2/1.5/3.2	11021085

ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

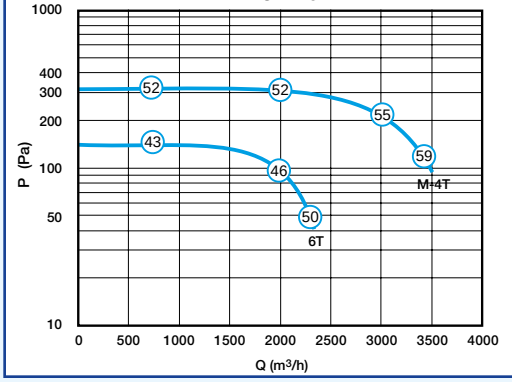
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
3.2	533	519	235	493	629	39	707	190	44

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 315 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
3.2 M	4	230	0.37	50	3	6
3.2- 4T	4	230/400	0.55	50/60	1.3	6
3.2- 6T	6	230/400	0.18	50/60	0.71	3.5
3.2- 4/8	4/8	400	0.6/0.15	50	1.87/0.9	5.2/2.8

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 4/8 = Dahlander motor.

New VELONE F400 - 4.5 - 3-P/Single-phase

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Did you know?

- There is now an S.O.S. VELONE –> p17

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 300 and 4500 m³/h.

RANGE with choice of options

Description	Code
NEW : VELONE STOCK 1-speed	
VELONE 4.5-6T 0.37KW+IP (stock)	11021258
VELONE 4.5-4T 0.75KW+IP (stock)	11021387
VELONE 4.5-4T 0.75KW+IP (stock)	11021397
VELONE 1-speed	
VELONE 4.5M 0.75 kW	11021393
VELONE 4.5 - 4T 0.75 kW	11021347
VELONE 4.5 - 6T 0.37 kW	11021348
VELONE 2-speed	
VELONE 4.5 - 4/6T 0.75/0.25 kW	11021374
VELONE 4.5 - 4/8T 0.8/0.20 kW	11021375

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

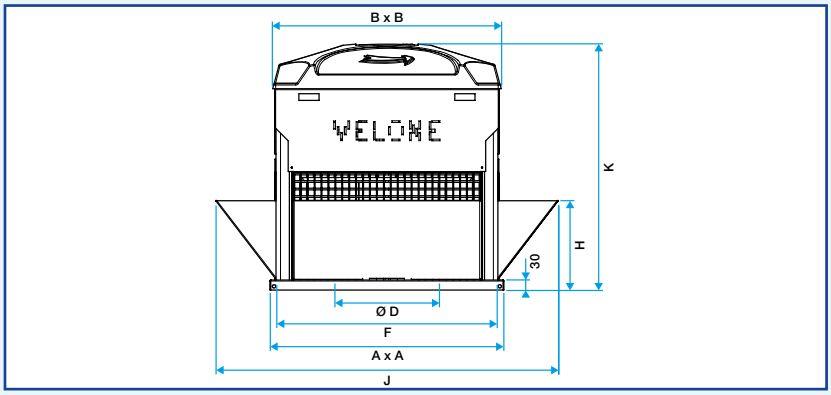
Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

Description	Code
Rain guard kit IPx4 - 4.5/7.2/10.5	11021286
Vertical kit 4.5/7.2/10.5	11021367
Sealed frame 4.5/7.2/10.5	11021291
Pivot pin 4.5/7.2/10.5	11021070
Backdraft damper 4.5/7.2/10.5	11021261
Duct-mounted frame 4.5/7.2/10.5	11021296
Floor stack base 4.5/7.2/10.5	11021081
Roof stack base 4.5/7.2/10.5	11021086

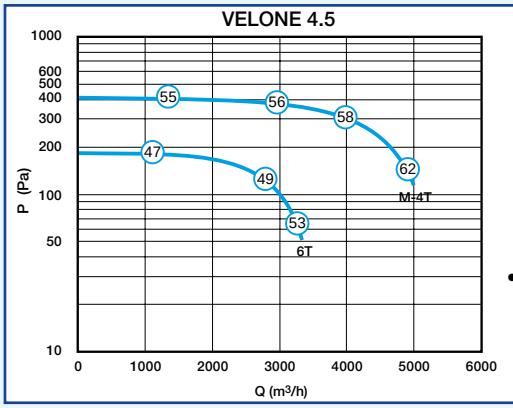
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
4.5	698	684	265	658	658	50	991	265	60

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 355 mm)
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
4.5 M	4	230	0.75	50	5.5	5.5
4.5- 4T	4	230/400	0.75	50/60	1.65	6
4.5- 6T	6	230/400	0.37	50/60	1.09	4.7
4.5 - 4/6T	4/6	400	0.75/0.25	50	1.98/1.2	4.7/3.9
4.5 - 4/8T	4/8	400	0.8/0.2	50	1.99/0.88	4.7/2.7

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 4/8 = Dahlander motor - 4/6 = Motor with independent coils (BI).

ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 7.2 - 3-P/Single-phase

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Did you know?

- There is now an S.O.S. VELONE –> p17

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 500 and 7200 m³/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 7.2M 1.1 kW	11021394
VELONE 7.2 - 4T 1.1KW	11021350
VELONE 7.2 - 6T 0.37 kW	11021351
VELONE 2-speed	
VELONE 7.2 - 4/6T 1.1/0.3KW	11021376
VELONE 7.2 - 4/8T 1.2/0.3KW	11021377
VELONE STOCK 1-speed	
VELONE 7.2-4T 1.1KW+IP (stock)	11021388
VELONE 7.2M 1.1KW+IP (stock)	11021398

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

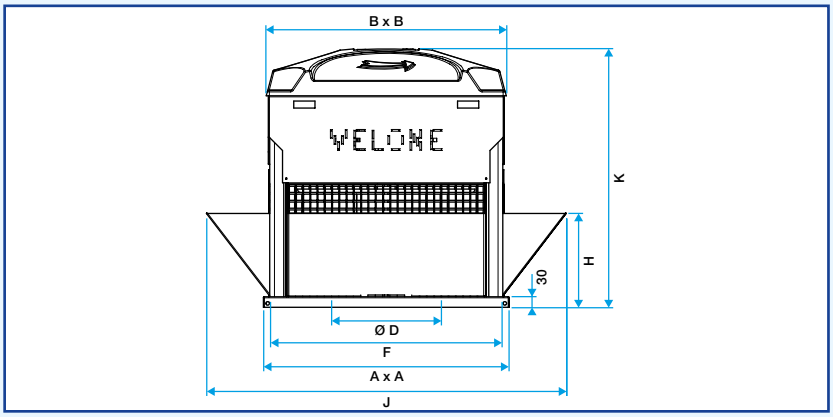
It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

Description on following pages

Description	Code
Rain guard kit IPx4 - 4.5/7.2/10.5	11021286
Vertical kit 4.5/7.2/10.5	11021367
Sealed frame 4.5/7.2/10.5	11021291
Pivot pin 4.5/7.2/10.5	11021070
Backdraft damper 4.5/7.2/10.5	11021261
Duct-mounted frame 4.5/7.2/10.5	11021296
Floor stack base 4.5/7.2/10.5	11021081
Roof stack base 4.5/7.2/10.5	11021086

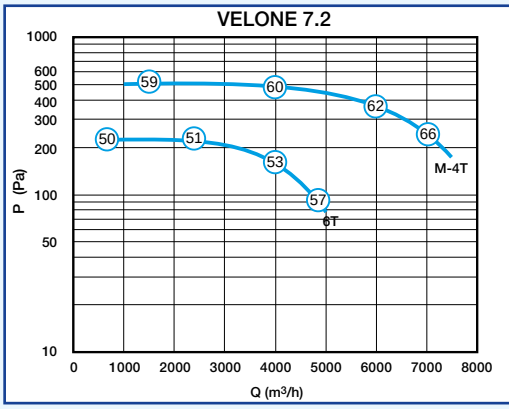
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
7.2	698	684	299	658	688	60	991	265	70

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 400 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
7.2 M	4	230	1.1	50	7.6	7
7.2 - 4 T	4	230/400	1.1	50/60	2.37	7
7.2 - 6 T	6	230/400	0.37	50/60	1.09	4.7
7.2 - 4/6T	4/6	400	1.1/0.3	50	3.02/1.43	5.4/4
7.2 - 4/8T	4/8	400	1.2/0.3	50	2.92/1.29	5.5/3.1

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 4/8 = Dahlander motor - 4/6 = Motor with independent coils (BI).

ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

New VELONE F400 - 10.5 - 3-P

With the 'All-In-One' option, hat removed

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 500 and 10,500 m³/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 10.5 - 4T 1.5 kW	11021353
VELONE 10.5 - 6T 0.55 kW	11021354
VELONE 10.5 - 8T 0.37 kW	11021355
VELONE 2-speed	
VELONE 10.5 - 4/6T 1.5/0.37KW	11021378
VELONE 10.5 - 4/8T 1.6/0.4KW	11021379
VELONE STOCK 1-speed	
VELONE 10.5-8T 0.37KW+IP (stock)	11021259
VELONE 10.5-4T 1.5KW+IP (stock)	11021389

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

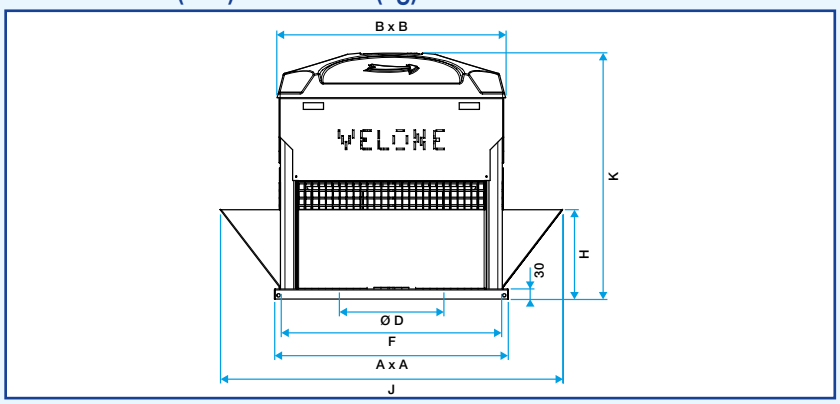
It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

Description on following pages

Description	Code
Rain guard kit IPx4 - 4.5/7.2/10.5	11021286
Vertical kit 4.5/7.2/10.5	11021367
Sealed frame 4.5/7.2/10.5	11021291
Pivot pin 4.5/7.2/10.5	11021070
Backdraft damper 4.5/7.2/10.5	11021261
Duct-mounted frame 4.5/7.2/10.5	11021296
Floor stack base 4.5/7.2/10.5	11021081
Roof stack base 4.5/7.2/10.5	11021086

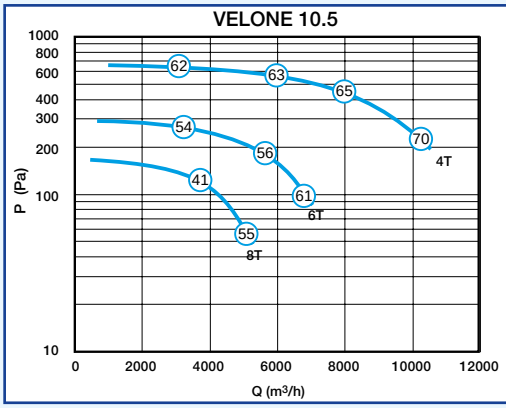
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
10.5	698	684	332	658	721	72	991	265	82

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 450 mm)
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
10.5-4 T	4	230/400	1.5	50/60	3.30	7.5
10.5-6 T	6	230/400	0.55	50/60	1.57	4.8
10.5-8 T	8	230/400	0.37	50/60	1.40	4
10.5-4/6T	4/6	400	1.5/0.37	50	3.71/1.73	5.6/3.8
10.5-4/8T	4/8	400	1.6/0.4	50	4.05/1.78	5.7/4.1

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 4/8 = Dahlander motor - 4/6 = Motor with independent coils (BI).

ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 8.5 - 3-P

With the 'All-In-One' option

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 500 and 8,500 m³/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 8.5 - 6T 1.1KW	11021357
VELONE 8.5 - 8T 0.55KW	11021358
VELONE 2-speed	
VELONE 8.5 - 6/8T 1.1/0.55KW	11021380
VELONE 8.5 - 6/12T 1.1/0.22 kW	11021381

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

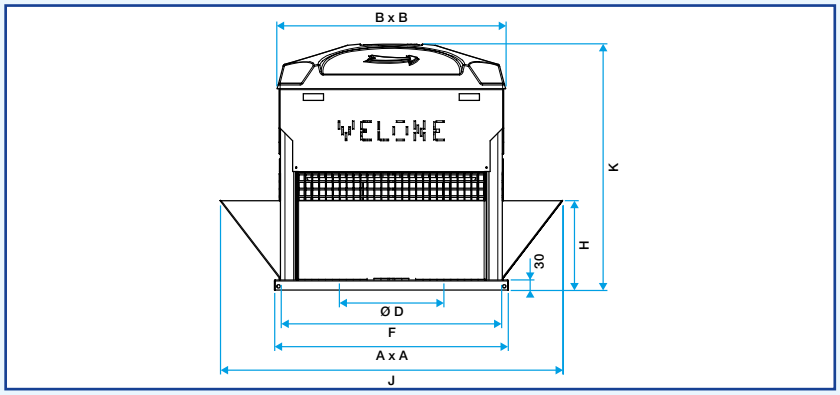
It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

Description on following pages

Description	Code
Rain-guard kit IP x4 - 8.5/13	11021287
Vertical kit 8.5/13	11021368
Sealed frame 8.5/13	11021292
Pivot pin 8.5/13	11021071
Backdraft damper 8.5/13	11021262
Duct-mounted frame 8.5/13	11021297
Floor stack base 8.5/13	11021082
Roof stack base 8.5/13	11021087

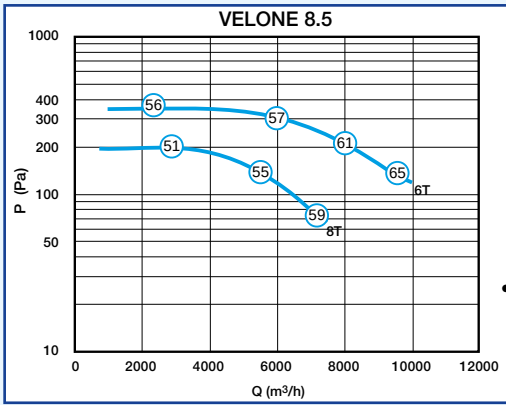
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
8.5	834	820	373	794	793	100	1270	355	116

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 500 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
8.5-6 T	6	230/400	1.1	50/60	2.9	5
8.5-8 T	8	230/400	0.55	50/60	2	4
8.5-6/8	6/8	400	1.1/0.55	50	3.59/2.52	5.1/4
8.5-6/12	6/12	400	1.1/0.22	50	4.39/1.5	5.5/2.6

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 6/12 = Dahlander motor - 6/8 = Motor with independent coils (BI).

ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 13.0 - 3-P

With the 'All-In-One' option, hat removed

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 1000 and 13,000 m³/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 13 - 6T 2.2KW	11021359
VELONE 13 - 8T 1.1KW	11021360
VELONE 2-speed	
VELONE 13 - 6/8T 2.2/1.3KW	11021382
VELONE 13 - 6/12T 2.2/0.55KW	11021383

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction	OPT21273
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

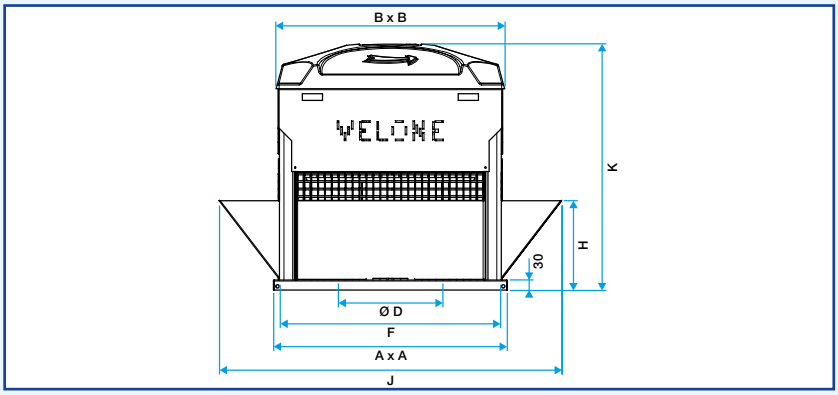
Description on following pages

Description	Code
Rain-guard kit IP x4 - 8.5/13	11021287
Vertical kit 8.5/13	11021368
Sealed frame 8.5/13	11021292
Pivot pin 8.5/13	11021071
Backdraft damper 8.5/13	11021262
Duct-mounted frame 8.5/13	11021297
Floor stack base 8.5/13	11021082
Roof stack base 8.5/13	11021087

ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

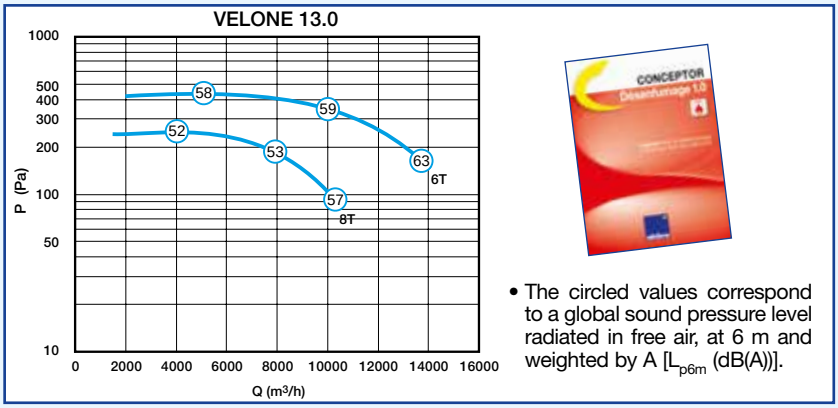
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
13.0	834	820	419	794	833	115	1270	355	131

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 560 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
13.0-6T	6	230/400	2.2	50/60	5.26	6.2
13.0-8T	8	230/400	1.1	50/60	3.30	4.2
13.0-6/8T	6/8	400	2.2/1.3	50/60	5.96/4.36	5.6/3.9
13.0-6/12T	6/12	400	2.2/0.55	50/60	6.4/2.6	7/3

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 6/12 = Dahlander motor - 6/8 = Motor with independent coils (BI).

VELONE smoke exhaust roof fan

New VELONE F400 - 20.0 - 3-P

With the 'All-In-One' option

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit.
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 1000 and 20,000 m^3/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 20 - 6T 3KW	11021361
VELONE 20 - 8T 1.5KW	11021362
VELONE 2-speed	
VELONE 20 - 6/8T 4/1.1KW	11021384
VELONE 20 - 6/12T 3/0.55KW	11021385

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected For two-speed smoke extraction, two pressure switches are required.
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
2-speed switch -7.5 kW + contacts	OPT21282
All-in-One 1-speed smoke extraction 4.7A	OPT21273
All-in-One 1-speed smoke extraction 16.7 A	OPT21274
All-in-One 2-speed Dahl smoke extraction	OPT21275
All-in-One 2-speed Dahl smoke extraction + comfort	OPT21276
All-in-One 2-speed BI smoke extraction	OPT21277
All-in-One 2-speed BI smoke extraction + comfort	OPT21278

It is recommended that the All-in-One 2-speed system be fixed to a floor mount, code 11021265.

ACCESSORIES

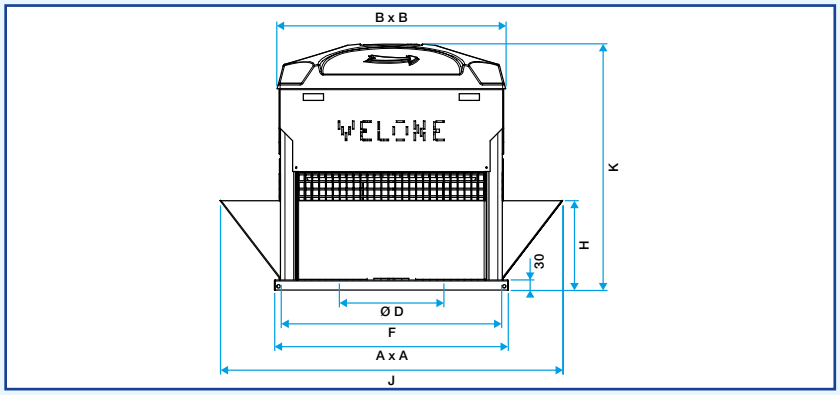
Description on following pages

Description	Code
Rain-guard kit IP x4 - 20/27	11021288
Vertical kit 20/27	11021369
Sealed frame 20/27	11021293
Pivot pin 20/27	11021072
Backdraft damper 20/27	11021263
Duct-mounted frame 20/27	11021298
Floor stack base 20/27	11021083
Roof stack base 20/27	11021088

ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

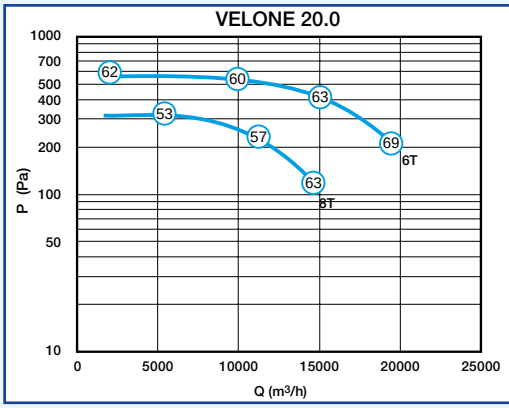
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
20.0	984	970	474	944	983	165	1555	440	189

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 630 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
20.0-6T	6	230/400	3	50/60	6.8	6
20.0-8T	8	230/400	1.5	50/60	4.00	5.4
20.0-6/8T	6/8	400	4/1.1	50/60	11.3/4.84	6.6/4.6
20.0-6/12T	6/12	400	3/0.55	50/60	6.77/2.3	8.5/4.3

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.
- 6/12 = Dahlander motor - 6/8 = Motor with independent coils (BI).

VELONE smoke exhaust roof fan

CE

New VELONE F400 - 27.0 - 3-P

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- All-in-one option, compliant with optional non-return damper and rain-guard kit accessories.

Advantages

- Accessories protected from shocks & weather conditions by the metallic body.
- Electrical accessories hardwired in the factory and mounted inside to protect against physical shocks and weather conditions.
- Pressure switch aeraulic connection established in the factory.
- IP x4 certified rain guard kit
- Pivot pin = easy cleaning.

DESCRIPTION

- Airflow between 1000 and 27,000 m³/h.

RANGE with choice of options

Description	Code
VELONE 1-speed	
VELONE 27 - 6T 5.5KW	11021363
VELONE 27 - 8T 3KW	11021364

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected
- Hardwired proximity switch, mounted and protected.
- All-in-One solution (not available for single-phase systems):
  - relay box delivered already wired,
  - pressure switch & proximity switch supplied and wired in.

If using a vertical kit, attach the relay box outside the VELONE unit and outside of the air flow.

Description	Code
Pressure switch 40-300 Pa aeraulically connected	OPT21279
Pressure switch 100-1000 Pa aeraulically connected	OPT21280
1-speed switch -7.5 kW + contacts	OPT21281
All-in-One 1-speed smoke extraction - 16.7A	OPT21274

ACCESSORIES

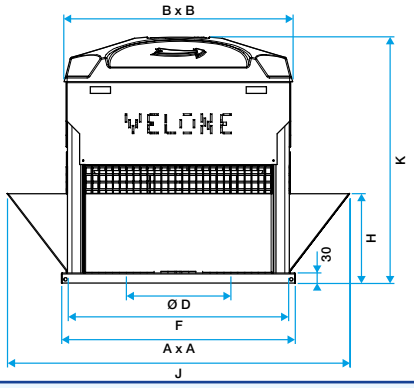
Description on following pages

Description	Code
Rain-guard kit IP x4 - 20/27	11021288
Vertical kit 20/27	11021369
Sealed frame 20/27	11021293
Pivot pin 20/27	11021072
Backdraft damper 20/27	11021263
Duct-mounted frame 20/27	11021298
Floor stack base 20/27	11021083
Roof stack base 20/27	11021088

ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.

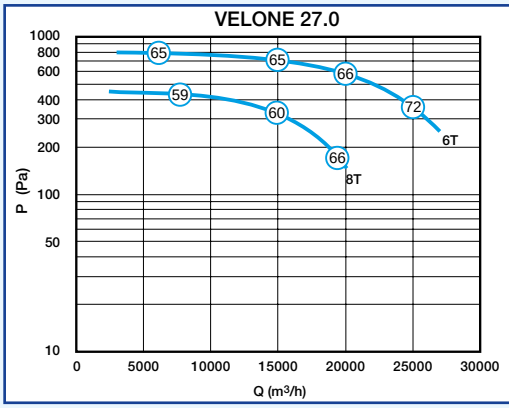
DIMENSIONS (mm) – WEIGHT (kg)



Type	Horizontal air outlet						With vertical kit		
Velone	A	B	Ø D	F	K	Weight	J	H	Weight
27.0	984	970	535	944	1034	175	1555	440	207

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801, aspiration connected (Ø 630 mm).
- Pressure values shown on the curves = static pressures.



- The circled values correspond to a global sound pressure level radiated in free air, at 6 m and weighted by A [L_{p6m} (dB(A))].

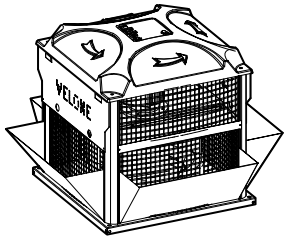
ELECTRICAL CHARACTERISTICS

Type	Number of poles	U (V)	P (kW)	f (Hz)	In rated current (A)	Id /In
27.0-6T	6	230/400	5.5	50/60	12.4	6.8
27.0-8T	8	230/400	3	50/60	6.8	6

- Rated current 'In' is given for a voltage of 400V with 3-Phase roof fans.

VELONE smoke exhaust roof fan

Vertical outlet kit



Advantages

- Conformity of markings CE.
- F400° - 2h as per EN 12101-3.

FIELD OF APPLICATION

- The vertical outlet kit is a deflector, used to redirect the airflow into a vertical plane.
- Caution - incompatible with the All-in-One solution and the rain-guard kit.

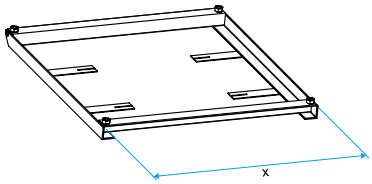
DESCRIPTION

- Comprises 4 sections in galvanised steel.
- Supplied with suitable fixings.

RANGE

Velone model	Code
Vertical kit 1.2/1.5/3.2	11021366
Vertical kit 4.5/7.2/10.5	11021367
Vertical kit 8.5/13	11021368
Vertical kit 20/27	11021369

Seal frame



FIELD OF APPLICATION

- Frame used to attach the attach the fan to a masonry surface.

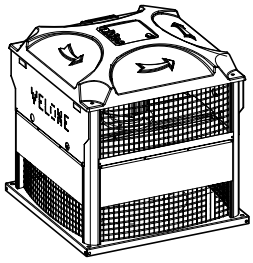
DESCRIPTION

- Comprises four folding pads which can be sealed against the stack base.
- Supplied with fixings.
- Can be fitted with the pivot pin.
- Anti-corrosion paint.

RANGE

Velone model	Code	X x X (mm)
Sealed frame 1.2/1.5/3.2	11021290	519
Sealed frame 4.5/7.2/10.5	11021291	684
Sealed frame 8.5/13	11021292	820
Sealed frame 20/27	11021293	970

IP x4 certified rain guard kit



Compliance

- Compliant with CE marking as per EN 12101-3:
- F400° - 2h as per EN 12101-3.
- Class IP x4: Tested in an independent laboratory.

Advantages

- Go for Exclusive!: Solution to prevent water penetrating the ducts during bad weather.

FIELD OF APPLICATION

- The rain-guard kit prevents rain entering the ducts during bad weather, when the fan is stopped.

DESCRIPTION

- Tested by the CETIAT, an independent laboratory, the VELONE fan, fitted with a rain-guard kit, was awarded IPx4 classification.

This classification corresponds to multi-directional rainfall (hemispherical) at a rate of 600 litres per hour.

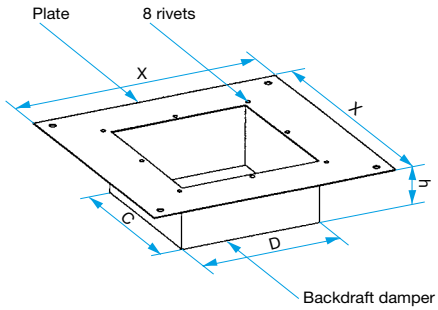
When running, the four sections lift away and do not produce significant pressure loss.

- 4 sections in M0 fabric, reinforced on one side by a metallic strip.
- To be fitted on-site.
- Incompatible with the vertical outlet kit.

RANGE

Velone model	Code
Rain guard kit IPx4 - 1.2/1.5/3.2	11021285
Rain guard kit IPx4 - 4.5/7.2/10.5	11021286
Rain-guard kit IP x4 - 8.5/13	11021287
Rain-guard kit IP x4 - 20/27	11021288

Backdraft damper



Advantages

- Conformity of markings CE.
- F400° - 2h as per EN 12101-3.

FIELD OF APPLICATION

- The backdraft damper prevents natural ventilation when the roof fan is in standby, thus making savings on heating/air-conditioning.
- The backdraft damper can be fitted using the sealed frame, the pivot pin and the floor-mounted fan.
- It is not compatible with the duct-mounted frame (ask for details).

DESCRIPTION

- The backdraft damper has passed its fire resistance tests.
- The backdraft damper has been designed for rapid installation thanks to its stacking plate.
- Can be dismantled and easily added at a later date.
- Factor-in an additional pressure loss of 50 Pa.

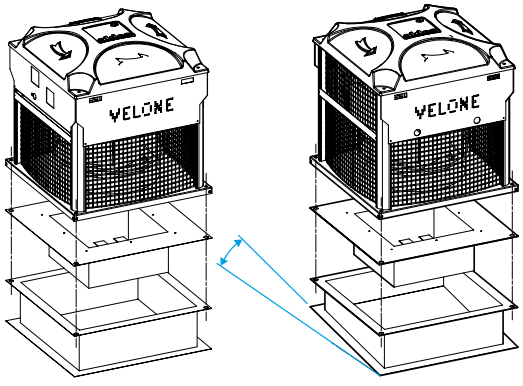
RANGE

Velone model	Code
Backdraft damper 1.2/1.5/3.2	11021260
Backdraft damper 4.5/7.2/10.5	11021261
Backdraft damper 8.5/13	11021262
Backdraft damper 20/27	11021263

DIMENSIONS (mm)

Code	C	D	X	h
11021260	380	328	519	120
11021261	480	498	684	120
11021262	580	580	820	120
11021263	780	780	970	120

Terrace-roof stack base



Stack base Roof base

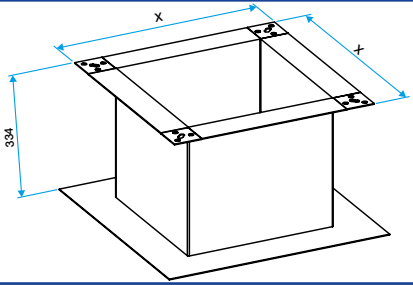
FIELD OF APPLICATION

- The stack base is used to install a roof fan on a horizontal roof with no stonework stacks.
- The roof base is used to install a roof fan on a sloping roof with no stonework stacks.

DESCRIPTION

- Galvanised steel.
- Drilled in the four corners for the backdraft damper.
- For the roof stack, state the roof angle as a percentage or in degrees when ordering.

DIMENSIONS (mm)



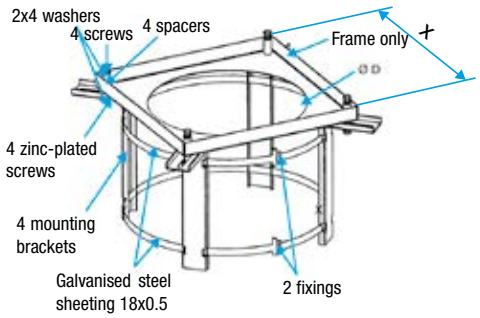
Stack base model	X
Stack base 1.2/1.5/3.2	526
Stack base 4.5/7.2/10.5	691
Stack base 8.5/13	827
Stack base 20/27	977

RANGE

Velone model	Code
Stack base	
Floor stack base 1.2/1.5/3.2	11021080
Floor stack base 4.5/7.2/10.5	11021081
Floor stack base 8.5/13	11021082
Floor stack base 20/27	11021083
Roof stack: define roof angle	
Roof stack base 1.2/1.5/3.2	11021085
Roof stack base 4.5/7.2/10.5	11021086
Roof stack base 8.5/13	11021087
Roof stack base 20/27	11021088

VELONE smoke exhaust roof fan

Duct-mounted frame



FIELD OF APPLICATION

- The duct-mounted frame is used to install a VELONE roof fan on a cylindrical duct capable of supporting its weight.

DESCRIPTION

- With four brackets, a frame, four spacers and the required fixings.

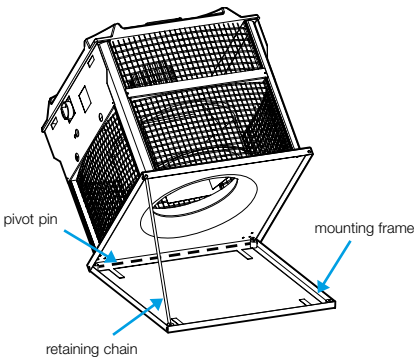
DIMENSIONS (mm)

Code	X	Ø D	DUCT	
			Ø min	Ø max
11021295	519	420	250	400
11021296	684	520	315	500
11021297	810	650	400	630
11021298	970	820	500	800

RANGE

Velone model	Code
Duct-mounted frame 1.2/1.5/3.2	11021295
Duct-mounted frame 4.5/7.2/10.5	11021296
Duct-mounted frame 8.5/13	11021297
Duct-mounted frame 20/27	11021298

Pivot pin



FIELD OF APPLICATION

- Hinge pin, used to provide access to the duct and fan turbine to facilitate maintenance.

DESCRIPTION

- Stainless steel pin which slides through the fan base, designed especially for it.
- 2 locking washers and a safety chain.
- IMPORTANT: immobilise the fan when open to prevent accidents.
- Requires the mounting frame.

RANGE

Velone model	Code
Pivot pin 1.2/1.5/3.2	11021069
Pivot pin 4.5/7.2/10.5	11021070
Pivot pin 8.5/13	11021071
Pivot pin 20/27	11021072

N E W

SOS Velone
Emergency natural smoke extraction.

Emergency natural smoke extraction for mechanical exhaust fan.

- **Ideal for residential buildings: up to 10,000 m³/h**
- **Conforms to Housing & Construction Codes**
- **Discrete**
- **Easy to install: new display and factory pre-wiring**
- **Natural smoke extraction opening of 20 dm²**

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CYCLONE F400 smoke extraction casing

Presentation of the CYCLONE F400 range (120)

Made in France

Compliance

- Smoke extraction casing - as per EN 12101-3.
- Class F400 (120).
- Extension to the 'thermal isolation' classification: as per § 74.1 of EN 12101-3.

Advantages

- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.
- 'Variable pulley' option: for on-site airflow rate adjustment.
- Choice of access direction possible, dependant on worksite configuration.
- Easy access thanks to the handles on the motor cover and access panel.

WHY CHOOSE A CYCLONE F400?

In order to fulfil the requirements of the CE markings (EN 12101-3 and the French governmental decree of the 2nd July 2004), applicable to all smoke extraction fans as of September 2005, ALDES has developed the CYCLONE F400, Class: F400-120.

FOR WHAT TYPE OF USE?

The CYCLONE F400 is a smoke extraction casing, available in 8 sizes, used to cover a wide range of airflows, from 1000 to 35000 m^3/h.

It is designed for smoke extraction from commercial premises (public buildings, high-rises, commercial & industrial premises, etc.) and multi-family housing (principally 3rd & 4th Family B dwellings).

WHAT ARE THE ADVANTAGES OF THIS NEW RANGE?

Range, with a choice of options, including:

- The authorised 'thermal isolation' option CE, prevents having to place the CMEV for the premises in the same location as the smoke extraction casing, for example, in the attic space. Your ALDES agency is available to answer any of your questions.
- Adjustable drive pulley for on-site airflow adjustment,
- Choice of discharge positioning (horizontal or vertical),
- Fitted with proximity switch, pre-cabled for easy installation,
- Adjustable pressure switch, aeraulically connected,
- All-in-One solution to save time, cabling conforms to NF-S 61.932.

Easy to maintain:

- The motor cover and access panel are fitted with handles to facilitate removal and access for maintenance.
- In addition, it is possible to choose the positioning of the transmission and the access panel for the various possible site configurations.
- Finally, belt tension adjustments are made easier by an ingenious motor mounting system and a set of belt markings.

EASY MAINTENANCE

Access panel with handles

Motor mounting to facilitate belt tension adjustments

Adjustable drive pulley.

Presentation of the CYCLONE F400 range (120)

Advantages

- 'Variable pulley' option: for on-site airflow rate adjustment.
- Choice of access direction possible, dependant on worksite configuration.
- Easy access thanks to the handles on the motor cover and access panel.

FIELD OF APPLICATION

- Smoke extraction from commercial premises (public buildings, high-rises, commercial & industrial premises, etc.) and multi-family housing (principally 3rd & 4th Family B dwellings).
- The Cyclone F400 is a smoke extraction casing only, do not use for other applications (professional kitchens, for example).

FIRE PROTECTION RATING

- CE compliant smoke extraction casing - as per EN 12101-3.
- The CYCLONE F400 has been awarded F400 (120) (400°C - 120 min) classification.

DESCRIPTION

- 8 sizes of casing: for flow rates of between 1000 & 35,000m³/h.
- Airflow > 3,000 m3/h: contact us
- Casing in galvanised steel.
- Forward curved impellor with aluminium hub.
- Belt & pulley drive.
- IP 55 class F motor, on a mount designed to allow easy adjustment of the belt tension.
- Single or two speed motor (independent coils 4/6 poles and Dahlander coupling 4/8 poles).
- 60 Hz product range, ask for details.

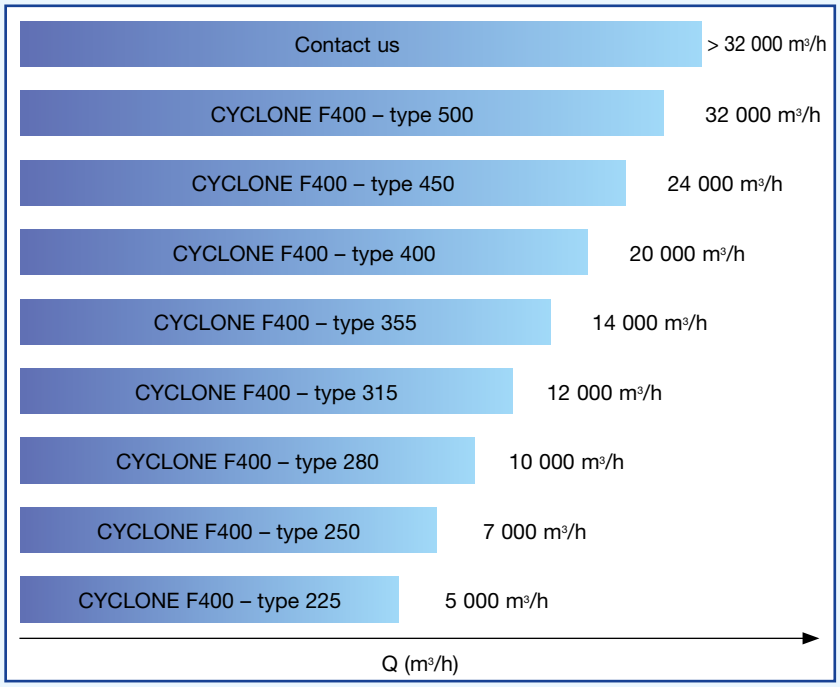
AVAILABLE OPTIONS

- 'Thermal isolation' option to prevent overheating the installation area.
- Choice of access panel and transmission positioning.
- Choice of discharge positioning (horizontal or vertical),
- Proximity switch - fitted & pre-cabled.
- Adjustable pressure switch - aeraulically connected (2 switches are required for 2-speed smoke extraction).
- Rain-guard kit fixings (supplied with casing but not fitted).
- All-in-One: pre-cabled relay box, protected by a cover (this option includes the proximity switch and aeraulically-connected pressure switch(es)).
- Adjustable drive pulley (except Model 500).

ACCESSORIES

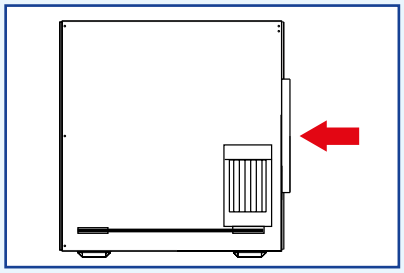
- Circular flexible inlet sleeve.
- Rectangular flexible exhaust sleeve.
- Rectangular/circular exhaust sleeve adapter.
- Anti-vibration mounting.

PRE-SELECTION - CYCLONE F400

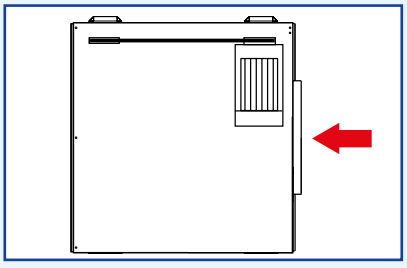


SELECTION OF ACCESS PANEL AND TRANSMISSION POSITIONING

Standard access panel position.



Standard access panel position. Door and transmission mounted to the left of the inlet turbine.



Optional access panel position. Door and transmission mounted to the right of the inlet turbine.

CYCLONE F400 smoke extraction casing

Presentation of the CYCLONE F400 range (120)

Cyclone F400 with proximity switch option.

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One proximity switch option: pressure switch(es) and proximity switches pre-cabled to save time on-site.

DESCRIPTION OF OPTIONS

- Proximity switch supplied pre-cabled, attached to a galvanised steel mounting.
- Adjustable pressure switch - aeraulically connected (2 switches are required for 2-speed smoke extraction). Fitted to the top of the casing alongside the motor cover.

- **All-in-One option:**

The wiring for the relay box is installed in the factory, as per NF-S-61932.

The proximity switch is integrated.

The aeraulically-connected pressure switch(es) are positioned on top of the casing, alongside the motor cover.

The cabinet is placed on the casing within a galvanised steel protective shell (rain & UV).

The front of the cover pivots to provide easy access to the AXONE MICRO II relay box.

- **Thermal isolation option:**

The casing is isolated by a layer of rock-wool, attached to the inner surfaces of all four single-skin sides (the double-skinned access faces do not conduct heat).

Adapted to an interior installation, this casing restricts radiated heat from the casing caused by the high temperatures of the smoke.

- Designed to be folded by hand, the rain-guard visor is delivered within the casing. To install, attach to the bolts around the edge of the casing outlet.
- Adjustable drive pulley (except Model 500).

Adjustments are by steps of a quarter turn over three turns.

Factory setting: maximum rotation speed.

DESCRIPTION OF ACCESSORIES

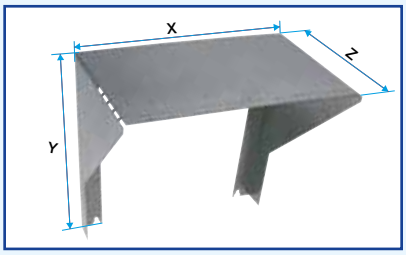
- M0 flexible circular inlet sleeve: comprising the flexible sleeve and 2 fixing collars.
- Flexible rectangular exhaust sleeve: comprising the flexible sleeve, 4 fixing pads and one fixing collar.
- Rectangular/circular flexible exhaust adapter: comprising a flexible adapter, four fixing pads and one fixing collar.
- Anti-vibration mounting in resilient material: dimensions: L x w x th = 100 x 100 x 10 (mm).

4 or 6 mounts are supplied, depending on the size of the casing.

ALL-IN-ONE

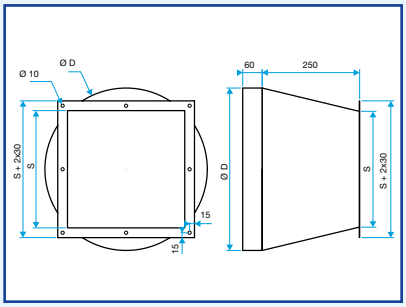
All-in-One: Axone micro II
+ Proximity Switch (IP) fitted and pre-cabled.
+ aeraulically-connected pressure switch.

DIMENSIONS OF RAIN-GUARD VISOR (m)

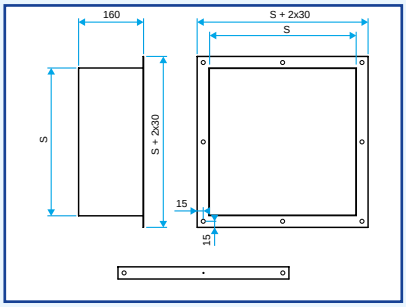


Type	225	250	280	315	355	400	450	500
X	388	422	461	504	553	607	699	738
Y	348	382	421	464	513	567	629	698
Z	247	276	320	356	405	459	521	590

ACCESSORY DIMENSIONS (mm)



Adapter



Flexible sleeve

Type	225	250	280	315	355	400	450	500
Ø D	400	450	500	560	630	710	800	800
S	288	322	361	404	453	507	569	638

Presentation of the CYCLONE F400 range (120)

Cyclone F400 with transmission access panel and cover removed.

Advantages

- Simplification of belt tension adjustment by the use of slide-mountings for the motor.
- Markings on the belt to guarantee the correct settings.
- Working at man-height.

INSTALLATION

- Can be installed either indoors or outdoors.
- It is recommended that the device be installed using an anti-vibration mounting. The anti-vibration mounting, using a resilient material, should be fitted between the base and the CYCLONE F400 (4 or 6 mounts).
- Connect the casing using the flexible sleeves attached to the inlet (and outlet when connected).
- A rain-guard visor should be used when installing the device outside.

MAINTENANCE

- The smoke extractor fan should be checked once a year to ensure it is working correctly (Article DF9). Since April 1997, the new standard, NF-S 61933 requires, in its Appendix A, a verification of all smoke extraction fans, via the relay boxes, ever quarter. No specific maintenance of the sealed bearings is required.
- Access to the transmission system is facilitated by a door, fitted with handles.
- The motor cover can easily be removed (also fitted with a handle).

ELECTRICAL CONNECTIONS

For smoke extraction installations:

The electrical connection must be done in respect of industry best practices and in accordance with standard NF C 15-100 and NF S 61.932 "Installation rules."

The power cable must be dimensioned according to principle 471-1-2 of standard NF C 15-100: "the cross-section of channel conductors is determined by an admissible current equal to 1.5 times the rated motor current."

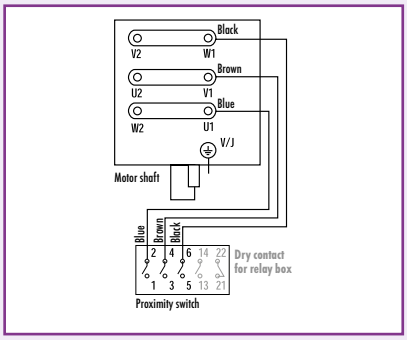
Attention: check the direction of rotation of the turbine.

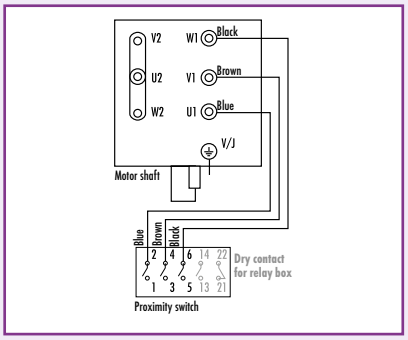
Important: when starting the fan, to avoid overheating the motor, make sure that the current consumption remains below the recommended maximum current.

ADJUSTING THE BELT TENSION

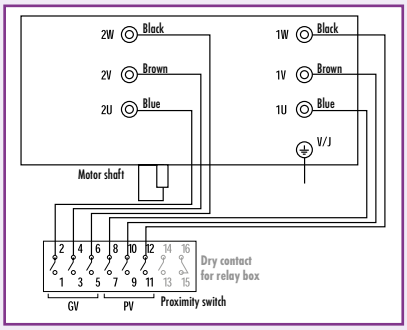
- Using a 19 or 22 mm wrench, move the motor along its rail.
- The length of the belt between the two orange marks should be equal to the value indicated on the belt.

ELECTRICAL CONNECTIONS

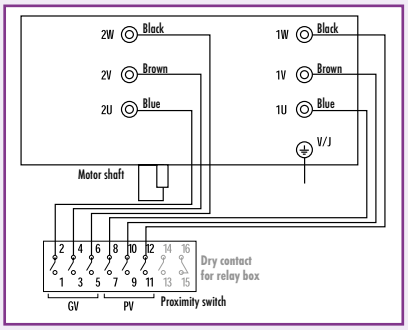




1-speed 3-P 230V1-speed 3-P 400V



2-speed Dahlander 3-P 400V



2-speed BI 3-P 400V

CYCLONE F400 smoke extraction casing

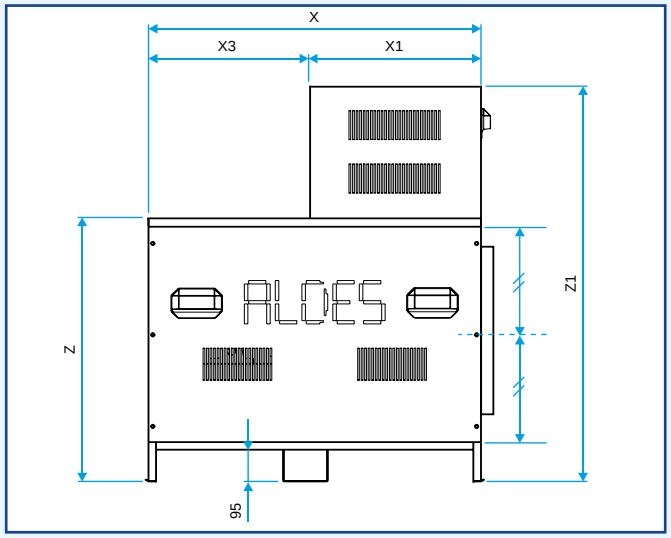
Presentation of the CYCLONE F400 range (120)

Cyclone F400 with the 'All-In-One' option.

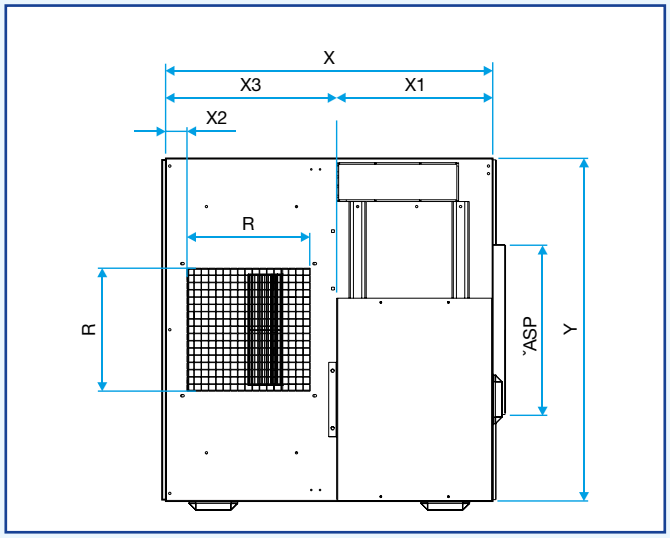
Advantages

- Minimal floor occupation dimensions.
- Horizontal or vertical discharge.
- Simplification of belt tension adjustment by the use of slide-mountings for the motor.
- Markings on the belt to guarantee the correct settings.
- Working at man-height.

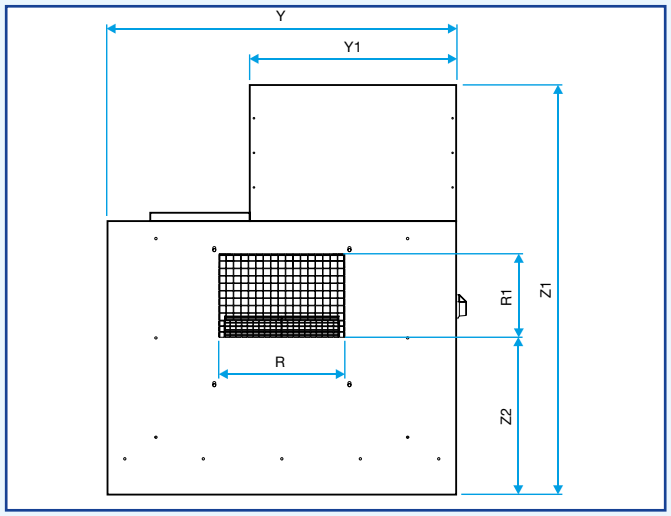
DIMENSIONS (mm)
CYCLONE F400 - types 225 to 355



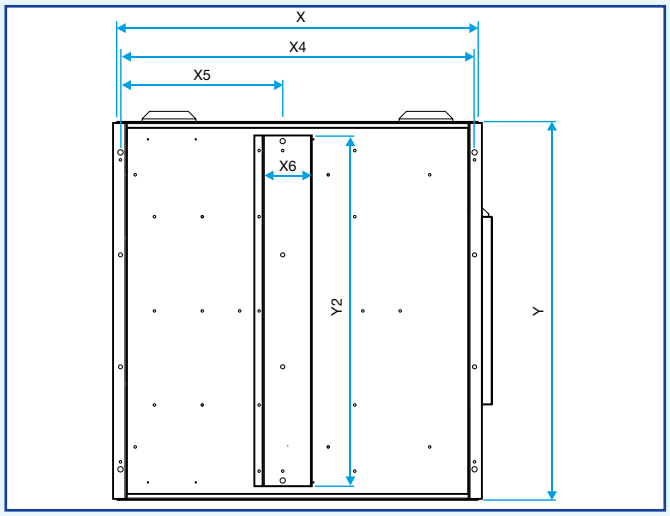
Front view



Top view



Side view



Floor coverage and fixings

Type	Horizontal & vertical exhaust flow													Horizontal exhaust flow			Vertical exhaust flow		
	X	X2	X4	X6	Y	Y1	Y2	Z	Z1	Z2	R	R1	Ø ASP	X1	X3	X5	X1	X3	X5
225	870	59	850	-	841	520	-	672	1024	391	300	210	400	450	420	-	450	420	-
250	915	65	895	-	944	600	-	732	1165	437	321	233	450	502	413	-	462	453	-
280	968	64	948	130	1014	600	939	792	1225	455	364	262	500	502	466	447	462	506	575
315	1070	64	1050	112	1162	680	1087	882	1390	518	407	288	560	548	522	459	503	567	569
355	1105	65	1085	112	1256	680	1181	972	1480	520	453	330	630	548	557	521	503	602	631

CYCLONE F400 smoke extraction casing

CE

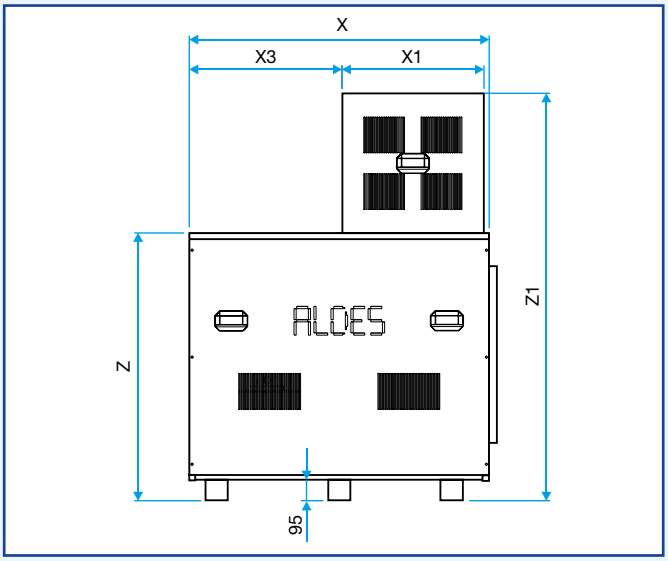
Presentation of the CYCLONE F400 range (120)

Cyclone F400 with proximity switch option.

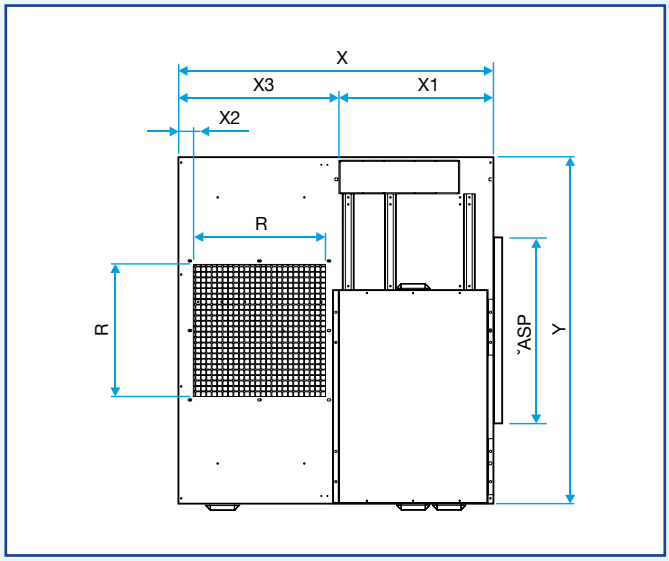
Advantages

- Minimal floor occupation dimensions.
- Horizontal or vertical discharge.
- Simplification of belt tension adjustment by the use of slide-mountings for the motor.
- Markings on the belt to guarantee the correct settings.
- Working at man-height.

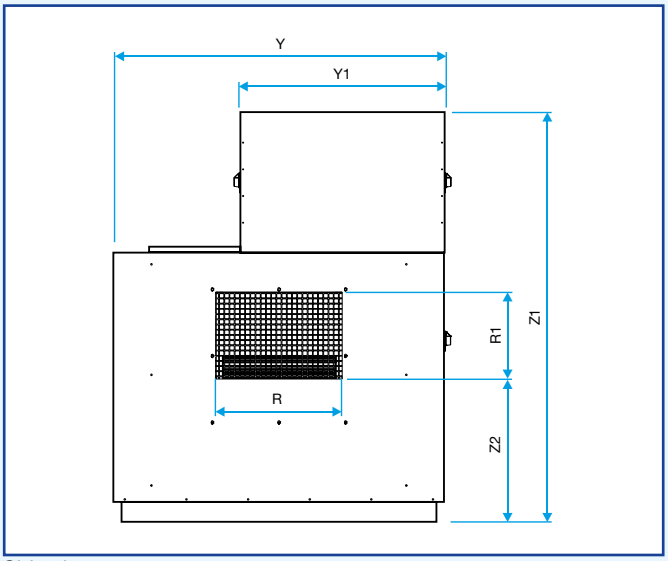
DIMENSIONS (mm)
CYCLONE F400 - types 400 to 500



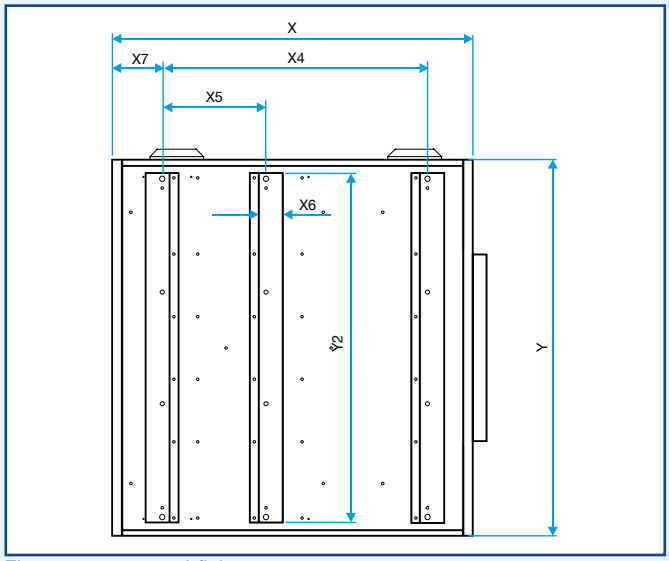
Front view



Top view



Side view



Floor coverage and fixings

Type	Horizontal & vertical exhaust flow															Horizontal exhaust flow		Vertical exhaust flow	
	X	X1	X2	X3	X5	X6	Y	Y1	Y2	Z	Z1	Z2	R	R1	Ø ASP	X4	X7	X4	X7
400	1205	553	65	629	379	90	1370	780	1295	1092	1600	498	507	346	710	875	187	786	277
450	1357	643	65	691	554	102	1492	920	1417	1212	1844	554	569	392	800	1062	137	961	238
500	1495	683	65	919	554	113	1621	920	1546	1332	1964	580	638	460	800	1148	173	1036	285

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 225

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One proximity switch option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 1,000 and 5,000 m³/h.
- Adjustable pulley as standard.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 225 A 1.1 kW	11039000
Cyclone 225 A 1.5 kW	11039001
Cyclone 225 A 2.2 kW	11039002
Cyclone 225 B 1.1 kW	11039003
Cyclone 225 B 1.5 kW	11039004
Cyclone F400 2-speed Dahlander	
Cyclone 225 A - 2-speed Dahlander 1.2 kW / 0.3 kW	11039100
Cyclone 225 A - 2-speed Dahlander 1.6 kW / 0.4 kW	11039101
Cyclone 225 A - 2-speed Dahlander 2.2 kW / 0.55 kW	11039102
Cyclone 225 B - 2-speed Dahlander 1.2 kW / 0.3 kW	11039103
Cyclone 225 B - 2-speed Dahlander 1.6 kW / 0.4 kW	11039104
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 225 A - 2-speed BI 1.1 kW / 0.3 kW	11039200
Cyclone 225 A - 2-speed BI 1.5 kW / 0.37 kW	11039201
Cyclone 225 A - 2-speed BI 2.2 kW / 0.7 kW	11039202
Cyclone 225 B - 2-speed BI 1.1 kW / 0.3 kW	11039203
Cyclone 225 B - 2-speed BI 1.5 kW / 0.37 kW	11039204

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 870 x 1024 x 841 mm.
For other dimensions, see the drawings on Page 28.

ELECTRICAL CHARACTERISTICS - WEIGHT

Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
225 A	4	1.1	230/400	2.6	3.0	5.6	116
225 A	4	1.5	230/400	3.3	3.9	5.5	120
225 A	4	2.2	230/400	4.8	5.4	5.6	124
225 B	4	1.1	230/400	2.6	3.0	5.6	116
225 B	4	1.5	230/400	3.3	3.9	5.5	120
Cyclone F400 2-speed Dahlander							
225 A2 Dahl	4/8	1.2/0.3	400	2.9/1.3	3.1/1.4	5.5/3.1	119
225 A2 Dahl	4/8	1.6/0.4	400	3.8/2.3	4.4/2.5	5.5/3.2	122
225 A2 Dahl	4/8	2.2/0.55	400	5.1/2.5	5.7/2.7	5.6/3.2	126
225 B2 Dahl	4/8	1.2/0.3	400	2.9/1.3	3.1/1.4	5.5/3.1	119
225 B2 Dahl	4/8	1.6/0.4	400	3.8/2.3	4.4/2.5	5.5/3.2	122
Cyclone F400 2-speed Independent Coils (BI)							
225 A2 BI	4/6	1.1/0.30	400	3/1.04	3.3/1.2	5.4/4	119
225 A2 BI	4/6	1.5/0.37	400	3.7/1.6	3.9/1.8	5.5/4.5	122
225 A2 BI	4/6	2.2/0.70	400	4.9/2.5	6.1/2.8	6/5.5	126
225 B2 BI	4/6	1.1/0.30	400	3/1.4	3.3/1.3	5.4/4	119
225 B2 BI	4/6	1.5/0.37	400	3.7/1.6	3.9/1.8	5.5/4.5	122

CYCLONE F400 (120): type 225

AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- For casings with connected exhaust ducts (in attic spaces for example), select a casing so that:

  DP network (up & downstream) = Ps - Pd + C

  Note: Do not forget the pressure drop from the network downstream of the fan, which can be notably high.

  Example:

  Q = 3600m³/h

  Read, from the straight scale Pd = 40 Pa and from the table C = 200 Pa.

  DP upstream network = 500 Pa

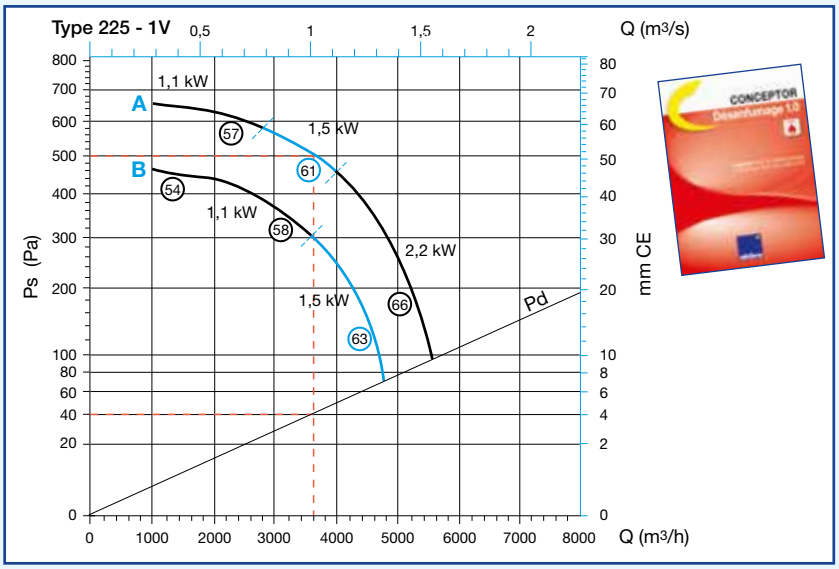
  DP downstream network = 150 Pa

  => DP network (down+upstream) = 650 Pa

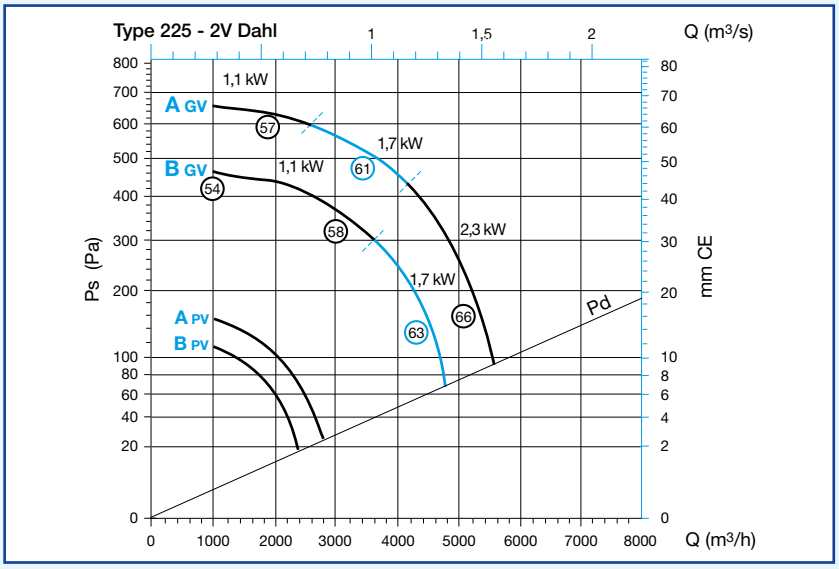
  Calculate the corresponding Ps for casing selection:

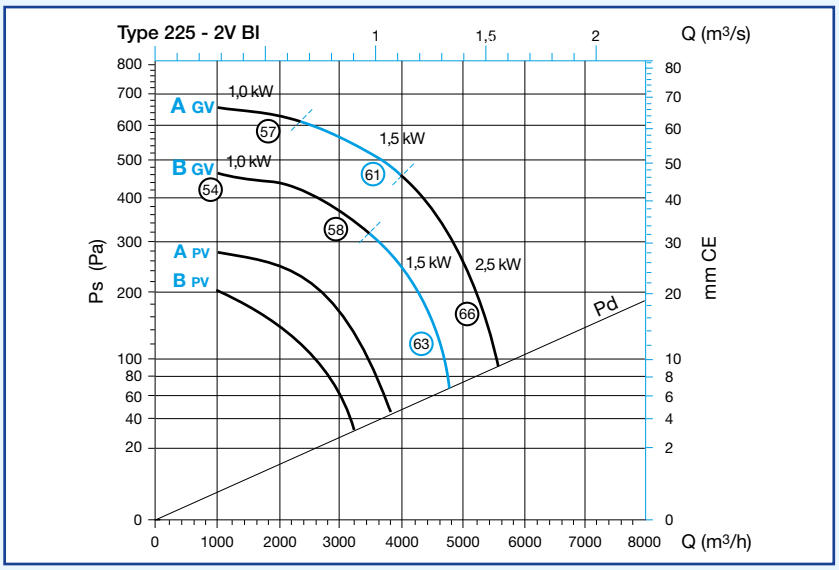
  Ps = DP network + Pd - C = 650 + 40 - 200 = 490 Pa

  => CYCLONE F400 225 A 1.5 kW.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	1000	2000	3000	4000	5000
C (Pa)	15	59	132	235	367





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 225	OPT39323
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed BI < 8 kW	OPT39311
1-speed proximity switch max. 6.5 kW	OPT39315
2-speed proximity switch max. 6.5 kW	OPT39318
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 400	11096938
Flexible sleeve (Exhaust) D 225	11039331
Flexible adapter (Exhaust) Type 225	11039339
Anti-vibration mounting 4 parts	11039347

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 250

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 1,000 and 7,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 250 A 3.0 kW	11039005
Cyclone 250 A 4.0 kW	11039006
Cyclone 250 A 5.5 kW	11039007
Cyclone 250 B 2.2 kW	11039009
Cyclone 250 B 3.0 kW	11039010
Cyclone 250 C 1.5 kW	11039011
Cyclone 250 C 2.2 kW	11039012
Cyclone 250 C3.0 kW	11039013
Cyclone F400 2-speed Dahlander	
Cyclone 250 A - 2-speed Dahlander 2.8 kW / 0.7 kW	11039105
Cyclone 250 A - 2-speed Dahlander 5 kW / 1.3 kW	11039107
Cyclone 250 B - 2-speed Dahlander 2.2 kW / 0.55 kW	11039109
Cyclone 250 B - 2-speed Dahlander 2.8 kW / 0.7 kW	11039110
Cyclone 250 C - 2-speed Dahlander 1.6 kW / 0.4 kW	11039111
Cyclone 250 C - 2-speed Dahlander 2.2 kW / 0.55 kW	11039112
Cyclone 250 C - 2-speed Dahlander 2.8 kW / 0.7 kW	11039113
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 250 A - 2-speed BI 3 kW / 1 kW	11039205
Cyclone 250 A - 2-speed BI 4.5 kW / 1.5 kW	11039206
Cyclone 250 A - 2-speed BI 6 kW / 2.2 kW	11039207
Cyclone 250 B - 2-speed BI 2.2 kW / 0.7 kW	11039209
Cyclone 250 B - 2-speed BI 3 kW / 1 kW	11039210
Cyclone 250 C - 2-speed BI 1.5 kW / 0.37 kW	11039211
Cyclone 250 C - 2-speed BI 2.2 kW / 0.7 kW	11039212
Cyclone 250 C - 2-speed BI 3 kW / 1 kW	11039213

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 915 x 1165 x 944 mm.
For other dimensions, see the drawings on Page 28.

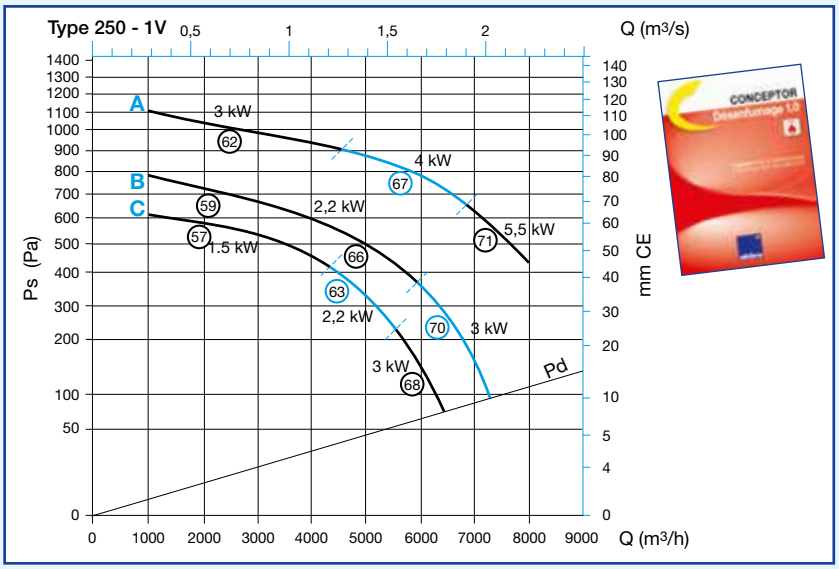
ELECTRICAL CHARACTERISTICS - WEIGHT

Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
250 A	4	3.0	230/400	6.5	7.3	6	154
250 A	4	4.0	230/400	8.2	9.2	6.2	157
250 A	4	5.5	230/400	11	12.7	6.5	170
250 B	4	2.2	230/400	4.8	5.4	5.6	150
250 B	4	3.0	230/400	6.5	7.3	6	154
250 C	4	1.5	230/400	3.4	3.9	5.5	157
250 C	4	2.2	230/400	4.8	5.4	5.6	150
250 C	4	3.0	230/400	6.5	7.3	6	154
Cyclone F400 2-speed Dahlander							
250 A2 Dahl	4/8	2.8/0.7	400	5.6/2.9	6.5/3.2	5.5/4.1	158
250 A2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11/3.8	8.5/6.2	182
250 B2 Dahl	4/8	2.2/0.55	400	5.1/2.5	5.7/2.8	5.6/3.2	152
250 B2 Dahl	4/8	2.8/0.7	400	5.6/2.9	6.5/3.2	5.5/4.1	158
250 C2 Dahl	4/8	1.6/0.4	400	3.8/2.2	4.4/2.4	5.5/3.2	148
250 C2 Dahl	4/8	2.2/0.55	400	5.1/2.5	5.7/2.8	5.6/3.2	152
250 C2 Dahl	4/8	2.8/0.7	400	5.6/2.9	6.5/3.2	5.5/4.1	158
Cyclone F400 2-speed Independent Coils (BI)							
250 A2 BI	4/6	3.0/1.00	400	6.9/3.9	7.5/4.4	7.6/6.2	158
250 A2 BI	4/6	4.5/1.50	400	10.2/5.4	11.1/5.8	7.5/7	182
250 A2 BI	4/6	6.0/2.2	400	13.7/7	14/7.7	7.8/7.4	193
250 B2 BI	4/6	2.2/0.70	400	4.9/2.5	5.4/2.8	6/5.5	152
250 B2 BI	4/6	3.0/1.00	400	6.9/3.9	7.5/4.4	7.6/6.2	158
250 C2 BI	4/6	1.5/0.37	400	3.7/1.6	4/1.8	5.5/4.5	148
250 C2 BI	4/6	2.2/0.70	400	4.9/2.5	5.4/2.8	6/5.5	152
250 C2 BI	4/6	3.0/1.00	400	6.9/3.9	7.5/4.4	7.6/6.2	158

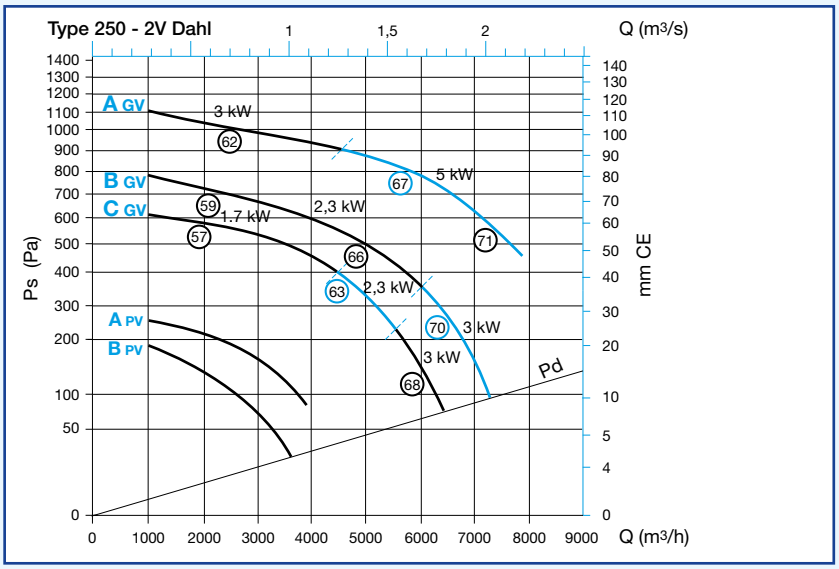
CYCLONE F400 (120): type 250

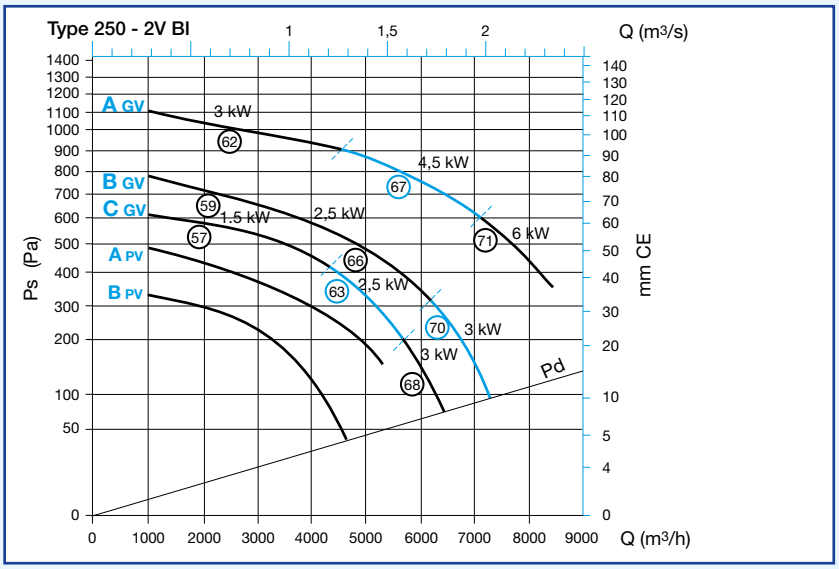
AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $$\Delta P_{network} = P_s$$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $$\Delta P_{network} = P_s - P_d + C$$
    C: connected exhaust correction.
    Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	1000	2000	3000	4000	5000	6000	7000	8000
C (Pa)	10	39	89	157	246	354	482	630





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 250	OPT39324
Adjustable pulley 250-280	OPT39350
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed BI < 8 kW	OPT39311
1-speed proximity switch max. 6.5 kW	OPT39315
2-speed proximity switch max. 6.5 kW	OPT39318
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 450	11096939
Flexible sleeve (Exhaust) D 250	11039332
Flexible adapter (Exhaust) Type 250	11039340
Anti-vibration mounting 4 parts	11039347

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 280

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 2,000 and 10,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 280 A 4.0 kW	11039014
Cyclone 280 A 5.5 kW	11039015
Cyclone 280 A 7.5 kW	11039016
Cyclone 280 B 3.0 kW	11039017
Cyclone 280 B 4.0 kW	11039018
Cyclone F400 2-speed Dahlander	
Cyclone 280 A - 2-speed Dahlander 3.8 kW / 1 kW	11039114
Cyclone 280 A - 2-speed Dahlander 5 kW / 1.3 kW	11039115
Cyclone 280 A - 2-speed Dahlander 7.2 kW / 1.8 kW	11039116
Cyclone 280 B - 2-speed Dahlander 3.8 kW / 1 kW	11039118
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 280 A - 2-speed BI 4.5 kW / 1.5 kW	11039214
Cyclone 280 A - 2-speed BI 6 kW / 2.2 kW	11039215
Cyclone 280 B - 2-speed BI 3 kW / 1 kW	11039217
Cyclone 280 A - 2-speed BI 4.5 kW / 1.5 kW	11039218

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 968 x 1225 x 1014 mm.
For other dimensions, see the drawings on Page 28.

ELECTRICAL CHARACTERISTICS - WEIGHT

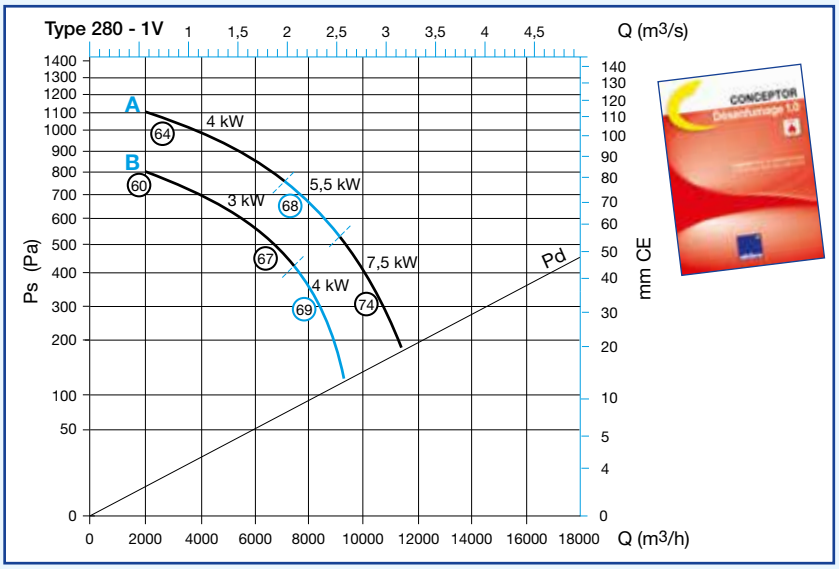
Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
280 A	4	4.0	230/400	8.2	9.2	6.2	181
280 A	4	5.5	230/400	11	12.7	6.5	194
280 A	4	7.5	230/400	14.8	16.8	6.7	202
280 B	4	3.0	230/400	6.5	7.3	6	178
280 B	4	4.0	230/400	8.2	9.2	6.2	181
Cyclone F400 2-speed Dahlander							
280 A2 Dahl	4/8	3.8/1	400	8.46/3.95	9.3/4.4	7.5/4.8	164
280 A2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.4/3.9	8.5/6.2	182
280 A2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.8/5.6	7.9/4.2	193
280 B2 Dahl	4/8	3.8/1	400	8.46/3.95	9.3/4.4	7.5/4.8	164
Cyclone F400 2-speed Independent Coils (BI)							
280 A2 BI	4/6	4.5/1.5	400	10.2/5.4	11.2/5.9	7.5/7	182
280 A2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	193
280 B2 BI	4/6	3.0/1.0	400	6.9/3.9	7.5/4.3	7.6/6.2	158
280 B2 BI	4/6	4.5/1.5	400	10.2/5.4	11.2/5.9	7.5/7	182

CYCLONE F400 (120): type 280

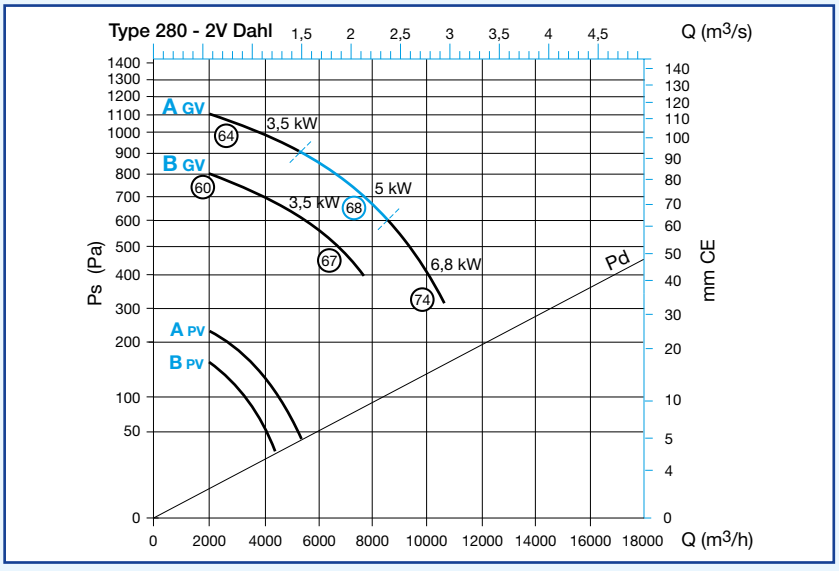
AIRFLOW AND ACOUSTIC CHARACTERISTICS

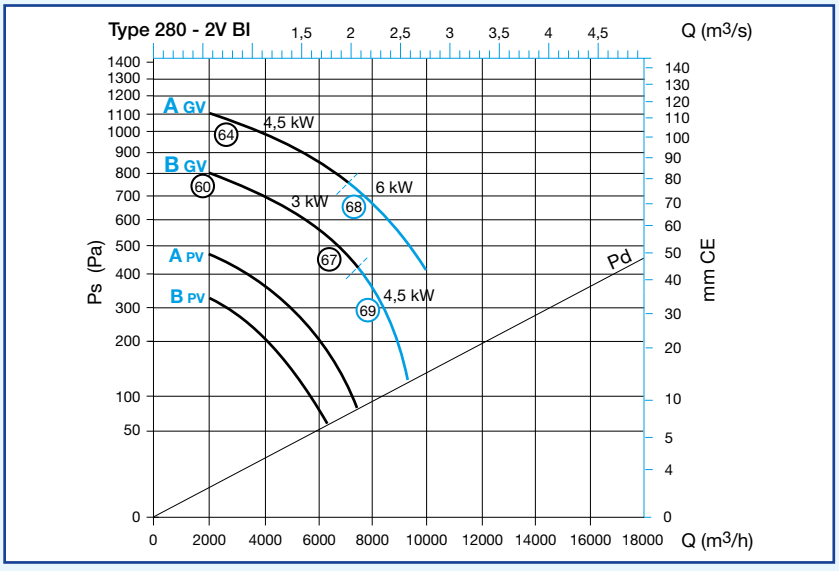
- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction.
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the **fan**.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	2000	4000	6000	8000	10000
C (Pa)	24	95	213	379	592





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 280	OPT39325
Adjustable pulley 250-280	OPT39350
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed BI < 8 kW	OPT39311
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 500	11096940
Flexible sleeve (Exhaust) D 280	11039333
Flexible adapter (Exhaust) Type 280	11039341
Anti-vibration mounting 6 parts	11039348

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 315

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 2,000 and 12,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 315 A 5.5 kW	11039019
Cyclone 315 A 7.5 kW	11039020
Cyclone 315 A 11 kW	11039021
Cyclone 315 B 4.0 kW	11039022
Cyclone 315 B 5.5 kW	11039023
Cyclone 315 B 7.5 kW	11039024
Cyclone F400 2-speed Dahlander	
Cyclone 315 A - 2-speed Dahlander 5 kW / 1.3 kW	11039119
Cyclone 315 A - 2-speed Dahlander 7.2 kW / 1.8 kW	11039120
Cyclone 315 A - 2-speed Dahlander 11 kW / 3 kW	11039121
Cyclone 315 B - 2-speed Dahlander 3.8 kW / 1 kW	11039122
Cyclone 315 B - 2-speed Dahlander 5 kW / 1.3 kW	11039123
Cyclone 315 B - 2-speed Dahlander 7.2 kW / 1.8 kW	11039124
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 315 A - 2-speed BI 6 kW / 2.2 kW	11039219
Cyclone 315 A - 2-speed BI 10 kW / 3.3 kW	11039221
Cyclone 315 B - 2-speed BI 4.5 kW / 1.5 kW	11039222
Cyclone 315 B - 2-speed BI 6 kW / 2.2 kW	11039223

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 1070 x 1390 x 1162 mm.
For other dimensions, see the drawings on Page 28.

ELECTRICAL CHARACTERISTICS - WEIGHT

Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
315 A	4	5.5	230/400	11	12.7	6.5	232
315 A	4	7.5	230/400	14.8	16.8	6.7	240
315 A	4	11.0	230/400	22.1	23.7	6	367
315 B	4	4.0	230/400	8.2	9.2	6.2	219
315 B	4	5.5	230/400	11	12.7	6.5	232
315 B	4	7.5	230/400	14.8	16.8	6.7	240
Cyclone F400 2-speed Dahlander							
315 A2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.5/3.9	8.5/6.2	244
315 A2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.5/5.6	7.9/4.2	255
315 A2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	292
315 B2 Dahl	4/8	3.8/1	400	8.5/4	9.3/4.4	7.5/4.8	226
315 B2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.5/3.9	8.5/6.2	244
315 B2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.5/5.6	7.9/4.2	255
Cyclone F400 2-speed Independent Coils (BI)							
315 A2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	255
315 A2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	292
315 B2 BI	4/6	4.5/1.5	400	10.2/5.4	11.1/5.9	7.5/7	244
315 B2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	255

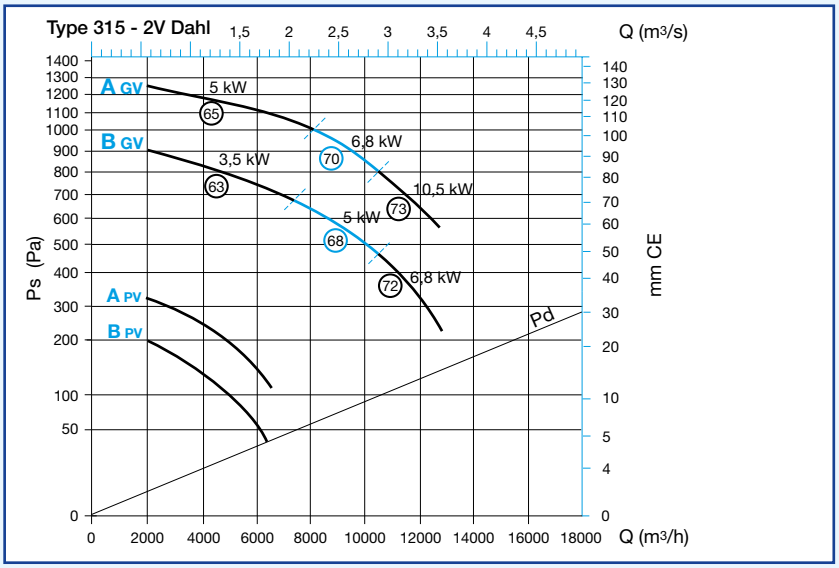
CYCLONE F400 (120): type 315

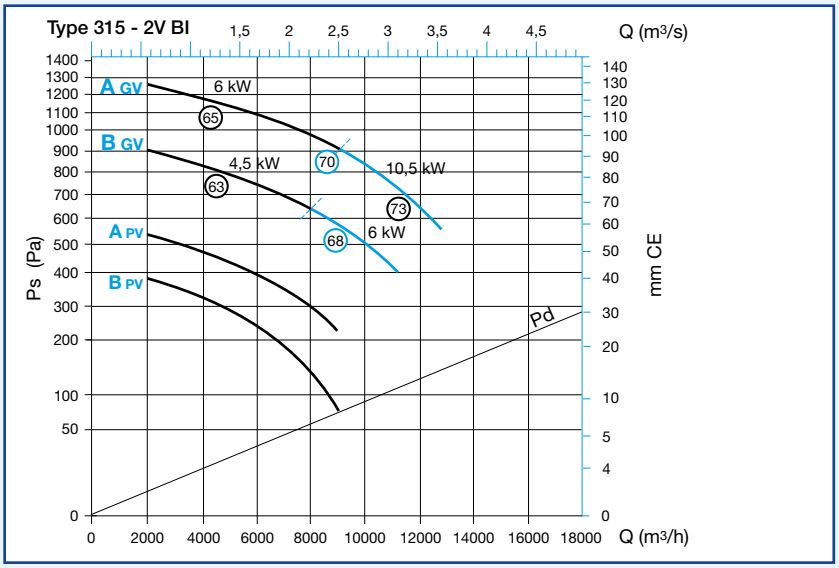
AIRFLOW AND ACOUSTIC CHARACTERISTICS

- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction.
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).

Q (m³/h)	2000	4000	6000	8000	10000	12000
C (Pa)	15	61	137	244	381	548





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 315	OPT39326
Adjustable pulley 315-355	OPT39351
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 1-speed < 13 kW	OPT39304
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed Dahl < 13 kW	OPT39308
All-in-One 2-speed BI < 8 kW	OPT39311
All-in-One 2-speed BI < 13 kW	OPT39312
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 560	11096941
Flexible sleeve (Exhaust) D 315	11039334
Flexible adapter (Exhaust) Type 315	11039342
Anti-vibration mounting 6 parts	11039348

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 355

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 2,000 and 14,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 355 A 7.5 kW	11039025
Cyclone 355 A 11 kW	11039026
Cyclone 355 B 5.5 kW	11039027
Cyclone 355 B 7.5 kW	11039028
Cyclone 355 C 4.0 kW	11039029
Cyclone 355 C 5.5 kW	11039030
Cyclone 355 C 7.5 kW	11039031
Cyclone F400 2-speed Dahlander	
Cyclone 355 A - 2-speed Dahlander 7.2 kW/1.8 kW	11039125
Cyclone 355 A - 2-speed Dahlander 11 kW/3 kW	11039126
Cyclone 355 B - 2-speed Dahlander 5 kW/1.3 kW	11039127
Cyclone 355 B - 2-speed Dahlander 7.2 kW/1.8 kW	11039128
Cyclone 355 C - 2-speed Dahlander 3.8 kW/1 kW	11039129
Cyclone 355 C - 2-speed Dahlander 5 kW/1.3 kW	11039130
Cyclone 355 C - 2-speed Dahlander 7.2 kW/1.8 kW	11039131
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 355 A - 2-speed - BI 10 kW/3.3 kW	11039226
Cyclone 355 B - 2-speed - BI 6 kW/2.2 kW	11039227
Cyclone 355 C - 2-speed - BI 4.5 kW/1.5 kW	11039229
Cyclone 355 C - 2-speed - BI 6 kW/2.2 kW	11039230

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 1105 x 1480 x 1256 mm.
For other dimensions, see the drawings on Page 28.

ELECTRICAL CHARACTERISTICS - WEIGHT

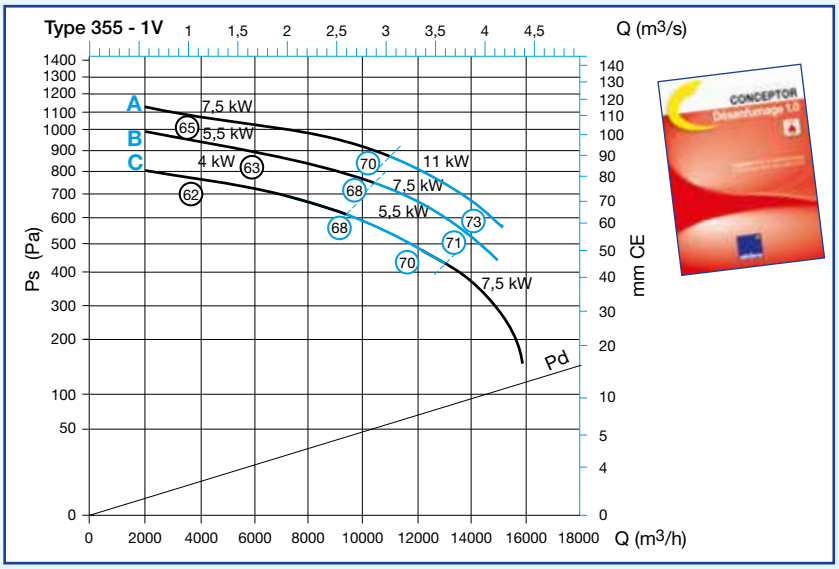
Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
355 A	4	7.5	230/400	14.8	16.8	6.7	273
355 A	4	11.0	230/400	22.1	23.7	6	300
355 B	4	5.5	230/400	11	12.7	6.5	265
355 B	4	7.5	230/400	14.8	16.8	6.7	273
355 C	4	4.0	230/400	8.2	9.2	6.2	252
355 C	4	5.5	230/400	11	12.7	6.5	265
355 C	4	7.5	230/400	14.8	16.8	6.7	273
Cyclone F400 2-speed Dahlander							
355 A2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.5/5.6	7.9/4.2	288
355 A2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	325
355 B2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.4/3.9	8.5/6.2	277
355 B2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.5/5.6	7.9/4.2	288
355 C2 Dahl	4/8	3.8/1	400	8.5/4	9.3/4.4	7.5/4.8	259
355 C2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.4/3.9	8.5/6.2	277
355 C2 Dahl	4/8	7.2/1.8	400	16.5/5.1	17.5/5.6	7.9/4.2	288
Cyclone F400 2-speed Independent Coils (BI)							
355 A2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	325
355 B2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	288
355 C2 BI	4/6	4.5/1.5	400	10.2/5.4	11.2/5.9	7.5/7	277
355 C2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	288

CYCLONE F400 (120): type 355

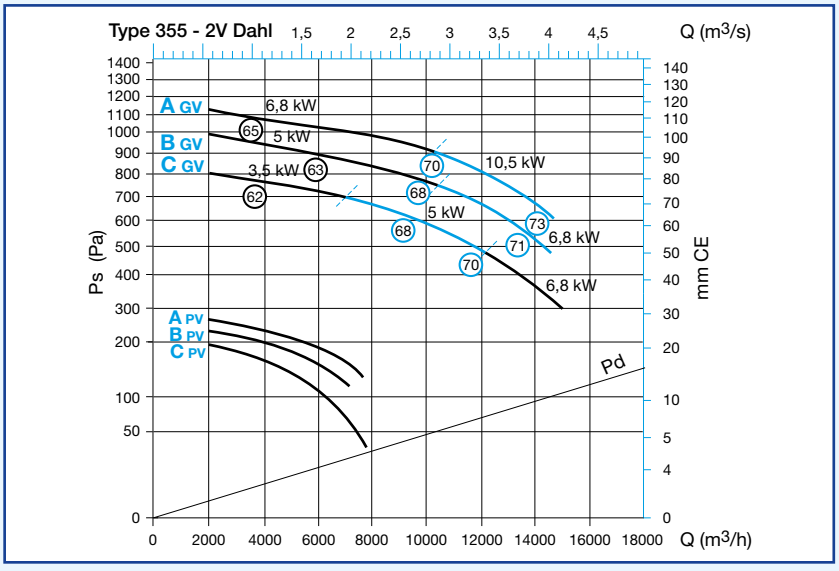
AIRFLOW AND ACOUSTIC CHARACTERISTICS

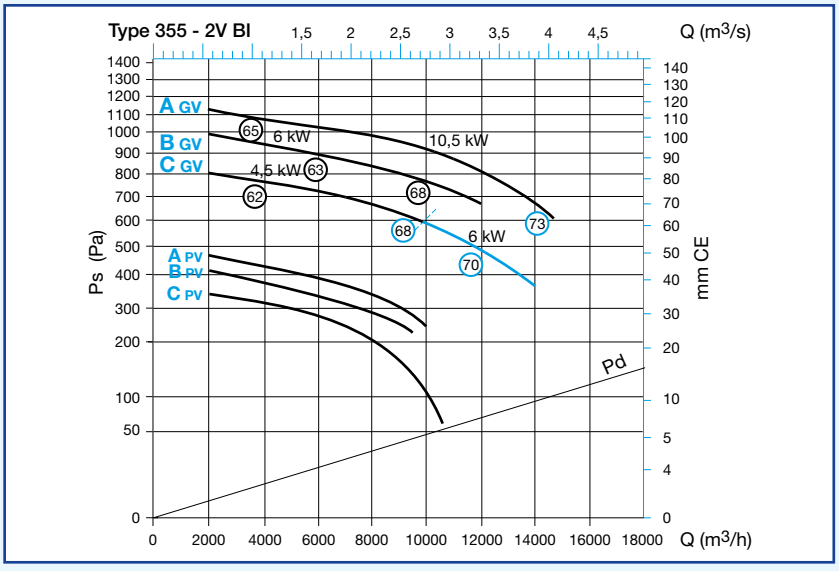
- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust
  - Ps: Static inlet pressure
  - Pd: Dynamic pressure in inlet duct
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	2000	4000	6000	8000	10000	12000	14000
C (Pa)	9	37	83	147	230	332	451





Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 355	OPT39327
Adjustable pulley 315-355	OPT39351
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 1-speed < 13 kW	OPT39304
All-in-One 1-speed < 23 kW	OPT39305
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed Dahl < 13 kW	OPT39308
All-in-One 2-speed BI < 8 kW	OPT39311
All-in-One 2-speed BI < 13 kW	OPT39312
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 630	11096942
Flexible sleeve (Exhaust) D 355	11039335
Flexible adapter (Exhaust) Type 355	11039343
Anti-vibration mounting 6 parts	11039348

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 400

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 2,000 and 20,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 400 A - 7.5 kW	11039032
Cyclone 400 A - 11 kW	11039033
Cyclone 400 A - 15 kW	11039034
Cyclone 400 B - 5.5 kW	11039035
Cyclone 400 B - 7.5 kW	11039036
Cyclone 400 B - 11 kW	11039037
Cyclone 400 C - 4.0 kW	11039038
Cyclone 400 C - 5.5 kW	11039039
Cyclone 400 C - 7.5 kW	11039040
Cyclone F400 2-speed Dahlander	
Cyclone 400 A - 2V Dahlander 7.2 kW/1.8 kW	11039132
Cyclone 400 A - 2V Dahlander 11 kW/3 kW	11039133
Cyclone 400 A - 2V Dahlander 14 kW/3.5 kW	11039134
Cyclone 400 B - 2V Dahlander 5 kW/1.3 kW	11039135
Cyclone 400 B - 2V Dahlander 7.2 kW/1.8 kW	11039136
Cyclone 400 B - 2V Dahlander 11 kW/3 kW	11039137
Cyclone 400 C - 2V Dahlander 3.8 kW/1 kW	11039138
Cyclone 400 C - 2V Dahlander 5 kW/1.3 kW	11039139
Cyclone 400 C - 2V Dahlander 7.2 kW/1.8 kW	11039140
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 400 A - 2-speed BI 10 kW / 3.3 kW	11039233
Cyclone 400 A - 2-speed BI 16 kW / 6.5 kW	11039234
Cyclone 400 B - 2-speed BI 6 kW / 2.2 kW	11039235
Cyclone 400 B - 2-speed BI 10 kW / 3.3 kW	11039237
Cyclone 400 C - 2-speed BI 4.5 kW / 1.5 kW	11039238
Cyclone 400 C - 2-speed BI 6 kW / 2.2 kW	11039239

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 1205 x 1600 x 1370 mm.
For other dimensions, see the drawings on Page 29.

ELECTRICAL CHARACTERISTICS - WEIGHT

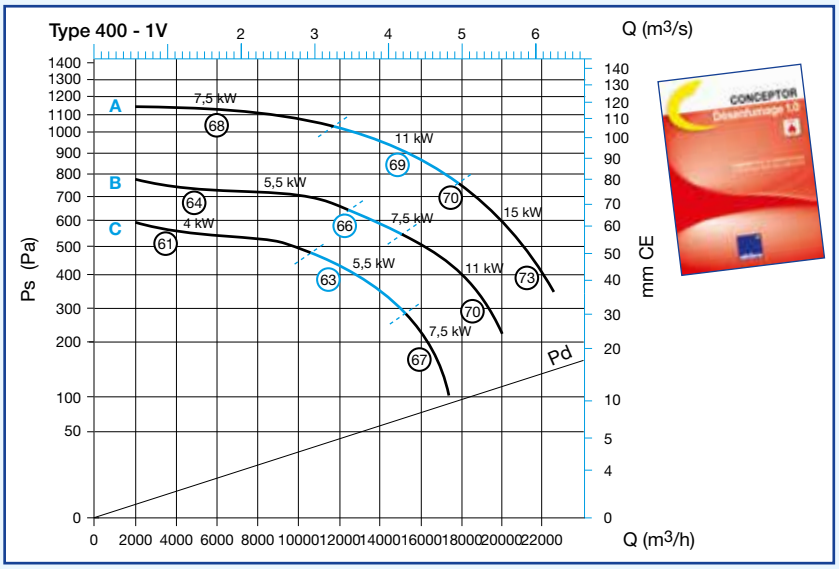
Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
400 A	4	7.5	230/400	14.8	16.8	6.7	352
400 A	4	11.0	230/400	22.1	23.7	6	379
400 A	4	15.0	230/400	29.1	33.0	5.8	398
400 B	4	5.5	230/400	11	12.7	6.5	344
400 B	4	7.5	230/400	14.8	16.8	6.7	352
400 B	4	11.0	230/400	22.1	23.7	6	379
400 C	4	4.0	230/400	8.2	9.2	6.2	331
400 C	4	5.5	230/400	11	12.7	6.5	344
400 C	4	7.5	230/400	14.8	16.8	6.7	352
Cyclone F400 2-speed Dahlander							
400 A2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	367
400 A2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	404
400 A2 Dahl	4/8	14/3.5	400	26.5/8.5	30/9.4	7.2/4.2	427
400 B2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.4/3.8	8.5/6.2	356
400 B2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	367
400 B2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	404
400 C2 Dahl	4/8	3.8/1	400	8.5/4	9.3/4.4	7.5/4.8	338
400 C2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.4/3.8	8.5/6.2	356
400 C2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	367
Cyclone F400 2-speed Independent Coils (BI)							
400 A2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	404
400 A2 BI	4/6	16.0/6.5	400	28.4/12.5	31/13.8	8.5/7.6	427
400 B2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	367
400 B2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	404
400 C2 BI	4/6	4.5/1.5	400	10.2/5.4	11.1/5.9	7.5/7	356
400 C2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	367

CYCLONE F400 (120): type 400

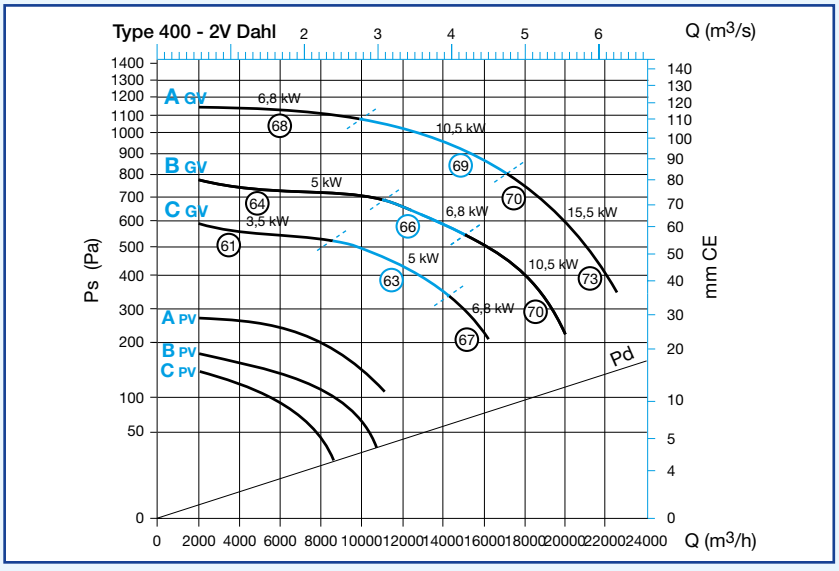
AIRFLOW AND ACOUSTIC CHARACTERISTICS

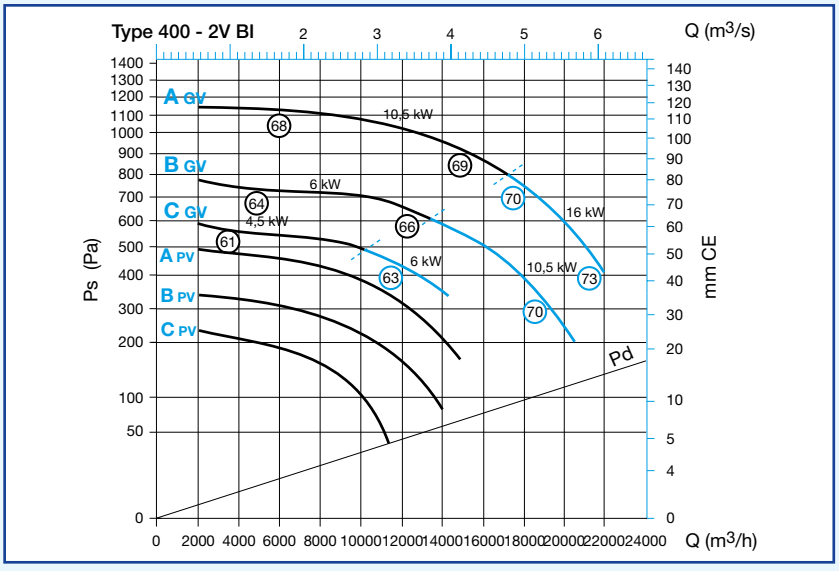
- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction.
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	2000	4000	6000	8000	10000	12000	14000	16000	18000	20000	22000
C (Pa)	6	24	53	94	147	212	288	376	476	588	712





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 400	OPT39328
Adjustable pulley 400	OPT39352
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 1-speed < 13 kW	OPT39304
All-in-One 1-speed < 23 kW	OPT39305
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed Dahl < 13 kW	OPT39308
All-in-One 2-speed Dahl < 23 kW	OPT39309
All-in-One 2-speed BI < 8 kW	OPT39311
All-in-One 2-speed BI < 13 kW	OPT39312
All-in-One 2-speed BI < 23 kW	OPT39313
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 710	11096930
Flexible sleeve (Exhaust) D 400	11039336
Flexible adapter (Exhaust) Type 400	11039344
Anti-vibration mounting 6 parts	11039348

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 450

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 4,000 and 24,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 450 A 7.5 kW	11039041
Cyclone 450 A 11 kW	11039042
Cyclone 450 A 15 kW	11039043
Cyclone 450 B 5.5 kW	11039044
Cyclone 450 B 7.5 kW	11039045
Cyclone 450 B 11 kW	11039046
Cyclone F400 2-speed Dahlander	
Cyclone 450 A - 2V Dahlander 7.2 kW/1.8 kW	11039141
Cyclone 450 A - 2V Dahlander 11 kW/3 kW	11039142
Cyclone 450 A - 2V Dahlander 14 kW / 3.5 kW	11039143
Cyclone 450 B - 2V Dahlander 5 kW / 1.3 kW	11039144
Cyclone 450 B - 2V Dahlander 7.2 kW/1.8 kW	11039145
Cyclone 450 B - 2V Dahlander 11 kW / 3 kW	11039146
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 450 A - 2-speed BI 10 kW / 3.3 kW	11039242
Cyclone 450 A - 2-speed BI 16 kW / 6.5 kW	11039243
Cyclone 450 B - 2-speed BI 6 kW / 2.2 kW	11039244
Cyclone 450 B - 2-speed BI 10 kW / 3.3 kW	11039246

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 1357 x 1844 x 1492 mm.
For other dimensions, see the drawings on Page 29.

ELECTRICAL CHARACTERISTICS - WEIGHT

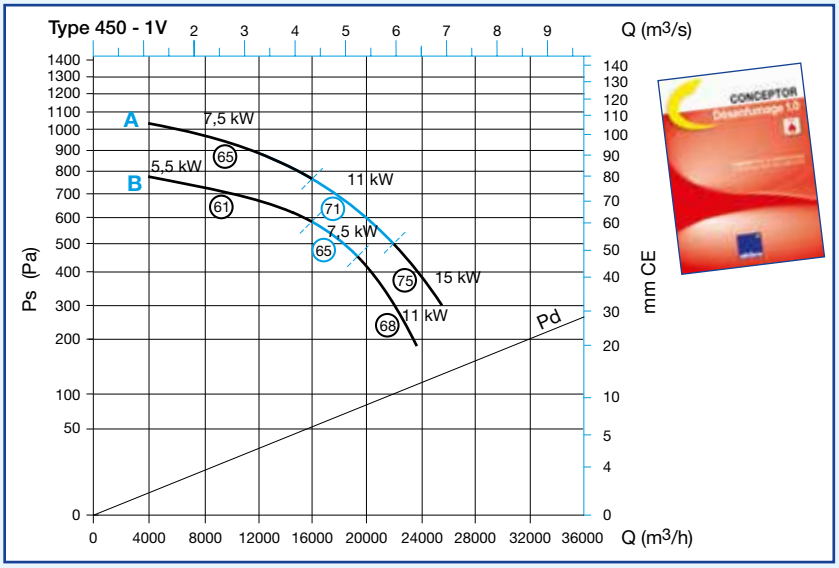
Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
450 A	4	7.5	230/400	14.8	16.8	6.7	458
450 A	4	11.0	230/400	22.1	23.7	6	485
450 A	4	15.0	230/400	29.1	33.0	5.8	504
450 B	4	5.5	230/400	11	12.7	6.5	450
450 B	4	7.5	230/400	14.8	16.8	6.7	458
450 B	4	11.0	230/400	22.1	23.7	6	485
Cyclone F400 2-speed Dahlander							
450 A2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	473
450 A2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	510
450 A2 Dahl	4/8	14/3.5	400	26.5/8.5	29/9.5	7.2/4.2	533
450 B2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.5/3.9	8.5/6.2	462
450 B2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	473
450 B2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	510
Cyclone F400 2-speed Independent Coils (BI)							
450 A2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	510
450 A2 BI	4/6	16.0/6.5	400	28.4/12.5	31/13.8	8.5/7.6	533
450 B2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	473
450 B2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	510

CYCLONE F400 (120): type 450

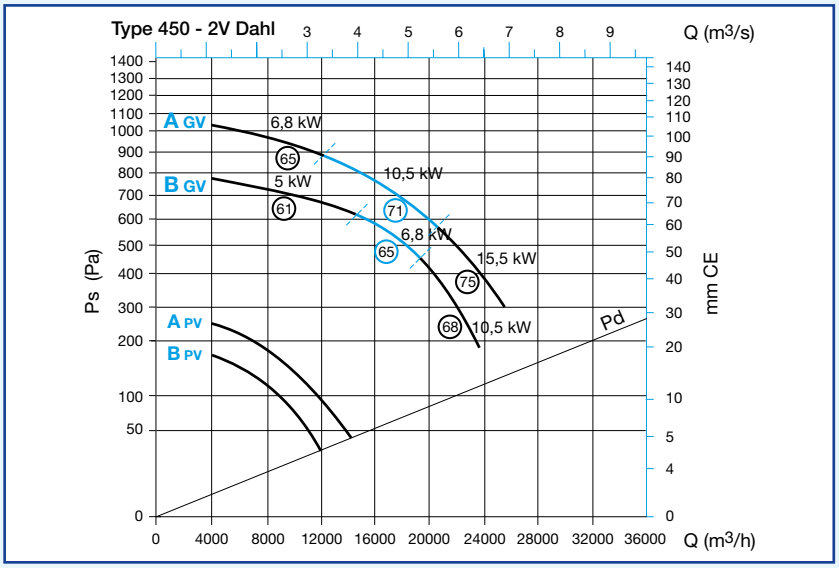
AIRFLOW AND ACOUSTIC CHARACTERISTICS

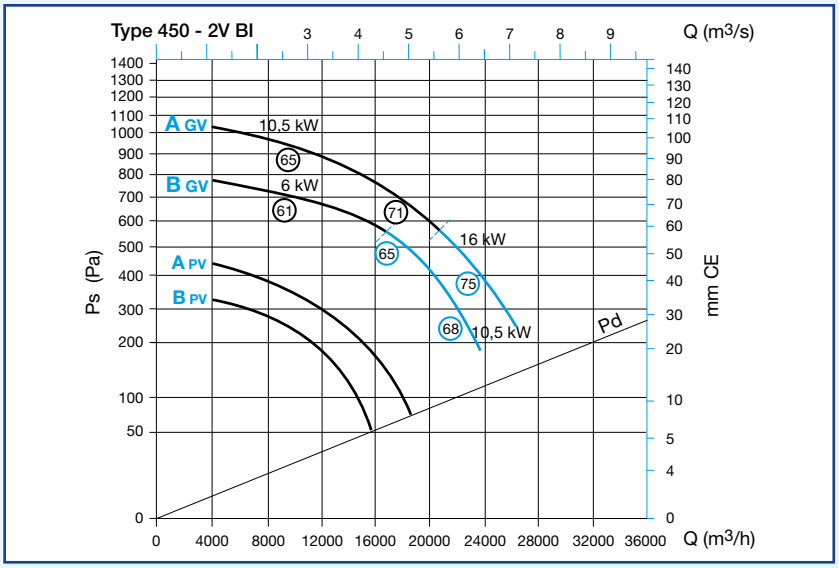
- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction.
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	4000	8000	12000	16000	20000	24000
C (Pa)	15	61	137	244	382	550





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 450	OPT39329
Adjustable pulley 450	OPT39353
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 1-speed < 13 kW	OPT39304
All-in-One 1-speed < 23 kW	OPT39305
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed Dahl < 13 kW	OPT39308
All-in-One 2-speed Dahl < 23 kW	OPT39309
All-in-One 2-speed BI < 8 kW	OPT39311
All-in-One 2-speed BI < 13 kW	OPT39312
All-in-One 2-speed BI < 23 kW	OPT39313
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
2-speed proximity switch max. 22 KW	OPT39320
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 800	11096931
Flexible sleeve (Exhaust) D 450	11039337
Flexible adapter (Exhaust) Type 450	11039345
Anti-vibration mounting 6 parts	11039348

CYCLONE F400 smoke extraction casing

CYCLONE F400 (120): type 500

Advantages

- Proximity switch option: simplified cabling for faster installation.
- All-in-One option: relay boxes, pressure switch(es) and proximity switches pre-cabled to save time on-site.
- Thermal isolation option: to avoid having to install CMEV systems in the attic spaces.

DESCRIPTION

- Airflow between 4,000 and 32,000 m³/h.

RANGE with choice of options

Description	Code
Cyclone F400 1-speed	
Cyclone 500 A 11 kW	11039047
Cyclone 500 A 15 kW	11039048
Cyclone 500 A 22 kW	11039049
Cyclone 500 B 7.5 kW	11039050
Cyclone 500 B 11 kW	11039051
Cyclone 500 B 15 kW	11039052
Cyclone 500 C 5.5 kW	11039053
Cyclone 500 C 7.5 kW	11039054
Cyclone 500 C 11 kW	11039055
Cyclone F400 2-speed Dahlander	
Cyclone 500 A - 2 V Dahlander 11 kW / 3 kW	11039147
Cyclone 500 A - 2 V Dahlander 14 kW / 3.5 kW	11039148
Cyclone 500 A - 2 V Dahlander 20 kW / 5 kW	11039149
Cyclone 500 B - 2 V Dahlander 7.2 kW / 1.8 kW	11039150
Cyclone 500 B - 2 V Dahlander 11 kW / 3 kW	11039151
Cyclone 500 B - 2 V Dahlander 14 kW / 3.5 kW	11039152
Cyclone 500 C - 2 V Dahlander 5 kW / 1.3 kW	11039153
Cyclone 500 C - 2 V Dahlander 7.2 kW / 1.8 kW	11039154
Cyclone 500 C - 2 V Dahlander 11 kW / 3 kW	11039155
Cyclone F400 2-speed Independent Coils (BI)	
Cyclone 500 A - 2-speed BI 10 kW / 3.3 kW	11039247
Cyclone 500 A - 2-speed BI 16 kW / 6.5 kW	11039248
Cyclone 500 A - 2-speed BI 20 kW / 8.5 kW	11039249
Cyclone 500 B - 2-speed BI 10 kW / 3.3 kW	11039251
Cyclone 500 B - 2-speed BI 16 kW / 6.5 kW	11039252
Cyclone 500 C - 2-speed BI 6 kW / 2.2 kW	11039253
Cyclone 500 C - 2-speed BI 10 kW / 3.3 kW	11039255

DIMENSIONS (mm)

Overall dimensions: width (X) x height (Z1) x depth (Y) = 1495 x 1964 x 1621 mm.
For other dimensions, see the drawings on Page 29.

ELECTRICAL CHARACTERISTICS - WEIGHT

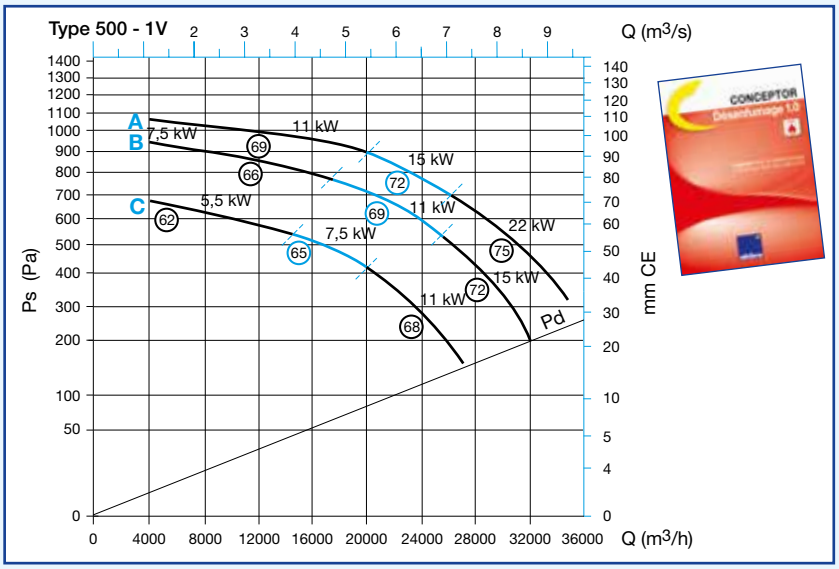
Type	Number of Poles	P (kW)	U (V)	IN (A)	Imax (A)	Id/IN	Weight (kg)
500 A	4	11.0	230/400	22.1	23.7	6	549
500 A	4	15.0	230/400	29.1	33.0	5.8	568
500 A	4	22.0	230/400	41	45.1	7	615
500 B	4	7.5	230/400	14.8	16.8	6.7	522
500 B	4	11.0	230/400	22.1	23.7	6	549
500 B	4	15.0	230/400	29.1	33.0	5.8	568
500 C	4	5.5	230/400	11	12.7	6.5	514
500 C	4	7.5	230/400	14.8	16.8	6.7	522
500 C	4	11.0	230/400	22.1	23.7	6	549
Cyclone F400 2-speed Dahlander							
500 A2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	574
500 A2 Dahl	4/8	14/3.5	400	26.5/8.5	29/9.5	7.2/4.2	597
500 A2 Dahl	4/8	20/5	400	38.6/14.1	42/15.5	8.8/5.1	641
500 B2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	537
500 B2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	574
500 B2 Dahl	4/8	14/3.5	400	26.5/8.5	29/9.5	7.2/4.2	597
500 C2 Dahl	4/8	5.0/1.3	400	10.4/3.5	11.5/3.9	8.5/6.2	526
500 C2 Dahl	4/8	7.2/1.8	400	16.5/5.1	18/5.6	7.9/4.2	537
500 C2 Dahl	4/8	11/3	400	21.0/7	23.1/7.7	7/4.3	574
Cyclone F400 2-speed Independent Coils (BI)							
500 A2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	574
500 A2 BI	4/6	16/6.5	400	28.4/12.5	31/13.8	8.5/7.6	597
500 A2 BI	4/6	20/8.5	400	39.4/16.3	43/18	9/8.7	641
500 B2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	574
500 B2 BI	4/6	16/6.5	400	28.4/12.5	31/13.8	8.5/7.6	597
500 C2 BI	4/6	6.0/2.2	400	13.7/7	15/7.7	7.8/7.4	537
500 C2 BI	4/6	10/3.3	400	22/8.7	24/9.5	7/4	574

CYCLONE F400 (120): type 500

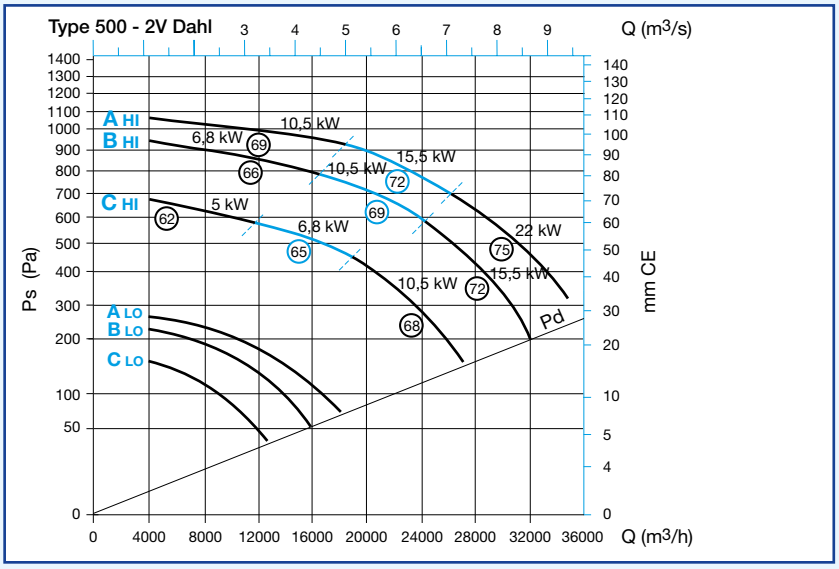
AIRFLOW AND ACOUSTIC CHARACTERISTICS

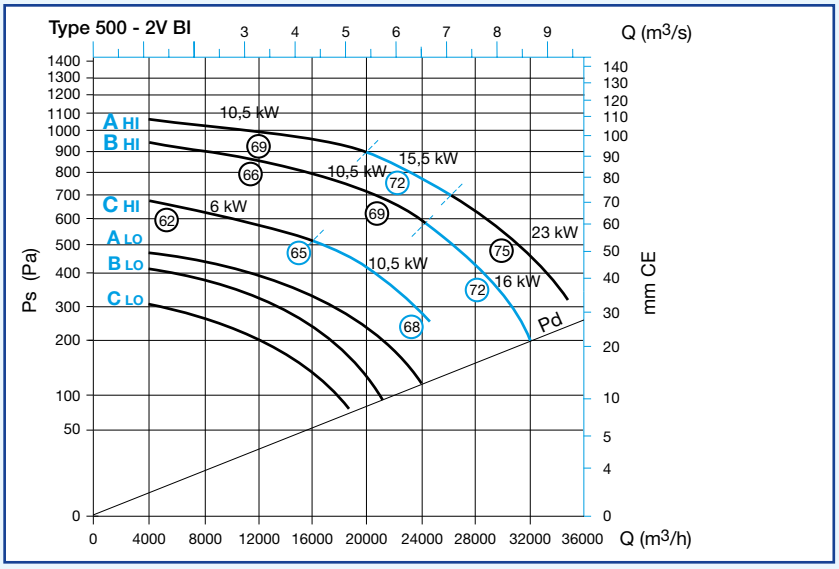
- Curves as per NF EN ISO 5801 - Assy. C: Inlet connected, free exhaust.
  - Ps: Static inlet pressure.
  - Pd: Dynamic pressure in inlet duct.
- Using the selection scales:
  - For casings with **free exhaust outlets** (terrace, roof for example), select a casing so that:
    $\Delta P_{network} = P_s$
  - For casings with **connected exhaust ducts** (in attic spaces for example), select a casing so that:
    $\Delta P_{network} = P_s - P_d + C$

  C: connected exhaust correction.
  Note: $\Delta P_{network}$ here includes the pressure losses from up and downstream of the fan.
- The circled values correspond to the acoustic pressure levels at 6 m from the casing (in dB(A)).



Q (m³/h)	4000	8000	12000	16000	20000	24000	28000	32000
C (Pa)	11	45	102	182	284	409	557	728





AVAILABLE OPTIONS

Description	Code
Casing configuration options	
Horizontal discharge	OPT39300
Vertical discharge	OPT39301
Motor on opposite side	OPT39302
Rain-guard 500	OPT39330
Screw-fit casing	OPTVISSE
Electrical accessory options (the All-in-One option includes the relay box, proximity switch and pressure switch)	
All-in-One 1-speed < 8 kW	OPT39303
All-in-One 1-speed < 13 kW	OPT39304
All-in-One 1-speed < 23 kW	OPT39305
All-in-One 2-speed Dahl < 8 kW	OPT39307
All-in-One 2-speed Dahl < 13 kW	OPT39308
All-in-One 2-speed Dahl < 23 kW	OPT39309
All-in-One 2-speed BI < 8 kW	OPT39311
All-in-One 2-speed BI < 13 kW	OPT39312
All-in-One 2-speed BI < 23 kW	OPT39313
1-speed proximity switch max. 6.5 kW	OPT39315
1-speed proximity switch max. 15 KW	OPT39316
1-speed proximity switch max. 30 KW	OPT39317
2-speed proximity switch max. 6.5 kW	OPT39318
2-speed proximity switch max. 13 KW	OPT39319
2-speed proximity switch max. 22 KW	OPT39320
100-1000 Pa pressure switch	OPT39321
2nd 100-1000 Pa pressure switch	OPT39322

CONNECTION ACCESSORIES

Description	Code
Flexible sleeve D 800	11096931
Flexible sleeve (Exhaust) D 500	11039338
Flexible adapter (Exhaust) Type 500	11039346
Anti-vibration mounting 6 parts	11039348

Presentation of the new EXONE F400° - 120 min range

New EXONE F400

New EXONE F400 with motor cover

Made in France

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

FIELD OF APPLICATION

- Smoke extraction from commercial premises (public buildings, high-rises, commercial & industrial premises, etc.) and multi-family housing (principally 3rd & 4th Family B dwellings).
- Ventilation in commercial premises where a fire classification is required (professional kitchens, sports halls, workshops, etc.).

FIRE PROTECTION RATING

- The EXONE F400 was granted F400°-120 min. classification, the vertical assembly and backdraft damper have been validated by fire resistance tests.
- CE - as per EN 12101-3.

DESCRIPTION

- 8 sizes, for air flows of between 100 and 18,500 m³/h for pressures of 50 to 1100 Pa.
- Casing in galvanised steel single-skinned panels with access panel on one side. Double-skinned isolation available as an option.
- Base & motor mounting in galvanised steel.
- BackWard curve double impellor in galvanised steel.
- Class F, IP55 electric motor.
- As standard, the casing is supplied with:

- Smooth connector sleeve on exhaust
- Inlet and exhaust at 90° Inlet plenum connector as an accessory.
- without motor cover. Accessories: single-skinned in stainless steel.

INSTALLATION

- Indoors or Outdoors.
- The wide range of accessories meets the majority of possible installation configurations:

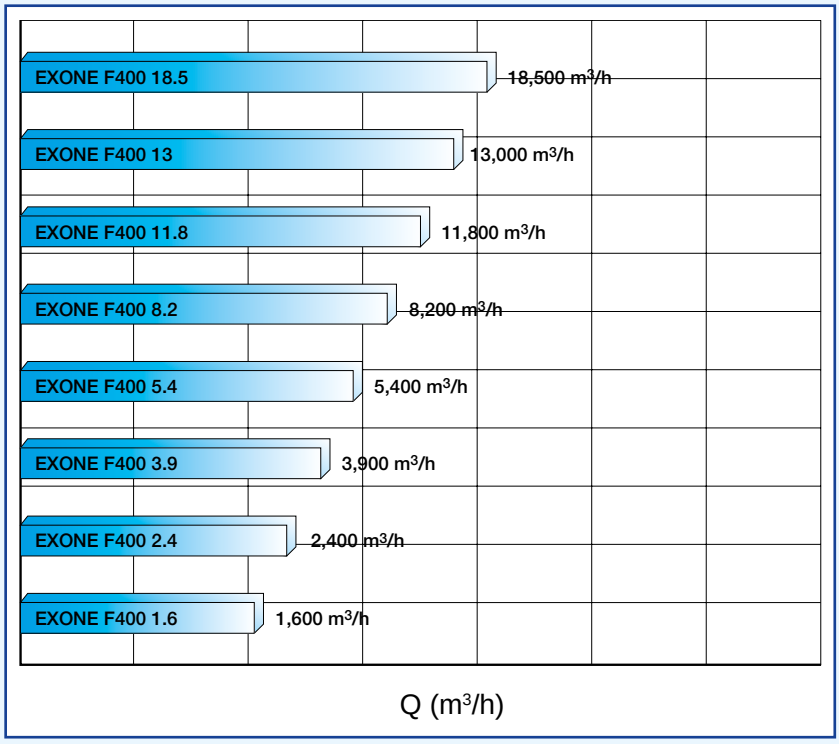
- Connection to rectangular or circular ducts on inlet and exhaust side,
- Direct connection to sealed base or masonry stack (accessory),
- Horizontal or vertical motor shaft.

AVAILABLE OPTIONS

- Adjustable pressure switch mounted inside to protect it from shocks and weather. **EXCLUSIVE**: the pressure switch is aeraulically connected (Note: for two-speed smoke extraction operations, two pressure switches should be used).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

PRE-SELECTION OF EXONE MODELS

Air flow corresponds to a pressure drop of 200 Pa.



INSTALLATION ACCESSORIES

- Motor cover.
- Inlet connection plenum.
- Backdraft damper.
- Anti-vibration pads and feet.
- Sealed base frame.
- Exhaust cover.
- Masonry stack in galvanised steel.
- Rectangular => Circular exhaust adapter.
- Shell plate.
- Terrace mounting for AXONE.

ELECTRICAL ACCESSORIES

- Frequency controller.

Presentation of the advantages of the EXONE F400

EXONE F400 - Horizontal

EXONE F400 - Vertical with inlet plenum & exhaust cover

EXONE F400 - Vertical with inlet plenum, exhaust cover and motor cover

MULTI-POSITION CASING

- The new EXONE casing has been validated with its motor shaft in both a vertical and horizontal position. Fitted with an inlet plenum, it can also meet all air-flow configuration requirements for a site.

DOUBLE-WALLED ISOLATION

- If the standard casing is proposed in a single-skinned, galvanised steel version, the double-skinned isolated version is available for all models. Glass fibre wool, 25 mm thick, is inserted between the two stainless steel walls, including the access hatch. This option is recommended for cases where the smoke extraction casing is installed within a zone where minimum operating noise levels are demanded.

ACCESS HATCH AS STANDARD

- All EXONE F400 casings are fitted with an access hatch as standard, to simplify cleaning operations on the turbine wheel.

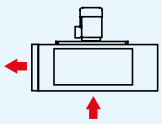
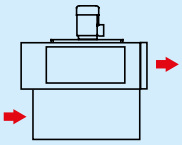
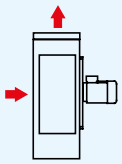
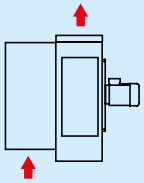
AERAULIC CONNECTIONS TO PRESSURE SWITCH

- Inventor of the 'All-in-One' system (relay box hardwired in the factory), we can exclusively offer this new range with aeraulic connections for pressure switches.
- This option minimises the labour on-site: no more drilling ducts on-site!

WIDE RANGE OF INSTALLATION ACCESSORIES

The range of EXONE casings is supported by various accessories in order to render the system compatible with all site configurations:

- Rectangular or circular exhaust and inlet network,
- Multi-position inlet and exhaust flows.

Exone F400 Multi-positions	Air flow requirements		Response	
	Suction	Discharge	EXONE F400	Accessories
	Vertical from below	Horizontal	Vertical	None
	Horizontal	Horizontal	Vertical	Inlet plenum
	Horizontal	Vertical	Horizontal	None
	Vertical from below	Vertical	Horizontal	Inlet plenum

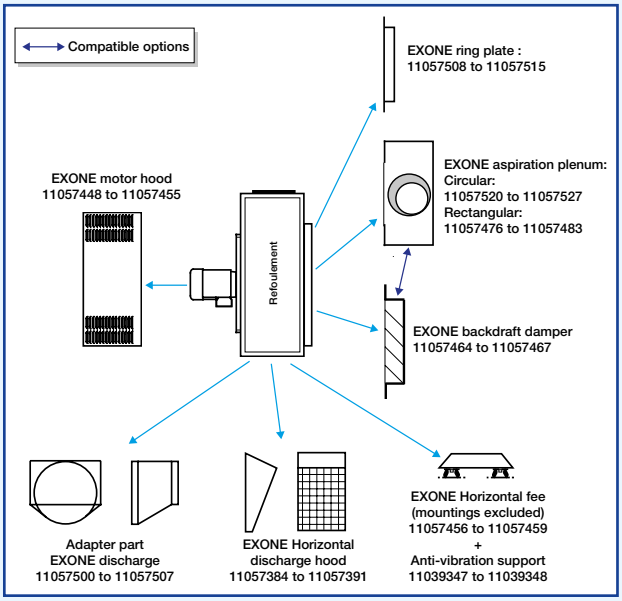
EXONE F400 accessories

EXONE F400 Horizontal

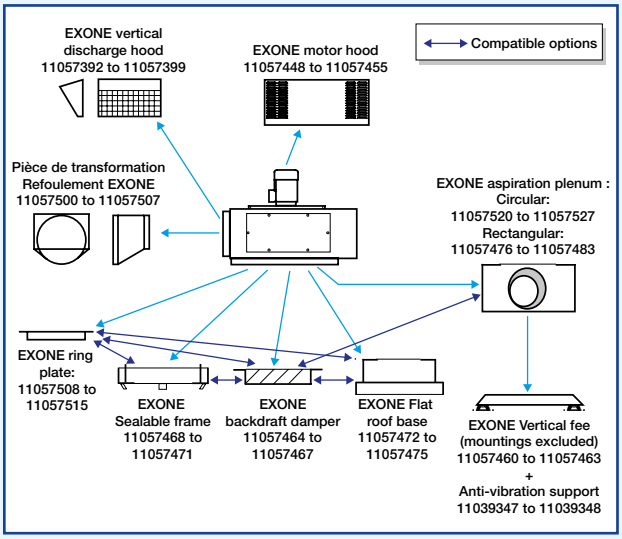
EXONE F400 vertical with IP, plenum and exhaust cover

EXONE F400 vertical with air supply plenum and exhaust cover

SELECTION DIAGRAMS FOR ACCESSORIES EXONE HORIZONTAL



EXONE VERTICAL



New EXONE F400 -1.6 - 3-P/Single phase

EXONE F400 - Vertical

EXONE F400 - Horizontal

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 1600 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 1.6-4M-0.22 kW	11057400
EXONE 1.6-4T-0.25 kW	11057401
EXONE 1.6-6T-0.25 kW	11057402
EXONE F400 2-speed	
EXONE 1.6-4/8T-0.37/0.08 kW	11057404

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 1.6	OPT57486

ACCESSORIES

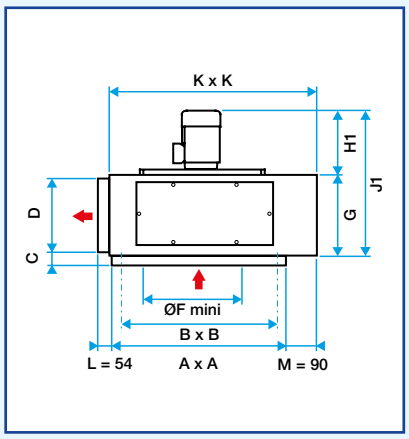
Description on following pages

Description	Code
Motor cover - EXONE 1.6	11057448
Exhaust cover - EXONE 1.6 Horizontal	11057384
Exhaust cover - EXONE 1.6 Vertical	11057392
Feet - EXONE 1.6 Horizontal	11057456
Feet - EXONE 1.6 Vertical	11057460
Backdraft damper EXONE 1.6	11057464
Sealed frame EXONE 1.6	11057468
Floor vent stack EXONE 1.6	11057472
Inlet plenum EXONE 1.6-H250	11057476
Exhaust adapter EXONE 1.6 - D315	11057500
Shell plate EXONE 1.6 - D315	11057508
Anti-vibration mounting - 4 parts	11039347

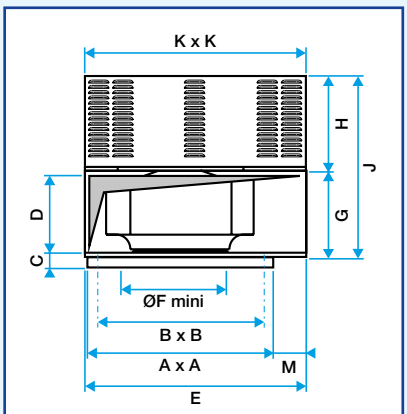
ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

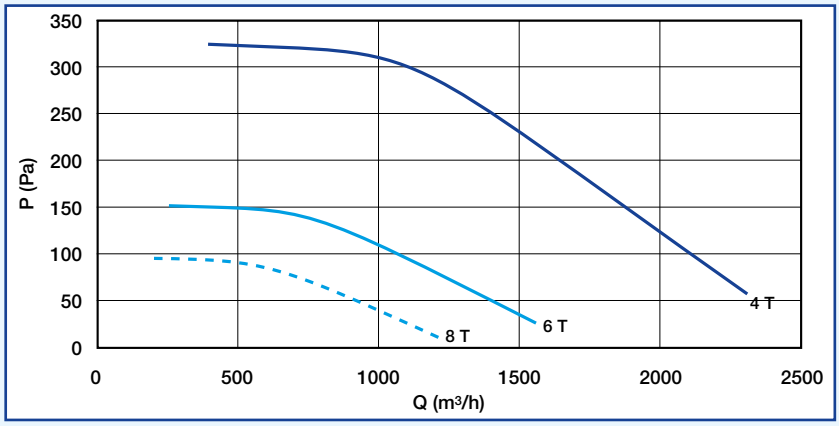


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
1.6	445	395	25	200	542	315	204	235	439	545	27	291	495	35

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm)
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
1.6 4M	4	230	0.22	2.2
1.6 4T	4	400	0.25	0.84
1.6 6T	6	400	0.25	0.87
1.6 - 2-speed 4/8-DAHL	4/8	400	0.37/0.08	1.8/0.5

- Rated current 'In' is given for a voltage of 400V for three-phase models.

Smoke exhaust + ventilation casings

CE

New EXONE F400 -2.4 - 3-P/Single phase

New EXONE F400
with motor cover

EXONE F400 vertical with IP
& inlet plenum

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 2400 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 2.4-4M-0.37 kW	11057405
EXONE 2.4-4T-0.37 kW	11057406
EXONE 2.4-6T-0.25 kW	11057407
EXONE F400 2-speed	
EXONE 2.4-4/8T-0.37/0.08 kW	11057409

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 2.4	OPT57487

ACCESSORIES

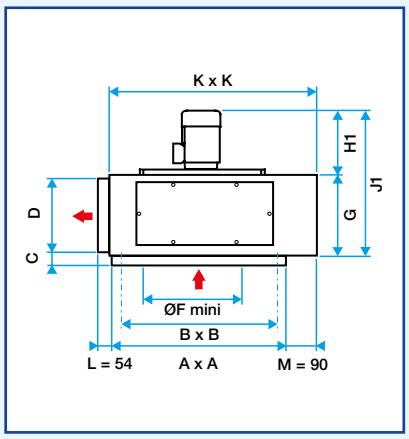
Description on following pages

Description	Code
Motor cover - EXONE 2.4	11057449
Exhaust cover - EXONE 2.4 Horizontal	11057385
Exhaust cover - EXONE 1.6 Vertical	11057393
Feet - EXONE 2.4/3.9/5.4 Horizontal	11057457
Feet - EXONE 2.4/3.9/5.4 Vertical	11057461
Backdraft damper EXONE 2.4/3.9/5.4	11057465
Sealed frame 2.4/3.9/5.4	11057469
Floor vent stack 2.4/3.9/5.4	11057473
Inlet plenum EXONE 2.4-H300	11057477
Exhaust adapter EXONE 2.4 - D355	11057501
Shell plate EXONE 2.4 - D355	11057509
Anti-vibration mounting - 4 parts	11039347

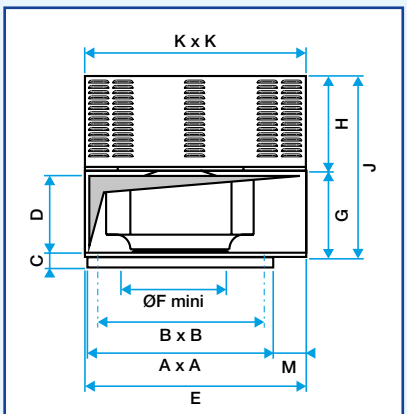
ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

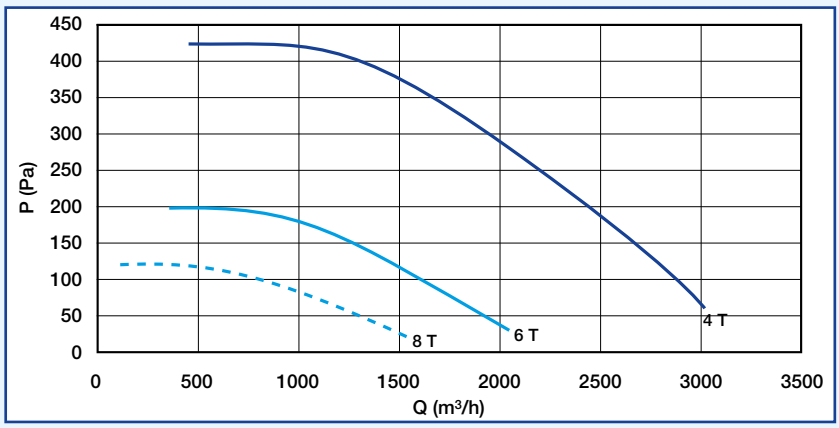


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
2.4	565	515	30	247	662	400	250	247	497	665	33	351	601	47

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
2.4 4M	4	230	0.37	3.1
2.4 4T	4	400	0.37	1.1
2.4 6T	6	400	0.25	1.23
2.4 - 2-speed 4/8-DAHL	4/8	400	0.37/0.08	1.8/0.5

- Rated current 'In' is given for a voltage of 400V for three-phase models.

New EXONE F400 -3.9 - 3-P/Single phase

EXONE F400 - Horizontal

EXONE F400 - Vertical with inlet plenum (IP) & exhaust cover

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 3900 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 3.9-4M-0.75 kW	11057410
EXONE 3.9-6M-0.25 kW	11057411
EXONE 3.9-4T-0.75 kW	11057412
EXONE 3.9-6T-0.37 kW	11057413
EXONE F400 2-speed	
EXONE 3.9-4/8T-0.8/0.2 kW	11057415
EXONE 3.9-6/8T-0.25/0.12 kW	11057416

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 3.9	OPT57488

ACCESSORIES

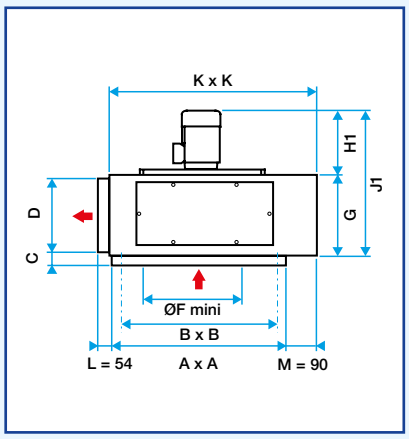
Description on following pages

Description	Code
Motor cover - EXONE 3.9	11057450
Exhaust cover - EXONE 3.9 Horizontal	11057386
Exhaust cover - EXONE 3.9 Vertical	11057394
Feet - EXONE 2.4/3.9/5.4 Horizontal	11057457
Feet - EXONE 2.4/3.9/5.4 Vertical	11057461
Backdraft damper EXONE 2.4/3.9/5.4	11057465
Sealed frame 2.4/3.9/5.4	11057469
Floor vent stack 2.4/3.9/5.4	11057473
Inlet plenum EXONE 3.9-H450	11057478
Exhaust adapter EXONE 3.9 - D400	11057502
Shell plate EXONE 3.9 - D400	11057510
Anti-vibration mounting - 4 parts	11039347

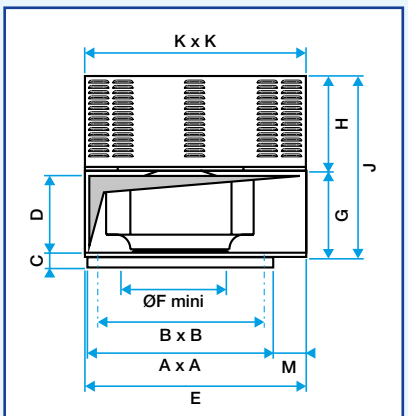
ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

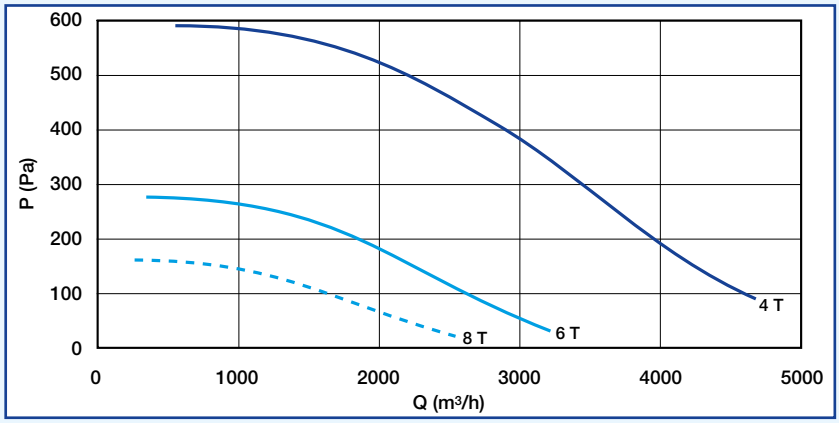


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
3.9	565	515	30	260	662	400	263	272	535	665	41	351	554	55

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
3.9 4M	4	230	0.75	5.4
3.9 6M	6	230	0.25	2.3
3.9 4T	4	400	0.75	1.95
3.9 6T	6	400	0.25	1.23
3.9 -2-speed 6/8-BI	6/8	400	0.29/0.12	1/0.94
3.9 - 2-speed 4/8-DAHL	4/8	400	0.8/0.2	2/0.9

- Rated current 'In' is given for a voltage of 400V for three-phase models.

Smoke exhaust + ventilation casings

CE

New EXONE F400 -5.4 - 3-P/Single phase

New EXONE F400

EXONE F400 with IP, motor and exhaust covers

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 5400 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 5.4-4M-1.1 kW	11057417
EXONE 5.4-6M-0.37 kW	11057418
EXONE 5.4-4T-1.1 kW	11057419
EXONE 5.4-6T-0.37 kW	11057420
EXONE F400 2-speed	
EXONE 5.4-4/6T-1.1/0.3 kW	11057421
EXONE 5.4-4/8T-1.2/0.3 kW	11057422
EXONE 5.4-6/8T-0.37/0.2 kW	11057423
EXONE 5.4-6/12T-0.37/0.07 kW	11057424

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected)
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 5.4	OPT57489

ACCESSORIES

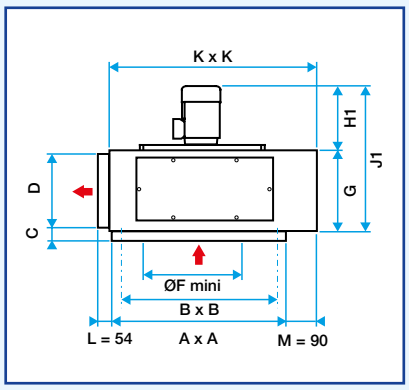
Description on following pages

Description	Code
Motor cover - EXONE 5.4	11057451
Exhaust cover - EXONE 5.4 Horizontal	11057387
Exhaust cover - EXONE 5.4 Vertical	11057395
Feet - EXONE 2.4/3.9/5.4 Horizontal	11057457
Feet - EXONE 2.4/3.9/5.4 Vertical	11057461
Backdraft damper EXONE 2.4/3.9/5.4	11057465
Sealed frame 2.4/3.9/5.4	11057469
Floor vent stack 2.4/3.9/5.4	11057473
Inlet plenum EXONE 5.4-H600	11057479
Exhaust adapter EXONE 5.4 - D450	11057503
Shell plate EXONE 5.4 - D450	11057511
Anti-vibration mounting - 4 parts	11039347

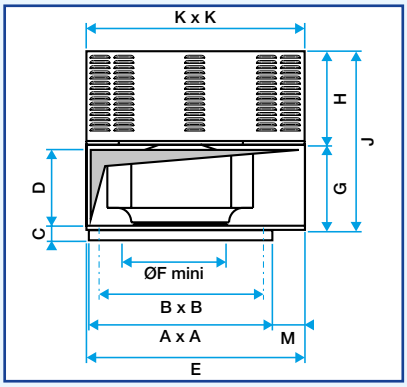
ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

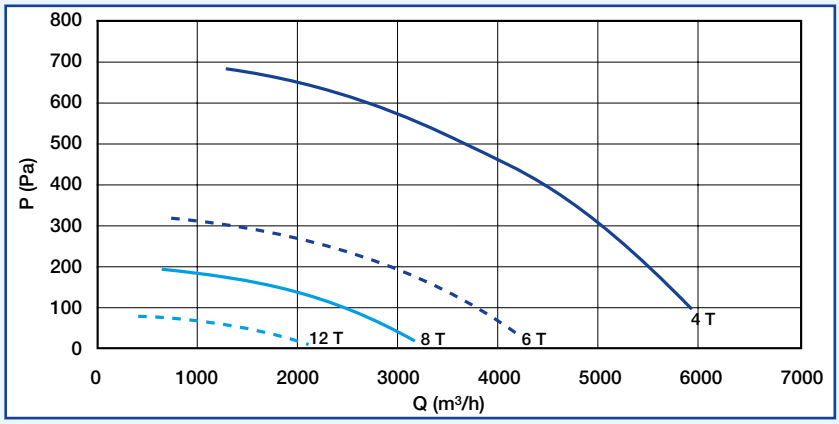


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
5.4	565	515	30	298	662	400	302	312	614	665	49	351	653	63

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
5.4 4M	4	230	1.1	7
5.4 6M	6	230	0.37	3
5.4 4T	4	400	1.1	2.64
5.4 6T	6	400	0.37	1.23
5.4 -2-speed 4/6-BI	4/6	400	1.1/0.3	3/1.5
5.4 - 2-speed 4/8-DAHL	4/8	400	1.2/0.3	2.9/1.3
5.4 -2-speed 6/8-BI	6/8	400	0.37/0.2	1.5/1.1
5.4 - 2-speed 6/12-DAHL	6/12	400	0.37/0.07	1.59/0.7

- Rated current 'In' is given for a voltage of 400V for three-phase models.

New EXONE F400 -8.2 - 3-P/Single phase

New EXONE F400 Vertical

EXONE F400 vertical with IP & inlet plenum

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 8200 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 8.2-6M-0.75 kW	11057425
EXONE 8.2-4T-2.2 kW	11057426
EXONE 8.2-6T-0.75 kW	11057427
EXONE 8.2-8T-0.37 kW	11057428
EXONE F400 2-speed	
EXONE 8.2-4/6T-2.2/0.7 kW	11057429
EXONE 8.2-4/8T-2.2/0.55 kW	11057430
EXONE 8.2-6/8T-0.75/0.37 kW	11057431
EXONE 8.2-6/12T-0.75/0.15 kW	11057432

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 8.2	OPT57490

ACCESSORIES

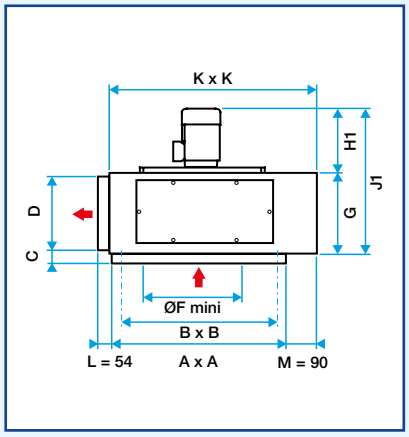
Description on following pages

Description	Code
Motor cover - EXONE 8.2	11057452
Exhaust cover - EXONE 8.2 Horizontal	11057388
Exhaust cover - EXONE 8.2 Vertical	11057396
Feet - EXONE 8.2/13 Horizontal	11057458
Feet - EXONE 8.2/13 Vertical	11057462
Backdraft damper EXONE 8.2/13	11057466
Sealed frame 8.2/13	11057470
EXONE Floor vent stack 8.2/13	11057474
Inlet plenum EXONE 8.2-H640	11057480
Exhaust adapter EXONE 8.2 - D560	11057504
Shell plate EXONE 8.2 - D560	11057512
Anti-vibration mounting - 4 parts	11039347

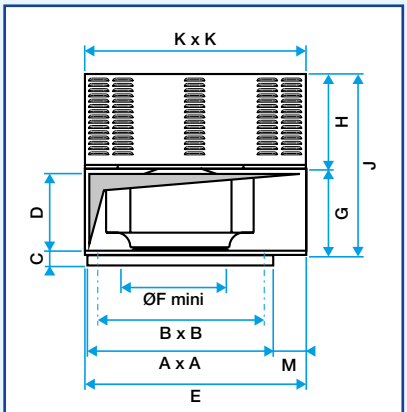
ELECTRICAL ACCESSORIES

- Single phase voltage controller.
- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

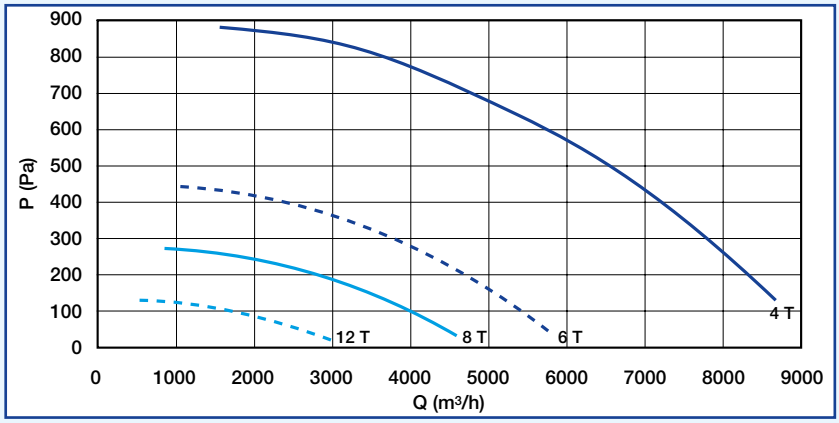


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
8.2	800	740	35	358	947	500	361	338	699	950	114	391	752	137

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
8.2 6M	6	230	0.75	6.5
8.2 4T	4	400	2.2	5.6
8.2 6T	6	400	0.75	2.2
8.2 8T	8	400	0.37	1.35
8.2 - 2-speed 4/6-BI	4/6	400	2.2/0.7	5.2/2.5
8.2 - 2-speed 4/8-DAHL	4/8	400	2.2/0.55	5/2
8.2 - 2-speed 6/8-BI	6/8	400	0.75/0.37	2.7/1.7
8.2 - 2-speed 6/12-DAHL	6/12	400	0.75/0.15	2.4/1

- Rated current 'In' is given for a voltage of 400V for three-phase models.

Smoke exhaust + ventilation casings

CE

New EXONE F400 - 13 - 3-Phase

EXONE F400 - Horizontal

EXONE F400 with IP, motor and exhaust covers

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 13000 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 13-4T-3 kW	11057433
EXONE 13-6T-1.5 kW	11057434
EXONE 13-8T-0.75 kW	11057435
EXONE F400 2-speed	
EXONE 13-4/6T-3/1 kW	11057436
EXONE 13-4/8T-3.8/1 kW	11057437
EXONE 13-6/8T-1.5/0.75 kW	11057438
EXONE 13-6/12T-1.5/0.25 kW	11057439

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 16.7	OPT57491

ACCESSORIES

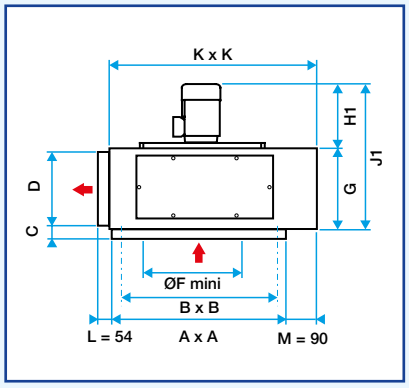
Description on following pages

Description	Code
Motor cover - EXONE 13	11057453
Exhaust cover - EXONE 13 Horizontal	11057389
Exhaust cover - EXONE 13 Vertical	11057397
Feet - EXONE 8.2/13 Horizontal	11057458
Feet - EXONE 8.2/13 Vertical	11057462
Backdraft damper EXONE 8.2/13	11057466
Sealed frame 8.2/13	11057470
Floor stack 8.2/13	11057474
Inlet plenum EXONE 13-H710	11057481
Exhaust adapter EXONE 13 - D630	11057505
Shell plate EXONE 13 - D630	11057513
Anti-vibration mounting - 4 parts	11039347

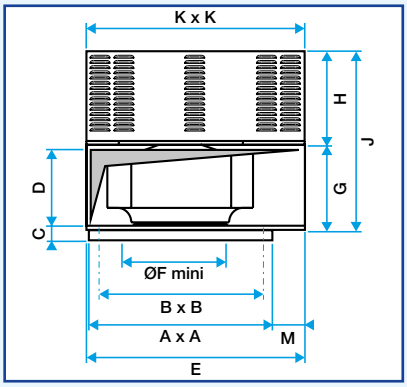
ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

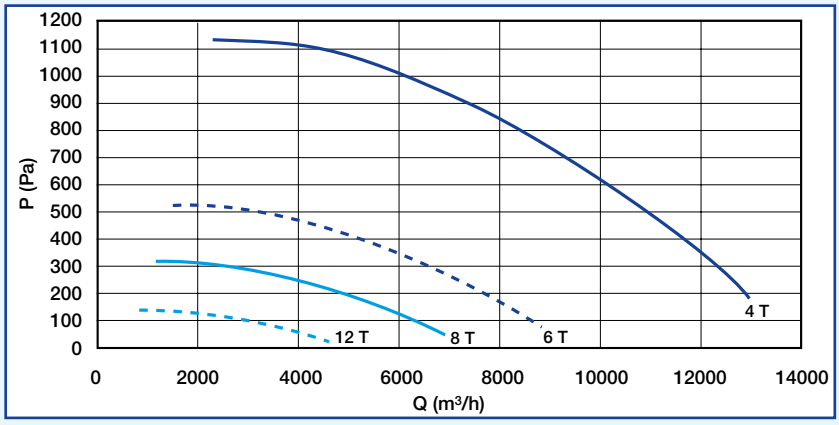


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
13	800	740	35	384	947	500	385	338	723	950	131	391	776	154

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
13 4T	4	400	3	7.5
13 6T	6	400	1.5	3.8
13 6T	8	400	0.75	2.4
13 - 2-speed 4/6-BI	4/6	400	3/1	7.52/3.85
13 - 2-speed 4/8-DAHL	4/8	400	3.8/1	8.63/3.69
13 - 2-speed 6/8-BI	6/8	400	1.5/0.75	4/3
13 - 2-speed 6/12-DAHL	6/12	400	1.5/0.25	4.3/1.7

- Rated current 'In' is given for a voltage of 400V for three-phase models.

New EXONE F400 -11.8 - 3-Phase

New EXONE F400 Vertical

EXONE F400 with IP, motor and exhaust covers

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 11800 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 11.8-6T-2.2 kW	11057440
EXONE 11.8-8T-1.1 kW	11057441
EXONE F400 2-speed	
EXONE 11.8-6/8T-2.2/1.3 kW	11057442
EXONE 11.8-6/12T-2.2/0.55 kW	11057443

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 11.8	OPT57492

ACCESSORIES

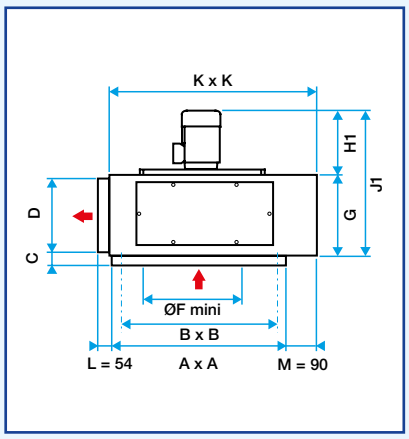
Description on following pages

Description	Code
Motor cover - EXONE 11.8	11057454
Exhaust cover - EXONE 11.8 Horizontal	11057390
Exhaust cover - EXONE 11.8 Vertical	11057398
Feet - EXONE 11.8/18.5 Horizontal	11057459
Feet - EXONE 11.8/18.5 Vertical	11057463
Backdraft damper EXONE 11.8/18.5	11057467
Sealed frame 11.8/18.5	11057471
EXONE Floor vent stack 11.8/18.5	11057475
Inlet plenum EXONE 11.8-H710	11057482
Exhaust adapter EXONE 11.8 - D710	11057506
Shell plate EXONE 11.8 - D710	11057514
Anti-vibration mounting - 6 parts	11039348

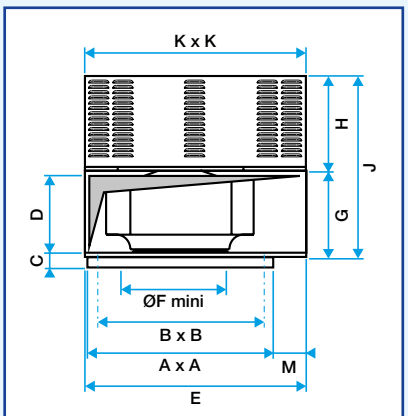
ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

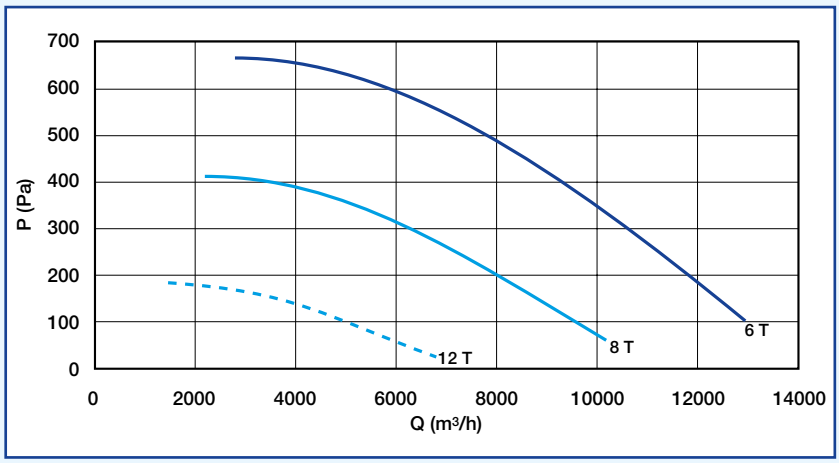


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
11.8	910	850	40	451	1056	630	454	336	790	1060	153	481	935	194

AIRFLOW DETAILS

- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
11.8 6T	6	400	2.2	5.7
11.8 8T	8	400	1.1	3.2
11.8 - 2-speed 6/8-BI	6/8	400	2.2/1.3	6.5/5
11.8 - 2-speed 6/12-DAHL	6/12	400	2.2/0.55	6.4/2.6

- Rated current 'In' is given for a voltage of 400V for three-phase models.

Smoke exhaust + ventilation casings

CE

New EXONE F400 -18.5 - 3-Phase

EXONE F400 - Horizontal

EXONE F400 - Vertical with inlet plenum (IP) & motor & exhaust covers

Compliance

- Compliant with CE marking as per EN 12101-3:
- 2h classification: F400 (120).
- Vertical positioning compliant.

Advantages

- It is possible to set the EXONE F400 in a vertical position.
- Inlet plenum available as an accessory.
- Pressure switch aeraulic connection established in the factory.
- Access hatch fitted as standard.
- Optional double-skin.

DESCRIPTION

- Airflow between 100 and 18500 m³/h (at 200 Pa).

RANGE with choice of options

Description	Code
EXONE F400 1-speed	
EXONE 18.5-6T-4 kW	11057444
EXONE 18.5-8T-2.2 kW	11057445
EXONE F400 2-speed	
EXONE 18.5-6/8T-4/1.1 kW	11057446
EXONE 18.5-6/12T-4/1 kW	11057447

AVAILABLE OPTIONS

- Aeraulically connected pressure switch, mounted and protected (if motor cover is selected).
- Hardwired proximity switch, mounted and protected.
- Double-skinned isolation.

Description	Code
Pressure switch 20-200 Pa aeraulically connected	OPT57494
Pressure switch 200-1000 Pa aeraulically connected	OPT57495
1-speed switch + contacts, fitted, pre-cabled	OPT57496
2-speed switch - 4 kW + contacts, fitted, pre-cabled	OPT57497
Double-skinned isolation EXONE 18.5	OPT57493

ACCESSORIES

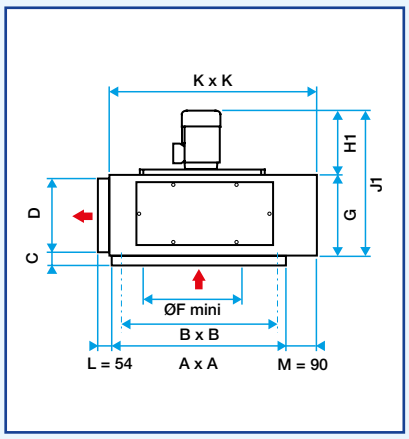
Description on following pages

Description	Code
Motor cover - EXONE 18.5	11057455
Exhaust cover - EXONE 18.5 Horizontal	11057391
Exhaust cover - EXONE 18.5 Vertical	11057399
Feet - EXONE 11.8/18.5 Horizontal	11057459
Feet - EXONE 11.8/18.5 Vertical	11057463
Backdraft damper EXONE 11.8/18.5	11057467
Sealed frame 11.8/18.5	11057471
EXONE Floor vent stack 11.8/18.5	11057475
Inlet plenum EXONE 18.5-H900	11057483
Exhaust adapter EXONE 18.5 - D800	11057507
Shell plate EXONE 18.5 - D800	11057515
Anti-vibration mounting - 6 parts	11039348

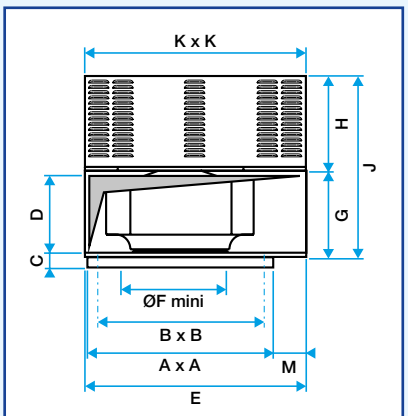
ELECTRICAL ACCESSORIES

- 3-phased auto transformer.
- Frequency controller.
- 2-speed comfort control box.

DIMENSIONS (mm) – WEIGHT (kg)



Without cover

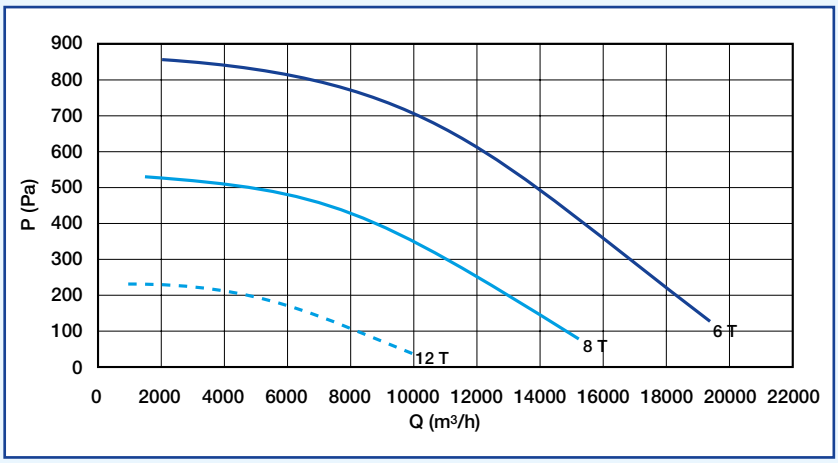


With cover

Type	Horizontal air outlet											With motor cover		
Exone	A	B	C	D	E	F	G	H1	J1	K	Weight	H	J	Weight
18.5	910	850	40	488	1056	630	491	431	922	1060	195	481	972	236

AIRFLOW DETAILS

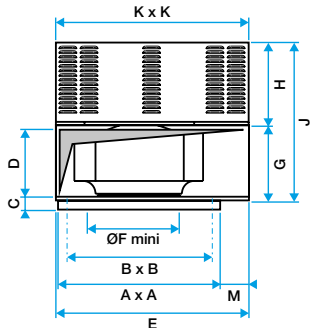
- Curves as per NF EN ISO 5801, inlet connected (Ø F mm).
- Pressures shown on the curves are 'static'.



Type	Number of poles	U (V)	P (kW)	In rated current (A)
18.5 6T	6	400	4	9.3
18.5 8T	8	400	2.2	5.96
18.5 - 2-speed 6/8-BI	6/8	400	4/1.1	11.3/4.9
18.5 - 2-speed 6/12-DAHL	6/12	400	4/1	12.6/5.2

- Rated current 'In' is given for a voltage of 400V for three-phase models.

Motor cover - EXONE F400



FIELD OF APPLICATION

- Recommended if the fan is to be installed outside.

DESCRIPTION

- Single-skinned cover in galvanised steel attached to the casing (fixings supplied).

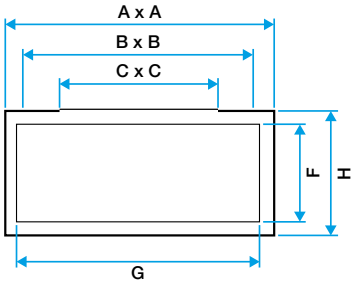
RANGE

Description	Code
Motor cover - EXONE 1.6	11057448
Motor cover - EXONE 2.4	11057449
Motor cover - EXONE 3.9	11057450
Motor cover - EXONE 5.4	11057451
Motor cover - EXONE 8.2	11057452
Motor cover - EXONE 13	11057453
Motor cover - EXONE 11.8	11057454
Motor cover - EXONE 18.5	11057455

DIMENSIONS (mm)

Model	K	H
EXONE 1.6	545	291
EXONE 2.4	665	351
EXONE 3.9	665	351
EXONE 5.4	665	351
EXONE 8.2	950	391
EXONE 13	950	391
EXONE 11.8	1060	481
EXONE 18.5	1060	481

Inlet Plenum - EXONE F400



FIELD OF APPLICATION

- Recommended where the inlet ducting is perpendicular to the motor shaft.

DESCRIPTION

- Inlet connector casing in galvanised steel with connecting sleeve.

RANGE

Velone model	Code
Inlet plenum EXONE 1.6-H250	11057476
Inlet plenum EXONE 2.4-H300	11057477
Inlet plenum EXONE 3.9-H450	11057478
Inlet plenum EXONE 5.4-H500	11057479
Inlet plenum EXONE 8.2-H640	11057480
Inlet plenum EXONE 13-H710	11057481
Inlet plenum EXONE 11.8-H710	11057482
Inlet plenum EXONE 18.5-H900	11057483

(See EXONE accessories on page 48

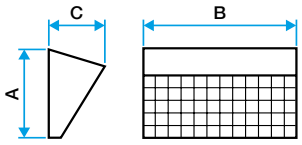
DIMENSIONS (mm)

Model	A	B	C	G	F	H
EXONE 1.6	440	395	150	395	200	250
EXONE 2.4	560	515	200	515	250	300
EXONE 3.9	560	515	200	515	400	450
EXONE 5.4	560	515	200	515	550	600
EXONE 8.2	795	740	300	750	590	640
EXONE 13	795	740	300	750	650	710
EXONE 11.8	905	850	400	860	650	710
EXONE 18.5	905	850	400	860	850	900

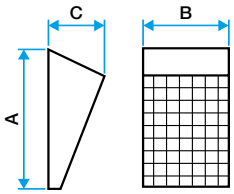
SHELL RANGE

Description	Code
Inlet plenum EXONE 1.6-D250	11057520
Inlet plenum EXONE 2.4-D315	11057521
Inlet plenum EXONE 3.9-D355	11057522
Inlet plenum EXONE 5.4-D400	11057523
Inlet plenum EXONE 8.2-D500	11057524
Inlet plenum EXONE 13-D630	11057525
Inlet plenum EXONE 11.8-D630	11057526
Inlet plenum EXONE 18.5-D800	11057527

Exhaust cover - EXONE F400



EXONE Vertical



EXONE Horizontal

FIELD OF APPLICATION

- Recommended for use with a free exhaust.

DESCRIPTION

- Exhaust cover in galvanised steel with drawn, non-volatile grille NFE-51190.

RANGE

Description	Code
Exhaust cover - EXONE 1.6 Vertical	11057392
Exhaust cover - EXONE 2.4 Vertical	11057393
Exhaust cover - EXONE 3.9 Vertical	11057394
Exhaust cover - EXONE 5.4 Vertical	11057395
Exhaust cover - EXONE 8.2 Vertical	11057396
Exhaust cover - EXONE 13 Vertical	11057397
Exhaust cover - EXONE 11.8 Vertical	11057398
Exhaust cover - EXONE 18.5 Vertical	11057399

Description	Code
Exhaust cover - EXONE 1.6 Horizontal	11057384
Exhaust cover - EXONE 2.4 Horizontal	11057385
Exhaust cover - EXONE 3.9 Horizontal	11057386
Exhaust cover - EXONE 5.4 Horizontal	11057387
Exhaust cover - EXONE 8.2 Horizontal	11057388
Exhaust cover - EXONE 13 Horizontal	11057389
Exhaust cover - EXONE 11.8 Horizontal	11057390
Exhaust cover - EXONE 18.5 Horizontal	11057391

(See EXONE accessories on page 48)

DIMENSIONS (mm)

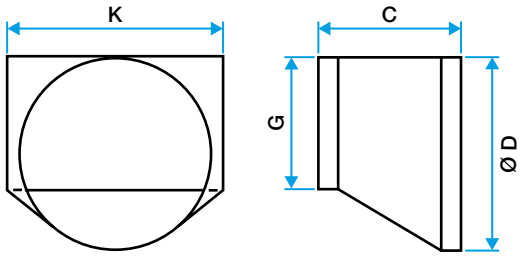
EXHAUST COVER - EXONE VERTICAL

Model	A	B	C
EXONE 1.6	204	545	150
EXONE 2.4	250	665	200
EXONE 3.9	263	665	200
EXONE 5.4	302	665	200
EXONE 8.2	361	950	300
EXONE 13	385	950	300
EXONE 11.8	454	1060	400
EXONE 18.5	491	1060	400

EXHAUST COVER - EXONE HORIZONTAL

Model	A	B	C
EXONE 1.6	545	204	150
EXONE 2.4	665	250	200
EXONE 3.9	665	263	200
EXONE 5.4	665	302	200
EXONE 8.2	950	361	300
EXONE 13	950	385	300
EXONE 11.8	1060	454	400
EXONE 18.5	1060	491	400

EXONE F400 exhaust adapter



FIELD OF APPLICATION

- Used to connect a circular exhaust duct to the EXONE casing, which has a rectangular exhaust outlet.

DESCRIPTION

- Rectangular > circular adapter components in galvanised steel.

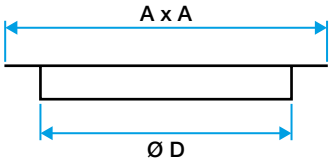
RANGE

Description	Code
Exhaust adapter EXONE 1.6 - D315	11057500
Exhaust adapter EXONE 2.4 - D355	11057501
Exhaust adapter EXONE 3.9 - D400	11057502
Exhaust adapter EXONE 5.4 - D450	11057503
Exhaust adapter EXONE 8.2 - D560	11057504
Exhaust adapter EXONE 13 - D630	11057505
Exhaust adapter EXONE 11.8 - D710	11057506
Exhaust adapter EXONE 18.5 - D800	11057507

DIMENSIONS (mm)

Model	K	G	C	D
EXONE 1.6	545	204	350	315
EXONE 2.4	665	250	450	355
EXONE 3.9	665	263	450	400
EXONE 5.4	665	302	450	450
EXONE 8.2	950	361	500	560
EXONE 13	950	385	500	630
EXONE 11.8	1060	454	600	710
EXONE 18.5	1060	491	600	900

Flexible sleeve and shell plate - EXONE F400



FIELD OF APPLICATION

- Plate: used to pass a circular duct through a flat surface.
- Sleeve: used to connect the shell plate to the circular duct network.

DESCRIPTION

- Shell plate in galvanised steel, to be attached to the EXONE base.
- Flexible circular sleeve - M0 + 2 fixing collars.

RANGE

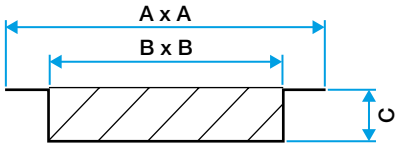
Velone model	Code
Shell plate EXONE 1.6 - D315	11057508
Shell plate EXONE 2.4 - D355	11057509
Shell plate EXONE 3.9 - D400	11057510
Shell plate EXONE 5.4 - D450	11057511
Shell plate EXONE 8.2 - D560	11057512
Shell plate EXONE 13 - D630	11057513
Shell plate EXONE 11.8 - D710	11057514
Shell plate EXONE 18.5 - D800	11057515
Flexible sleeve M0 Ø315	11096936
Flexible sleeve M0 Ø355	11096937
Flexible sleeve M0 Ø400	11096938
Flexible sleeve M0 Ø450	11096939
Flexible sleeve M0 Ø560	11096941
Flexible sleeve M0 Ø630	11096942

DIMENSIONS (mm)

Plate model	A	D
EXONE 1.6	425	315
EXONE 2.4	545	355
EXONE 3.9	545	400
EXONE 5.4	545	450
EXONE 8.2	780	560
EXONE 13	780	630
EXONE 11.8	890	710
EXONE 18.5	890	900

(See EXONE accessories on page 48)

Backdraft damper EXONE F400 Vertical



FIELD OF APPLICATION

- Stops natural ventilation when the casing is in standby.

DESCRIPTION

- Backdraft damper made of galvanised steel
- Compatible with sealed base frame and floor/terrace stack base.

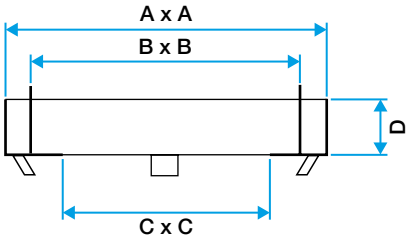
RANGE

Description	Code
Backdraft damper EXONE 1.6	11057464
Backdraft damper EXONE 2.4/3.9/5.4	11057465
Backdraft damper EXONE 8.2/13	11057466
Backdraft damper EXONE 11.8/18.5	11057467

DIMENSIONS (mm)

Model	A	B	C
EXONE 1.6	425	300	115
EXONE 2.4/3.9/5.4	545	400	
EXONE 8.2/13	780	500	
EXONE 11.8/18.5	890	650	

Sealed frame base - EXONE F400 Vertical



FIELD OF APPLICATION

- Used to fix the EXONE casing, like a roof fan, onto a masonry surface.

DESCRIPTION

- Sealed frame plate in galvanised steel.

RANGE

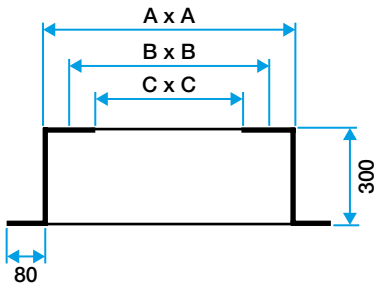
Velone model	Code
Sealed frame EXONE 1.6	11057468
Sealed frame 2.4/3.9/5.4	11057469
Sealed frame 8.2/13	11057470
Sealed frame 11.8/18.5	11057471

(See EXONE accessories on page 48)

DIMENSIONS (mm)

Model	A	B	C	D
EXONE 1.6	425	395	365	120
EXONE 2.4/3.9/5.4	545	515	485	
EXONE 8.2/13.5	780	740	700	
EXONE 11.8/18.5	890	850	810	

Floor vent stack EXONE F400 Vertical



FIELD OF APPLICATION

- Used to install the casing on a horizontal roof with no stonework stacks.

DESCRIPTION

- Floor stack in galvanised steel.

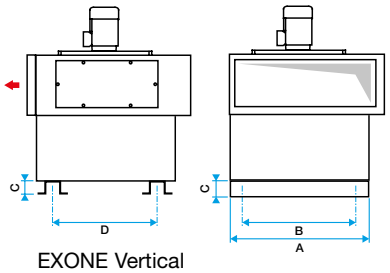
RANGE

Description	Code
Floor vent stack EXONE 1.6	11057472
Floor vent stack 2.4/3.9/5.4	11057473
EXONE Floor vent stack 8.2/13	11057474
EXONE Floor vent stack 11.8/18.5	11057475

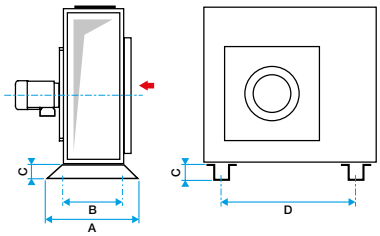
DIMENSIONS (mm)

Model	A	B	C
EXONE 1.6	425	395	365
EXONE 2.4/3.9/5.4	545	515	485
EXONE 8.2/13	780	740	700
EXONE 11.8/18.5	890	850	810

Mounting feet + anti-vibration mountings - EXONE F400



EXONE Vertical



EXONE Horizontal

FIELD OF APPLICATION

- Recommended to separate the mounting from the casing supports.

DESCRIPTION

- Mounting feet in galvanised steel - factory fitted. Two models for horizontal or vertical casing installation.
- Anti-vibration mounting in resilient material: dimensions: L x w x th = 100 x 100 x 10 (mm).

RANGE

Velone model	Code
Feet - EXONE 1.6 Horizontal	11057456
Feet - EXONE 2.4/3.9/5.4 Horizontal	11057457
Feet - EXONE 8.2/13 Horizontal	11057458
Feet - EXONE 11.8/18.5 Horizontal	11057459
Feet - EXONE 1.6 Vertical	11057460
Feet - EXONE 2.4/3.9/5.4 Vertical	11057461
Feet - EXONE 8.2/13 Vertical	11057462
Feet - EXONE 11.8/18.5 Vertical	11057463
Anti-vibration mountings	
Anti-vibration mounting - 4 parts	11039347
Anti-vibration mounting - 6 parts	11039348

DIMENSIONS (mm)

Vertical model	A	B	C	D
EXONE 1.6	545	490	50	280
EXONE 2.4/3.9/5.4	865	640	170	400
EXONE 8.2/13	900	845	170	635
EXONE 11.8/18.5	1010	900	170	745
Horizontal model	**A**	**B**	**C**	**D**
EXONE 1.6	290	235		285
EXONE 2.4/3.9/5.4	340	285		405
EXONE 8.2/13	450	395		610
EXONE 11.8/18.5	500	430		720

(See EXONE accessories on page 48)

HELIONE axial fan units

Presentation of the HELIONE range of axial fans CE

HELIONE short shell

Compliance

- Class: F400° - 2h & F200° - 2h.
- Conforms to EN 12101-3.

Advantages

- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

FIELD OF APPLICATION

- With its fire resistance classifications of F200° / 2h & F400° / 2h, the new HELIONE range meets ventilation or smoke extraction requirements for residential buildings (car parks, stairwells), commercial premises (car parks, warehouses) and industrial premises, wherever high flow rates and low pressure levels are required.
- Helione works both for extraction and for the supply of fresh air into premises where the acoustic requirements are not primordial, or, for occasional smoke extraction.

DESCRIPTION

- The standard HELIONE range covers Ø 500 to Ø 1250 mm for standard flow rates of 5 000 - 72,000 m^3/h and pressures of 100 to 500 Pa.
- Fans with multiple aluminium blades, mounted on an aluminium hub. The angle is determined by the operating location.
- Each blade is radiographically tested using x-rays prior to assembly to check the quality of the materials used.
- Shells are manufactured from a metallic plate, with integrated flanges and drill-holes for connections bead welded and galvanised after manufacturing for increased service life. Standard = short shell, optional long shell
- Motor mounting arms in galvanised steel for better corrosion resistance.
- Boss-type motor, 4 poles or 4/8 poles, IP55, Isolation Class F as standard. Operating temperature range -20/ 50 °C.
- All motors are designed to support the power absorbed across the full width of the curve.
- Nous consulter pour tout autre besoin : Ø hors standard, hautes pressions, débits supérieurs à 72000 m^3/h.

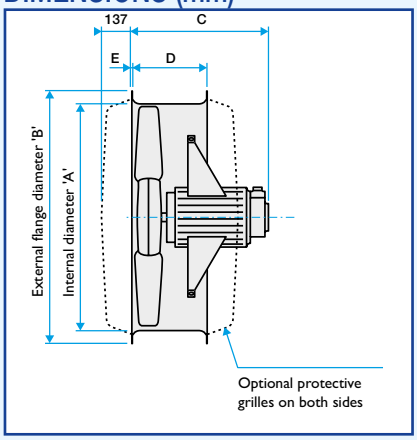
RECOMMENDATION

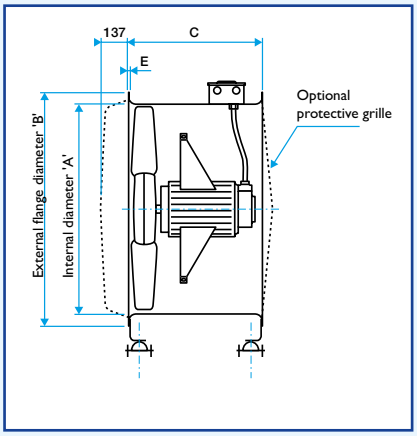
- When installing with anti-vibration mounts, above Ø 800, and for motors > 4 kW, it is recommended that the long shell option be used. Otherwise, rails should be used between the feet and pads to spread the load.

AVAILABLE OPTIONS

- Long shell: includes an external, pre-cabled terminal box.

DIMENSIONS (mm)





			Short ring		Long ring	
A	Motor power (kW)	B	C	D	C	E
560	0,9 ; 1,27 ; 0,92 / 0,23	654	331	225	375	3
630	0,9 ; 1,27 ; 0,92 / 0,23	724	331	225	375	3
	1,8 ; 1,84 / 0,46		345		520	
710	0,9 ; 1,27 ; 0,92 / 0,23	804	331	225	375	2,5
	1,8 ; 1,84 / 0,46		358		520	2,5
	2,64 ; 3,6 ; 2,53 / 0,63 ; 3,22 / 0,8		377		520	3
800	1,8 ; 1,84 / 0,46	894	333	225	520	2,5
	2,64 ; 3,6 ; 2,53 / 0,63 ; 3,22 / 0,8		377		520	3
900	2,64 ; 3,6 ; 2,53 / 0,63 ; 3,22 / 0,8	1006	377	225	520	3
	4,8 ; 4,37 / 1,15		394	225	520	3
	6,6 ; 5,75 / 1,5		438	300	520	4
	9 ; 11 ; 7,92 / 1,98		475	300	520	4
	13,2 ; 12,7 / 3,45		569	300	625	4
1000	4,8 ; 4,37 / 1,15	1106	394	225	520	3
	6,6 ; 5,75 / 1,5		450	300	520	5
	9 ; 11 ; 7,92 / 1,98		475	300	520	5
	13,2 ; 12,7 / 3,45		603	300	625	5
	18 ; 16,1 / 4,03		647	300	711	5
	22,2 ; 19,6 / 4,95		697	300	711	6
	26,4 ; 23 / 5,75		697	300	711	6

Your ALDES agency will also be able to provide you with detailed technical sheets for each model.

Presentation of the HELIONE range of axial fans

HELIONE long shell

Compliance

- Class: F400° - 2h & F200° - 2h
- Conforms to EN 12101-3.

Advantages

- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

ACCESSORIES

- Protective grilles on fan and motor ends.
- Flexible sleeve for fitting between counter-flange and circular duct. M0 Fabric.
- Counter-flange in galvanised steel to connect the HELIONE to a circular duct. Required with flexible sleeve.
- 2 square plate models in galvanised steel for wall-mounted HELIONE units:
  - 'Economy' square plate: cannot support the weight of the fan alone, requires suspension strengtheners.
  - 'Reinforced' square plate: fan held in place on the wall by the square plate alone.
- Feet (x2) in galvanised steel to attach the HELIONE.
- Anti-vibration mounts (x4) to fix under the feet.
- Backdraft damper: circular: 2 flaps, in galvanised steel. May need adjustment of stops on-site.
- Passive circular silencer.
- Electrical accessories:
  - Proximity switch,
  - Pressure switch,
  - AXONE Micro II Relay Box,
  - Emergency Stop button,
  - Residential parking smoke extraction unit.

INSTALLATION

Installation A (MH) or B (HM)

Horizontal to the ground and wall mounted.

- Options required: feet and anti-vibration mounts, counter flanges & flexible sleeves or grille if not connected to the network of ducts.

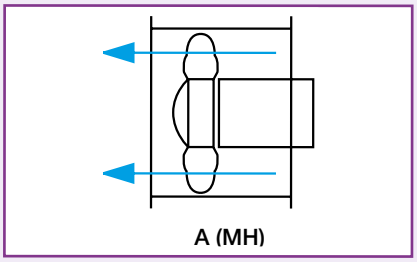
Horizontal to the ground between two ducts

- Options required, feet and anti-vibration mounts, counter flanges and flexible sleeves on both sides, long shell for access to the motor through an inspection hatch.

Horizontal and wall mounted.

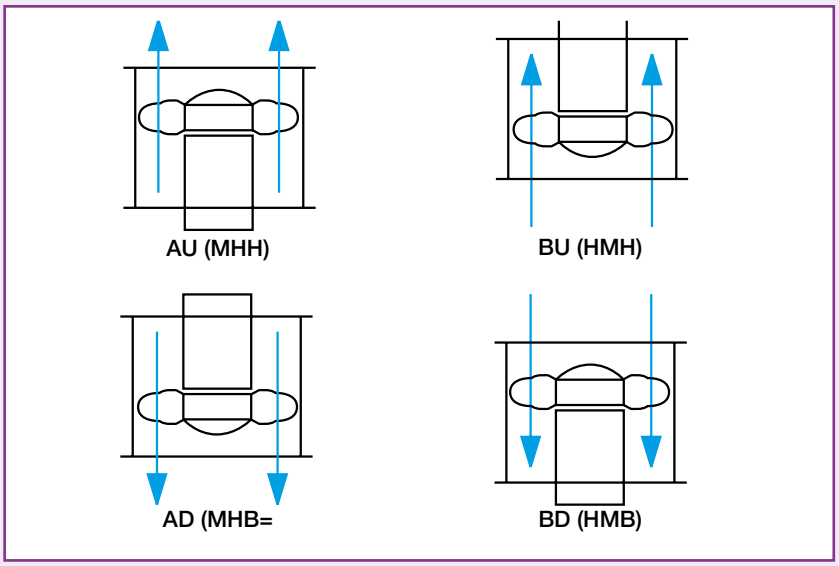
- Options required: square plate for wall mount, counter-flange and flexible sleeve or grille (if not connected to ductwork).

Installation AU (MHH), BU (HMH), AD (MHB), BD (HMB)



Vertical - suspended from ceiling or ducts

- Shell should be bolted in place using all flange holes.
- Options required: square, reinforced plate to support the HELIONE, protective grill if access remains possible or if there is a risk of foreign objects being sucked up, if connected to the ductwork on both sides: long shell for access to the motor through an inspection hatch.



Descriptions of HELIONE fans have the following information:

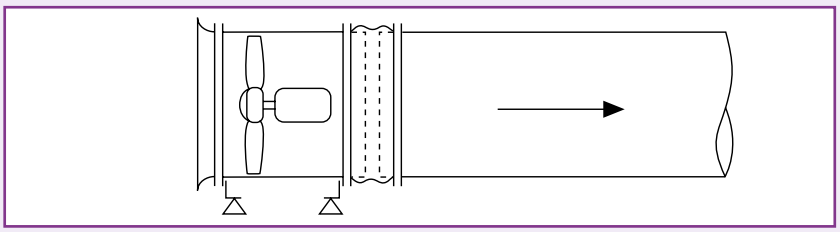
Helione	F200-	560/	20/	4/	6-	13,2kW
	Fire protection rating	Nominal diameter in mm	Shaft diameter in mm	Number of motor poles	Number of fan blades	Motor power in kW

Presentation of the HELIONE range of axial fans

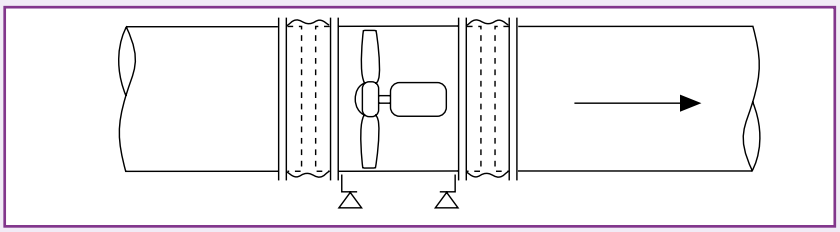
EXAMPLE INSTALLATIONS

- **Duct on one side only - Horizontal**
  Use:
  - Grille on motor or fan side,
  - Support feet,
  - Anti-vibration mounts,
  - 1 counter-flange.

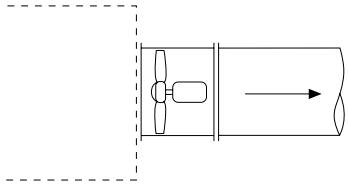
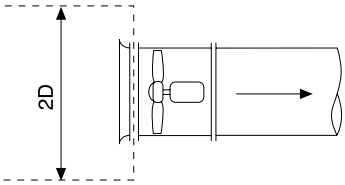
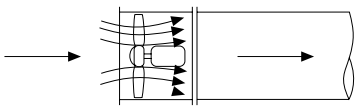
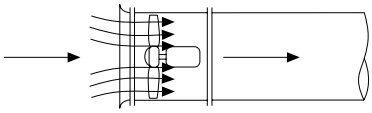
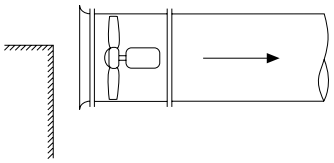
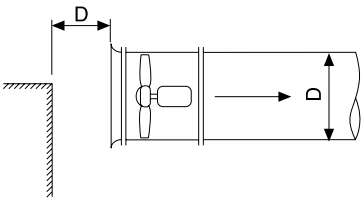
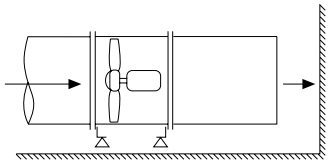
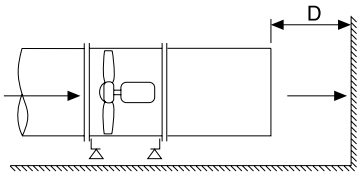
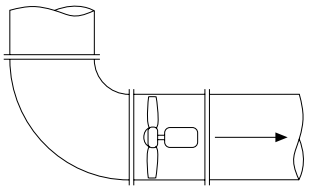
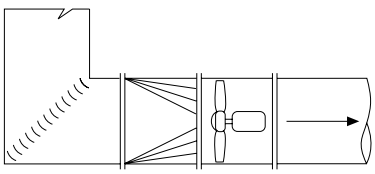
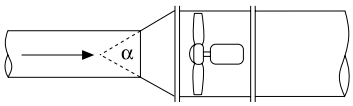
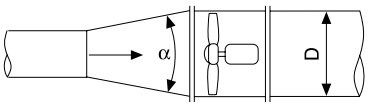
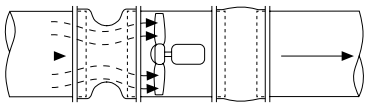
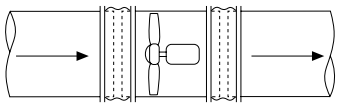
The support feet are compatible with vertical mounting, simply attach the fan using brackets.



- **Duct on both sides (long shell)**
  Use:
  - Support feet (if floor mounted),
  - Anti-vibration mounts,
  - 2 flexible sleeves,
  - 2 counter-flanges.



Installation guide

To avoid	Recommended	Comments
		A sharp edge on the inlet side reduces the efficiency of the fan, **Conical connections are recommended.**
		A sharp edge on the inlet side increases noise levels and reduces efficiency **a conical connection is recommended**.
		**A minimum clearance is recommended, equivalent to the inlet diameter.**
		**A minimum clearance is recommended, equivalent to the inlet diameter.**
		**It is recommended that a square adapter is used.**
		**It is recommended that an adapter with angles > 15° is used.**
		**Flexible sleeves must be sufficiently taut to prevent pressure loss.**

HELIONE axial fan units

CE

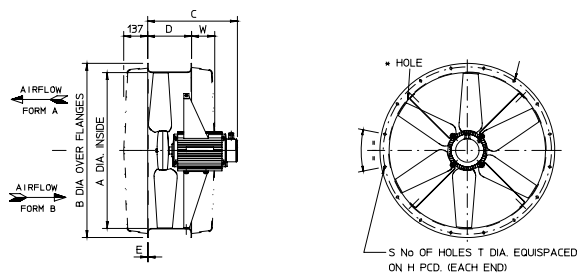
Example of a detailed technical sheet

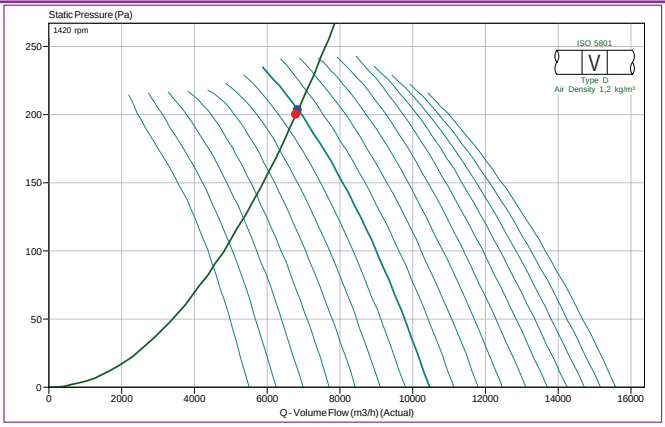
Fan references: 56JM/20/4/6/22
Fan diameter: 560 mm
Blades: 6
Speed of rotation: 1420 rpm
Speed: 7.7 m/s
Blade angle: 22°
Air flow direction: A
Fan shell: short
Characteristics required: 6800 m³/h @ 200 Pa (static)
Dynamic exhaust pressure 36 Pa
Absorbed turbine power 0.629 kW
Max. power 0.646 kW
Aeraulic efficiency: 72 %
Height of motor shaft: CT9
Motor power: 1.15 kW
Nominal current: 3.2 A
Current on start-up: 11 A
Motor support: boss
Power supply: 380-420 Volts 50 Hz 3 Phase
Starter type: DOL
Motor windings: standard
Air density: 1.2 kg/m³ / 20 °C / 0 m / 50% RH
Smoke extraction: Not for smoke extraction

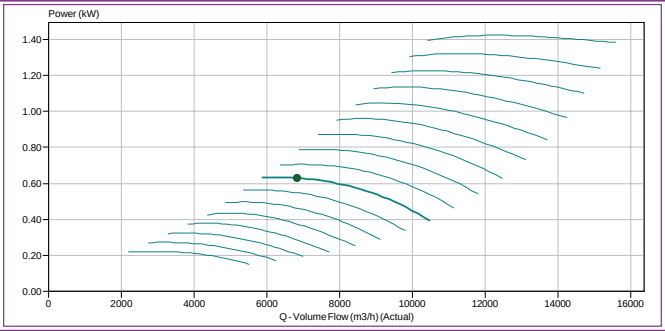
The aeraulic data is produced by our laboratories as per ISO 5801 & are applicable for ducted installations.
Acoustic data is produced by our laboratories as per BS 848-P2-1985 & are applicable for ducted installations. Only the total inlet acoustic pressure level is given for the distance specified (in free air, spherical).

	Acoustic spectrum (Hz)								Overall	
	63	125	250	500	1k	2k	4k	8k	Lw*	LpA @ 3 m**
Inlet*	78	82	79	78	76	72	69	65	86	60
Outlet*	80	83	79	78	77	73	70	66	87	60

* Lw dB re 10^{-12} W ** dBA re $2x10^{-5}$ Pa







New HELIONE unclassified & F200 - 1 SPEED

Short ring

Long ring

Compliance

- Classification F200° - 2h.
- Conforms to EN 12101-3.

Advantages

- Up to 70,000 m³/h.
- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

FIELD OF APPLICATION

- Ventilation & smoke extraction from covered car parks.
- Quick selection tables covering standard products, for more information, contact us.

RECOMMENDATION

- When installing with anti-vibration mounts, above Ø 800, and for motors > 4 kW, it is recommended that the long shell option be used. Otherwise, rails should be used between the feet and pads to spread the load.

RANGE F200 (120) - 1-SPEED

Description	Code
HÉLIONE F200-560/20/4/6 - 0,66 kW	11090299
HÉLIONE F200-560/20/4/6 - 1,27 kW	11090300
HÉLIONE F200-710/20/4/3 - 1,27 kW	11090302
HÉLIONE F200-710/20/4/3 - 1,8 kW	11090303
HÉLIONE F200-710/20/4/6 - 1,8 kW	11090305
HÉLIONE F200-710/20/4/6 - 2,64 kW	11090294
HÉLIONE F200-710/25/4/9 - 2,64 kW	11090304
HÉLIONE F200-710/20/4/6 - 3,6 kW	11090306
HÉLIONE F200-900/25/4/3 - 4,8 kW	11090307
HÉLIONE F200-900/25/4/6 - 4,8 kW	11090309
HÉLIONE F200-900/25/4/6 - 6,6 kW	11090310
HÉLIONE F200-900/25/4/9 - 6,6 kW	11090311
HÉLIONE F200-1000/25/4/3 - 4,8 kW	11090312
HÉLIONE F200-1000/25/4/3 - 6,6 kW	11090313
HÉLIONE F200-1000/25/4/6 - 4,8 kW	11090314
HÉLIONE F200-1000/25/4/6 - 9 kW	11090315
HÉLIONE F200-1000/25/4/6 - 13,2 kW	11090316
HÉLIONE F200-1000/25/4/9 - 9 kW	11090295
HÉLIONE F200-1000/25/4/9 - 13,2kW	11090296
HÉLIONE F200-1000/25/4/9 - 18 kW	11090317
HÉLIONE F200-1000/31/4/9 - 22,2 kW	11090318
HÉLIONE F200-1000/31/4/9 - 26,4 kW	11090319

OPTIONS AVAILABLE

Long shell: includes an external, pre-cabled terminal box.

SELECTION of HELIONE unclassified / F200(120) - 1 SPEED

Note: pressure loss on motor-side grille included
The number of cases corresponds to the last figures of the Aldes code.

	Pressure (Pa)							
Q (m3/h)	150	200	250	300	350	400	450	500
5400	299	299						
7200	299	299						
9000	299	300						
10800	300	302						
11400	302	302	305	305	304	309	309	
12000	302	302	305	294	304	309	309	
12600	302	303	305	294	304	309	309	314
13200	302	303	294	294	304	309	309	314
13800	302	303	294	294	309	309	309	314
14400	303	303	294	294	309	309	309	314
15000	303	303	294	294	309	309	309	314
15600	303	294	294	294	309	309	309	311
16200	294	294	294	306	309	309	309	311
16800	294	294	294	306	309	309	314	311
17400	294	294	306	306	309	309	314	311
18000	294	306	306	306	309	309	311	311
21000	306	306	307	309	309	309	311	311
24000	307	307	309	309	309	310	311	311
27000	307	307	309	310	310	310	311	295
30000	307	312	312	310	310	315	315	296
33000	307	312	313	310	315	315	315	296
36000	312	312	313	315	315	315	315	316
39000	312	313	315	315	315	315	316	296
42000	313	313	315	315	315	316	316	296
45000	313	315	315	316	316	316	296	317
48000	315	315	316	316	316	317	317	317
54000	316	316	316	316	317	317	317	318
60000	316	317	317	317	318	318	318	319
66000	317	318	318	319	319			
72000	319	319						

ELECTRICAL CHARACTERISTICS F200 - 3-PHASE

Motor F200 - 1-speed - 4 poles		
Power (kW)	Rated current (A)	Start-up current (A)
0.9	2	9.4
1.27	3.08	14.2
1.8	3.75	19.8
2.64	5.42	30.9
3.6	7.03	38.6
4.8	9.23	57.2
6.6	12.6	84
9	17.1	114
11	21.4	107
13.2	24.3	165.3
18	34.7	170
22.2	41.4	242
26.4	49.8	284

HELIONE axial fan units

CE

New HELIONE unclassified & F200 - 2 SPEED

Short ring

Long ring

Compliance

- Classification F200° - 2h.
- Conforms to EN 12101-3.

Advantages

- Up to 70,000 m³/h.
- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

FIELD OF APPLICATION

- Ventilation & smoke extraction from covered car parks.
- Quick selection tables for the standard product range. For more information, contact us.

RECOMMENDATION

- When installing with anti-vibration mounts, above Ø 800, and for motors > 4 kW, it is recommended that the long shell option be used. Otherwise, rails should be used between the feet and pads to spread the load.

RANGE F200 (120) - 2-SPEED

Description	Code
HELIONE F200-560/20/4-8/6 - 0.92/0.23 kW	11090320
HELIONE F200-630/20/4-8/3 - 1.84/0.46 kW	11090321
HELIONE F200-710/20/4-8/3 - 1.84/0.46 kW	11090322
HELIONE F200-800/20/4-8/3 - 3.22/0.8 kW	11090323
HELIONE F200-710/20/4-8/6 - 3.22/0.8 kW	11090324
HELIONE F200-900/25/4-8/3 - 3.22/0.8 kW	11090325
HELIONE F200-900/25/4-8/6 - 3.22/0.8 kW	11090326
HELIONE F200-900/25/4-8/6 - 4.37/1.15 kW	11090327
HELIONE F200-900/25/4-8/6 - 5.75/1.5 kW	11090328
HELIONE F200-1000/25/4-8/3 - 4.37/1.15 kW	11090329
HELIONE F200-1000/25/4-8/3 - 5.75/1.5 kW	11090330
HELIONE F200-1000/25/4-8/6 - 4.37/1.15 kW	11090331
HELIONE F200-1000/25/4-8/6 - 5.75/1.5 kW	11090332
HELIONE F200-1000/25/4-8/6 - 7.2/1.8 kW	11090333
HELIONE F200-1000/25/4-8/6 - 12.7/3.45 kW	11090334
HELIONE F200-1000/25/4-8/9 - 16.1/4.03 kW	11090335
HELIONE F200-1000/31/4-8/9 - 19.6/4.95 kW	11090336
HELIONE F200-1000/31/4-8/9 - 23/5.75 kW	11090337

OPTIONS AVAILABLE

Long shell: includes an external, pre-cabled terminal box.

SELECTION of HELIONE unclassified / F200(120) - 2 SPEED

Note: pressure loss on motor-side grille included.
The number of cases corresponds to the last figures of the Aldes code.

	Pressure (Pa)							
Q (m³/h)	150	200	250	300	350	400	450	500
5400	20	20						
7200	20	20						
9000	20	22						
10800	21	22						
11400	21	22	24	24	26	26	27	31
12000	21	22	24	24	26	26	27	31
12600	21	22	24	24	26	26	27	31
13200	22	22	24	24	26	26	27	31
13800	22	22	24	24	26	26	27	31
14400	22	22	24	24	26	26	27	31
15000	22	22	24	24	26	26	27	31
15600	22	23	24	24	26	27	27	32
16200	22	23	24	24	26	27	31	32
16800	22	23	24	24	26	27	31	32
17400	23	23	24	24	27	27	31	32
18000	23	23	24	24	27	27	31	32
21000	23	23	25	27	27	27	32	32
24000	23	25	27	27	27	28	32	33
27000	25	27	27	28	28	32	33	35
30000	27	27	29	28	32	33	33	35
33000	29	29	32	33	33	33	33	35
36000	29	29	30	33	33	33	34	34
39000	29	30	33	34	34	34	34	35
42000	30	33	34	34	34	34	35	35
45000	33	34	34	34	34	34	35	35
48000	34	34	34	34	34	35	35	35
54000	34	34	34	35	35	35	36	36
60000	35	35	36	36	36	36	37	37
66000	36	36	37	37	37			
72000	37	37						

ELECTRICAL CHARACTERISTICS F200 - 3-PHASE

Motor F200 - 2-speed - 4/8 poles		
Power (kW)	Rated current (A)	Start-up current (A)
0.92/0.23	2.21/0.94	9.3/2.4
1.84/0.46	4.23/1.77	21.6/5.5
3.22/0.8	6.8/2.54	36/8.6
4.37/1.15	9.23/3.02	55.4/10.8
5.75/1.5	11.8/3.78	88.5/21.5
7.2/1.8	13.8/4.24	89.7/22
12.7/3.45	24/7.81	146/30.5
16.1/4.03	30.4/9.41	192/35.8
19.6/4.95	37.9/14	269/50.4
23/5.75	43.4/15.1	339/72.5

New HELIONE F400 - 1-SPEED

Short ring

Long ring

Compliance

- Class: F400° - 2h.
- CE compliant: EN 12101-3.

Advantages

- Up to 70,000 m3/h.
- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

FIELD OF APPLICATION

- Ventilation & smoke extraction from covered car parks.
- Quick selection tables covering standard products, for more information, contact us.

RECOMMENDATION

- When installing with anti-vibration mounts, above Ø 800, and for motors > 4 kW, it is recommended that the long shell option be used. Otherwise, rails should be used between the feet and pads to spread the load.

RANGE F400 (120) - 1-SPEED

Description	Code
HELIONE F400-560/16/4/5 - 0.9 kW	11090340
HELIONE F400-630/20/4/6 - 0.9 kW	11090341
HELIONE F400-630/20/4/6 - 1.27 kW	11090342
HELIONE F400-630/20/4/6 - 1.8 kW	11090343
HELIONE F400-710/25/4/6 - 1.8 kW	11090345
HELIONE F400-800/25/4/3 - 2.64 kW	11090347
HELIONE F400-800/25/4/6 - 2.64 kW	11090348
HELIONE F400-800/25/4/6 - 3.6 kW	11090349
HELIONE F400-900/25/4/6 - 4.8 kW	11090352
HELIONE F400-900/25/4/6 - 6.6 kW	11090353
HELIONE F400-900/25/4/9 - 3.6 kW	11090354
HELIONE F400-900/25/4/9 - 4.8 kW	11090355
HELIONE F400-900/25/4/9 - 6.6 kW	11090356
HELIONE F400-900/25/4/9 - 9 kW	11090357
HELIONE F400-900/25/4/9 - 11 kW	11090358
HELIONE F400-1000/31/4/6 - 6.6 kW	11090359
HELIONE F400-1000/31/4/6 - 11 kW	11090361
HELIONE F400-1000/31/4/6 - 13.2 kW	11090362
HELIONE F400-1000/31/4/9 - 11 kW	11090363
HELIONE F400-1000/31/4/9 - 13.2 kW	11090364
HELIONE F400-1000/31/4/9 - 18 kW	11090365
HELIONE F400-1000/31/4/9 - 27kW	11090367

OPTIONS AVAILABLE

Long shell: includes an external, pre-cabled terminal box.

SELECTION of HELIONE F400(120) - 1 SPEED

Note: pressure loss on motor-side grille included.
The number of cases corresponds to the last figures of the Aldes code.

	Pressure (Pa)							
Q (m³/h)	150	200	250	300	350	400	450	500
5400	40	41	45	45				
7200	40	42	45	48				
9000	42	42	45	48				
10800	42	43	45	48				
11400	43	43	48	48				
12000	43	43	48	48	52	52	55	55
12600	43	45	48	48	52	52	55	55
13200	43	47	48	52	52	52	55	55
13800	45	47	48	52	52	52	55	56
14400	45	47	48	48	52	55	55	56
15000	47	47	48	52	52	55	55	56
15600	47	48	48	52	52	55	55	56
16200	47	48	48	52	52	55	55	56
16800	47	48	48	52	52	55	56	56
17400	47	48	49	52	52	55	56	56
18000	47	48	49	52	52	55	56	59
21000	47	49	49	52	56	56	63	63
24000	49	52	52	52	56	56	63	63
27000	52	52	52	53	56	57	57	63
30000	52	52	53	53	57	57	63	63
33000	53	53	53	57	57	57	63	63
36000	53	53	57	57	57	58	63	64
39000	57	57	57	58	58	61	64	64
42000	57	58	58	58	61	64	64	65
45000	58	58	61	61	64	64	65	65
48000	61	61	61	62	62	65	65	65
54000	61	62	62	65	65	65	67	67
60000	62	65	65	67	67	67		
66000	67	67	67	67				
72000	67							

ELECTRICAL CHARACTERISTICS F400 - 3-PHASE

Motor F400 - 1-speed - 4 poles		
Power (kW)	Rated current (A)	Start-up current (A)
0.9	2	9.4
1.27	3.08	14.2
1.8	3.75	19.8
2.64	5.42	30.9
3.6	7.03	38.6
4.8	9.23	57.2
6.6	12.6	84
9	17.1	114
11	21.4	107
13.2	24.3	165.3
18	34.7	170
27	49.8	284

HELIONE axial fan units

CE

New HELIONE F400 - 2-SPEED

Short ring

Long ring

Compliance

- Class: F400° - 2h.
- CE compliant: EN 12101-3.

Advantages

- Up to 70,000 m³/h.
- Wide range, for car-parks, commercial & industrial premises.
- Numerous accessories for easy introduction.

FIELD OF APPLICATION

- Smoke extraction for commercial & industrial premises.
- Ventilation & smoke extraction from covered car parks.
- Quick selection tables covering standard products, for more information, contact us.

RECOMMENDATION

- When installing with anti-vibration mounts, above Ø 800, and for motors > 4 kW, it is recommended that the long shell option be used. Otherwise, rails should be used between the feet and pads to spread the load.

RANGE F400 (120) - 2-SPEED

Description	Code
HELIONE F400-560/16/4-8/5 - 0,92/0,23 KW	11090370
HELIONE F400-630/20/4-8/6 - 0,92/0,23 KW	11090371
HELIONE F400-630/20/4-8/6 - 1,84/0,46 KW	11090372
HELIONE F400-710/25/4-8/6 - 1,84/0,46 KW	11090373
HELIONE F400-800/25/4-8/3 - 1,84/0,46 KW	11090374
HELIONE F400-800/25/4-8/6 - 2,53/0,63 KW	11090376
HELIONE F400-800/25/4-8/6 - 3,22/0,8 KW	11090377
HELIONE F400-900/25/4-8/3 - 3,22/0,8 KW	11090378
HELIONE F400-900/25/4-8/6 - 4,37/1,15 KW	11090379
HELIONE F400-900/25/4-8/6 - 5,75/1,5 KW	11090380
HELIONE F400-900/25/4-8/6 - 7,92/1,98 KW	11090381
HELIONE F400-900/25/4-8/9 - 4,37/1,15 KW	11090382
HELIONE F400-900/25/4-8/9 - 5,75/1,5 KW	11090383
HELIONE F400-900/25/4-8/9 - 7,92/1,98 KW	11090384
HELIONE F400-900/25/4-8/9 - 12,7/3,45 KW	11090385
HELIONE F400-1000/31/4-8/6 - 7,92/1,98 KW	11090387
HELIONE F400-1000/31/4-8/6 - 12,7/3,45 KW	11090388
HELIONE F400-1000/31/4/8/9 - 7,92/1,98 KW	11090297
HELIONE F400-1000/31/4/8/9 - 12,7/3,45 KW	11090298
HELIONE F400-1000/31/4-8/9 - 16,1/4,03 KW	11090389
HELIONE F400-1000/31/4-8/9 - 19,6/4,95 KW	11090390
HELIONE F400-1000/31/4-8/9 - 23/5,75 KW	11090391

OPTIONS AVAILABLE

Long shell: includes an external, pre-cabled terminal box.

SELECTION of HELIONE F400(120) - 2 SPEED

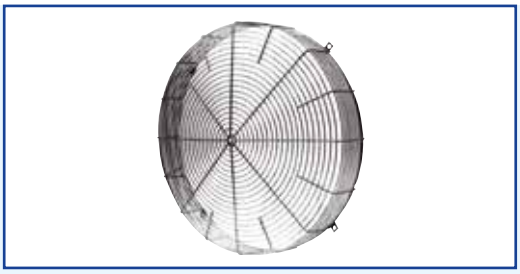
Note: pressure loss on motor-side grille included.
The number of cases corresponds to the last figures of the Aldes code.

	Pressure (Pa)							
Q (m³/h)	150	200	250	300	350	400	450	500
5400	70	71	73	73				
7200	70	71	73	76				
9000	72	72	73	76				
10800	72	72	73	76				
11400	72	72	73	76				
12000	72	72	76	76	79	79	82	83
12600	72	73	76	76	79	79	82	83
13200	72	74	76	79	79	79	82	83
13800	73	74	76	79	79	82	83	83
14400	73	74	76	79	79	82	83	83
15000	74	74	76	79	79	82	83	83
15600	74	76	77	79	79	83	83	83
16200	74	76	77	79	79	83	83	83
16800	74	76	77	79	79	83	83	83
17400	74	77	77	79	79	83	83	83
18000	74	77	77	79	79	83	83	83
21000	77	77	79	79	83	83	83	297
24000	78	79	79	79	83	84	83	298
27000	78	79	80	80	84	84	84	298
30000	79	80	80	81	84	85	85	298
33000	80	81	81	81	85	85	298	298
36000	81	81	81	87	87	85	298	298
39000	81	87	87	87	85	85	298	89
42000	87	87	85	85	85	88	89	89
45000	87	85	85	85	88	89	89	89
48000	88	88	88	88	89	89	89	89
54000	88	88	89	89	90	90	90	91
60000	89	90	90	90	91	91		
66000	90	91	91	91				
72000	91							

ELECTRICAL CHARACTERISTICS F400 - 3-PHASE

Motor F400 - 2-speed - 4/8 poles		
Power (kW)	Rated current (A)	Start-up current (A)
0.92/0.23	2.21/0.94	9.3/2.4
1.84/0.46	4.23/1.77	21.6/5.5
2.53/0.63	5.46/2.07	33.4/7
3.22/0.8	6.8/2.54	36/8.6
4.37/1.15	9.23/3.02	57.8/11
5.75/1.5	11.8/3.78	88.5/21.5
7.92/1.98	16.3/4.83	117/28.5
12.7/3.45	24/7.81	146/30.5
16.1/4.03	30.4/9.41	192/35.8
19.6/4.95	37.9/14	269/50.4
23/5.75	43.4/15.1	339/72.5

HELIONE accessories

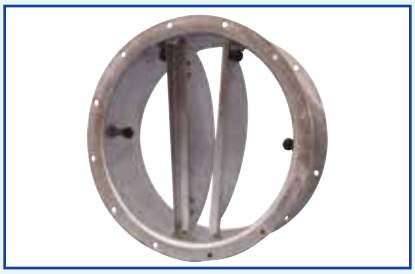


Protective screen

Wings

Anti-vibration mountings

Feet



Backdraft damper

Flexible sleeve

Dimensions of accessories available on request.

The choice of accessories is dependent on the diameter of the fan propeller.

Diameter (mm)	560	630	710	800	900	1000	1120	1250
Flexible sleeve	11090400	11090401	11090402	11090403	11090404	11090405	11090406	11090407
Counter flange	11090408	11090409	11090410	11090411	11090412	11090413	11090414	11090415
Fan grille	11090416	11090417	11090418	11090419	11090420	11090421	11090422	11090423
Motor grille for long shell	11090424	11090425	11090426	11090427	11090428	11090429	11090430	11090431
Motor grille for short shell	11090472	11090473	11090474	11090475	11090476	11090477	11090478	11090479
Set of 2 feet	11090480	11090481	11090482	11090483	11090484	11090485	11090486	11090487
Set of 4 HELIONE F200 pads	11090490	11090490	11090490	11090492	11090492	11090495	11090495	11090495
Square 'economy' plate	11090456	11090457	11090458	11090459	11090460	11090461	11090462	11090463
Square 'reinforced' plate	11090464	11090465	11090466	11090467	11090468	11090469	11090470	11090471
Vertical backdraft damper	11090440	11090441	11090442	11090443	11090444	11090445	-	-
Horizontal backdraft damper	11090448	11090449	11090450	11090451	11090452	11090453	11090454	11090455
Inlet unit	11090432	11090433	11090434	11090435	11090436	11090437	11090438	11090439

Accessories are supplied un-installed.

Electrical Accessories

Smoke extraction - residential parking

Advantages

- (New) : Single cabinet for 2 fans (2 floors for example).

FIELD OF APPLICATION

- Unit used to programme fan start-up (SLOW/HI/STAND-BY) to match traffic levels in the car park. It is particularly useful in apartment block car parks
- It handles the start-up of manual smoke clearance and the stoppage of smoke clearance on request from the fire services.

DESCRIPTION

- Plastic box - IP 55.
- Dimensions: width x height x depth = 375 x 375 x 200 mm.
- Weekly programming time (secure).
- Motor protection for High & Low speeds using magneto-thermal CBs, current selection to match motors used.
- Range for 2-speed Dahlander - 3P 400V motors.
- Input/Output terminals for manual smoke clearance trigger on current outage (dry contact open).
- Possibility of connecting a key-operated fir service shutdown switch (dry contact open).
- Manuals and plans available from your agency.

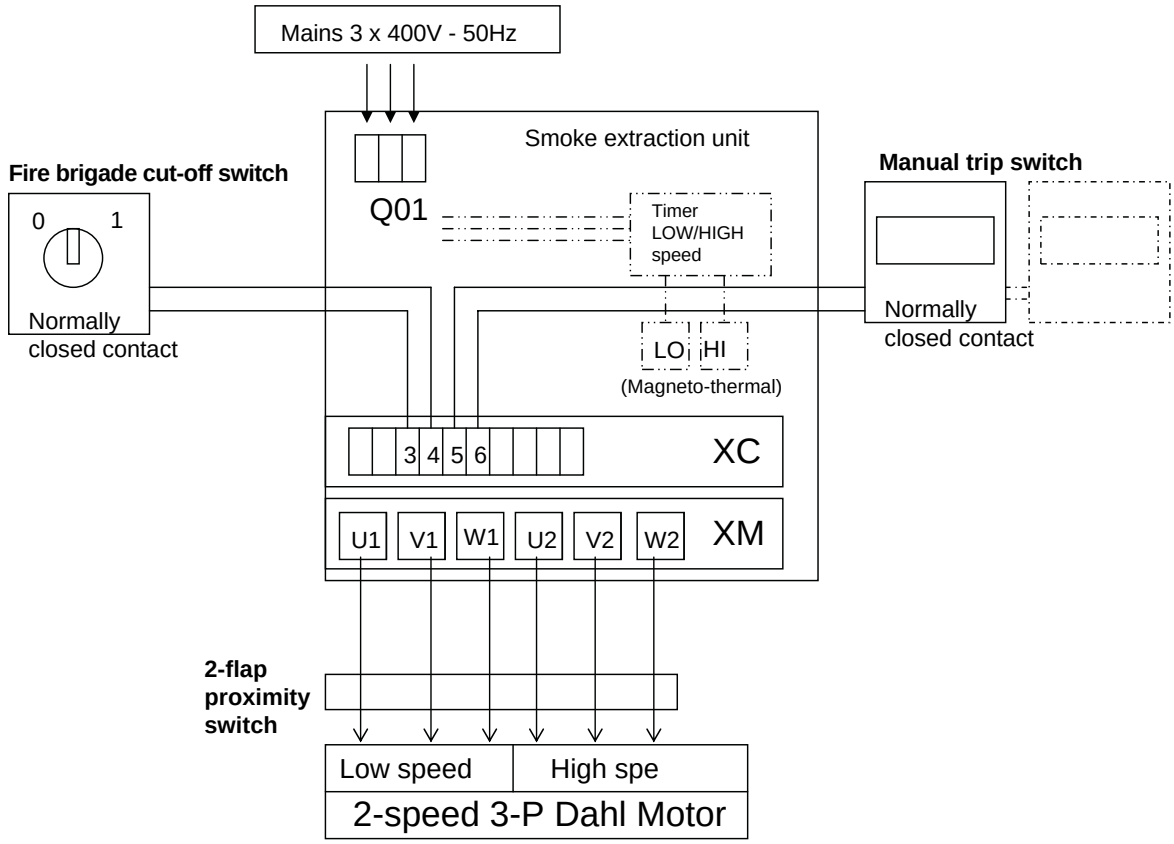
RANGE

Description	Power	Code
Car Park box: 4.0 A / 1.6 A - DAHL	1.1 kW / 0.18 kW	11057252
Car Park box: 9.0 A / 2.4 A - DAHL	3 KW / 0.55 KW	11057253
Car Park box: 16.0 A / 6.0 A - DAHL	7.5 KW / 1.5 KW	11057254
Car Park box: 6.0 A / 1.6 A - DAHL	2.2 KW / 0.37 KW	11057255
Car Park box: 12 A / 4 A - DAHL	5.5 KW / 1.1 KW	11057256
Car Park box: 24 A / 6.0 A - DAHL	11 KW / 2.8 KW	11057257
Car Park box: 32 A / 10 A - DAHL	15.3 KW / 3.8 KW	11057258
Car Park box: 40 A / 12 A - DAHL	18 KW / 4.8 KW	11057259
Car Park box: 57 A / 16 A - DAHL	22 KW / 5.3 KW	11057260
(New) Car park box - 2 fans	Please contact us	11057261

ACCESSORIES

Description	Code
Manual trigger	11044121
Fire service shutdown (NO + NC)	11057251

Simplified wiring diagram



VARILONE VF: frequency controller for professional kitchens

VARILONE VF

Advantages

- Pre-set for professional kitchen use for easy wiring.
- Continual, progressive airflow settings.
- 1 potentiometer & 1 remote Hi-speed emergency shutdown.

FIELD OF APPLICATION

- Frequency variation speed controller for asynchronous 3 phase motor 230/400V - 50 Hz.
- The VARILONE VF is factory pre-set to be controlled by a remote RD potentiometer and a priority high-speed emergency stop button.
- Ideal for use in professional kitchens, notably to control VELONE roof fans and EXONE casings.
- Single speed motors only. Do not use on 2-speed motors.

DESCRIPTION

- Power ON LCD.
- IP 20 box.
- No ON/OFF switch.
- CE & UL Certification.
- Integrated class A EMC filter Class B filter recommended for residential environments, ask us for details.
- 1 status change relay if potentiometer requires 0 Hz.

Note 1: Activating the Emergency Stop button chops the controller to maximum smoke extraction mode for large kitchens.

Note 2: The potentiometer on the front of the unit is inactive, only the remote potentiometer functions.

STANDARD RANGE

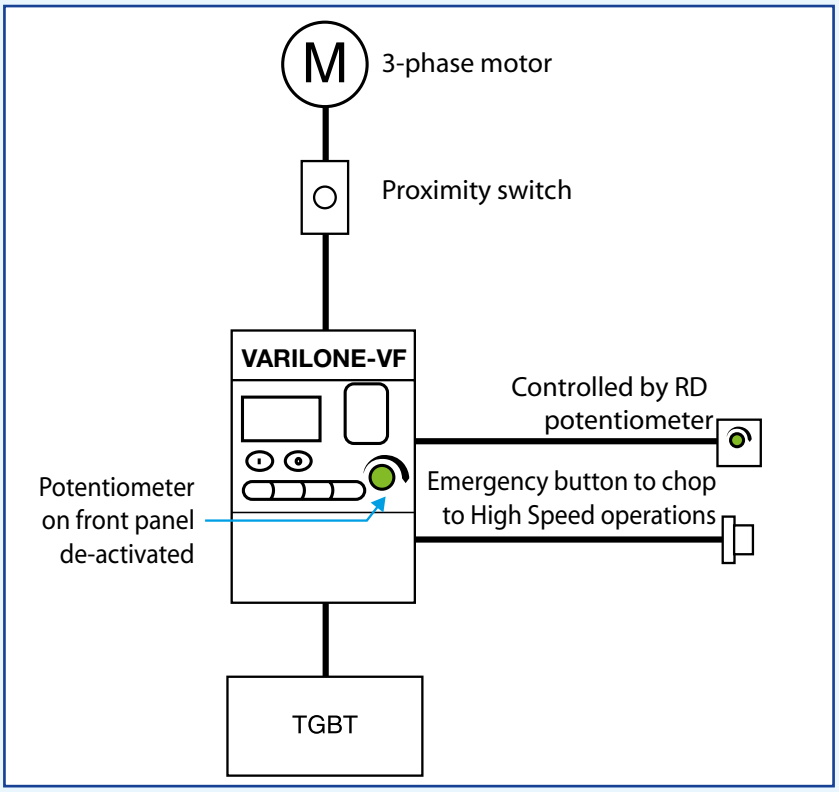
Description	Code
MONO/3 phase range	
VARILONE VF 0.75 kW - Mono/3-P	11057265
VARILONE VF 1.5 kW - Mono/3-P	11057266
VARILONE VF 2.2 kW - Mono/3-P	11057267
3/3 phase range	
VARILONE VF 0.75 kW - 3-P/3-P	11057270
VARILONE VF 1.5 kW - 3-P/3-P	11057271
VARILONE VF 2.2 kW - 3-P/3-P	11057272
VARILONE VF 3 kW - 3-P/3-P	11057273
VARILONE VF 4 kW - 3-P/3-P	11057274
VARILONE VF 7.5 kW - 3-P/3-P	11057275

INSTALLATION ACCESSORIES

- Emergency stop (closure): priority to High Fan speed. Box: IP65.
- Potentiometer + emergency stop button in a single IP65 box (RD + CPGV).

Description	Code
RD potentiometer - IP65	11057065
Emergency stop button (High speed override)	11057759
Remote potentiometer & emergency stop button (High speed override) box	11057066

LAYOUT DIAGRAM



DIMENSIONS

Type of Varilone VF	Width	Height	Depth
Varilone VF 0.75 kW	110	155	136 Mono/3-P 163 3-P/3-P
Varilone VF 1.5 / 2.2 / 3 / 4 kW	110	155	163
Varilone VF 7.5 kW	180	250	163

Electrical Accessories

3-phased auto transformer

FIELD OF APPLICATION

- Voltage controller for 1-speed asynchronous 3-P 400V motor, compatible with voltage variation.
- **Compatible with VELONE, EXONE.**

RANGE

Description	Code
Three-phase 2 A autotransformer	11086096
Three-phase 4 A autotransformer	11086097
Three-phase 6 A autotransformer	11086098
Three-phase 8 A autotransformer	11086099
Three-phase 14 A autotransformer	11057060

DIMENSIONS (mm) – WEIGHT (kg)

Type	W	H	P	Weight
Three-phase 2 A autotransformer	200	280	140	6.0
Three-phase 4 A autotransformer	250	300	200	14.0
Three-phase 6 A autotransformer	300	400	200	20.5
Three-phase 8 A autotransformer	300	400	200	27.7
Three-phase 14 A autotransformer	500	400	250	38.0

TECHNICAL DETAILS

- Auto-transformer voltage controller.
- 3-phase 400 V, 50 Hz + neutral.
- Metallic, epoxy covered IP55.
- Front panel of box fitted with voltage indicator and 5 position selector switch + I/O (130 - 180 - 230 - 300 - 400 V).
- Hinged access door.
- No motor protection.

Frequency controller

FIELD OF APPLICATION

- Frequency controller designed for single speed asynchronous 3 phase 230/400 V - 50/60 Hz motor.
- Compatible with all ALDES 1-speed 3-Phase motors.
- See General Aldes Catalogue.

2-speed comfort unit

FIELD OF APPLICATION

- These units, for three-phase 400 V dual-speed fan units or roof fans with independent windings or Dahlander systems, enable:
  - Manual speed control: Stop, low speed, high speed
  - Thermal protection of the motor at high and low speed.

DESCRIPTION

- ABS IP65 box.
- Knock-out cable gland entries (cable glands not supplied).
- 3-position selector on front face (LOW-STOP-HIGH)
- Appropriately sized 400V contactors.
- 2 thermal relays (LO/HI) of appropriate sizes.

RANGE

Description	Code
2-speed Dahlander coupling	
2-speed box Dahlander 1.6/0.6	11057235
2-speed box Dahlander 2.4/1.0	11057236
2-speed box Dahlander 4/1.6	11057237
2-speed box Dahlander 4/1	11057238
2-speed box Dahlander 4/2.4	11057239
2-speed box Dahlander 6/2.4	11057240
2-speed box Dahlander 9/2.4	11057241
2-speed box Dahlander 9/4	11057242
2-speed box Dahlander 9/6	11057243
2-speed box Dahlander 10/4	11057244
2-speed box Dahlander 16/4	11057245
2-speed box Dahlander 16/6	11057246
2-speed box Dahlander 24/10	11057247

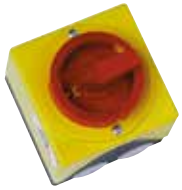
Description	Code
2 SPEED - Independent windings (BI)	
2-speed box BI 1.6/0.6	11057280
2-speed box BI 1.6/1.6	11057281
2-speed box BI 2.4/1.6	11057282
2-speed box BI 2.4/1.0	11057283
2-speed box BI 4/1.6	11057284
2-speed box BI 4/2.4	11057285
2-speed box BI 6/2.4	11057286
2-speed box BI 6/4	11057287
2-speed box BI 9/4	11057288
2-speed box BI 9/6	11057289
2-speed box BI 10/6	11057290
2-speed box BI 16/6	11057291
2-speed box BI 16/10	11057292
2-speed box BI 24/10	11057293

Electrical and mechanical characteristics

	Rated current (High) (A)		Rated current (Low) (A)		Dimensions		
Description	Ith mini	Ith maxi	Ith mini	Ith maxi	W (mm)	H (mm)	D (mm)
MOTOR - 2 SPEED - Independent windings (BI)							
2-speed box Dahlander 1.6/0.6	1.0	1.6	0.4	0.6	160	240	152
2-speed box Dahlander 2.4/1.0	1.6	2.4	0.6	1.0	160	240	152
2-speed box Dahlander 4/1.6	2.4	4.0	1.0	1.6	160	240	152
2-speed box Dahlander 4/1	2.4	4.0	0.6	1.0	160	240	152
2-speed box Dahlander 4/2.4	2.4	4.0	1.6	2.4	160	240	152
2-speed box Dahlander 6/2.4	4.0	6.0	1.6	2.4	160	240	152
2-speed box Dahlander 9/2.4	6.0	9.0	2.4	4.0	160	240	152
2-speed box Dahlander 9/4	6.0	9.0	2.4	4.0	160	240	152
2-speed box Dahlander 9/6	6.0	9.0	4.0	6.0	160	240	152
2-speed box Dahlander 10/4	6.0	10.0	2.4	4.0	200	280	152
2-speed box Dahlander 16/4	10.0	16.0	2.4	4.0	200	280	152
2-speed box Dahlander 16/6	10.0	16.0	4.0	6.0	200	280	152
2-speed box Dahlander 24/10	16.0	24.0	6.0	10.0	200	280	152
2-speed box Dahlander 40/10	24.0	40.0	6.0	10.0	375	375	175
2-speed box Dahlander 24/16	24.0	40.0	10.0	16.0	375	375	175
2-speed box Dahlander 57/16	40.0	57.0	10.0	16.0	375	375	175
2-speed box Dahlander 57/24	40.0	57.0	16.0	24.0	375	375	175
MOTOR - 2 SPEED - Independent windings (BI)							
2-speed box BI 1.6/0.6	1.0	1.6	0.4	0.6	160	240	152
2-speed box BI 1.6/1.6	1.0	1.6	1.0	1.6	160	240	152
2-speed box BI 2.4/1.6	1.6	2.4	1.0	1.6	160	240	152
2-speed box BI 2.4/1.0	1.6	2.4	0.6	1.0	160	240	152
2-speed box BI 4/1.6	2.4	4.0	1.0	1.6	160	240	152
2-speed box BI 4/2.4	2.4	4.0	1.6	2.4	160	240	152
2-speed box BI 6/2.4	4.0	6.0	1.6	2.4	160	240	152
2-speed box BI 6/4	4.0	6.0	2.4	4.0	160	240	152
2-speed box BI 9/4	6.0	9.0	2.4	4.0	160	240	152
2-speed box BI 9/6	6.0	9.0	4.0	6.0	160	240	152
2-speed box BI 10/6	6.0	10.0	4.0	6.0	160	240	152
2-speed box BI 16/6	10.0	16.0	4.0	6.0	200	280	152
2-speed box BI 16/10	10.0	16.0	6.0	10.0	200	280	152
2-speed box BI 24/10	16.0	24.0	6.0	10.0	200	280	152
2-speed box BI 40/10	24.0	40.0	6.0	10.0	250	375	175
2-speed box BI 40/16	24.0	40.0	10.0	16.0	250	375	175
2-speed box BI 57/16	40.0	57.0	10.0	16.0	250	375	175
2-speed box BI 57/24	40.0	57.0	16.0	24.0	250	375	175

Electrical Accessories

Proximity switch disconnector



FIELD OF APPLICATION

- On/Off proximity disconnector function - padlockable, for category AC 23 A use (high breaking capacity).
- Compatible with all single-phase or three-phase fan units (depending on max. consumed power).

DESCRIPTION

- In IP64 box for surface mounting.
- Category of use: AC3.
- Fitted with auxiliary NO and NF contacts for 3-phase models only.
- Supplied with wiring instructions.

RANGE

Description	W x H x D (mm)	Code
1-speed 1-phase proximity switch 0.9 kW.	86 x 86 x 108	11056196
1-speed 3-phase proximity switch 7.5 kW + contacts	86 x 86 x 120	11057606
1-speed 3-phase proximity switch 22.5 kW + contacts	180 x 110 x 143	11057607
1-speed 3-phase proximity switch 30 kW + contacts	182 x 180 x 148	11057608
2-speed 3-phase proximity switch 7.5 kW + contacts	86 x 86 x 120	11057613
2-speed 3-phase proximity switch 22.5 kW + contacts	182 x 180 x 148	11057610
2-speed 3-phase proximity switch 30 kW + contacts	254 x 180 x 148	11057611

Pressure switch kit

FIELD OF APPLICATION

- This safety device is used to detect operational anomalies with the fan (pressure loss) respecting the norms and standards in force.
- Compatible with all fans, units or roof fans manufactured by ALDES.

DESCRIPTION

- Box to be installed inside or outside fan unit casing or on ductwork.
- Supplied as a complete kit, ready for installation. Kit comprises 2 m of crystal tubing, 2 pressure ports or cable guides, mounting accessories, fixed alarm level (80 Pa) or adjustable pressure switch and assembly instructions.

RANGE

Description	Code
80 Pa fixed pressure switch kit	11025018
40-300 Pa adjustable pressure switch kit	11091001
100-1000 Pa adjustable pressure switch kit	11091002

Single phase auto-transformer

Advantages

- Precise settings - 5 positions.

FIELD OF APPLICATION

- Variable speed control designed for single-phase 230 V AC single-speed motors, compatible with voltage regulation.
- Compatible with TVEC Silence, VEKITA+ (acoustics), HELICA, THELIA mono, VDA mono & VC.

DESCRIPTION

- Fitted inside IP54 box.
- Manual 5-position settings + OFF (110 - 140 - 170 - 200 - 230 V).
- Power ON lamp.
- Built-in protective fuse.
- Supplementary non-regulated 230 V output.
- 230 VAC - 50/60 Hz.

RANGE

Description	Code	W x H x D (mm)
1-phase 1.5 A autotransformer	11086100	115 x 180 x 85
1-phase 3.5 A autotransformer	11086418	170 x 245 x 140
1-phase 5.0 A autotransformer	11086417	170 x 245 x 140
1-phase 13 A autotransformer	11057061	300 x 300 x 170

Single-phase 3-10A voltage controller

Advantages

- Continual variation
- Separate ON/OFF switch.
- Safe start-up function - full voltage.

FIELD OF APPLICATION

- Voltage controller designed for 1-speed 230V single-phase motors with a maximum current of less than 3, 5 & 10 A respectively, compatible with voltage variation.

DESCRIPTION

- Fitted inside IP54 box.
- PCB design.
- Remote ON/OFF switch (on the side of the unit).
- Integrated anti-parasite function (EMC).
- Built-in protective fuse.
- 230 VAC - 50/60 Hz.
- Full voltage start-up function: on start-up, the controller applies maximum voltage for 6 - 7 seconds before returning to the voltage selected by the potentiometer. This function prevents re-starts at low voltage, which can damage the motor.
- Minimum speed can be pre-set (100 V by default).

RANGE

Description	Code	W x H x D (mm)
Voltage regulator 3.0 A	11086024	83 x 140 x 88
Voltage regulator 5.0 A	11086013	83 x 160 x 88
Voltage regulator 10 A	11057067	115 x 195 x 95

Smoke exhaust dampers and air inlets

This section presents the air inlets and smoke exhaust dampers for use in commercial & high-rise buildings.

All smoke extraction dampers are now marked CE as conforming to NF-S-61937-10 & certified NF

(For more information, see page 86).

The new range of OPTONE grilles is remarkable, notably due to the ease with which motorisation can be added, on-site, to the 1-flap & 2-flap dampers. The OPTONE "+GRILLE" model is also patented and a first for the market.

Note: Ask for the CONCEPTOR - SMOKE EXTRACTION software or an update, it will save you considerable time when selecting new smoke extraction dampers.

The offer for residential buildings is presented in the new COMPULSOR - RESIDENTIAL SMOKE EXTRACTION 36-page document.

Smoke exhaust air inlet

OXYTONE PANNEAU 2012
p. 79

AIRONE
p. 81

OXYTONE LAMES 2013
p. 83

Smoke exhaust dampers

OPTONE smoke exhaust shutter
p. 89

PLAFONE
smoke exhaust damper
p. 108

Aesthetic grilles

Aesthetic damper grilles
p. 97

OXYTONE smoke exhaust air inlets

OXYTONE PANNEAU 2012 air inlet NF

OXYTONE PANNEAU 2012 closed, in stand-by position

Open in safety position

Compliance

- Certified NF.
- Compliant with NF-S-61937-8 concerning air inlets.
- Complies with CE marking in accordance with EN 12101-2 (possibility of using OXYTONE PANNEAU 2012 for natural smoke extraction).

Advantages

- Insulated air inlet.
- New: Invisible mechanism, integrated in frame.
- Choice of RAL paint.
- Aesthetic GFAP 007 indoor grille - Identical to that used on the smoke exhaust damper.

Think about the selection software Conceptor Smoke extraction

FIELD OF APPLICATION

- OXYTONE PANNEAU 2012 is a remote-controlled air inlet, opening outwards and used exclusively for air inlet applications. These air inlets are designed for natural and mechanical smoke exhaust installations in commercial buildings and multi-family housing.
- OXYTONE PANNEAU 2012 particularly meets the needs of modern buildings, where heat losses must be minimal.
- Principle of operation: closed in standby position, OXYTONE PANNEAU 2012 opens outwards by an electrical command in the event of a fire, providing the fresh air necessary for smoke exhaust operations.
- Indoors, the installation of a GFAP 007 or a GFAP grille offers the possibility of a homogeneous aesthetic design with VANTONE damper grilles used for the extraction of smoke and fumes.
- it is also possible to install OXYTONE PANNEAU 2012 in a curtain wall.
- OXYTONE PANNEAU 2012 is also qualified for natural smoke extraction.

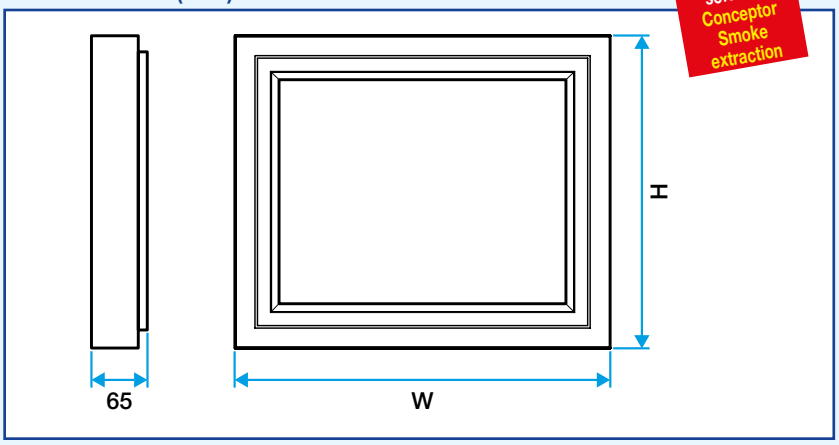
DESCRIPTION

- The panel is outward-opening, using mechanical actuators released by a command via the 24V or 48V remote control.
- Activation by power emission or power cut-off, 24 or 48 VDC.
- The panel is fitted with a handle for manual reset.
- The chassis features a frame in which 2 actuators articulate the panel. In addition to the actuators, the position contacts and the electric trip device are built into the frame and therefore invisible when the OXYTONE PANNEAU 2012 panel is closed.
- The frame and the panel use aluminium surrounds to ensure their perfect integration into all types of window frames, both on reveals and wall mounted.
- The panel is available with 3 different versions:

- standard = double glazing (hardened and laminated outside glass 4/10/33.2).
- optional thermal double glazing (Argon-filled 4/16/4 Climaplus).
- optional insulated solid metal panel (2 aluminium sheets 20/10 + 20 mm polystyrene).

- RAL paint is possible as an option on the chassis and the solid panel.
- Supplied without seal covers, available as accessories (not mounted), to be cut to size.

DIMENSIONS (mm)



FREE AIR PASSAGE (dm²)

- The nominal dimensions W x H correspond to overall dimensions.
- Opening size = W x H + clearance required for mounting.
- Free air passage = (W-120) x (H-120) mm.

Height H	Width W												
	420	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
420	9	10.6	13.4	16.2	19	21.8	24.6	27.4	30.2	33	35.8	38.6	41.4
500	10.6	14.4	18.2	22	25.8	29.6	33.4	37.2	41	44.8	48.6	52.4	56.2
600	13.4	18.2	23	27.8	32.6	37.4	42.2	47	51.8	56.6	61.4	66.2	71
700	16.2	22	27.8	33.6	39.4	45.2	51	56.8	62.6	68.4	74.2	80	85.8
800	19	25.8	32.6	39.4	46.2	53	59.8	66.6	73.4	80.2	87	93.8	100.6
900	21.8	29.6	37.4	45.2	53	60.8	68.6	76.4	84.2	92	99.8	107.6	115.4
1000	24.6	33.4	42.2	51	59.8	68.6	77.4	86.2	95	103.8	112.6	121.4	130.2
1100	27.4	37.2	47	56.8	66.6	76.4	86.2	96	105.8	115.6	125.4	134.2	145
1200	30.2	41	51.8	62.6	73.4	84.2	95	105.8	116.6	127.4	138.2	149	159.8

INSULATION COEFFICIENT Uw

- The thermal transmission coefficient to be taken into account for wall insulation calculations is dependent on the panel dimensions. A small panel offers a higher Uw than a large panel (impact of frame in relation to panel area).
- The aluminium surrounds used for the frame and panel are thermal break surrounds.
- The OXYTONE PANNEAU range is available with 3 different versions:

- standard = double glazing ((hardened and laminated outside glass 4/10/33.2 - Ug = 3.03 W/m2.k).

➡ Uw = 3.8 for 420 x 420 mm to 3.3 W/m2.K for 1600 x 1200 mm.

- optional thermal double glazing (Argon filled 4/16/4 Climaplus - Ug = 1.1 W/m2.K).

➡ Uw = 3.3 for 420 x 420 mm to 2 W/m2.K for 1600 x 1200 mm.

- optional insulated solid metal panel (2 aluminium sheets 20/10 + 20 mm polystyrene - Ug = 1.49 W/m2.K).

➡ Uw = 3.1 for 420 x 420 mm to 2.1 W/m2.K for 1600 x 1200 mm.

OXYTONE smoke exhaust air inlets

OXYTONE PANNEAU 2012 air inlet

Actuators and contacts integrated in frame

Trip device integrated into surround

Advantages

- Insulated air inlet.
- New: Invisible mechanism, integrated in frame.
- Ideal for air inlet dampers on outside walls.
- Choice of RAL paint.
- Aesthetic GFAP 007 indoor grille - Identical to that used on the smoke exhaust damper.

DIMENSIONAL RANGE

• The standard range extends to:
- Width: 420 < W < 1600 mm with step of 5 mm
and
- Height: 420 < H < 1200 mm with step of 5 mm.
Beyond widths of 1200 mm the frame is equipped with two electromagnetic actuators to ensure the panel closes correctly.
• Other versions, e.g. with inward-opening panel: consult us.

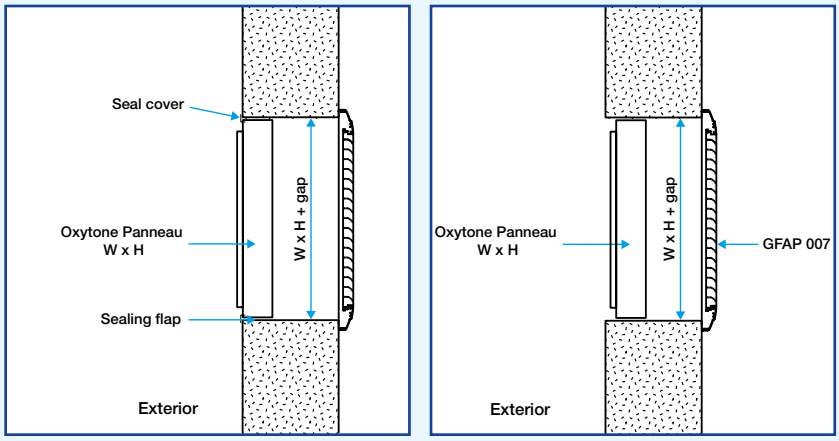
INSTALLATION

• On outside wall, with an angle between 0 and 5° to the vertical.
• The structure must be able to bear the whole weight of the panel and hinges when it is fully opened.
• In a masonry wall, the panel and frame are installed on reveals as per the diagram and in respect of the DTU directives concerned:
- ensure the support is flat,
- ensure the frame is correctly aligned,
- Number of vertical anchor points:
• H < = 650 mm ➡ 1 central attachment,
• H > 650 mm ➡ 2 attachments at 250 mm from top and bottom,
• The air inlet can also be installed in a curtain wall (glazed façade).
In this case the unit is anchored using the tightening system specific to the curtain wall structure. Please consult us.

ACCESSORIES

• **GFAP 007 indoor grille**
If the air inlet is installed on a masonry wall, a GFAP 007 indoor grille offers an aesthetic finish for the smoke extract damper. The GFAP 007 blade core is easily removed using the 007 clips.
Selection of GFAP 007 grille:
- X dimension of GFAP 007 = W - 50 mm.
- Y dimension of GFAP 007 = H - 50 mm rounded up to nearest 25 mm.
The inlet is surface-mounted on the wall.
For more information on the GFAP 007 grille, see page 106.
• **Mounting accessories**
- 20 mm seal cover, price per linear metre, useful if the OXYTONE PANNEAU 2012 is installed flush with the wall.
- 78 x 20 mm sealing flap, price per linear metre, used to dress the lip.
- 3 anchoring kits for wood (8 screws), metal (8 screws) or concrete (8 screws + plugs).
- adaptation for installation on a curtain wall: please consult us.
- adaptation possible to connect two OXYTONE PANNEAU 2012 air inlets together: please consult us.

INSTALLATION PRINCIPLE IN MASONRY WALL



RANGE with choice of options (steps of 5 mm)

• Code 11044310 up to W = 1200 mm.
• Code 11044309 for W > 1200 mm.

AVAILABLE OPTIONS

Description	Code
FCU + DCU open and closed position contacts	OPT44315
GLAZED PANEL 4/10/33.2	OPT44317
CLIMAPLUS GLAZED PANEL 4/16Ar/4	OPT44318
RAL paint for GLAZED PANEL	OPT44319
Insulated sheet SOLID PANEL	OPT44320
RAL paint for insulated sheet SOLID PANEL	OPT44321

ACCESSORIES

Description	Code
GFAP 007 (partition without mounting-frame)	11045335
Strip 780 x 22 mm (price per linear m)	11044323
20 mm seal cover (price per linear m)	11044324
Wood anchoring kit	11044326
Metal anchoring kit	11044327
Concrete anchoring kit	11044328
FCU or DCU contact kit	11044325

AIRONE smoke exhaust air inlet

Presentation of the AIRONE range of smoke exhaust air inlets

Closed, in standby position

Open, in safety position

Made in France

Compliance

- Compliant with NF-S-61937-8 concerning air inlets.
- IT246 (air passage)

Advantages

- Elegant, sober design.
- Thermal insulation as standard.
- Aesthetic GFAP 007 indoor terminal - Identical to that used on the smoke exhaust damper.
- Ideal for air inlet dampers on outside walls.
- Choice of RAL colour.

Think about the selection software Conceptor Smoke extraction

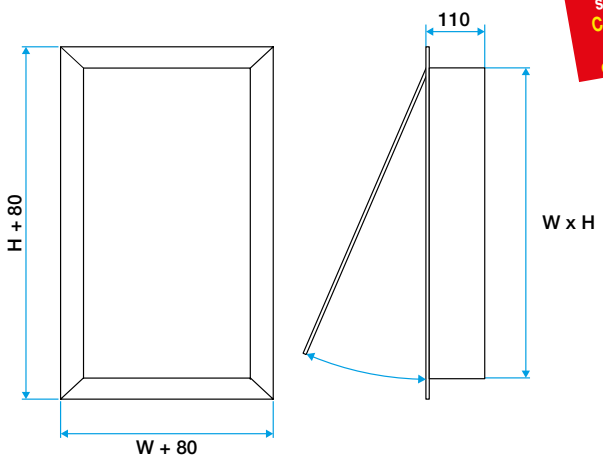
FIELD OF APPLICATION

- AIRONE is a remote-controlled, outward-opening casement reserved for air inlet functions. These air inlets are designed for natural and mechanical smoke exhaust installations in commercial buildings and multi-family housing.
- AIRONE particularly meets the needs of modern buildings, where heat losses must be minimal.
- Principle of operation: closed in standby position, AIRONE opens outward when it receives an electrical command due to a fire alarm, providing the fresh air necessary for smoke exhaust operations.
- Indoors, the installation of a GFAP 007 grille offers a harmonious finish with OPTONE damper grilles used for smoke extraction.

DESCRIPTION

- Opening: outward-opening, using oleo-pneumatic springs actuated by the 24V or 48V remote control.
- Activation by power emission or power cut-off, 24 or 48 VDC.
- Reset: manual, the casement is equipped with a handle.
- Frame: aluminium profiles for seamless integration in all type of joinery, in particular surface-mounted.
- Panel: insulated aluminium sandwich (metal sheet/ polystyrene/metal sheet).
- RAL paint: possible as option (standard: anodised aluminium).
- Optional open and closed position limit contacts: can be duplicated (additional contacts).

AIRONE OVERALL DIMENSIONS (mm)



FREE AIR PASSAGE (dm²)

- The nominal dimensions W x H correspond to the dimensions of the neck.
- Opening size = W x H + clearance required for mounting (+5 mm without mounting frame).
- Free air passage (dm²) = (W-59) x (H-59)/10000 - C where:
  C = 4.5 where H = 475
  C = 4.83 where 600 ≤ H ≤ 850
  C = 5.88 where H > 850

Height H	Width W							
	475	600	725	850	975	1100	1225	1350
475	12.8	18	23.2	28.4	33.6	38.8	44	49.2
600	17.7	24.4	31.2	38	44.7	51.5	58.2	65
725	22.9	31.2	39.5	47.8	56.2	64.58	72.8	81.1
850	28.1	38	47.8	57.7	67.6	77.5	87.4	97.3
975	32.2	43.7	55.1	66.6	78	89.5	100.9	112.4
1100	37.4	50.4	63.4	76.5	89.5	102.5	115.5	128.5
1225	42.6	57.2	71.8	86.4	100.9	115.5	130.1	-
1350	47.8	64	80.1	96.2	112.4	128.5	144.6	-

INSULATION COEFFICIENT Uw

- The thermal transmission coefficient to be taken into account for wall insulation calculations is dependent on the casement dimensions. A small casement offers a higher Uw than a large one (impact of frame in relation to panel size).

Height H	Width W							
	475	600	725	850	975	1100	1225	1350
475	3.2	3.03	2.94	2.87	2.82	2.78	2.75	2.72
600	3.05	2.89	2.79	2.72	2.67	2.63	2.6	2.57
725	2.96	2.8	2.7	2.63	2.57	2.53	2.5	2.47
850	2.9	2.74	2.63	2.56	2.51	2.46	2.43	2.4
975	2.85	2.69	2.58	2.51	2.46	2.41	2.38	2.35
1100	2.81	2.65	2.55	2.47	2.42	2.37	2.34	2.31
1225	2.79	2.62	2.52	2.44	2.39	2.34	2.31	-
1350	2.76	2.6	2.49	2.42	2.36	2.32	2.28	-

AIRONE smoke exhaust air inlet

Presentation of the AIRONE range of smoke exhaust air inlets

Closed, interior view

RANGE OF DIMENSIONS

- The standard range offers:
  - Width: 475 ≤ W ≤ 1350 mm in increments of 5 mm,
  - Height: 485 ≤ W ≤ 1350 mm in increments of 5 mm.

INSTALLATION

- On outside walls, with an angle between 0 and 30° to the vertical.
- In a masonry wall, the panel and frame are installed on reveals as per the diagram and in respect of applicable DTU directives:
  - ensure the support is flat,
  - ensure the frame is correctly aligned,
  - Number of vertical anchor points:
- H < = 650 mm ➡ 1 central attachment
- H > 650 mm ➡ 2 attachments at 250 mm from top and bottom
- The air inlet can also be installed in a curtain wall (glazed façade).
  In this case the unit is anchored using the tightening system specific to the curtain wall structure. Contact us for more details.

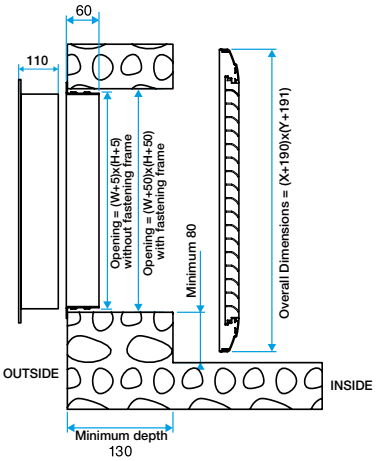
ACCESSORIES

- Mounting frame - 11044345 (same as oxytone lames):
  Recommended for installation in concrete walls.
- Indoor aesthetic terminal GFAP 007 -11045335:
  For installation on a masonry wall, a GFAP 007 indoor terminal offers a decorative finish for the smoke exhaust damper.
  The GFAP 007 blade core is easily removed using the 007 clips.
  Selecting the GFAP 007 terminal:
  - X dimension of GFAP 007 = width of opening - 50 mm,
  - Y dimension of GFAP 007 = height of opening - 50 mm rounded up to nearest 25 mm.
  The inlet is surface-mounted on the wall.
  For more information on the GFAP 007, see the appropriate page.
- 3 anchoring kits for wood (8 screws), metal (8 screws) or concrete (8 screws + plugs).
- Adapter kit for installation on doors.
- Additional set of position contacts.

RANGE OF DIMENSIONS

H	AIRONE air inlet - 11044370 W in mm (or slots)							
	475	600	725	850	975	1100	1225	1350
475	817	854	890	926	962	998	1034	1070
600	863	902	941	980	1019	1059	1098	1137
725	908	950	992	1034	1077	1119	1161	1203
850	953	998	1044	1089	1134	1179	1225	1270
975	998	1047	1095	1143	1191	1240	1288	1336
1100	1043	1095	1146	1197	1249	1300	1352	1403
1225	1089	1143	1197	1252	1306	1361	1415	-
1350	1134	1191	1249	1306	1364	1421	1478	-

INSTALLATION PRINCIPLE IN MASONRY WALL



AVAILABLE OPTIONS

The code 11044370 AIRONE includes the 24V or 48V DC electromagnetic trip device, either in power emission version (VDS) or power cut-off (VM) - specify at the time of ordering.

Description	Code
FCU1+DCU1	44335
FCU2+DCU2	44336
RAL paint (option)	44377

N E W

Airone

Efficiency and guaranteed discretion

- **New air inlet casement**
- **Thermal insulation as standard**
- **Airtight**
- **Extensive range of dimensions**
- **Discrete aspect, easy to install**

aldes

OXYTONE smoke exhaust air inlets

OXYTONE LAMES 2013 air inlet with vanes

OXYTONE LAMES 2013 closed in standby position

OXYTONE LAMES 2013 open in safety position

Compliance

- Compliant with French Standard NF-S 61937-8.
- Air passage conforms to IT 246.
- CE marking (as per EN 12101-2) does not concern air inlet openings.

Advantages

- Motorised reset.
- Outdoor opening.
- GFA 007 indoor grille with removable core.
- Insulated version.
- Kit for installation on doors.

Think about the selection software Conceptor Smoke extraction

FIELD OF APPLICATION

- OXYTONE LAMES 2013 is a remote-controlled air inlet mounted on the outside wall. The air inlets are designed for natural and mechanical smoke exhaust installations for commercial property and multi-family housing.
- On indoor walls, the installation of a GFAP 007 grille offers a decorative finish which matches VANTONE damper extraction grilles.

DESCRIPTION

- Mechanical cover featuring an aluminium frame (natural anodised finish) in which the horizontal blades are pivoted. The blades have the same finish as the frame. When closed, the blades cover the frame for a better seal.
- in the ISOLEF version, the blades are lined with 23 mm of M1 expanded polystyrene (K = 1.55 W/m /°C) enclosed within a PVC box.
- The activation mechanism (driven by an oleo-pneumatic spring) is located behind the blades. Electrical wiring is done through a connection box.
- OXYTONE LAMES 2013 is equipped with a remote control power emission (3.5W) or power cut-off (1.6W) in 24V and 48V versions.
- Manual reset (standard) or 24V motorised reset (optional on factory or site installations).
- Optional open and closed position contacts are available, can be doubled up.

INSTALLATION

- The blades must remain horizontal.
- Intended for installation on an outside wall, OXYTONE LAMES 2013 is installed on a metal or concrete wall (the mounting-frame is recommended in this case).
- Possible to install OXYTONE LAMES 2013 on doors using an adaptation kit.

ACCESSORIES

Mounting-frame for OXYTONE LAMES 2013

- The mounting-frame is recommended when installing OXYTONE units on concrete walls. In galvanized 2 cm-thick steel, sealed using flexible pads or tightly screwed in. Delivered in kit form with assembly instructions.
- Aesthetic indoor grille GFAP 007 on wall.

In the event of installation on a masonry wall, a GFAP 007 indoor grille offers an aesthetic finish for the smoke extract damper. The blade core is easily removed using the 007 clips.

Selection of GFAP 007 grille:

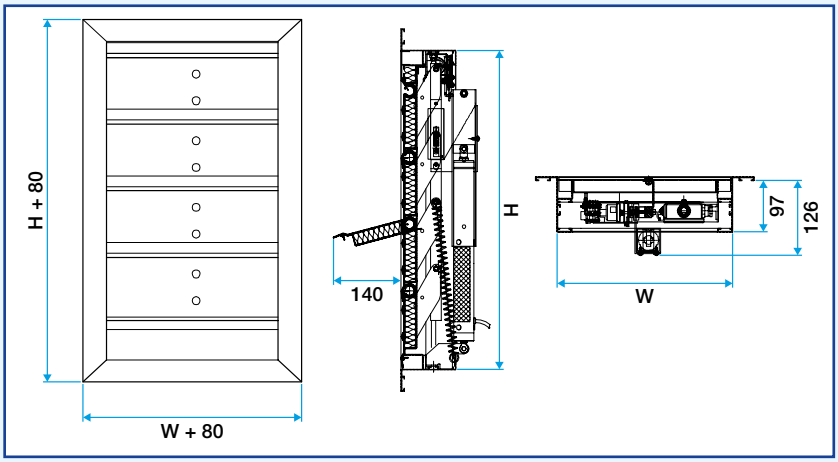
- X dimension of GFAP 007 = W reservation - 50 mm.
- Y dimension of GFAP 007 = H reservation - 50 mm rounding up to nearest 25 mm.

The inlet is surface-mounted on the wall.

For more information on the GFAP 007, see page 106.

DIMENSIONS (mm)

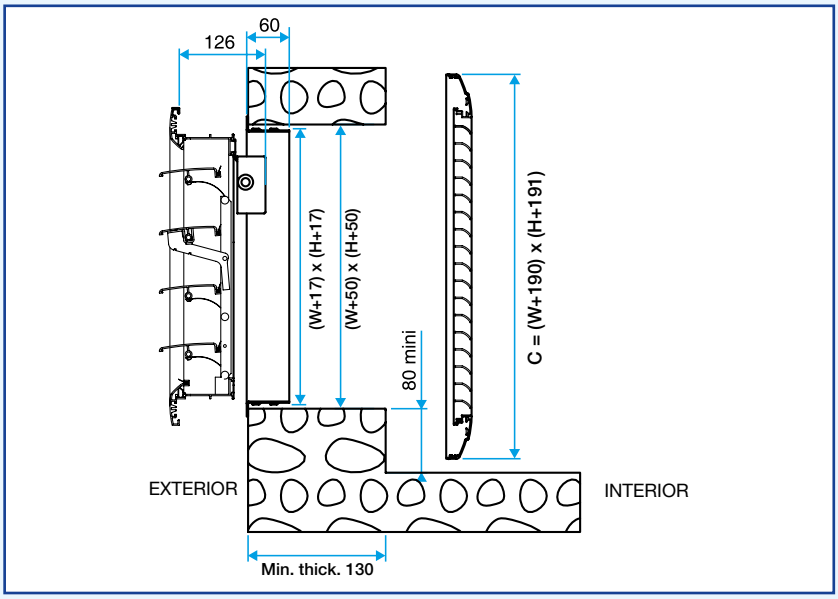
- Nominal dimensions: W x H
- Recess dimensions with sealed mounting-frame: (W+50) x (H+50).
- Recess dimensions without mounting-frame: (W+5) x (H+5).



SIZE WITH GFAP 007 (mm)

- Nominal dimensions GFAP 007: X x Y.
- Selection with mounting-frame: X = W, Y = H.
- Selection without mounting-frame: X = W - 45 mm, Y = H - 45 mm.

Ensure that X and Y are multiples of 25 mm.



OXYTONE smoke exhaust air inlets

OXYTONE LAMES 2013 air inlet with vanes

OXYTONE LAMES 2013
closed in standby position

Open in safety position

GFA 007 with removable core

Advantages

- Wide range of dimensions.
- GFA 007 indoor grille with removable core.

RANGES AND FREE AIR PASSAGES (dm²)

Motorised reset option

It is possible to order OXYTONE LAMES 2012 with an electrical reset mechanism to facilitate maintenance and testing.
The system includes an electrically-operated cylinder to close the fins, it can only be fitted to products where the height ≥ H 600 mm (minimum 4 fins).

Codification

- Code - mounting-frame - OXYTONE LAMES 2013: 11044345.
- Code - OXYTONE LAMES 2013 ISOLATED: 11044343.
- Code - OXYTONE LAMES 2013: 11044342.

OXYTONE Motorisation has no effect on the code.

AVAILABLE OPTIONS

Description	Code
OXYTONE can be fitted with signalling contacts. Delivered fitted, these contacts must be ordered with the air inlet.	
Open and closed position contacts DCU1 + FCU1	OPT44335
Open and closed position contacts DCU2 + FCU2	OPT44336
Factory-mounted motorised reset (24V actuator)	OPT44337
OXYTONE LAMES 2013 RAL paint	OPT44338
OXYTONE LAMES 2013 INSULATED RAL paint	OPT44341

ACCESSORIES

Description	Code
Kit of additional FCU & DCU contacts	11044346
Motor kit - 24V OXYTONE LAMES 2013	11044354
PSU unit - 1 x 24V motor - OXYTONE LAMES 2013	11044349
PSU unit - 2 x 24V motor - OXYTONE LAMES 2013	11044350
PSU unit - 4 x 24V motor - OXYTONE LAMES 2013	11044351
PSU unit - 8 x 24V motor - OXYTONE LAMES 2013	11044348
Door installation kit - OXYTONE LAMES 2013	11044353

OXYTONE LAMES 2013 (manual reset)

Height H (mm)	No. of fins	Width W (mm) 330	475	600	725	850	975	1100	1225	1350
350	2	-	8.14	11.06	13.99	16.92	19.85	22.78	25.71	28.64
475	3	-	12.68	17.01	21.34	25.67	29.99	34.32	38.65	42.98
600	4	10.59	17.23	22.96	28.68	34.41	40.14	45.86	51.59	57.32
725	5	13.52	21.78	28.91	36.03	43.16	50.28	57.41	64.53	71.66
850	6	16.44	26.33	34.85	43.38	51.9	60.42	68.95	77.47	86
975	7	19.37	30.88	40.8	50.72	60.65	70.57	80.49	90.41	100.34
1100	8	22.29	35.43	46.75	58.07	69.39	80.71	92.03	103.35	114.68
1225	9	25.22	39.98	52.7	65.42	78.14	90.86	103.58	116.3	-
1350	10	28.15	44.52	58.64	72.76	86.88	101	115.12	129.24	-

OXYTONE LAMES 2013 ISOLATED (manual reset)

Height H (mm)	No. of fins	Width W (mm) 330	475	600	725	850	975	1100	1225	1350
350	2	-	6.57	9	11.43	13.86	16.29	18.72	21.15	23.58
475	3	-	10.46	14.08	17.71	21.34	24.96	28.59	32.21	35.84
600	4	8.76	14.35	19.17	23.99	28.81	33.63	38.45	43.27	48.09
725	5	11.26	18.24	24.25	30.27	36.28	42.3	48.32	54.33	60.35
850	6	13.76	22.13	29.34	36.55	43.76	50.97	58.18	65.39	72.6
975	7	16.26	26.01	34.42	42.83	51.23	59.64	68.04	76.45	84.86
1100	8	18.77	29.9	39.5	49.11	58.71	68.31	77.91	87.51	97.11
1225	9	21.27	33.79	44.59	55.38	66.18	76.98	87.77	98.57	-
1350	10	23.77	37.68	49.67	61.66	73.65	85.65	97.64	109.63	-

OXYTONE LAMES 2013 (motorised reset)

Height H (mm)	No. of fins	Width W (mm) 330	475	600	725	850	975	1100	1225	1350
350	2	-	-	-	-	-	-	-	-	-
475	3	-	-	-	-	-	-	-	-	-
600	4	9	15.64	21.37	27.09	32.82	38.55	44.27	50	55.73
725	5	11.93	20.19	27.32	34.44	41.57	48.69	55.82	62.94	70.07
850	6	16.44	24.74	33.26	41.79	50.31	58.83	67.36	75.88	84.4
975	7	19.37	29.29	39.21	49.13	59.05	68.98	78.9	88.82	98.74
1100	8	22.29	33.84	45.16	56.48	67.8	79.12	90.44	101.76	113.08
1225	9	25.22	38.38	51.1	63.82	76.54	89.26	101.98	114.7	-
1350	10	28.15	42.93	57.05	71.17	85.29	99.41	113.53	127.65	-

OXYTONE LAMES 2013 ISOLATED (motorised reset)

Height H (mm)	No. of fins	Width W (mm) 330	475	600	725	850	975	1100	1225	1350
350	2	-	-	-	-	-	-	-	-	-
475	3	-	-	-	-	-	-	-	-	-
600	4	7.07	12.66	17.48	22.3	27.12	31.94	36.76	41.58	46.4
725	5	9.57	16.55	22.56	28.58	34.6	40.61	46.63	52.64	58.66
850	6	12.07	20.44	27.65	34.86	42.07	49.28	56.49	63.7	70.91
975	7	14.58	24.33	32.73	41.14	49.54	57.95	66.36	74.76	83.17
1100	8	17.08	28.22	37.82	47.42	57.02	66.62	76.22	85.82	95.42
1225	9	19.58	32.1	42.9	53.7	64.49	75.29	86.08	96.88	-
1350	10	22.08	35.99	47.98	59.98	71.97	83.96	95.95	107.94	-

Regulations concerning smoke exhaust dampers

The regulatory environment for smoke exhaust dampers is changing

The European Union has issued the Construction Products Regulation (305/2011).

Today, it is the turn of smoke exhaust dampers to be subject to CE marking. This new regulation will disrupt the habits of stakeholders in the fire protection industry. In particular these changes concern:

- New methods for testing fire resistance and for classifying equipment,
- New European vocabulary for fire resistances,
- New CE certificate, in addition to existing documents (fire resistance classification reports, official report NF-S-61937-10 and NF certificate).
- Performance declarations compliant with regulation 305-2011.

BUT IN TECHNICAL TERMS, WHAT CHANGES AFFECT SMOKE EXHAUST DAMPERS?

The smoke exhaust damper has had to evolve to satisfy new European regulations, an illustration of the best-selling gate type damper in France:

VANTONE damper
Before CE marking

OPTONE damper
After CE marking

Changes in regulations are extensive and impose the full re-qualification of all the ranges:

- test conducted on a European duct compliant with EN1366-8 and/or -9,
- test performed under negative pressure, a damper is placed in the oven to test its ability to remain open when hot, another is above the oven, closed, to demonstrate its ability to act as a fire barrier.
- leakage rate minimised to 200 $m^3/h/m^2$ under the test pressure, either 1000 or 1500 Pa.

CF 1h30 ➡ E I 90 S (Ved - i ⬌ o) – 1000 Pa - AA - multi - C300

EXPLANATION OF THE NEW EUROPEAN FIRE PROTECTION CLASSIFICATIONS

- **E** = Integrity against fire (corresponds to former Fire Retardant),
- **I** = Insulation (EI corresponds to our former Fire Damper),
- **90** = duration in minutes, or 120 minutes,
- **S** = the leakage rate is stricter at 200 m3/h maximum per m², under test pressure, generally 1000 or 1500 Pa. The S criteria is obligatory in France,
- **i** ⬌ o = the damper is tested for internal and external fires, it satisfies restrictions for use as a low position air inlet and high-position smoke exhaust damper,
- **Ved** = the damper is tested on a vertical duct,
- **1000 Pa**: negative pressure applied to the damper during the fire resistance test: the damper is remote-controlled,
- **multi** as in multi-compartment: the duct is a collective one. Note that the "multi" version is also qualified for use as a "single" duct,
- **C300** = damper reserved for use in a smoke exhaust system. Succeeded a 300-cycle endurance test prior to testing.

AND WHAT WILL BECOME OF STANDARD NF S 61937-10?

Some time ago, the commission responsible for fire safety standards NF-S-61930 to 40 undertook to revise standard NF-S-61937 in preparation for the arrival of CE marking on each Actuated Safety Device (DAS).

In France, all smoke exhaust dampers must also hold an official report in compliance with NF-S-61937-10 (association of dampers in a fire safety system) to guarantee their suitability for use in the fire safety system. The NF certificate issued by AFNOR CERTIFICATION is also third party proof.

HOW TO SELECT A CE MARKED SMOKE EXHAUST DAMPER CE?

1 - Ensure the presence of the certificate of CE compliance as per EN 12101-8.

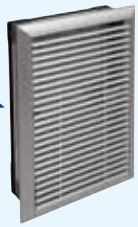
2 - Ensure that the damper service pressure does not exceed the test pressure - indicated on the certificate - (in accordance with the decision of 14 March 2011, article 16-d-4 "Only dampers with EIS classification may be used. The service pressure must not exceed the test pressure.").

3 - Ensure that the fire resistance classification for the smoke exhaust damper (EI 90 S or EI 120 S) corresponds to the intended use. Particular attention should be paid to installation. For example, a CE smoke exhaust damper is always connected to a smoke exhaust duct compliant with EN 1366-8 and/or -9 in dimensional terms.

Regulations concerning smoke exhaust dampers

TABLE OF EQUIVALENCES FOR SMOKE EXHAUST DAMPERS "BEFORE / AFTER CE"

To help you select your new CE-compliant smoke exhaust damper, we have created this table to indicate correspondences between old and new ranges.

French dampers	CE Dampers	European vocabulary
 VANTONE PF and CF	 OPTONE “+Grille”  OPTONE single flap  OPTONE double-flap	OPTONE “+Grille” EI 90 S - 1000 Pa OPTONE “Classic” EI 90 S - 1000 Pa EI 120 S - 1000 Pa
 VANTONE M	New OPTONE gate type damper: • OPTONE “+Grille” model offering major time savings on installation and operation. • OPTONE “Classic” model, housing a specific aesthetic grill, type GFE, GGH or GFA 007 in the colour of your choice.	
 VRFI-DES	 New PLAFONE tunnel damper.	PLAFONE EI 120 S - 1500 Pa
 GCF	 Guillotine smoke exhaust dampers are no longer produced, use an OPTONE double-flap damper to limit travel in the duct.	OPTONE “+Grille” EI 90 S - 1000 Pa OPTONE “Classic” EI 90 S - 1000 Pa EI 120 S - 1000 Pa
 GDF	The GDF transfer damper is not a smoke exhaust damper as defined by the standard EN 12101-8, so it has not been modified. It’s been tested according to EN1634-1.	E60

N E W

OPTONE.T "Classic" :

Made to measure for CE regulations!

- **Custom dampers**
- **Full range of motor-driven dampers (single-flap, double-flap)**
- **Free air passage: up to 104 dm²**

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Presentation of the new OPTONE smoke exhaust damper range New

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1053 and 1055.
- EI 90 (ved-i ⟷ o) S 1000 Pa - AA multi.
- EI 120 (ved-i ⟷ o) S 1000 Pa - AA multi.
- H > 1000 = EI 60 S.
- Certified. NF

Advantages

- Time savings on installation of OPTONE "+Grille" model.
- Easy wiring.
- Both 1 & 2 flap versions can be motorised.
- Custom-built OPTONE Classic.

INTRODUCTION

Inspired by its cousin OPTONE.H on sale since early 2012, the new OPTONE gate type smoke exhaust damper will replace all VANTONE dampers very quickly due to the CE marking requirement as per standard EN 12101-8.

The new range of OPTONE dampers present a new and exclusive design:

OPTONE "+Grille"

This patented innovation satisfies most installation requirements and saves time by avoiding the installation of the separate grill.

To satisfy certain aesthetic needs, there is also the **OPTONE "Classic"** range, to which GFA 007, GFE or GGH type grills may be attached.

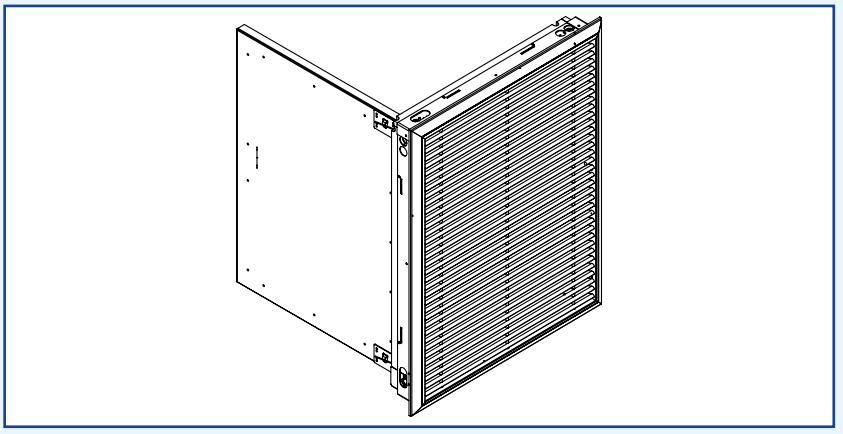
QUALIFICATION

- Compliant with CE marking as per EN 12101-8: Certificate 1812-CPR-1053 and certificate 1812-CPR-1055.
- Fire resistance classification according to EN 1366-10 test:
  1. OPTONE "+Grille":
     EI 90 (ved-i ⟷o) S - 1000 Pa - AA multi, compliant with § 7.2.4 of EN 13501-4,
     qualified on Promatect L500 smoke exhaust duct and on ducts compliant with EN 1366-9 made of the same material and with the same density.
  2.a OPTONE "Classic":
     EI 120 (ved-i⟷o) S - 1000 Pa - AA multi, compliant with § 7.2.4 of EN 13501-4, qualified on Promatect L500 smoke exhaust duct and on ducts compliant with EN 1366-9 made of the same material and with the same density.
  2.b OPTONE "Classic" for H > 1000 mm:
     EI 60 (ved-i⟷o) S - 1000 Pa - AA multi, compliant with § 7.2.4 of EN 13501-4, qualified on Promatect L500 smoke exhaust duct and on ducts compliant with EN 1366-9 made of the same material and with the same density.
- Compliant with NF S 61937-10,
- Leakage rate: the OPTONE damper presents a very low leakage rate: under 1000 Pa, the rate is < 200 m^3/h per m^2 of flap surface, or less than 40 m^3/h under 1000 Pa for a 400 x 650 mm damper.
- Pressure loss lower than VANTONE dampers with equivalent dimensions.

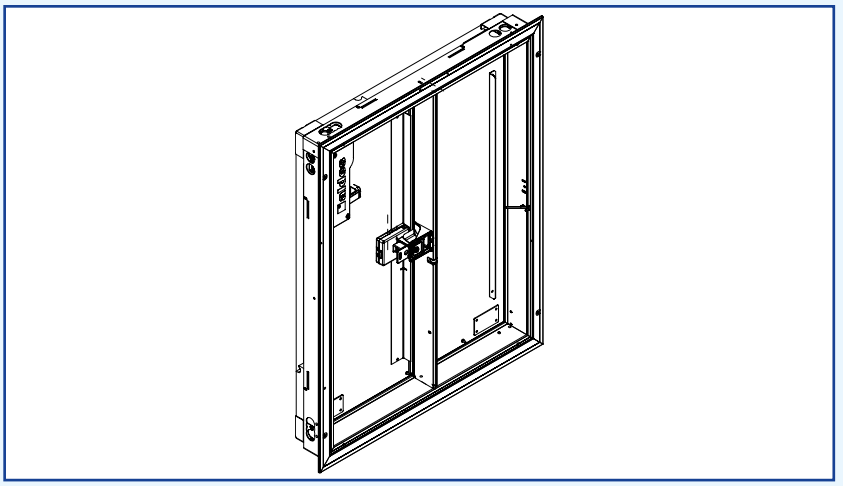
Our dampers are qualified up to fire rating EI 120 S on the following smoke exhaust ducts (and on EN 1366-9-compliant products of the same material and the same density):

- PROMATECT L500
- TECNIVER L
- GEOFLAM / GEOFLAM Light
- EXTHAMAT P
- GLASROC F V500
- CAROPLATRE + GLASROC
- DESENFIRE
- STAFF PUR

OPTONE "+Grille" single-flap – open with finned-core removed



OPTONE "+Grille" single-flap – open with finned-core



OPTONE "Classic" double-flap – closed

OPTONE Smoke exhaust damper

Presentation of the new OPTONE smoke exhaust damper range New

Advantages

- Simplicity: Nominal dimensions = embedding dimension.
- Reversible mounting-frame top/bottom.
- Same mounting-frame for all OPTONE models.
- Built-in cable passages.

DESCRIPTION

- Composition of the OPTONE smoke exhaust damper:
- aluminium frame built using internally-crimped profiles to offer a first-rate finish,
- flap made of refractory material,
- electrical control mechanism protected within a box.
- The damper is supplied with essential accessories:
- 20/10 mm steel mounting frame
- freely-selectable aluminium terminal:
  - on the OPTONE "+Grille" model, the grille frame is bonded with the damper, the removable blade core is attached with invisible Zamak clips (same as OPTONE.H),
  - GFA 007 grille to be fixed on front side (for OPTONE "Classic"),
  - GFE or GGH grille to be fixed in front (for OPTONE "Classic").
- Nominal W x H dimensions of damper = dimensions of the opening required for the mounting-frame, which is fixed without adhesive mortar.
- Free air passage (dm^2) on the damper depends on the W and H (mm) dimensions and the number of leaves:
  Single-flap (1V) = ((W-57) x (H-57) -14147) / 10000
  Double-flap (2V) = ((W-76) x (H-57) -14147) / 10000

  The pressure loss for the damper alone (with grille) are given by:

Exhaust: $\Delta p=2.083 .\sqrt{(free\_air\_passage/WxH).(Q/free\_air\_passage)^2}$

Air supply: $\Delta p=2.00 .\sqrt{(free\_air\_passage/WxH).(Q/free\_air\_passage)^2}$

(Δp in Pa, free_air_passage in m2, Q in m3.s-1, W/H in m)

- Locking system positioned on flap: greater free air passage and reduced pressure losses.
- Airtight seal when cold is provided by 2 elastomer gaskets clipped into the frame grooves:
  - the first seals the frame / flap junction,
  - the second seals the frame / duct junction.
- Airtight seal when hot is provided by 2 intumescent seals fixed around the outside of the damper facing the vane field and the duct sleeve.
- Electric wiring can be passed through a corner near the control box.
- Locking system featuring a trip device attached to the flap which slots into a bolt lock embedded in the frame. The patented electromagnetic trip device is self-resetting, enabling you to close the flap with just one hand.
- Scalable connection box designed to facilitate electrical connections:
  - automatic terminals for the remote control and reset motor,
  - removable signal contacts,
  - large space to accommodate Fire safety control system modules,
  - pre-installed electrical components to equip the reset motor later.

SIZE RANGES AND FREE AIR PASSAGES (dm^2)

OPTONE "+Grille" - Single-flap code 11044410.
OPTONE "Classic" - Double-flap code 11044420 / OPTONE "Classic" - 2H.single flap code 11044430.

Free air passage (dm^2)		W = width of reservation for mounting-frame fixed without adhesive mortar								
		300	350	400	450	500	550	600	650	700
H = height of reservation for mounting frame fixed without adhesive mortar	300	4.5	5.7	6.9	8.1	9.4	10.6	11.8	13.0	14.2
	350	5.7	7.2	8.6	10.1	11.6	13.0	14.5	16.0	17.4
	400	6.9	8.6	10.4	12.1	13.8	15.5	17.2	18.9	20.6
	450	8.1	10.1	12.1	14.0	16.0	18.0	19.9	21.9	23.9
	500	9.4	11.6	13.8	16.0	18.2	20.4	22.6	24.9	27.1
	550	10.6	13.0	15.5	18.0	20.4	22.9	25.4	27.8	30.3
	600	11.8	14.5	17.2	19.9	22.6	25.4	28.1	30.8	33.5
	650	13.0	16.0	18.9	21.9	24.9	27.8	30.8	33.8	36.7
	700	14.2	17.4	20.6	23.9	27.1	30.3	33.5	36.7	39.9
	750	15.4	18.9	22.4	25.8	29.3	32.8	36.2	39.7	43.1
	800	16.6	20.4	24.1	27.8	31.5	35.2	38.9	42.6	46.4
	850	17.9	21.8	25.8	29.8	33.7	37.7	41.6	45.6	49.6
	900	19.1	23.3	27.5	31.7	35.9	40.1	44.4	48.6	52.8

OPTONE "+Grille" double-flap code 11044411.
OPTONE "Classic" double-flap code 11044421 / OPTONE "Classic" 2H. double-flap code 11044431.

Free air passage (dm^2)		W = width of reservation for mounting-frame fixed without adhesive mortar											
		450	500	550	600	650	700	750	800	850	900	950	1000
H = height of reservation for mounting frame fixed without adhesive mortar	300	7,7	8,9	10,1	11,3	12,5	13,7	15,0	16,2	17,4	18,6	19,8	21,0
	350	9,5	11,0	12,5	13,9	15,4	16,9	18,3	19,8	21,3	22,7	24,2	25,7
	400	11,4	13,1	14,8	16,6	18,3	20,0	21,7	23,4	25,1	26,8	28,6	30,3
	450	13,3	15,2	17,2	19,2	21,1	23,1	25,1	27,0	29,0	31,0	32,9	34,9
	500	15,2	17,4	19,6	21,8	24,0	26,2	28,4	30,7	32,9	35,1	37,3	39,5
	550	17,0	19,5	22,0	24,4	26,9	29,3	31,8	34,3	36,7	39,2	41,7	44,1
	600	18,9	21,6	24,3	27,0	29,8	32,5	35,2	37,9	40,6	43,3	46,0	48,8
	650	20,8	23,7	26,7	29,7	32,6	35,6	38,6	41,5	44,5	47,4	50,4	53,4
	700	22,6	25,8	29,1	32,3	35,5	38,7	41,9	45,1	48,4	51,6	54,8	58,0
	750	24,5	28,0	31,4	34,9	38,4	41,8	45,3	48,8	52,2	55,7	59,2	62,6
	800	26,4	30,1	33,8	37,5	41,2	44,9	48,7	52,4	56,1	59,8	63,5	67,2
	850	28,2	32,2	36,2	40,1	44,1	48,1	52,0	56,0	60,0	63,9	67,9	71,9
	900	30,1	34,3	38,5	42,8	47,0	51,2	55,4	59,6	63,8	68,0	72,3	76,5
	950	32,0	36,4	40,9	45,4	49,8	54,3	58,8	63,2	67,7	72,2	76,6	81,1
	1000	33,9	38,6	43,3	48,0	52,7	57,4	62,1	66,9	71,6	76,3	81,0	85,7
	1050	35,7	40,7	45,7	50,6	55,6	60,5	65,5	70,5	75,4	80,4	85,4	90,3
	1100	37,6	42,8	48,0	53,2	58,5	63,7	68,9	74,1	79,3	84,5	89,7	95,0
	1150	39,5	44,9	50,4	55,9	61,3	66,8	72,3	77,7	83,2	88,6	94,1	99,6
	1200	41,3	47,0	52,8	58,5	64,2	69,9	75,6	81,3	87,1	92,8	98,5	104,2

For heights H > 1000, the damper only exists in the "Classic" version and is qualified EI 60 (ved-i⟷o) S 1000 Pa.

Footprint incompatible with LOCKTONE reset motor.

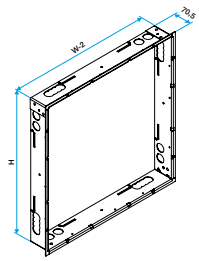
OPTIONS

The flap may feature a galvanised steel trim to offer uniform aesthetics and protect the wiring from the public and prevent vandalism. The trim may be painted with the RAL colour of your choice.

The OPTONE «+Grille» core can be locked using a 5x5 mm clip compatible with a fireman's standard square socket.

Presentation of mounting-frame for OPTONE smoke exhaust damper

New



Compliance

- The mounting-frame is mandatory to respect the fire resistance classification.

Advantages

- Simplicity: Nominal dimensions = embedding dimension.
- Reversible mounting-frame top/bottom.
- Same mounting-frame for all OPTONE models.
- Built-in cable passages.

INSTALLATION

The mounting-frame is an indispensable accessory that ensures the smoke exhaust damper is installed correctly. It not only offers a good base for the installation work, it enable the damper to be mounted and removed easily throughout the life of the building.

The OPTONE mounting-frame is reversible, so ensure the width and height dimensions are correctly respected.

The same mounting-frame can be used for both the OPTONE "+Grille" model and the OPTONE "Classic" model, and also for single-flap or double-flap versions.

The mounting-frame is selected simply on the basis of the nominal width x height dimensions.

The OPTONE mounting-frame is designed to be fixed by screws or using mortar.

- To seal in place using mortar, unfold the four anchor tabs before positioning the mounting-frame in the duct.
- To attach with screws, use the holes other than any marked a or b.

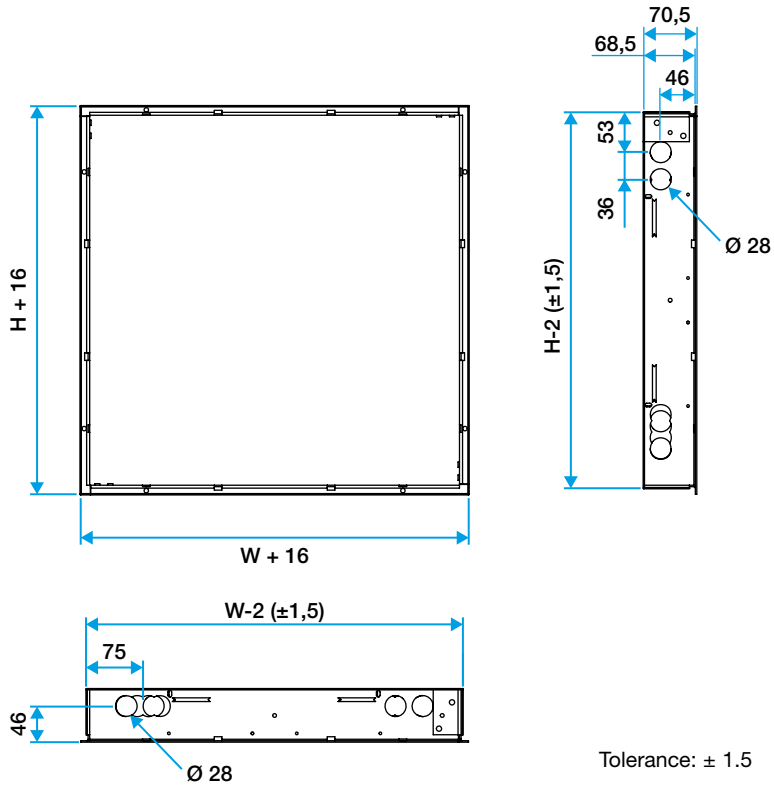
The OPTONE smoke exhaust damper requires the passage of electric cables, so the instructions on the label should be respected.

This label is affixed to each mounting-frame.

RANGE

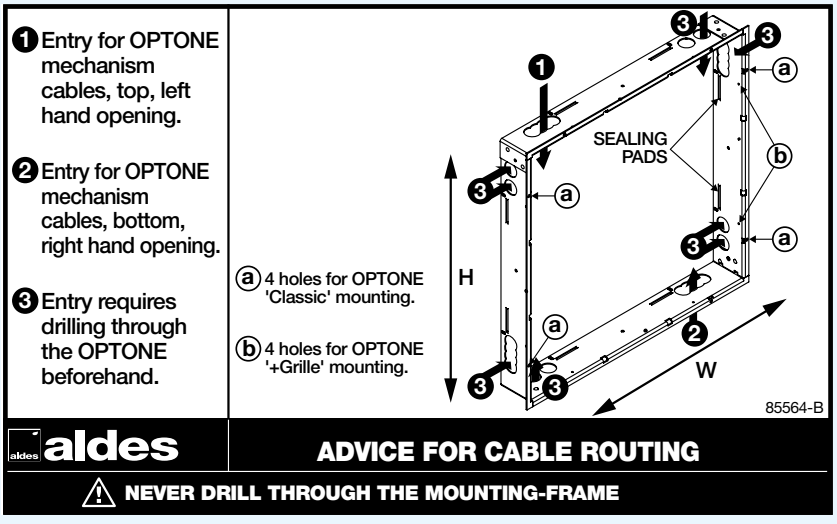
Description	Code
OPTONE mounting-frame W x H	11044406

DIMENSIONS OF MOUNTING FRAME (mm)



Tolerance: ± 1.5

MARKING ON MOUNTING-FRAME



OPTONE Smoke exhaust damper

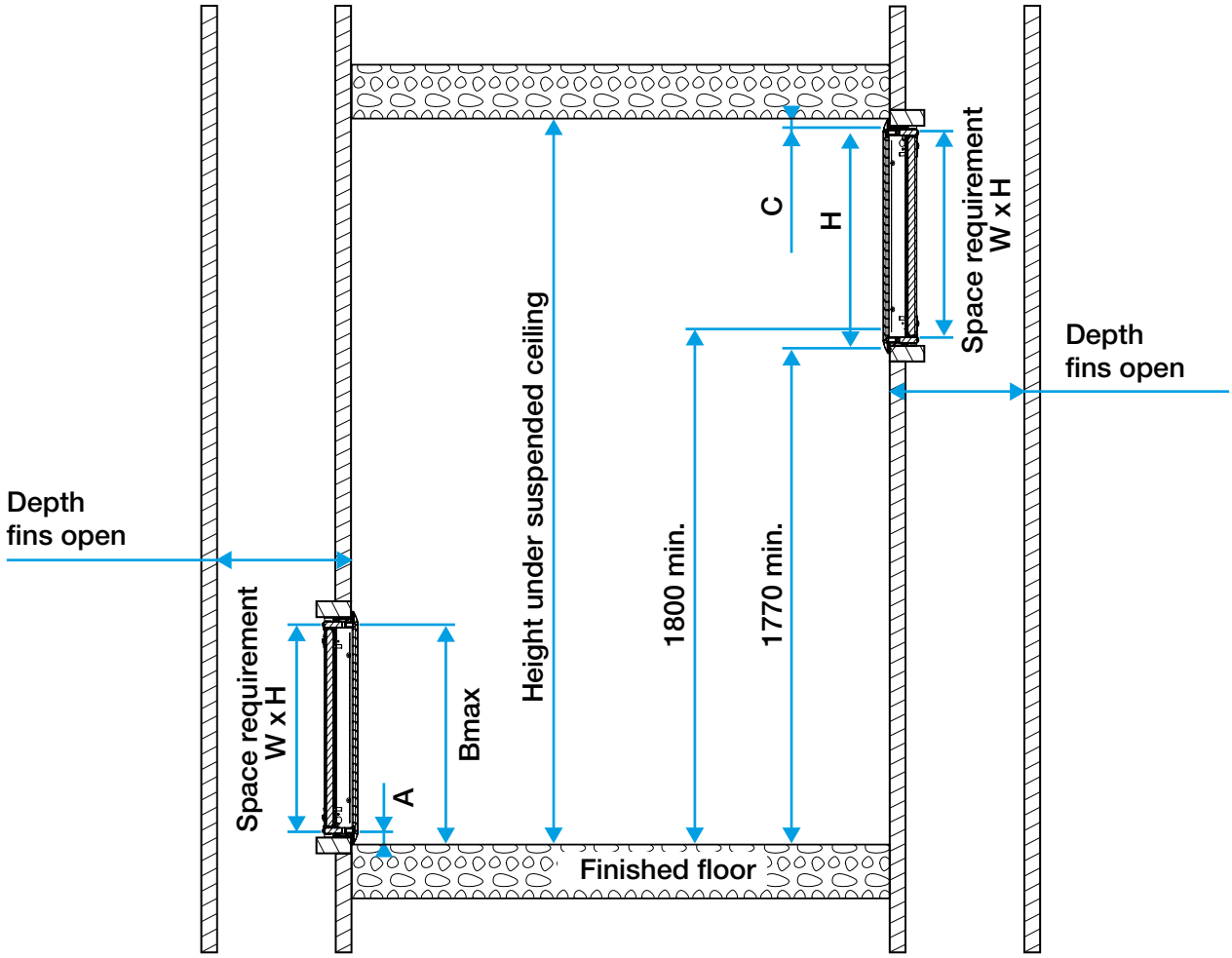
Installation instructions for OPTONE smoke exhaust shutters

New

Advantages

- Simplicity: Nominal dimensions = embedding dimension.

For the air passage for the high position damper to be at least 1.80 m from the ground in accordance with standard IT 246 for ceilings ≤ 2700 mm in height, position the mounting-frame at a minimum height of 1.77m.



C = 22 mm for OPTONE "+GRILLE"
C = 32 mm for OPTONE "CLASSIC" with GFA 007
A = Height of plinth + C
Bmax = A + H < 1030

The fitting of the mounting-frame into the duct support must conform to CE certification and the classification reports available via www.aldes.fr.

OPTONE Smoke exhaust damper

New OPTONE "+Grille" smoke damper

New

OPTONE “+Grille” without finned-core

OPTONE “+Grille” with finned-core

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1053.
- EI 90 (ved-i ⟷ o) S 1000 Pa - AA multi.
- EI 60 S for H > 1000.

Advantages

- Simplicity: Nominal dimensions = embedding dimension.
- Reversible mounting-frame top/bottom.
- Same mounting-frame for all OPTONE models.
- Built-in cable passages.
- All dampers can be motorised.
- New feature: core locking clip.

INSTALLATION

For which installation?

- Qualified on a Promatect L500 smoke exhaust duct and on ducts compliant with EN 1366-9 of the same material and same density.
- The "multi-compartment" smoke exhaust dampers are suitable for "single-compartment" applications.
- The fire classification stipulates the service pressure: the damper must not be subjected to pressures > -1000 Pa.
- Fire direction: like all smoke exhaust dampers, respect fire inside the smoke exhaust duct (when the damper is closed).

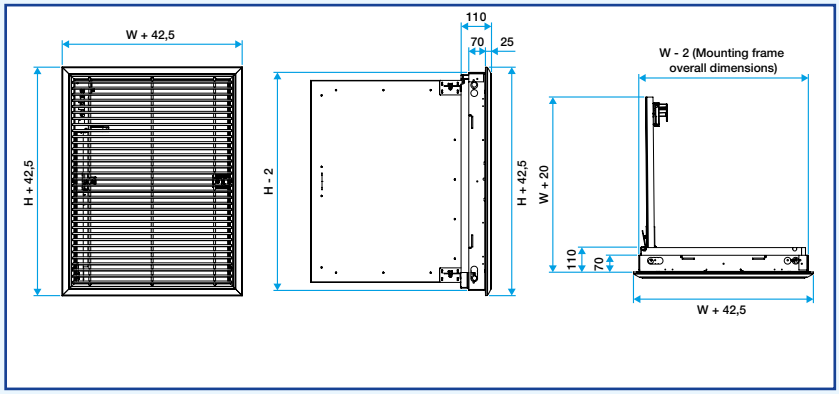
How?

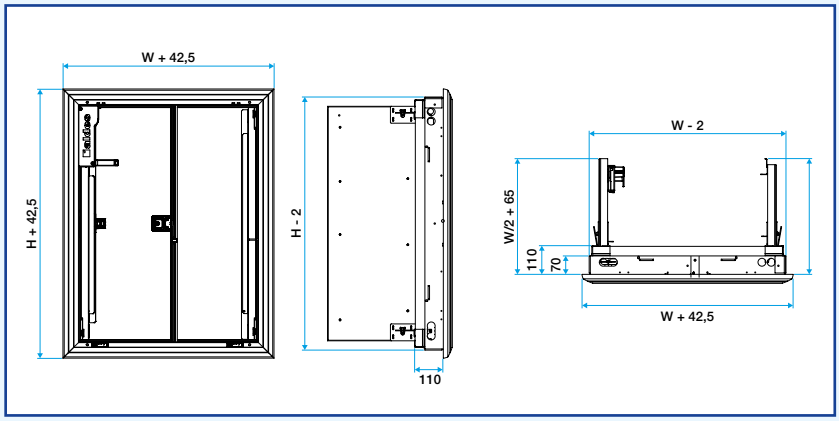
- The CONCEPTOR DESENFUMAGE smoke damper selection software may help you to define the embedding dimensions for the mounting-frame so as to comply with Technical Instruction 246 (IT 246). The detailed installation instructions will be of great help to ensure correct installation of the dampers on your site.
- The nominal W x H dimensions of the damper correspond to the dimensions of the reservation required to embed the mounting-frame, without travel. To install a mortar-sealed mounting-frame, add the desired thickness of the mortar to the W x H dimensions.
- The OPTONE damper is reversible:
  - box on upper left = cable passage on upper left + left opening for single flap versions,
  - box on lower right = cable passage on lower right + right opening for single flap versions.

What fixing method to use?

- Embedded in a vertical smoke exhaust duct.
- The mounting-frame is fixed in a duct sleeve with a minimum length of 110 mm, attached with 8 VBA screws Ø 5 x 70 mm (not supplied).
- The damper is fixed in place using four self-tapping screws supplied.
- The screws are driven into the lugs on the aluminium frame, which purposely buckle under the force applied.

OPTONE “+GRILLE” DIMENSIONS (mm)





RANGE

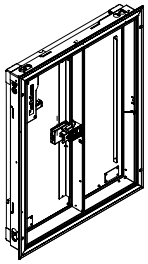
Désignation	Code	EI S
OPTONE "+ Grille" 1 flap	11044410	90
OPTONE "+ Grille" 2 flaps	11044411	90
LOCKTONE motor kit (to power the reset function on OPTONE single-flap and double-flap units)	11044398	-
BAG OF 10 LOCKING CLIPS (used to lock the vane core on OPTONE «+Grille» units)	11044415	-
Kit ENJOLIVEUR 1 flap	11144404	-
Kit ENJOLIVEUR 2 flaps	11144405	-

Locking pin for grille

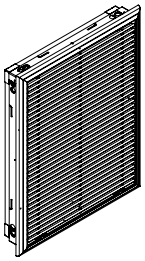
OPTONE Smoke exhaust damper

New OPTONE "Classic" smoke damper

New



OPTONE “Classic”



OPTONE “Classic” fitted with GFA 007 grille

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1055.
- EI 90 (ved-i ⟷ o) S 1000 Pa - AA multi.
- EI 120 (ved-i ⟷ o) S 1000 Pa - AA multi.
- EI 60 S for H > 1000.

Advantages

- Simplicity: Nominal dimensions = embedding dimension.
- Reversible mounting-frame top/bottom.
- Same mounting-frame for all OPTONE models.
- Built-in cable passages.
- All dampers can be motorised.
- New feature, damper with 5 mm increments in W/H dimensions for refurbishment.

INSTALLATION

For which installation?

- Qualified on a Promatect L500 smoke exhaust duct and on ducts compliant with EN 1366-9 of the same material and same density.
- The "multi-compartment" smoke exhaust dampers are suitable for "single-compartment" applications.
- The fire classification stipulates the service pressure: the damper must not be subjected to pressures > -1000 Pa.
- Fire direction: like all smoke exhaust dampers, respect fire inside the smoke exhaust duct (when the damper is closed).

How?

- The CONCEPTOR DESENFUMAGE smoke damper selection software may help you to define the embedding dimensions for the mounting-frame so as to comply with Technical Instruction 246 (IT 246). The detailed installation instructions will be of great help to ensure correct installation of the dampers on your site.
- The nominal W x H dimensions of the damper correspond to the dimensions of the reservation required to embed the mounting-frame, without travel. To install a mortar-sealed mounting-frame, add the desired thickness of the mortar to the W x H dimensions.
- The OPTONE damper is reversible:

- box on upper left = cable passage on upper left + left opening for single flap versions,
- box on lower right = cable passage on lower right + right opening for single flap versions.

What fixing method to use?

- Embedded in a vertical smoke exhaust duct.
- The mounting-frame is fixed in a duct sleeve with a minimum length of 110 mm, attached with 8 VBA screws Ø 5 x 70 mm (not supplied).
- The damper is fixed in place using four self-tapping screws supplied.
- Fixed on the front face using the drilled holes in the mounting-frame.

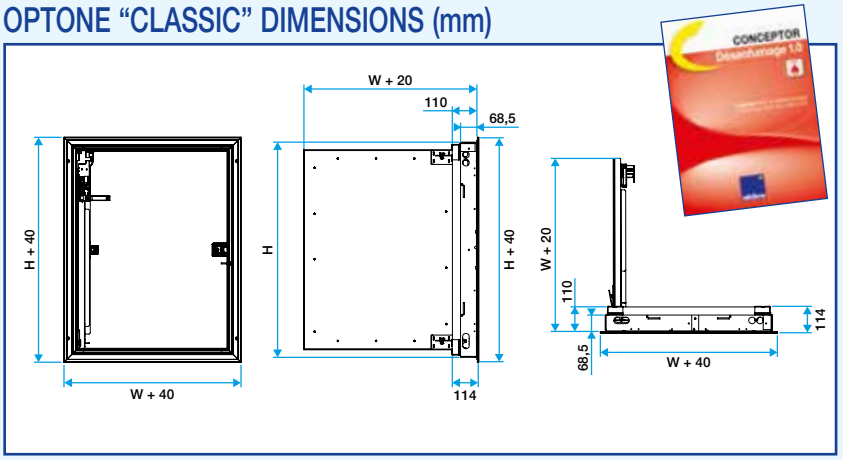
DESCRIPTION OF OPTONE GFA 007

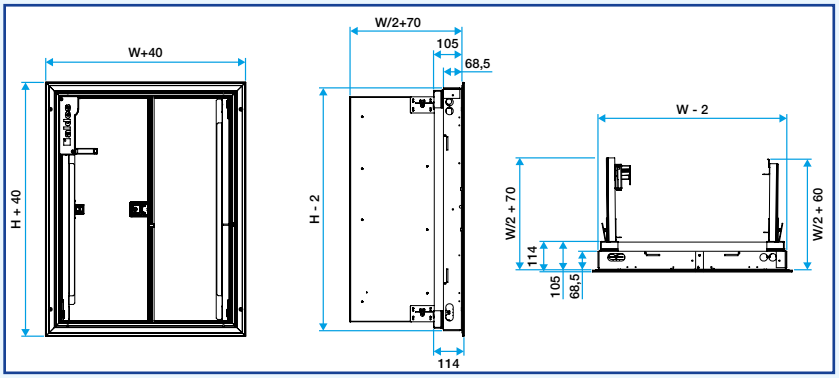
- The OPTONE “Classic” damper can be fitted with a GFA 007 grill that has all the same characteristics as the GFA 007 on the old VANTONE dampers.
- Code 11044408 GFA 007 OPTONE “Classic” can be fixed to either single-flap or double-flap dampers using the 4 inserts located on the front of the OPTONE damper.

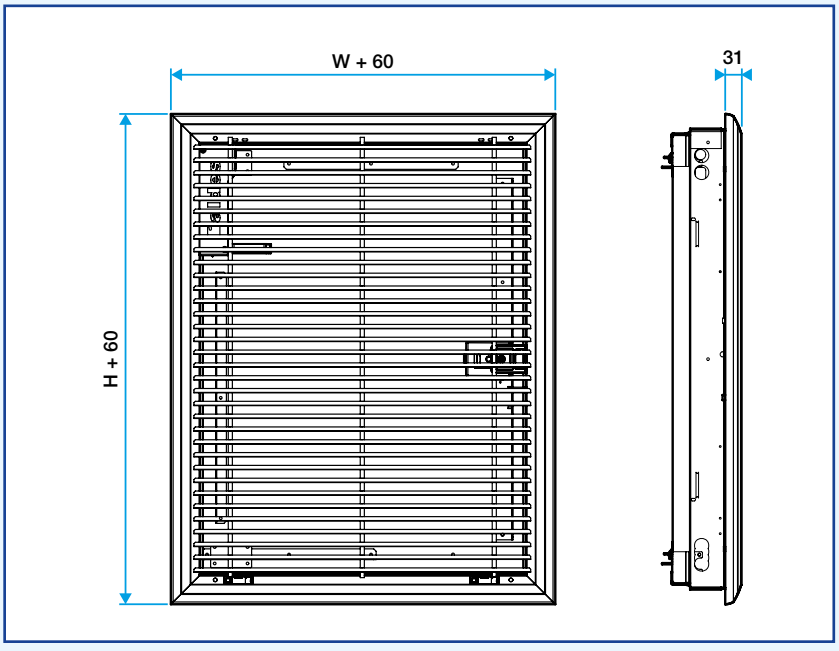
RANGE

Description	Code	EI S
OPTONE "Classic" 1 flap	11044420	90
OPTONE "Classic" 2 flaps	11044421	90
OPTONE "Classic" 2 H/1 flap	11044430	120
OPTONE "Classic" 2 H/2 flaps	11044431	120
GFA 007 OPTONE T 1 flap-2 flaps	**11044408**	-
LOCKTONE motor kit (to power the reset function on OPTONE single-flap and double-flap units).	**11044398**	-
Kit ENJOLIVEUR 1 flap	**11144404**	-
Kit ENJOLIVEUR 2 flaps	**11144405**	-

OPTONE “CLASSIC” DIMENSIONS (mm)







LOCKTONE reset motor

New LOCKTONE reset motor for OPTONE dampers

New

Advantages

- Fits to all OPTONE 1 & 2 flap dampers.
- Simple to install.
- Resets in less than 30 s.
- Facilitates regulatory inspections.

INTRODUCTION

In accordance with the new European regulations, Aldes has developed a new range of OPTONE CE gated dampers, replacing the VANTONE range.

For the motorised reset version, ALDES has continued with the principle of upgradeability already employed successfully with the ISONE dampers: the OPTONE dampers can be fitted with the new LOCKTONE reset motor at any time.

WARNING

The smallest OPTONES will be incompatible with the LOCKTONE motor:

(**NOTE**: these dimensions do not exist for VANTONE-M models).

OPTONE 1-flap 'CLASSIC' or '+GRILLE'

		Width W								
		300	350	400	450	500	550	600	650	700
Height H	300	No	No	No	No	No	No	No	No	No
	350	No	No	No	No	No	No	No	No	No
	400	No	OK	OK	OK	OK	OK	OK	OK	OK
	450	No	OK	OK	OK	OK	OK	OK	OK	OK
	500	No	OK	OK	OK	OK	OK	OK	OK	OK
	550	OK	OK	OK	OK	OK	OK	OK	OK	OK
	600	OK	OK	OK	OK	OK	OK	OK	OK	OK
	650	OK	OK	OK	OK	OK	OK	OK	OK	OK
	700	OK	OK	OK	OK	OK	OK	OK	OK	OK
	750	OK	OK	OK	OK	OK	OK	OK	OK	OK
	800	OK	OK	OK	OK	OK	OK	OK	OK	OK
	850	OK	OK	OK	OK	OK	OK	OK	OK	OK
	900	OK	OK	OK	OK	OK	OK	OK	OK	OK

OPTONE 2-flap 'CLASSIC' or '+GRILLE'

		Width W											
		450	500	550	600	650	700	750	800	850	900	950	1000
Height H	300	No	No	No	No	No	No	No	No	No	No	No	No
	350	No	No	No	No	No	No	No	No	No	No	No	No
	400	No	No	No	OK	OK	OK	OK	OK	OK	OK	OK	OK
	450	No	No	No	OK	OK	OK	OK	OK	OK	OK	OK	OK
	500	No	No	No	OK	OK	OK	OK	OK	OK	OK	OK	OK
	550	No	No	No	OK	OK	OK	OK	OK	OK	OK	OK	OK
	600	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	650	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	700	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	750	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	800	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	850	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	900	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	950	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1000	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1050	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1100	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1150	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1200	No	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Note: The OPTONE.H model, designed for residential buildings for 3re&t 4th families, with its specific terminal, cannot be used with the LOCKTONE motor.

LOCKTONE reset motor

New LOCKTONE reset motor for OPTONE dampers

New

Advantages

- Fits to all OPTONE 1 & 2 flaps dampers.
- Simple to install.
- Resets in less than 30 s.
- Facilitates regulatory. inspections.

PRESENTATION

Fitted to the gate, LOCKTONE has no impact on the airflow passage nor on pressure drop levels.
LOCKTONE is available as:

1. An option for the OPTONE damper: the motor is fitted and connected to the damper in the factory,
2. As an accessory kit: the motor is to be installed on-site, simple as the OPTONE dampers are designed with this in mind, integrating, as standard, a drilled bracket and suitable electrical cabling.

The fitting of the LOCKTONE has been simplified and can be completed in just a couple of minutes.

INSTALLING THE KIT

Installation of the motor (1 min)

1. Position the two metallic lugs in the two slots in the bracket, below the trigger.
2. Tighten the 2 screws (supplied).

Fit the ribbon winder (20 seconds).

1. The motor feeds out a wound ribbon fitted with a hook.
2. For OPTONE 1-flap models, unwind the ribbon and attach the hook to the hole in the aluminium frame by turning it a quarter of a turn.
3. for OPTONE 2-flap models, attach the roller in the intermediate riser before unwinding the ribbon and attaching the ring to the 'slave' flap.

Electrical connections (1 min).

1. The LOCKTONE is fitted with a quick-fit connector.
2. On the damper, open the trigger unit housing to identify the connector position.
3. Plug the supplied connector into the two green and yellow wires (already stripped), connect it to the motor and position them in free space.
4. Repeat the operation for the principle unit.
5. Connect the power supply cables to the main box.
6. Close the covers.

TECHNICAL CHARACTERISTICS

- LOCKTONE option Code = OPT44398.
- LOCKTONE kit Code = 11044398 for OPTONE 1 & 2-flaps.
- 24 to 48V DC and AC.
- Max. current = 1.9 A under 24V; 1.1 A under 48 V.
- Response time < 30 s.
- Automatic stop at end of cycle, 5 seconds pause between two cycles.
- Operating temperatures: 0 to +50°C.
- Weight = 1.4 kg.
- No specific maintenance required.
- Operating cycles: 300, validated by NF certification.
- Reminder: power supply - V Low Voltage (Safety) (TBTS).

OPTONE Smoke exhaust damper

Aesthetic GFA 007 grille

Exclusive!

- It is possible to fit a filter to prevent dust entering via the VB air inlet.

Advantages

- Removable core locked by a 1/4 turn screw.
- EXCLUSIVE: core suspended using Clip 007 for simple resetting!
- Aesthetically pleasing and aeraulically efficient fin profiles.

FIELD OF APPLICATION

- Interior aesthetic grille to match OXYTONE inlets placed outside.

DESCRIPTION

- Comprises a frame surrounding the damper.
- The GFA 007 has a removable core to facilitate damper resetting. This finned-core is locked in place by the Clip 007, which opens with a flat or cross-headed screwdriver 6x6 and closes manually.
- The clip 007 also makes it possible to suspend the finned-core whilst resetting after smoke clearance, freeing up the users hands and meaning that they do not have to descend from the stepladder.
- Horizontal aluminium fins with a spacing of 25 mm.
- The profiles in use guarantee a lowest pressure loss and prevent anyone seeing through them.
- Air flow passage > 91.3 % (used to calculate the effective air flow passage for mechanical smoke extraction).

FINISH

- The standard finish is a natural anodised sheen.
- A high-resistance epoxy paint can be requested depending on the RAL colour code required. The paint is not applied to the 007 clip.

MOUNTINGS

- Attaches to OPTONE 'Classic': products fitted with threaded inserts for the GFA 007 grille, using the four screws (supplied).
- Wall mounting: See GFAP 007.
- Replacement of a GFA Alu: ask for details.

CLIP 007

The Clip 007 is multifunctional: in the open position the clips are used to support the finned-core, allowing the user to safely reset the damper using both hands, without having to climb down the stepladder. With the damper shut, simply centre the core and push on the self-locking 007 clips.

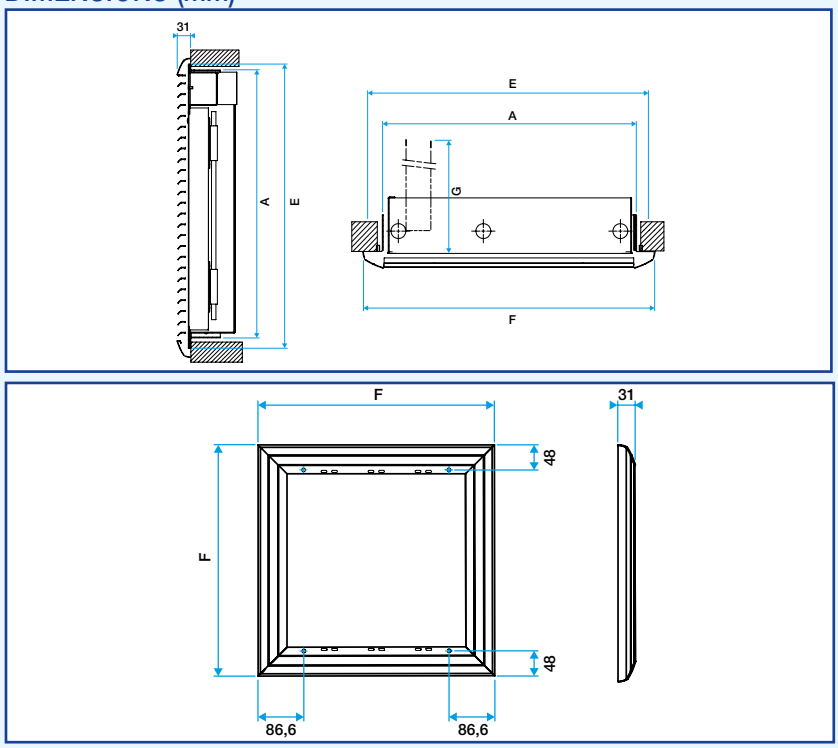
Description	Code
Set of 6 x 007 clips	11147071

AVAILABLE OPTIONS

GFA 007 grille on OPTONE «Classic»: 11044408

Description	Code
«Overall dimensions + 50 mm» option	PLUS50
Standard RAL 9010 colour (55%)	9010
Other RAL group 1	RAL1
Other RAL group 2	RAL2
Other RAL group 3	RAL4

DIMENSIONS (mm)



For OPTONE Classic & OXYTONE, for the sizes of the GFA007 grille, see the corresponding product pages.

POSITION

The grille frame itself defines the positioning of the 007 clips. We would recommend:
- clips 007 in the lower section of a smoke extraction damper (> 1 m 80 from the ground),
- clips 007 in the upper section of an air supply inlet (< 1 m from the ground).

For reasons of aesthetics, we would recommend:
- Orient the fins upwards for smoke extraction,
- Orient the find downwards for air supply.

OPTONE Smoke exhaust damper

G3 filter for GFA 007 grille

Advantages

- Ideal for hygiene during smoke extraction tests.

FIELD OF APPLICATION

To avoid degradation to the quality of air when carrying out smoke extraction tests, ALDES proposes a G3 filter, positioned between the GFA 007 grille and the air inlet dampers, to prevent dust entering via the cold air VB inlets.

DESCRIPTION

- Filter uses fire-resistant and non-fire resistant polyester fibres.
- Colour: white.
- Fire protection rating: M1.
- Efficiency: G3.
- Additional characteristics: See R29/1 Technical Sheet - available on request.

INSTALLATION

1 - Fitting of filters for tests only:

a. For each air inlet within the zone (or floor):
- Remove the GFA 007 core,
- Position the filter in front of the closed damper,
- Refit the GFA 007 core, which will hold the filter in place by compression.

b. Test the zone (or floor), leave the fan running for a moment to 'clean' the duct network.

c. Remove the filters, repeating the operations of 1a in reverse.

2 - If necessary, restart the smoke extraction without the filter to measure air supply flow rates.

RANGE

OPTONE: ask for details.

'OVERALL + 50' option for GFA 007 grille

FIELD OF APPLICATION

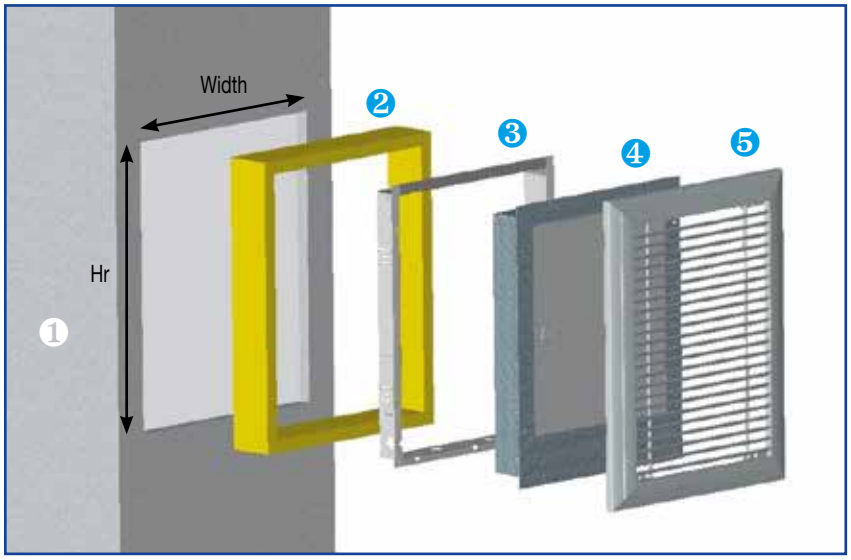
Grille adapted if the sleeve ❷ is larger than the overall GFA 007 ❺.

DESCRIPTION

This option allows you to increase the width and height of the GFA 007 grille by 50 mm whilst retaining the same damper mounting points.

RANGE

Option available for GFA 007 grilles on OPTONE Classic.



the GFA 007 'overall + 50' option is used to hide the junction between duct and sleeve.

GFA Alu grille

FIELD OF APPLICATION

- Aesthetic grille trim for GDF dampers.

DESCRIPTION

- Comprises a frame surrounding the damper.
- Horizontal aluminium fins, 25 mm spacing, held in place by an aluminium frame.
- The profiles in use guarantee a lowest pressure loss and prevent anyone seeing through them.

AIR FLOW

- The Test Report by the CETIAT N° 94 01 163 dated 16/12/94 guarantees an air flow percentage = 91.34%. This value is used to calculate the effective cross section of the airflow passage during smoke extraction.
- In fact, for natural smoke extraction, the Central Security Commission (CCS) decision of the 16.9.1992 states that an airflow passage of > 90% (test carried out by an independent laboratory) will have no impact on the calculation of the reduction in air flow passage.

FINISH

- A high-resistance epoxy paint can be requested depending on the RAL colour code required. Please consult us.

GFA RANGE with choice of options

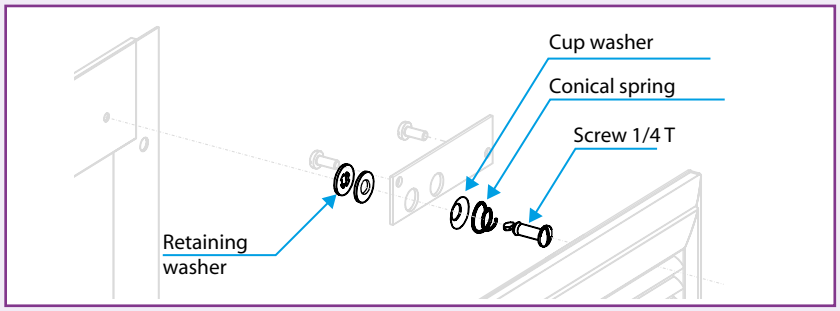
Description	Code
For GDF	11045098

FIXING OPTIONS

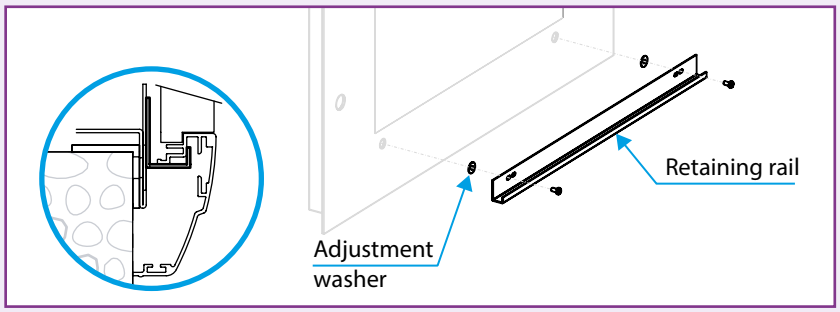
Description	Code
2 x 1/4-turn square 'security' screws + lower rail	OPT45008
2 x 1/4-turn slotted screws + lower rail	OPT45018
4 clips	OPT45021
4 metric screws	OPT45023
1/4-turn for hinges (slotted & security)	OPT45047
Hinge	OPT41915

IMPORTANT: mountings using 1/4-turn screws (OPT 45018 slotted OPT 45008 security) require the 1/4-turn screw holder option (OPT 45017 available for the VANTONE by ordering).

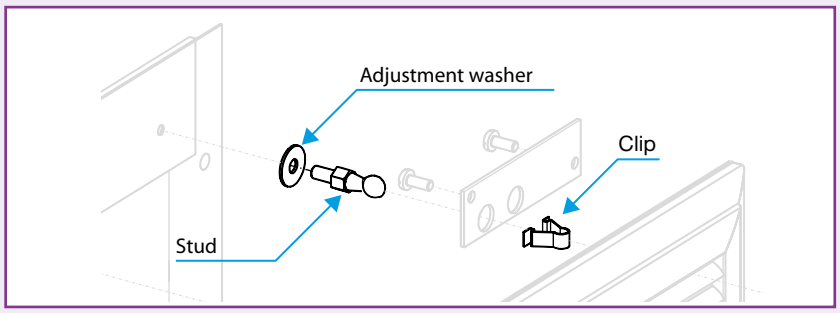
MOUNTING DETAILS



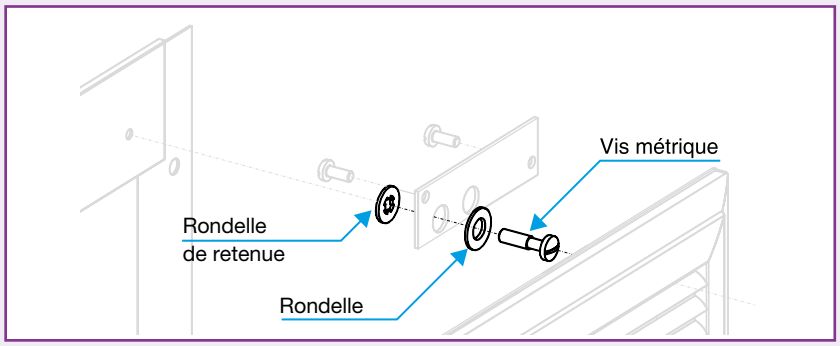
Quarter-turn screw (slotted head or square, security head).
Note: The quarter-turn screws can only be fitted to the vertical corresponding to the mechanism cache. Do not forget the OPT 45017 'quarter turn fixing adapter' for the VANTONE.



Lower rail
Note: For 1/4 turn screw fixings using the lower rail, an additional 15 mm grille height will be needed to correctly fit the system to the slide.



Clip
Note: Avoid holding grilles by the fins when unclipping. It is preferable to insert a flat screwdriver between the grille and the damper (or wall).



Metric screws

The GFA Alu grille, its mountings and hinges are designed for fitting with the mounting frame and damper overlaid upon the wall.
If not, continue with the adjustments and fit the adjustment elements:
- between the slide and the damper (washers, 1.5 mm thick, supplied),
- between the stud and the damper (washers/bolts supplied).

DAMPER GRILLE Selection Guide

1 - What size do you want the grille to be?

A full height grille, that is to say, from floor to suspended ceiling, will produce a visual fluidity within the corridor, mixing the VB & VH dampers and close to the dimensions of a standard door.

GGH - VB damper, this grille:
- Can be fitted in front of any air inlet.
- Can be attached to a wall (with 30 mm spacing in front of the damper).
- Is fitted with a removable core granting access to the damper.
- The removable core is either type 007 or the invisible OMEGA type.

GGH - VH damper, this grille:
- Can be fitted in front of any smoke extraction damper,
- Can be attached to a wall (with 30 mm spacing in front of the damper),
- Is fitted with a removable core granting access to the damper,
- The removable core is either type 007 or the invisible OMEGA type.

Technical description
See page 105

DAMPER GRILLE Selection Guide

1 - What size do you want the grille to be?

A grille of identical size to the damper will create a visible difference between VB & VH dampers.

2 - Which fixing method should I use?

Mounted on the damper
"GFA Range"

GFA 007
this grille:
- attaches directly to the damper,
- Is fitted with a removable core granting access to the damper, using a Clip 007,
- Can be enlarged by 5 cm in both height and width by the 'Overall + 50' option.
- See page 98.

Reserved for OPTONE 'Classic' dampers
Available in GFAP 007 version

In front of any damper embedded into the wall (leave a gap of 30 mm)
"GFE Range"

Also exists with the invisible OMEGA clip

GFE 007- visible frame
this grille:
- Can be fitted in front of any damper.
- Can be attached to a wall (via its mounting frame) (with 30 mm spacing in front of the damper),
- Is fitted with a removable core granting access to the damper, using a Clip 007,
- See page 102.

GFE 007 - edged, this grille:
- Can be fitted in front of any damper.
- Can be attached to a wall (with 30 mm spacing in front of the damper),
- Is fitted with a removable core granting access to the damper, using a Clip 007.
- See page 103.

Flush-mounted aesthetic grilles

GFE 007 visible frame or GFE visible frame

GFE 007
Visible frame

GFE 007 - Visible frame core suspended from Clip 007

'Fire' compliant

- Complies with resistance test reports:
- The GFE completely covers the dampers completely,
- The finned-core is identical to that of a GFA Alu grille.

Advantages

- New removable core with the 007 clip for H ≤ 1000 mm.
- Discreet and aesthetic design as an extension of the wall.
- RAL paint colours available (except for 007 clip).

Did you know?

- The designation "GFE" indicates that the grille is embedded into the wall.
- The designation "007" indicates that the grille is fitted with the Clip 007.
- The designation "visible frame" indicates that the grille has a flat frame of 27 mm.

FIELD OF APPLICATION

The interior of buildings does not always meet the requirements for the use of an oversize grille for GFA exhaust dampers (frame exceeds thickness of lining). With the GFE range, Aldes offers a range of aesthetically designed grilles ready for flush-mounting in the wall in front of the smoke exhaust damper.

These grilles are highly appreciated by architects and are either the same dimension as the damper they mask (GFE), or of large height (GGH).

DESCRIPTION

- The finned-core is identical to that of the GFA or GFAP, see page 95 and 106.
- Flat frame of 27 mm.

GFE 007- visible frame:

- With the removable core secured by the Clip 007 in the 27 mm frame - available for reserved dimensions of W x H: 250 < W < 1200 mm & 250 < H < 1000 mm (in steps of 25 mm).

- GFE - visible frame:

- Also available with the finned-core fixed into the 27 mm frame - available for reserved dimensions of W x H: 250 < W < 1200 mm and 250 < H < 3200 mm (steps of 5 mm).

- A high-resistance epoxy paint can be requested depending on the RAL colour code required. The paint is not applied to the 007 clip.

INSTALLATION

- Anchoring preferable using an F4 mounting frame to be fixed to the wall. The GFE is equipped with F3 clips.

Selection Guide

- To facilitate removal of the smoke extraction damper, select W & H dimensions in accordance with the rule:
  W (grille) = Overall width of damper + 40 mm*
  H (grille) = Overall height of damper + 80 mm**
  Round up W & H to the next 25 mm step.

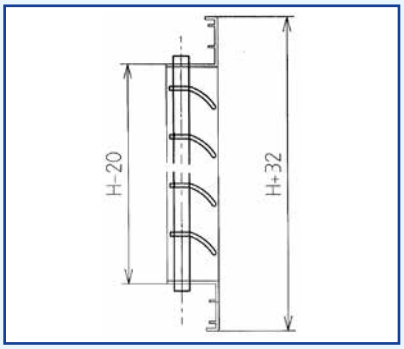
* 40 mm includes an 8 mm gap around the damper.
** 80 mm includes a gap of 9 mm around the damper.

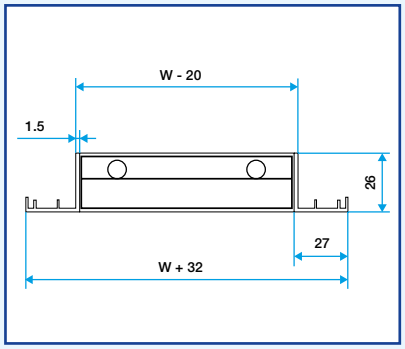
RANGE

Description	Code
GFE 007- visible frame	11045336
GFE - visible frame	11045590
F4 mounting-frame for GFE 11045336 & 11045590	11003001

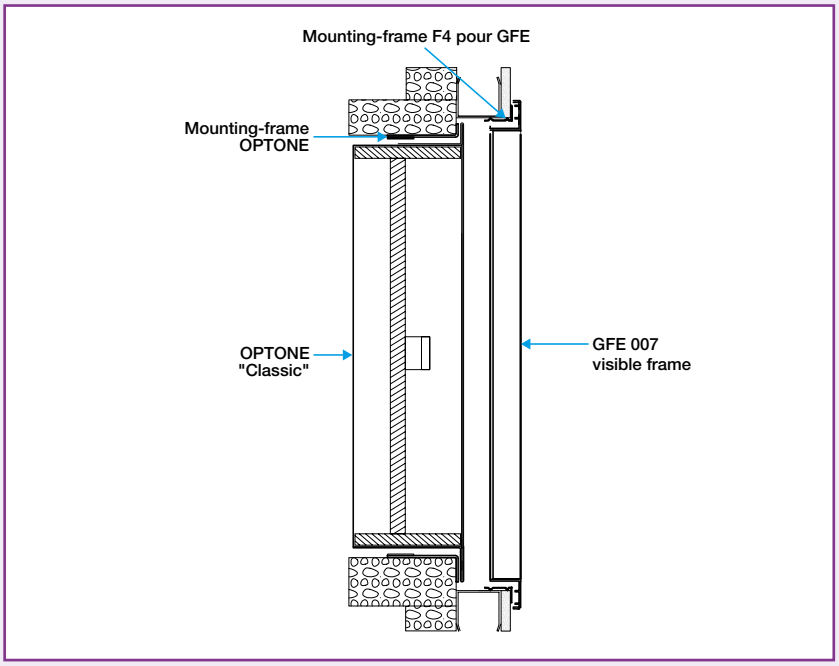
DIMENSIONS (mm)

GFE - visible frame:





EXAMPLE OF THE FITTING OF A GFE 007 with visible frame



Flush-mounted aesthetic grilles

GFE edged or GFE 007 edged

GFE - Edged

'Fire' compliant

- Complies with resistance test reports:
- The GFE completely covers the dampers completely,
- The finned-core is identical to that of a GFA Alu grille.

Did you know?

- The designation “007” indicates that the grille is fitted with the Clip 007.
- The designation “GFE” indicates that the grille is embedded into the wall.
- The designation “edged” indicates that the grille has an invisible frame.

Advantages

- New removable core with the 007 clip for H ≤ 1000 mm.
- Discreet and aesthetic design as an extension of the wall.
- Also available in 'full height' version (floor to ceiling).
- RAL paint colours available (except for 007 clip).
- New feature: removable core locked with 007 clip for H ≤ 1300 mm.

FIELD OF APPLICATION

The interior of buildings does not always meet the requirements for the use of an oversize grille for GFA exhaust dampers (frame exceeds thickness of lining). With the GFE range, Aldes offers a range of aesthetically designed grilles ready for flush-mounting in the wall in front of the smoke exhaust damper.

These grilles are highly appreciated by architects and are either the same dimension as the damper they mask (GFE), or of large height (GGH).

DESCRIPTION

- The frame is 'invisible' ('L' shaped cornice or just the thickness of the aluminium visible), known as 'liseré' or 'edged'.
- GFE - Edged:

- with the clipped OMEGA core option for heights of up to H = 1000 mm,
- With the finned-core in an 'edged' frame - available for reserved dimensions of W x H: 250 < W < 1200 mm & 100 < H < 3200 mm (in steps of 5 mm).

- GFE 007 - edged: with removable core secured by clip 007 in the 'edged' frame - up to 100 < H < 1300 mm (5 mm increments).
- A high-resistance epoxy paint can be requested depending on the RAL colour code required. The paint is not applied to the 007 clip.

INSTALLATION

- Frame attached using screws (not supplied).

Selection Guide

- To facilitate removal of the smoke extraction damper, select W & H dimensions in accordance with the rule:

  W (grille) = Overall width of damper + 70 mm*

  H (grille) = Overall height of damper + 70 mm*

  Round up W & H to the next 25 mm step.

  * 70 mm includes a gap of 10 mm around the damper (2 x 25 + 2 x 10).

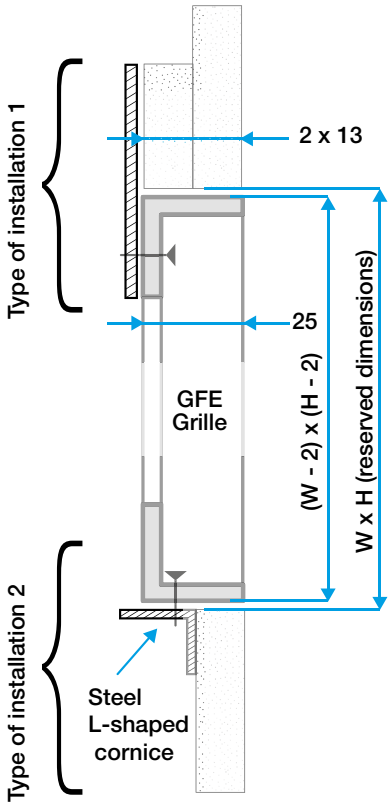
RANGE

Description	Code
GFE - edged (with Omega clipped core option)	11045591
GFE 007 - Edged	11045337

DIMENSIONS (mm)

Grille with invisible mounting screws 4 x 10 mm diameter holes between 4th & 5th fin.

EXAMPLE OF THE FITTING OF A GFE 007



Grilles for ALDES smoke extraction dampers

Aesthetically pleasing and simple!

GFA 007

GFE 007 visible frame

GFE with edging

- **Aesthetic choices:**
  - With or without visible frame,
  - Finish - anodised aluminium or RAL paint,
  - Damper or overall height dimensions.
- **Choice of fixings:**
  - Directly onto the damper,
  - Embedded into a wall, with or without mounting-frame.
- **Easy maintenance:**
  - Fin cores can be removed from all grilles,
  - Core can be suspended to facilitate re-arming of the dampers at height (on grilles fitted with the 'Clip 007').
- **Aeraulic performance:**
  - Grilles with airflow passage > 90%.

aldes.com

aldes

GGH: Full-height grille, with removable 1m core, for flush mounting in wall

Advantages

- Provides the corridor with a superb aesthetic design through the alternation of grilles from the floor to the ceiling.
- Identical aesthetic design for both low and high position smoke dampers.
- Easy maintenance due to the removable 1m core.

FIELD OF APPLICATION

- These new grilles offer an unbeatable aesthetic design!
- Positioned in front of an VB damper or VH smoke exhaust damper, the attractive design is completely identical. The only difference is that the 1m core is removable in the lower part for a VB position damper and in the upper part for a VH damper. The corridor offers an unrivalled visual continuity.

DESCRIPTION

- The 'edged' frame is thin, almost totally hidden, only its thickness remains visible.
- Built using the GFA as a base, the core's aluminium vanes are spaced at 25 mm.
- A finned-core with a height of 1 metre can be unclipped, either in the lower part to gain access to the VB fresh air inlet dampers, or via the upper part for the VH smoke exhaust dampers.

INSTALLATION

- The frame is drilled for attachment to the wall (screws not supplied).
- Ensure that you do not warp the grille when mounting it.

RANGE

- These grilles are only available on order for large dimensions, from:

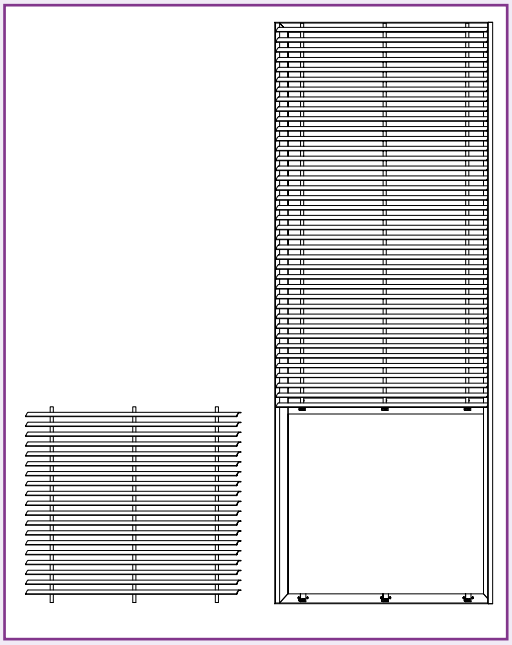
- 250 < Width W < 1200 mm,
- 1000 < Height H < 2600 mm.

For further information, contact your Aldes agency.

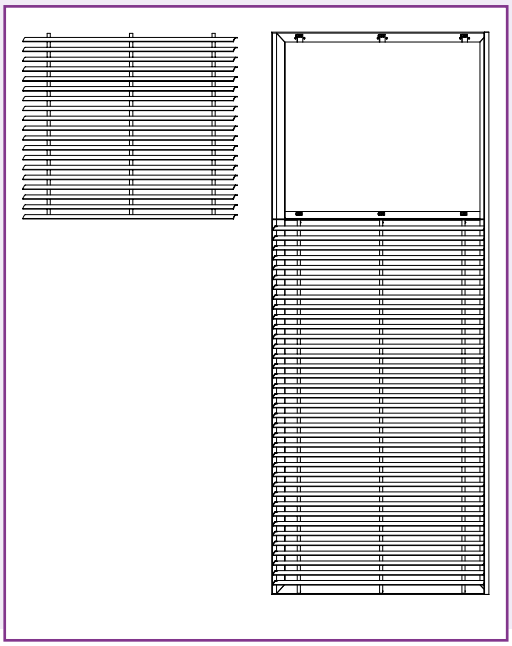
Description	Code
GGH with low position opening VB:	11045598
GGH with high position opening VH:	11045599

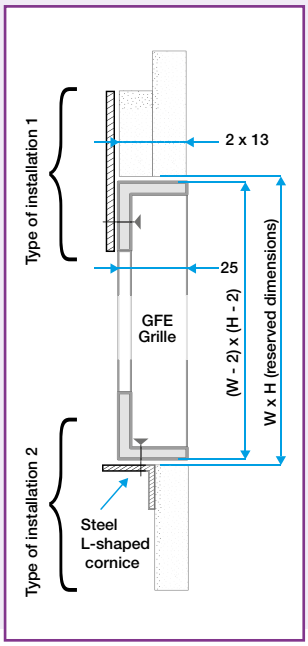
A high-resistance epoxy paint can be requested depending on the RAL colour code required.

INSTALLATION



GGH lower opening - VB





Aesthetically pleasing wall-mounted grilles

GFAP 007: surface-mounted installation

GFAP 007 - locked core

Close up of Clip 007 with suspended core

Advantages

- Aesthetics - Identical to the GFA 007.
- Removable core locked by a 1/4 turn screw.
- EXCLUSIVE: core suspended by 007 clip.
- Simple to install.
- Aesthetically pleasing and aeraulically efficient fin profiles.

FIELD OF APPLICATION

This aesthetically pleasing grille can hide edges or dampers.

FINISH

- The standard finish is a natural anodised sheen.
- High resistance epoxy paint can be requested (excluding Clip 007) in the required RAL colour.

DESCRIPTION

- The GFAP 007 grille is in every way identical to a GFA 007 grille, except that only the nominal dimensions are different. The choice of dimensions depends on the opening to be covered (no connection with the X,Y on an Aldes damper).
- The GFAP 007 can be fixed directly on to the wall using the spacers provided, without a mounting frame. It is particularly well suited for OXYTONE and AIRONE air inlets.

Selection Guide

To choose the dimensions for a GFAP 007, the simplest way is to apply the rule:

- X = opening width - 50 mm,
- Y = opening height - 50 mm.

INSTALLATION

- Can be wall-mounted without mounting frame.
- Screws straight onto the wall (screws not supplied).
- Spacers are provided to fill the space between the grille and the wall.

RANGE

The choice of dimensions (X,Y) is based on the mounting points and the dimensions of the space required: X + 50 mm / Y + 50 mm,

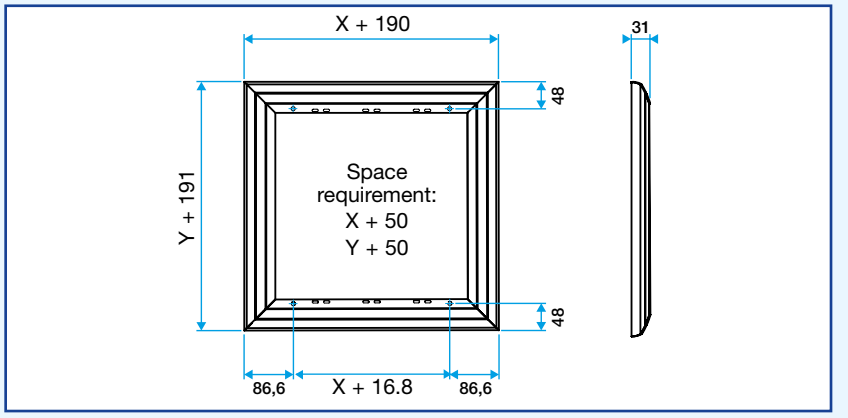
200 ≤ X ≤ 1200 mm (in steps of 5 mm),

250 ≤ Y ≤ 1000 mm (in steps of 25 mm).

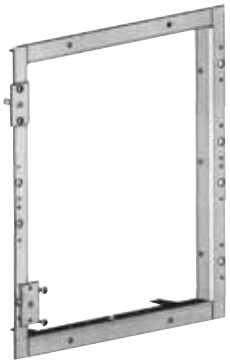
Description of the filter - See Page 111.

Description	Code
GFAP 007	11045335
Filter G3/M1 GFAP 007	11045323

DIMENSIONS (mm)



GFAP: surface-mounted installation



GFAP mounting frame with hinge adapter

GFAP mounting frame with adjustment kit

FIELD OF APPLICATION

This aesthetically pleasing grille can hide edges or dampers.

DESCRIPTION

- The GFAP is identical to the GFA Alu (See Page 99).

FINISH

- The standard finish is a natural anodised sheen.
- A high-resistance epoxy paint can be requested depending on the RAL colour code required.

INSTALLATION

- Can be wall-mounted with or without mounting frame.
- Screws straight onto the wall (screws not supplied).

RANGE

The choice of dimensions (X,Y) is based on the mounting points and the dimensions of the space required.

200 ≤ X ≤ 1200 mm (in steps of 5 mm).

200 ≤ Y ≤ 1500 mm (in steps of 25 mm).

Description	Code
GFAP	11045050

MOUNTING-FRAME

The GFAP mounting-frame is used to attach the grille, using screws, clips or hinges.

Description	Code
GFAP mounting-frame	11045077
Adjustment kit for GFAP on mounting frame	11041950
Hinge adapter on GFAP mounting-frame	11041949

HINGE KIT

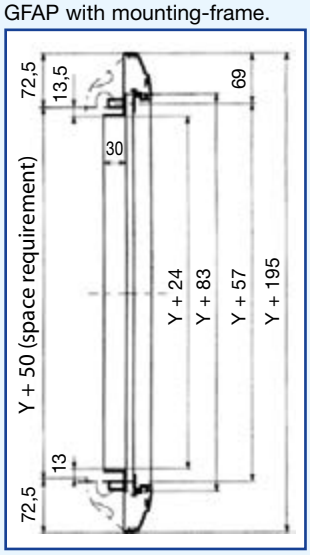
Description	Code
Hinge kit for GFA Alu	11041915

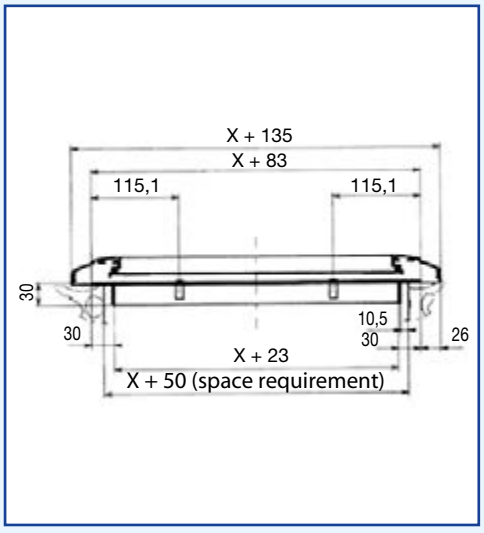
To adapt the hinges to the GFAP, use codes 11041915 & 11041949.

For a grille Y ≥ 700, order two hinge kits and two hinge adapters.

DIMENSIONS (mm)

GFAP with mounting-frame.

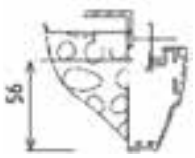




ADJUSTMENT KIT

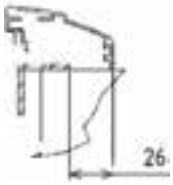
The Adjustment Kit is used to position the GFAP with respect to its mounting frame (See Drawings).

Centred



Offset

Centred



Can be offset upwards

Can be offset downwards

PLAFONE Smoke exhaust damper

Presentation of the new PLAFONE tunnel damper range

New

PLAFONE closed
in stand-by position

PLAFONE open
in safety position

Made in France

Remember the selection software Conceptor Smoke Extraction

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1054.
- EI 120 (ved-ho-i ⟷ o) S -1500 Pa - AA multi.
- Certified NF " and compliant with NF-S-61937-10.

Advantages

- Minimal leakage rate.
- Validate for remote and horizontal installations.
- Upgradable ISONE mechanism.
- Extensive range of certified ducts.

INTRODUCTION

Like gate type dampers, CE marking for tunnel dampers has been obligatory since February 2013. The new PLAFONE tunnel damper has been developed in accordance with all European and French requirements.

QUALIFICATION

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1054
- Fire resistance classification according to EN 1366-10 test: EI 120 (ved-ho-i⟷o) S -1500 Pa - AA multi, compliant with § 7.2.4 of EN13501-4,

Qualified up to fire rating EI 120 S on the following smoke exhaust ducts (and on EN 1366-9-compliant products of the same material and the same density):

- PROMATECT L500
- TECNIVER L
- GEOFLAM / GEOFLAM Light
- EXTHAMAT P
- GLASROC F V500
- DESENFIRE
- STAFF PUR

- Compliant with NF S 61937-10.
- Leakage rate: the PLAFONE damper presents an extremely low leakage rate: under 150 Pa, the leak is < 200 m^3/h per m^2 of vane. (Under 1500 Pa.)

FIELD OF APPLICATION

Tunnel smoke exhaust damper intended for public buildings, high-rise buildings, or cat. 3 and 4 residential buildings. Suitable for installation in technical ceilings.

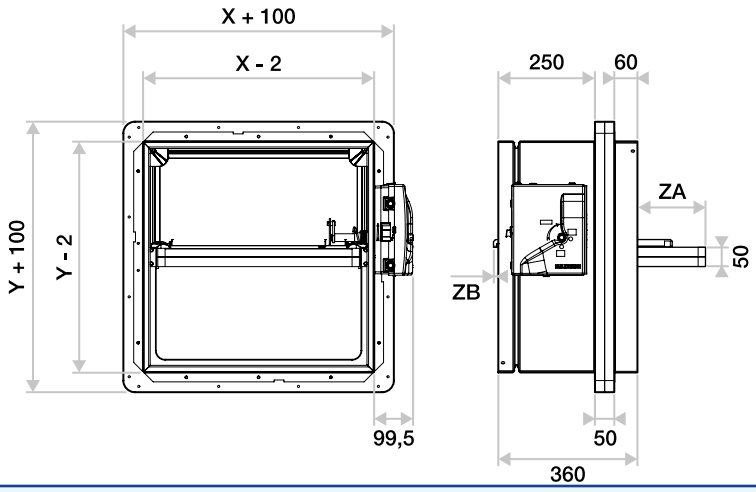
Smoke exhaust dampers are normally closed and only open in the event of a fire, on electrical command from the Fire safety control system.

DESCRIPTION

- The PLAFONE smoke exhaust damper is inspired by the ISONE/Ap wall-mounted damper, it features:
  - Two metal sleeves on either side of a refractory material structure that acts as a vane and fixing frame,
  - An intumescent seal and cold gasket placed between the vane and the refractory frame, to achieve the required leakage rate,
  - The refractory complex is drilled with holes to enable attachment to the smoke exhaust duct certified EN 1366-8 or -9,
  - An ISONE-type electric control mechanism is used to house an electromagnetic trip device, up to 4 signalling contacts and an EHOP reset motor.
- Smoke exhaust dampers are never fitted with fuses.
- The nominal X and Y dimensions of the damper correspond to the embedding dimensions in the duct (or duct air stream).

Further information concerning ISONE mechanisms is available in the fire damper section.

DIMENSIONS (mm)



Y	200	250	300	350	400	450	500	550	600
ZA	0	12	36	61	86	101	126	151	176
ZB	0	0	0	0	0	0	0	0	125

Y	650	700	750	800	850	900	950	1000
ZA	201	226	251	276	301	326	351	376
ZB	37.2	62.2	87.2	112.2	137.5	162.2	187.2	212.5

PLAFONE Smoke exhaust damper

Presentation of the new PLAFONE tunnel damper range

New

PLAFONE closed
in stand-by position

PLAFONE open
in safety position

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1054.
- EI 120 (ved-ho-i ⟺ o) S -1500 Pa - AA multi.
- Certified NF and compliant with NF-S-61937-10.

Advantages

- Minimal leakage rate.
- Validate for remote and horizontal installations.
- Upgradable ISONE mechanism.

SIZE RANGES AND FREE AIR PASSAGES (dm²)

PLAFONE 11041111		Width X															
		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Height Y	200	1.5	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.4	5.9	6.4	6.8	7.3	7.8	8.3	8.8	9.3
	250	2.2	2.9	3.7	4.4	5.2	5.9	6.6	7.4	8.1	8.9	9.6	10.3	11.1	11.8	12.6	13.3	14.0
	300	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.8	12.8	13.8	14.8	15.8	16.8	17.8	18.8
	350	3.7	4.9	6.2	7.4	8.6	9.9	11.1	12.4	13.6	14.8	16.1	17.3	18.6	19.8	21.0	22.3	23.5
	400	4.4	5.9	7.4	8.9	10.4	11.9	13.4	14.8	16.3	17.8	19.3	20.8	22.3	23.8	25.3	26.8	28.3
	450	4.3	5.9	7.6	9.2	10.9	12.5	14.2	15.8	17.5	19.1	20.8	22.4	24.1	25.7	27.4	29.0	30.7
	500	4.9	6.8	8.7	10.6	12.5	14.4	16.3	18.2	20.1	22.0	23.9	25.8	27.7	29.6	31.5	33.4	35.3
	550	5.6	7.7	9.9	12.0	14.2	16.3	18.5	20.6	22.8	24.9	27.1	29.2	31.4	33.5	35.7	37.8	40.0
	600	6.2	8.6	11.0	13.4	15.8	18.2	20.6	23.0	25.4	27.8	30.2	32.6	35.0	37.4	39.8	42.2	44.6
	650	6.9	9.5	12.2	14.8	17.5	20.1	22.8	25.4	28.1	30.7	33.4	36.0	38.7	41.3	44.0	46.6	49.3
	700	7.5	10.4	13.3	16.2	19.1	22.0	24.9	27.8	30.7	33.6	36.5	39.4	42.3	45.2	48.1	51.0	53.9
	750	8.2	11.3	14.5	17.6	20.8	23.9	27.1	30.2	33.4	36.5	39.7	42.8	46.0	49.1	52.3	55.4	58.6
	800	8.8	12.2	15.6	19.0	22.4	25.8	29.2	32.6	36.0	39.4	42.8	46.2	49.6	53.0	56.4	59.8	63.2
	850	9.5	13.1	16.8	20.4	24.1	27.7	31.4	35.0	38.7	42.3	46.0	49.6	53.3	56.9	60.6	64.2	67.9
	900	10.1	14.0	17.9	21.8	25.7	29.6	33.5	37.4	41.3	45.2	49.1	53.0	56.9	60.8	64.7	68.6	72.5
	950	10.8	14.9	19.1	23.2	27.4	31.5	35.7	39.8	44.0	48.1	52.3	56.4	60.6	64.7	68.9	73.0	77.2
	1000	11.4	15.8	20.2	24.6	29.0	33.4	37.8	42.2	46.6	51.0	55.4	59.8	64.2	68.6	73.0	77.4	81.8

PLAFONE 11041111		Width X									
		1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
Height Y	200	-	-	-	-	-	-	-	-	-	-
	250	-	-	-	-	-	-	-	-	-	-
	300	19.8	20.8	21.7	22.7	23.7	24.7	25.7	26.7	27.7	28.7
	350	24.8	26.0	27.2	28.5	29.7	31.0	32.2	33.4	34.7	35.9
	400	29.7	31.2	32.7	34.2	35.7	37.2	38.7	40.2	41.7	43.2
	450	32.3	34.0	35.6	37.3	38.9	40.6	42.2	43.9	45.5	47.2
	500	37.2	39.1	41.0	42.9	44.8	46.7	48.6	50.5	52.4	54.3
	550	42.1	44.3	46.4	48.6	50.7	52.9	55.0	57.2	59.3	-
	600	47.0	49.4	51.8	54.2	56.6	59.0	61.4	63.8	-	-
	650	51.9	54.6	57.2	59.9	62.5	65.2	67.8	-	-	-
	700	56.8	59.7	62.6	65.5	68.4	71.3	-	-	-	-
	750	61.7	64.9	68.0	71.2	74.3	-	-	-	-	-
	800	66.6	70.0	73.4	76.8	-	-	-	-	-	-
	850	71.5	75.2	78.8	-	-	-	-	-	-	-
	900	76.4	80.3	-	-	-	-	-	-	-	-
	950	81.3	-	-	-	-	-	-	-	-	-
	1000	-	-	-	-	-	-	-	-	-	-

Possibility of circular connections, diameters from 160 mm to 900 mm, using specific accessories.

Ø	160	200	250	315	355	400	450	500	560	630	710	800	900
X x Y	265x265	265x265	315x315	365x365	415x415	465x465	515x515	565x565	600x600	670x670	750x750	840x840	940x940
Free air passage (dm²)	3,5	3,5	5,6	8,2	11,4	15	19,1	23,8	27,3	35,1	45,2	58,2	74,4
VIROLE PLAFONE reference	11041050	11041051	11041052	11041053	11041054	11041055	11041056	11041057	11041058	11041059	11041060	11041061	11041062

Free surface (in dm²) = (X-70) x (Y-120) / 1000 (X & Y in mm) for y > 400
Free surface (in dm²) = (X-52) x (Y-102) / 1000 (X & Y in mm) for y ≤ 400

PLAFONE Smoke exhaust damper

New PLAFONE tunnel damper

New

PLAFONE closed
in stand-by position

PLAFONE open
in safety position

Compliance

- Compliant with CE marking as per EN 12101-8: 1812 - CPD -1054.
- EI 120 (ved-ho-i ⟷ o) S -1500 Pa - AA multi.
- Certified NF " and compliant with NF-S-61937-10.

Advantages

- Minimal leakage rate.
- Validate for remote and horizontal installations.
- Upgradable ISONE mechanism.

INSTALLATION

For which installation?

Qualified on a Promatect L500 or EXTHAMAT smoke exhaust duct and on ducts compliant with EN 1366-8 and -9 of the same material and same density.

Multi-compartment smoke exhaust dampers can be used for single-compartment installations.

The fire classification stipulates the service pressure: the damper must not be subjected to pressure drops > -1500 Pa.

Fire direction: like all smoke exhaust dampers, respect fire inside the smoke exhaust duct.

How?

The PLAFONE tunnel damper is equipped with a short 60 mm sleeve that must be embedded in the duct air stream. Fixing in the duct is done in the usual way for installation in ducts, using screws or adhesive mortar.

The CONCEPTOR DESENFUMAGE smoke damper selection software may help you to define the installation dimensions for a technical ceiling.

The nominal damper dimensions X and Y correspond to the interior dimensions of the duct.

The fitting of the mounting-frame into the duct support must conform to CE certification and the classification reports available via www.aldes.fr.

RANGE with choice of options

- The PLAFONE smoke exhaust damper exists in a rectangular version for the most stringent fire resistance class: EI 120 S ⟷ -1500 Pa.

Description	Code
PLAFONE tunnel damper	11041111

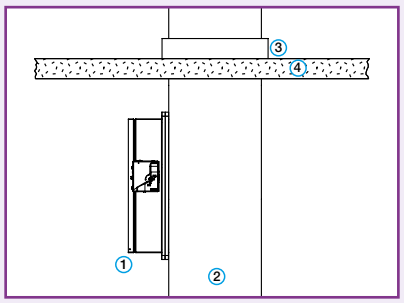
AVAILABLE OPTIONS

Equipment selection	24V Option Code	48V Option Code
VDS 24/48 + FCU1	OPT43304	OPT43306
VDS 24/48 + FCU1 + DCU1	OPT43305	OPT43307
VM 24/48 + FCU1	OPT43308	OPT43310
VM 24/48 + FCU1 + DCU1	OPT43309	OPT43311
VDS 24/48 + FCU1 + EHOP30s	OPT43312	OPT43314
VDS 24/48 + FCU1 + DCU1 + EHOP30s	OPT43313	OPT43315
VM24/48 + FCU1 + EHOP30s	OPT43316	OPT43318
VM24/48 + FCU1 + DCU1 + EHOP30s	OPT43317	OPT43319

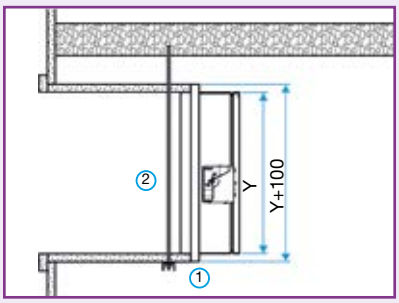
Description	Code
FCU2 + DCU2	OPT43320

DIAGRAM - VERTICAL INSTALLATION

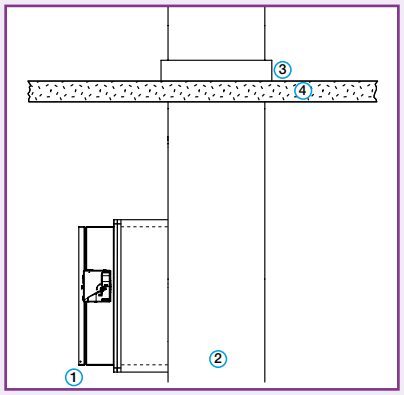
1. Attachment to vertical duct wall.

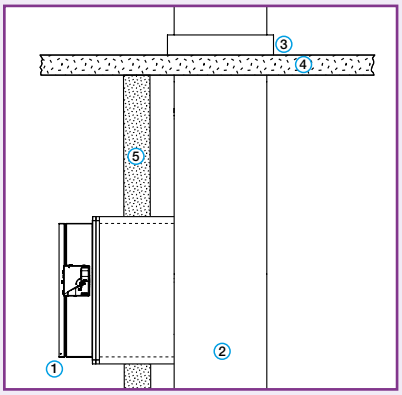


2. Attachment to horizontal side flue of smoke exhaust duct.



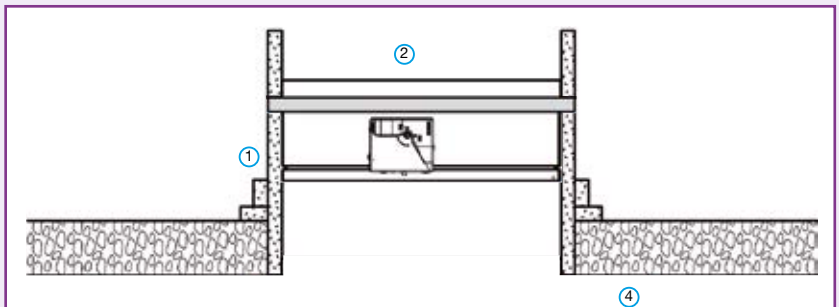
2. Attachment to horizontal side flue of smoke exhaust duct.





1. PLAFONE tunnel damper.
2. Smoke extraction duct.
3. Recommended for tile passage (depending on brand of duct used).
4. Tile.
5. Partition (not impacting on Fire Resistance Classification).

HORIZONTAL INSTALLATION



OFFSET Mounting

Fixed vane grilles tiles

Grille AO 123 Z

Grille AO 251

SC 370

Advantages

- Suitable for standard suspended-ceiling tiles.
- AU 123 & AU 124 series, with thin frame, for greater rigidity.

FIELD OF APPLICATION

- Air recovery for all ventilation & air conditioning applications.
- Ceiling installation - replacing a suspended ceiling tile.

DESCRIPTION

AO 123 Z
- Square, straight mesh - 15 x 15 mm without frame.
- White epoxy painted aluminium finish, RAL 9010.

AU 123 Z
- Square, straight mesh - 15 x 15 mm with thin 5 mm frame.
- White epoxy painted aluminium finish, RAL 9010.

AU 124 Z
- Square, angled mesh - 45° - 15 x 15 mm with thin 5 mm frame.
- White epoxy painted aluminium finish, RAL 9010.

AO 251
- Grille with fins angled at 45°.
- Finish: natural anodised aluminium or white epoxy paint (RAL 9010).

SC 370
- Perforated plate - 45% free surface excluding frame.
- White epoxy painted finish, RAL 9010.
- Gravity mounting on 'T' pieces in the suspended ceiling.

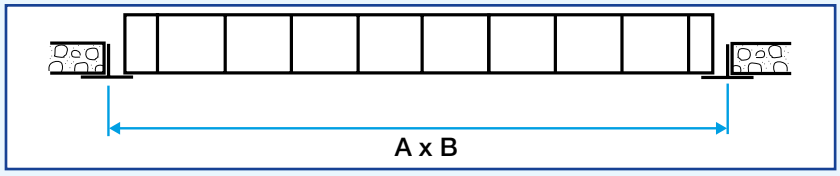
ACCESSORIES

- Galvanised steel connecting plenum (side connector).

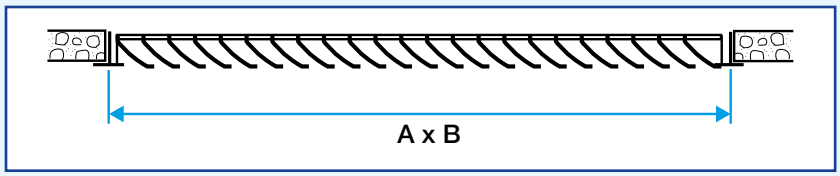
ADDITIONAL RANGE

- Paint finish from RAL colour chart (contact us).

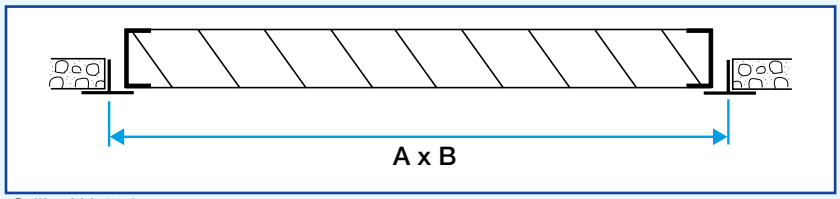
DIMENSIONS



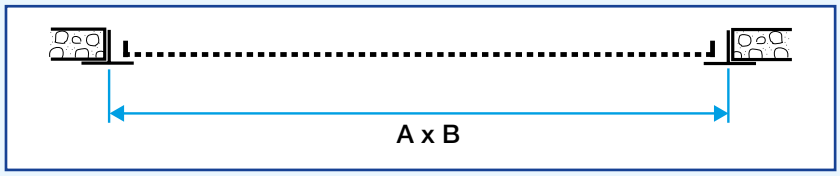
Grille AO 123



Grille AO 251



Grille AU 124



Grille SC 370

A (mm)	B (mm)	Ø spigot (mm)	Plenum height (mm)
600	600	200	300
1200	600	-	-

RANGE

Dimensions AxB	Anodised finned grille AO 251 Code	White finned grille AO 251 Code	White mesh grille AO123-Z Code	White mesh grille AU 124-Z Code	Plenum - side connector RE 123 Code
600 x 600	11050667	11050668	11050661	11050727	11053694
1200 x 600			11050662	-	-

Dimensions AxB	White perforated plate SC 370 Code	White perforated plate + filter SC 370 W Code	Spare filter W Code	White mesh grille AU 123-Z Code	Plenum - side connector RE 123 Code
600 x 600	11050669	11050670	11053499	11050725	11053694

Fire dampers

Leader in the French market, ALDES has already delivered more than a million fire dampers, which have includes a variety of innovative features, such as:

- A surface-mounted version, which can be installed without having to be sealed, thus remaining removable,
- An unequalled ability to upgrade the ISONE mechanism,
- A new range - subjected to fire resistance testing at 1500 Pa,
- An 'ALDES Control' pack to simulate the Fire Safety Control Unit (CMSI) prior to finalising the connections.

ALDES also supplies fire dampers for specific uses such as the EPR Nuclear Power Plants in FLAMANVILLE or for motorway tunnels.

Mechanisms

ISONE+
p. 114

BF/BLF
p. 118

'ALDES CONTROL' PACK
p. 155

VRFI
p. 156

Dampers

Surface-mounted Isone+
p. 120

Circular flush-mounted Isone+
p. 130

Rectangular flush-mounted Isone+
p. 137

ISONE 1500 with casing
p. 146

ISONE 1500 with sleeve
p. 147

MINISONE
p. 149

Terminal dampers

CF1 / CF2
p. 152

Marking CE according to EN 15650

The regulatory environment for fire dampers is changing

For over 10 years, the European Union has been gradually implementing the "Construction Products" directive on a product by product basis. Today, it is the turn of fire dampers to respect CE marking. This new regulation may disrupt the habits of stakeholders in the fire protection industry. In particular these changes concern:

- *New fire resistance testing and classification methods.*
- *New European vocabulary concerning fire resistance.*

Did you know?

In regulatory terms, a fire damper is selected according to the service pressure.

FROM A TECHNICAL STANDPOINT, WHAT CHANGES AFFECT FIRE DAMPERS?

The answer is illustrated below with the mosxt widely sold fire damper in France:

Before CE marking

After CE marking

The damper is identical but the vocabulary concerning its fire classification has changed, to become pan-European:

CF 2h - under 500 Pa ➡ E I 120 S - i ⬌ O – Ho / Ve – under 500 Pa

EXPLANATION OF THE NEW "EUROCLASS" FIRE PROTECTION VOCABULARY:

- **E** = Integrity against fire (corresponds approximately to the former Fire Retardant),
- **I** = Insulation (EI corresponds approximately to our former Fire Damper),
- **120** = duration in minutes,
- **S** = the leakage rate no higher than 200 m^3/h maximum per m^2, under test pressure, generally 500 or 1500 Pa. The S criteria is obligatory in France,
- **i ⬌ o** = the damper is tested for fire in both directions,
- **Ho** = the damper is tested when mounted horizontally,
- **Ve** = the damper is tested when mounted vertically,
- **500 Pa**: the negative pressure applied to the damper during the fire resistance test.

HOW TO SELECT A FIRE DAMPER WITH CE MARKING?

1 Ensure the presence of the certificate of CE compliance as per EN 15650.

2 Ensure that the classification of the damper "EI 120 S…" corresponds to the intended use. Particular attention should be paid to the size ranges. For example, large-dimension dampers will be replaced by smaller ones that will need to be assembled in batteries.

ISONE + mechanisms : fully adaptable in just a few minutes!

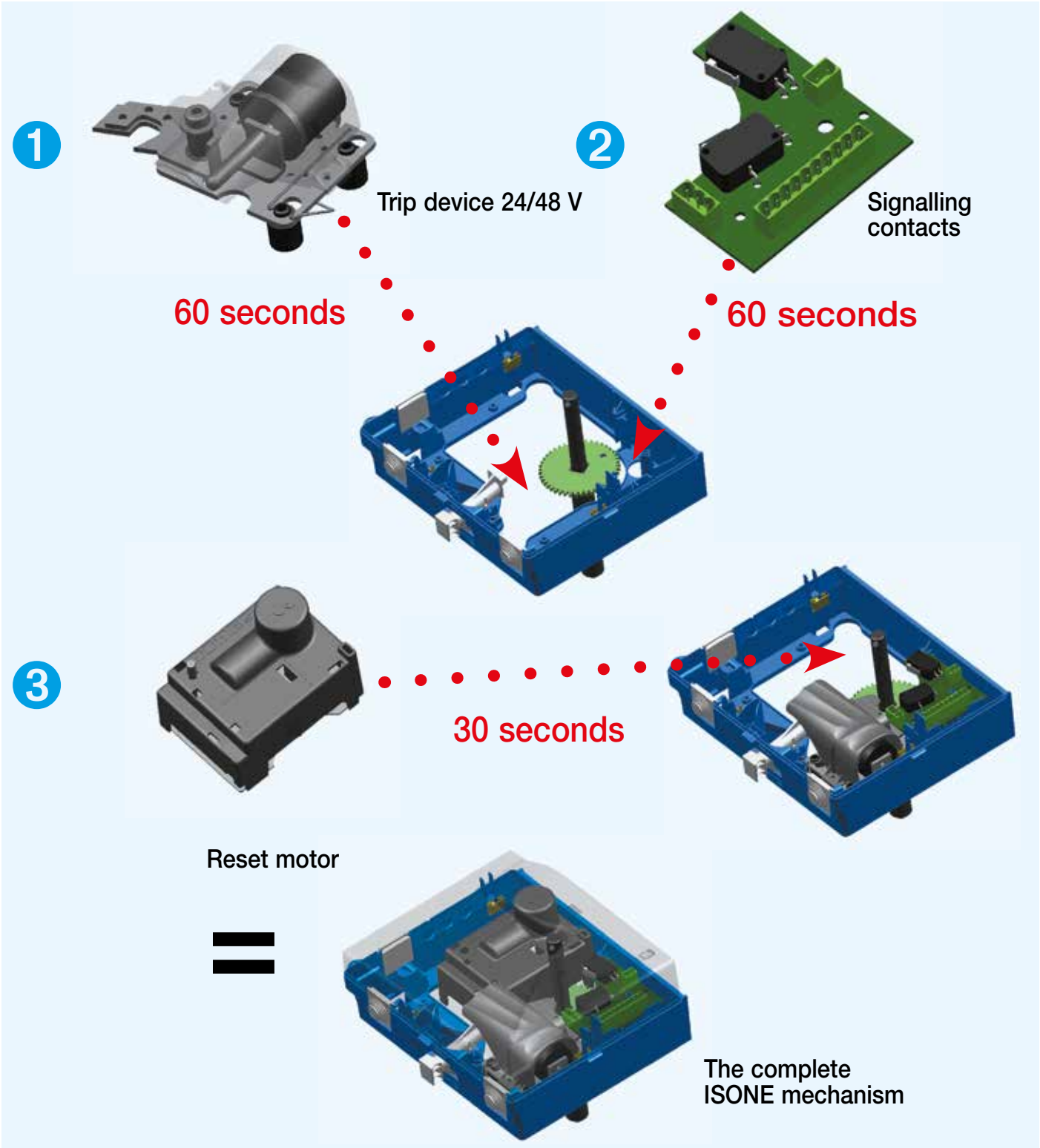
Since 1984, all ALDES dampers have been upgradeable. This means that, once installed, the damper mechanism can be improved by fitting an electromagnetic tripping device, one or more signalling contacts and a reset motor.

The dampers can therefore be adapted to match changing regulatory requirements and operational needs.

With the ISONE mechanism, upgradeability is simplified to the limit! Thanks to plug-in, tool free fittings, the ISONE mechanism can be transformed into its most complete version in less than 3 minutes.

The reset motor is obviously the most interesting to the operator, as it allows him to perform the obligatory annual tests from a distance, thus avoiding having to dismantle suspended ceilings.

If no electrical supply is available, just use the portable ALDES CONTROL pack (See Page 155).



ISONE + mechanisms : fully adaptable in just a few minutes!

EHOP 30S remote reset motor

INSTALLATION

Ensure the damper is in safety position prior to any intervention.
Attention: To reset the damper, the airflow must be zero.

Installation of motor

Pin descends into housing

Installation of motor

Replace the ISONE cover.

To remove the motor

- Disconnect the connector.
- Lift out the pin (1).
- Remove the motor (2 - 3).

Characteristics

- Voltage: 21 to 53 V DC and AC.
- Maximum current:
  - 0.7 A under 24 V,
  - 0.35 A under 48 V.

REMINDER: the power supply must be Very Low Safety Voltage.

- Reset in 10 sec.
- Automatic stop at end of cycle.
- 2 seconds of stop time between 2 cycles.
- Operating temperatures: -10 to +50 °C.
- Service life: 1500 operations.
- Maintenance-free.
- The output impeller rotates freely when the motor is not powered.

ISONE + fire damper mechanism

ISONE+: fully adaptable in just a few minutes!

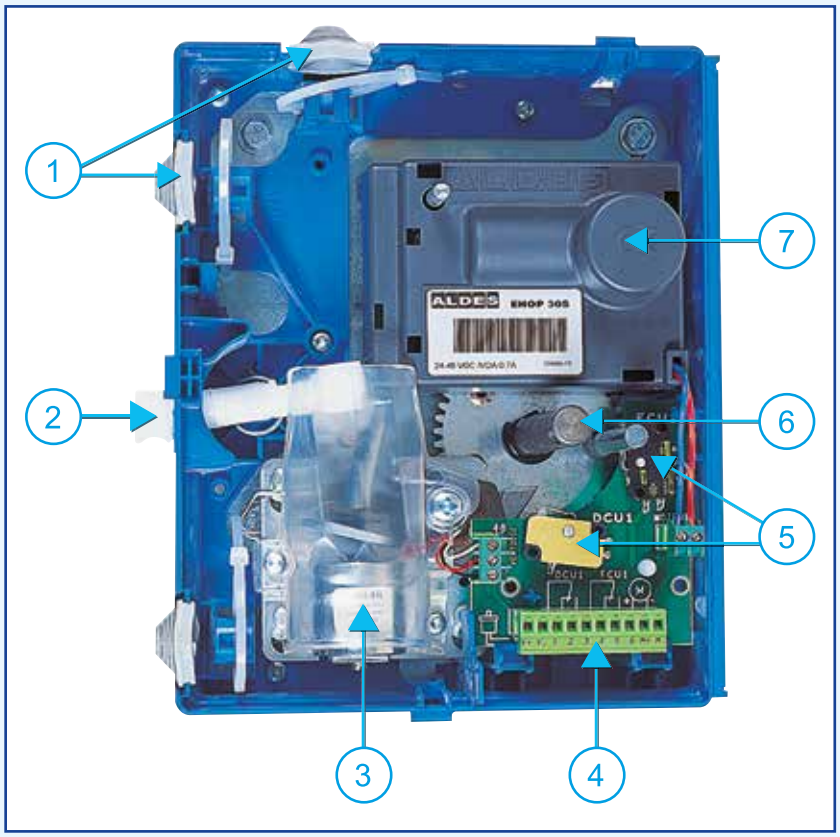
Advantages

- Upgradeable mechanism: all equipment can be installed/removed at any time; operations can be carried out single-handed without tools.
- 24 or 48 V?: control errors rendered impossible by bi-voltage trip device.
- Easy to connect: all ISONE terminals are fitted with fool-proof devices and can be disconnected without tools.

DESCRIPTION

- The ISONE mechanism can be fitted with all tripping, signalling & reset equipment, either in the factory or on-site at a later date.
- All this equipment is connected within the same IP42 box, with a blue base, designed to provide you with a number of installation and test tips.
- The transparent clip-fit cover can be removed using a large screwdriver and shows the position of the damper.

1. The 3 cable glands slide into the box.
2. Ergonomic & simple trip command.
3. Electromagnetic trip device 24/48 V (prevents control errors).
4. Disconnectable terminal for easy electrical connections.
5. Signalling contacts.
6. Reset lever accessible without removing cover; 1/4 of a turn with a screwdriver is sufficient to open the damper.
7. 30 s EHOP reset motor.



TRIPPING OPTIONS

- **Thermal trip FTE 70°C**

  A thermal, stainless steel rod is fitted into the mechanism box, held in place by a screw.

  Rapid access for fuse changes.

  70° fuse.

- **Electromagnetic trip**

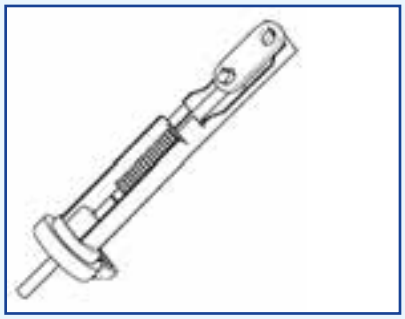
  Operates on external command (e.g. Fire safety control system) via shunt trip (VDS) or power cut-off (VM).

  An exclusive trip device, can operate under 24 or 48 Vdc. Manual adjustment switch Power: VDS < 3.5 W, VM < 1.5 W.

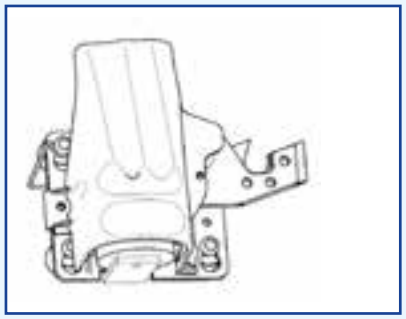
  The tripping assembly can be removed, without tools & single handed.

- **Manual control**

  White handle integrated into the unit for tripping without having to remove the cover.



Thermal rod



Electromagnetic trip device

ISONE + fire damper mechanism

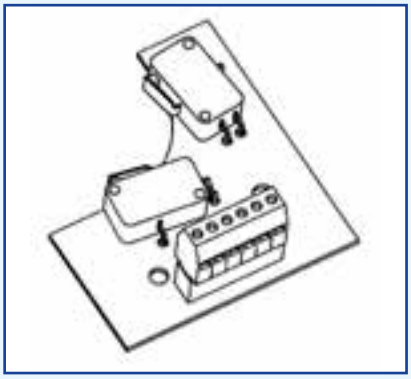
SIGNALLING OPTIONS

The signalling contacts are fitted to printed circuit boards. All boards are clipped into the mechanism housing and can be removed easily and quickly without tools. The connector terminals are fitted with fool-proof devices and can be removed easily.

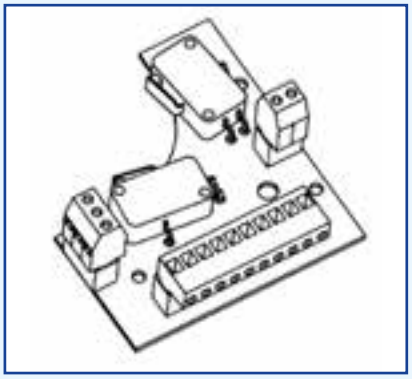
- **PCB No.1 - FCU1 - DCU1**
  Reserved for dampers with Thermal Fuse (FTE) only.
  Includes a choice of:
  - End of travel contact FCU1 (shows that the damper is closed),
  - Start of travel contact DCU1 (shows that the damper is open),
  - Both contacts FCU1 + DCU1.
- **PCB No.2 - motor electromagnet**
  Adapted to dampers fitted with VDS or VM electromagnetic trip device.
  It is systematically fitted with an FCU1 end of travel contact. It can also be fitted with a DCU1 start of travel contact.
- **PCB No.3 - FCU2 - DCU2**
  Clips onto PCBs 1 & 2.
  Systematically fitted with start and end of travel contacts FCU2 + DCU2.

RESET OPTIONS

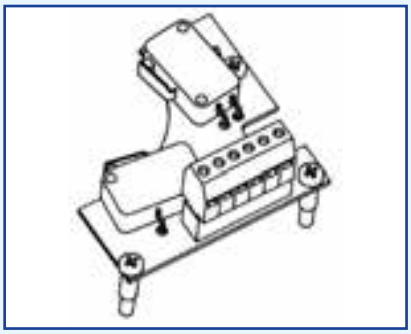
- **Manual reset**
  Manual reset is possible on all ISONE dampers without having to remove the cover.
  Using a large screwdriver, turn the operating shaft a quarter of a turn.
- **EHOP 30s reset motor**
  Used to return the damper to its standby position without touching the unit.
  Easily connected with one hand, without tools, fits into the mechanism unit.
  Can be removed with one hand, without tools.
  Resets in less than 10 seconds.
  Max. current absorbed during resetting 0.7 A under 24 V - 0.35 A under 48 V.
  Current absorbed at other times = 0.
  Voltage between 24 & 48 Vdc (VDA).



PCB No.1 - FCU1 + DCU1

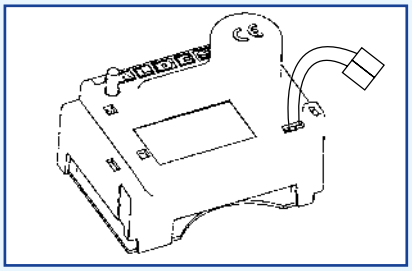


PCB No.2 - FCU1 + DCU1



PCB No.3 - FCU2 + DCU2

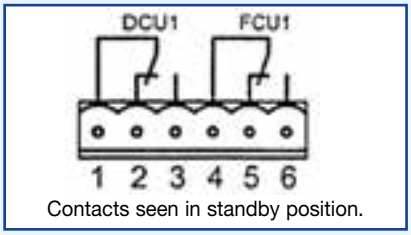
Mechanism box



EHOP 30s reset motor

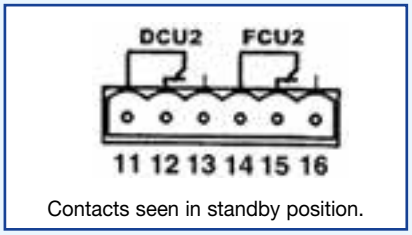
ELECTRICAL CONNECTION

The ISONE® terminals can be removed without tools, the electrical wiring is held in place by screws.



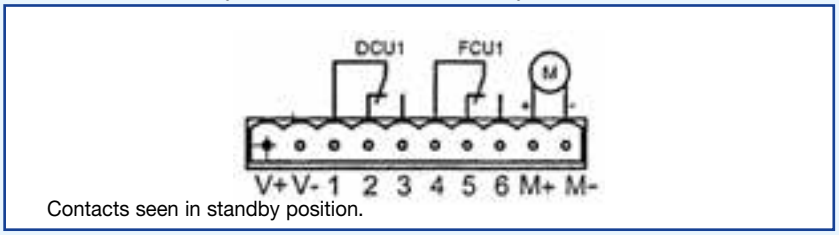
Contacts seen in standby position.

Board No. 1 FCU1-DCU1: 2 contacts for ISONE with FTE only = 6 terminals.



Contacts seen in standby position.

Board No. 3 FCU2-DCU2:
2 auxiliary contacts = 6 terminals.



Contacts seen in standby position.

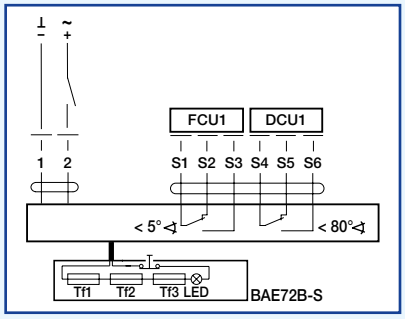
Board No.2 - motor/electromagnet: electromagnet + 2 contacts + motor = 10 terminals

BF/BLF Mechanism

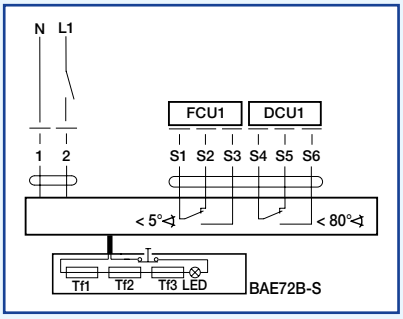
ISONE+ fire dampers can house the BF/BLF mechanism!

DESCRIPTION

- Isone+ EM or FDP fire dampers can house the BF/BLF mechanism.
- The BF/BLF motor moves the damper to the operating position at the same time as tensioning the return spring. The damper is turned back to the safety position by spring energy when the supply voltage is interrupted.
- Thermo-electric fuse 72°C (BAE72) for BF/BLF mechanism.
- Manual or motorize reset.
- 24 V or 230 V.
- IP 54
- FC/DC signalling contacts (open/closed position).



BLF 24 V - Contacts are illustrated on standby

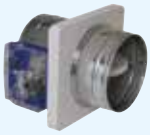


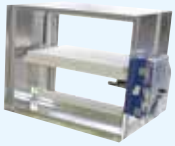
BLF 230 V - Contacts are illustrated on standby

TECHNICAL DETAILS

4 mechanism models	BLF		BF	
	24 V	230 V	24 V	230 V
Rated Voltage	AC 24 V 50 / 60 Hz - DC 24 V	AC 230 V 50 / 60 Hz	AC 24 V 50 / 60 Hz - DC 24 V	AC 230 V 50 / 60 Hz
Consumption (resetting)	5 W	6 W	7 W	8 W
Permanent consumption (excl. resetting)	2.5 W	3 W	2 W	3 W
Resetting time	40 to 75 s	40 to 75 s	140 s	140 s
Cable length:	1 m	1 m	1 m	1 m
- motor	2 x 0.75 mm^2	2 x 0.75 mm^2	2 x 0.75 mm^2	2 x 0.75 mm^2
- FC/DC contacts	6 x 0.75 mm^2	6 x 0.75 mm^2	6 x 0.75 mm^2	6 x 0.75 mm^2
Weight	1.6 kg	1.7 kg	2.8 kg	3.1 kg

Summary table of fire resistance properties of ISONE+ fire dampers

Type of Fire damper	Thin plasterboard partition wall	
 Circular surface-mounted ISONE+	EI 90 S (CF 1h30) 500 Pa Ve (1hr or 2 hr wall) i ⟷ o	Page 120
 Rectangular surface-mounted ISONE+	EI 90 S (CF 1h30) 500 Pa Ve (1hr or 2 hr wall) i ⟷ o	Page 120

Type of Fire damper	110 mm concrete	
 ISONE+ circular FdP - EM	EI 120 S (CF 2hr) 500 Pa Ve (wall) Ho (slab) i ⟷ o	Page 130
 ISONE+ rectangular FdP - EM	EI 120 S (CF 2hr) 500 Pa Ve (wall) Ho (slab) i ⟷ o	Page 137
 ISONE+ rectangular EM - GM (beyond 800 x 600 mm)	EI 90 S (CF 1h30) 500 Pa Ve (wall) i ⟷ o Vane axis: horizontal	Page 137
 ISONE 1500	EI 120 S (CF 2hr) 1500 Pa Ve (wall) Ho (slab) up to 600 x 600 i ⟷ o Vane axis: horizontal	Page 145

ISONE + surface mounted fire damper

CE 1812

Circular & rectangular surface-mounted ISONE+

Advantages

- Easy and cheap to install, no sealing or suspension elements required.
- On 70 mm plasterboard tiles.
- On lightweight plasterboard partitions.
- Onto offset GEOSTAFF ducts.
- Airtight - Class B from EN 1751.

FIELD OF APPLICATION

- Compartmentalisation of commercial premises (Public buildings, High rise buildings, commercial or industrial premises etc.).

DESCRIPTION

- EI 60 S - on CF 1h wall.
- EI 90 S - on plasterboard + rail wall 1hr30 or 2hr.
- EI 120 S on offset GEOSTAFF duct.
- Consists of 2 metal sleeves on both sides of an assembly of refractory material.
- The refractory material is provided with holes to attach it to the metallic framework of a plasterboard partition.
- The upgradable mechanism box is positioned on a sleeve.

RANGE

- Surface-mounted Isone+ up to Ø 500 mm.
- Rectangular surface-mounted Isone+ up to 800 x 600 mm. See following pages.

AVAILABLE OPTIONS

- **Mechanism equipment (See Page 128)**
  - Start and end of travel contact ((FCU1, DCU1).
  - Electromagnetic trip 24/48 V on making (VDS 24/48 V) or breaking (VM 24/48 V) current.
  - Electrical reset motor (EHOP 30s).
- **Aeraulic and airtight connection**
  - Seals on circular connections.
  - Flange for rectangular models.
- **Customisable labelling**

  Name of the work site, customer, installation area, etc.

CIRCULAR ISONE+ surface-mounted PRESSURE DROP

	Speed in duct (m/s)											
	2		4		6		8		10		12	
Ø D	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP
(mm)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)
100	57	**3**	113	**10**	170	**23**	226	**40**	283	**63**	339	**90**
125	88	**2**	177	**8**	265	**18**	353	**32**	442	**50**	530	**72**
160	145	**3**	290	**10**	434	**23**	579	**40**	724	**63**	869	**90**
200	226	**2**	452	**7**	679	**16**	905	**28**	1,131	**44**	1,357	**63**
250	353	**1**	707	**5**	1,060	**11**	1,414	**20**	1,767	**31**	2,121	**45**
315	561	**1**	1,122	**3**	1,683	**7**	2,244	**12**	2,806	**19**	3,367	**27**
355	713	**4**	1,425	**14**	2,138	**32**	2,851	**56**	3,563	**88**	4,276	**126**
400	905	**3**	1,810	**12**	2,714	**27**	3,619	**48**	4,524	**75**	5,429	**108**
450	1,145	**3**	2,290	**11**	3,435	**25**	4,580	**44**	5,726	**69**	6,871	**99**
500	1,414	**2**	2,827	**7**	4241	**16**	5,655	**28**	7,069	**44**	8,482	**63**

Pressure loss in Pa for a flow rate in m^3/h or speed in m/s.

RECTANGULA ISONE+ surface-mounted PRESSURE DROP

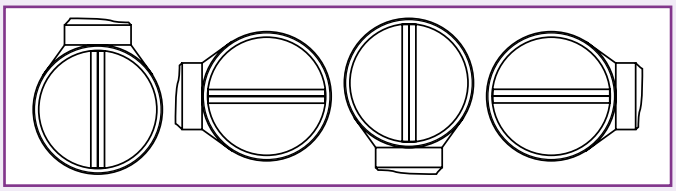
Height Y	Width X												
	200	250	300	350	400	450	500	550	600	650	700	750	800
200	**21**	**13**	**11**	**10**	**9**	**9**	**8**	**14**	**14**	**-**	**-**	**-**	**-**
250	**9**	**7**	**6**	**6**	**5**	**5**	**5**	**8**	**7**	**4**	**12**	**12**	**-**
300	**6**	**5**	**4**	**4**	**4**	**4**	**3**	**15**	**15**	**3**	**15**	**16**	**17**
350	**5**	**4**	**4**	**3**	**3**	**3**	**3**	**10**	**10**	**2**	**11**	**11**	**11**
400	**16**	**10**	**8**	**10**	**9**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
450	**-**	**9**	**12**	**9**	**8**	**7**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
500	**-**	**16**	**10**	**8**	**7**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**5**
550	**-**	**-**	**10**	**7**	**6**	**5**	**5**	**5**	**4**	**4**	**4**	**4**	**4**
600	**-**	**-**	**9**	**7**	**5**	**5**	**4**	**4**	**4**	**4**	**4**	**4**	**4**

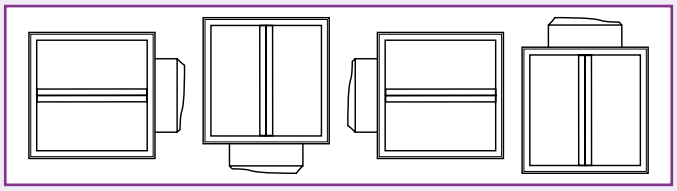
Pressure loss in Pa for a speed in duct of 4 m/s.
For all other speeds V: ΔP (Pa) = ΔP (read) x V^2 / 16.

ISONE + surface mounted fire damper

CE 1812

MECHANISM POSITIONING UNIMPORTANT





INSTALLATION PRINCIPLES

- **Installation on plasterboard partitions with metallic rails.** See page 122.
- **Installation on plasterboard tiles.** See page 128.
- **Installation on offset ducts.** See page 129.
- **Aeraulic connection.**
  The two metallic sleeves on the ISONE are both MALE.
  The sleeves should be attached without mechanical pressure and should enable perfect alignment of the ducts with the damper.
- The installation of the ISONE Ap requires no sealing, suspension elements or thermal protection.
- Quick & easy to install, validated for plasterboard partitions.

ISONE + surface mounted fire damper

CE 1812

Rectangular or circular ISONE+ surface-mounted on light plasterboard partition wall - 500 Pa

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1100 and 1101.

Advantages

Installation advantages
- No grouting or suspension required.
- Removable.
- Horizontal or vertical blade axis.

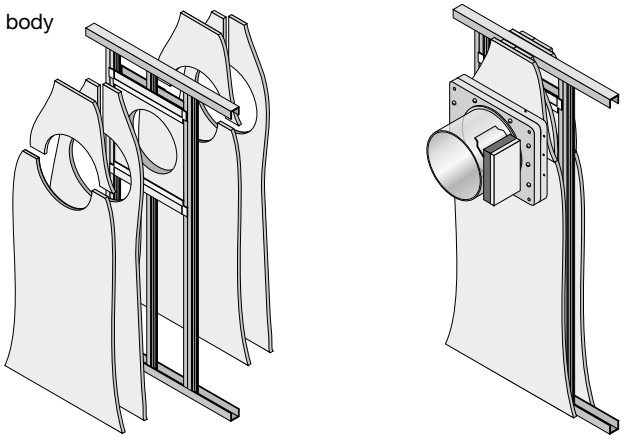
Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

PRINCIPLE OF INSTALLATION ON PLASTERBOARD WALL AND + RAIL

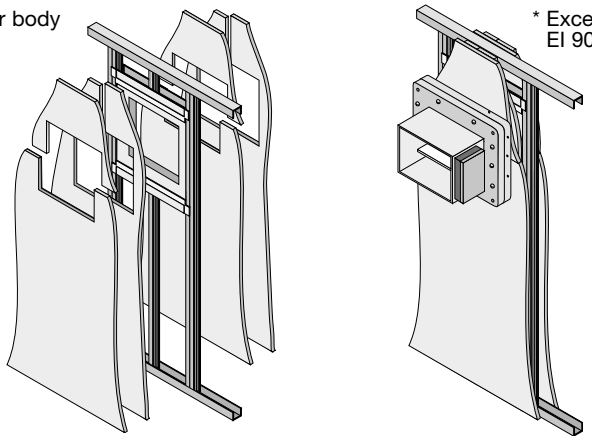
- **1 hour fire-retardant partition walls**
  - Fire damper EI 60 S - 500 Pa.
  - Insert rock wool insulation.
  - Fix damper in place with screws through metal frame.
- **90 min and 2 hour fire-retardant walls**
  - Fire damper EI 90 S - 500 Pa.
  - Insert rock wool insulation.
  - Fix damper in place with screws through metal frame.

Except for rectangular bodies*.

Circular body



Rectangular body



* Except for EI 90 S

* To install an EI 90 S in an EI 120 S partition wall (2-hour fire damper), see installation instructions on page 125.

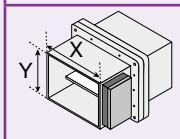
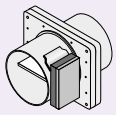
Rectangular or circular ISONE+ surface-mounted on light plasterboard partition wall - 500 Pa

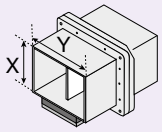
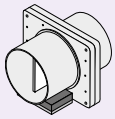
INSTALLATION ON LIGHT PLASTERBOARD PARTITION WALL (EXCEPT FOR EI 90 S RECTANGULAR)

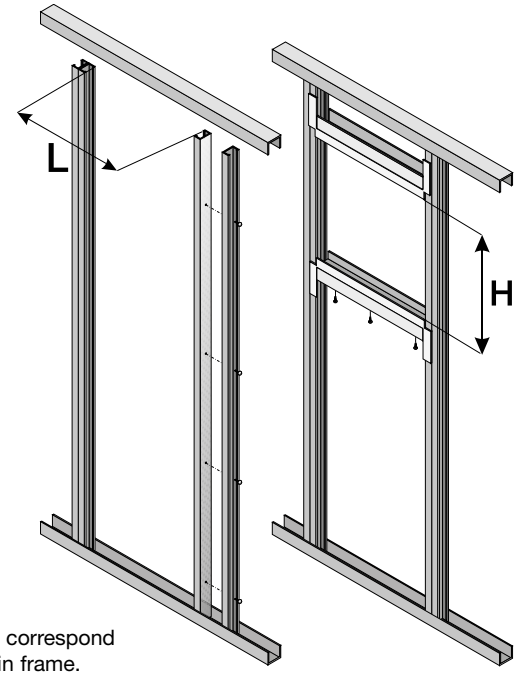
Dimensions of metal frame adapted to damper

To install an Isone+ surface-mounted fire damper on a plasterboard partition wall, you will need a frame of suitable dimensions. As the damper mounting screws will be screwed into this frame, it must be perfectly positioned to receive the damper.

Note: For the surface-mounted Isone+ 100, 125, 125 versions, the damper diameter is 160 mm.

Orientation of ISONE+/ Ap	Mechanism to side	
		
W (mm)	X + 25	Ø + 25
H (mm)	Y + 25	Ø + 25

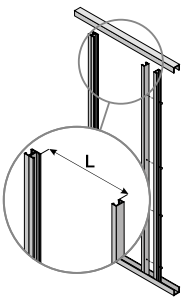
Orientation of ISONE+/ Ap	Mechanism underneath	
		
W (mm)	X + 25	Ø + 25
H (mm)	Y + 25	Ø + 25



Note: L and H correspond to free space in frame.

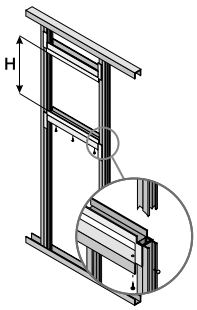
1. Construction of metal structure and frame

- Fix the rails to the floor and ceiling.
- Insert the double uprights side by side, respecting distance L (the uprights are screwed together approximately every metre).

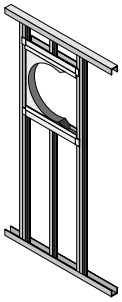


2. Installation of plasterboard and positioning of surface-mounted ISONE+

- Cut rail sections to create the top and bottom of the framework.
- Cut two rail sections of approximately L + 200 mm which will be folded and screwed to the double uprights.
- Screw two other rails of length L to the two previous rail sections.



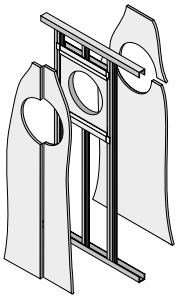
- Centre and insert a single upright between the floor rail and the bottom of the frame, and another between the top of the frame and the ceiling rail.
- Fill any space between the fire damper and the metal frame created using rock wool with a theoretical mass of 80 kg/m^3 (alpharock ROCKWOOL).



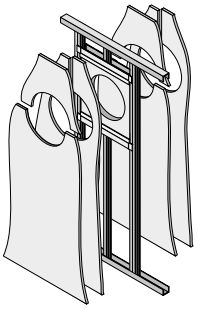
Rectangular or circular ISONE+ surface-mounted on light plasterboard partition wall - 500 Pa

3. Installation of plasterboard and positioning of surface-mounted ISONE+

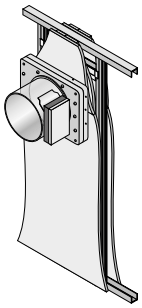
- Install the first (or only) piece of plasterboard.
  - Ensure board joints are not in the same place on each side of the partition wall.



- Put second piece of plasterboard in place.
- Ensure board joints are not in the same place on each side of the partition wall.
- Mount the boards with type TTPC 35 screws with a maximum spread of 300 mm, to all rails and uprights.



- Use the Ø 5 mm holes in the fire damper body to screw it to the metal framework.
- The screws should be sufficiently long to penetrate the framework.

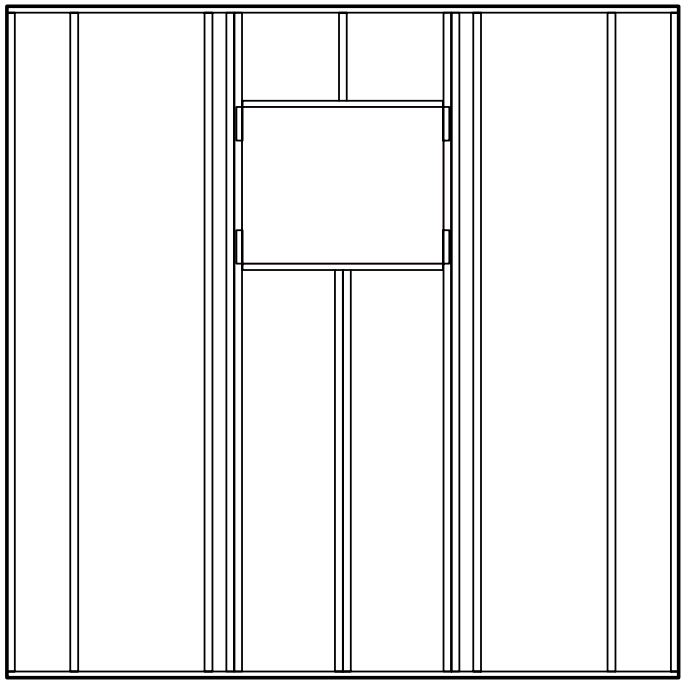


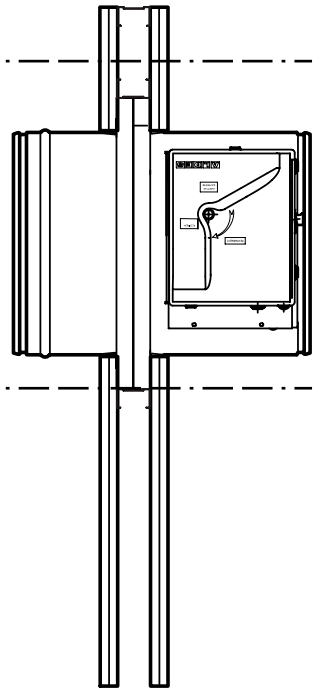
For more details refer to the fire classification reports. The plasterboard partition wall should be assembled in accordance with manufacturer recommendations and instructions.

Rectangular or circular ISONE+ surface-mounted on light plasterboard partition wall - 500 Pa

SPECIFIC MOUNTING FOR RECTANGULAR ISONE+ EI 90 S

The fire damper should be positioned in the framework in accordance with the diagram below: inner dimensions of framework = outer dimensions of fire damper.





Note: this assembly does not require the use of mineral wool insulation or screws on the ISONE+ damper.

Note: This assembly is also appropriate for all other ISONE+/Ap units: circular and rectangular, EI 60 S, EI 90 S. It is the only one authorised for sizes of greater than 500 x 500 mm.

ISONE + surface mounted fire damper

CE 1812

Circular and rectangular ISONE+ surface-mounted on a plaster brick wall - EI 60 S - 500 Pa

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1100 and 1101.

Advantages

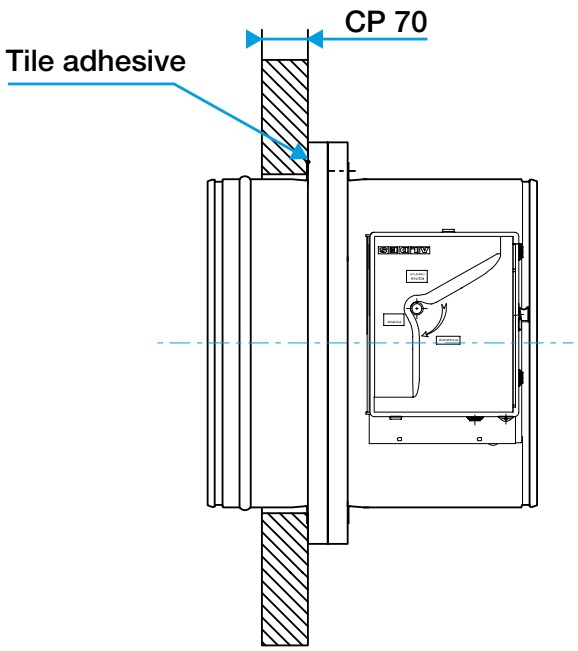
Installation advantages
- Ideal in a hopper installation (only one side accessible).
- No grouting or suspension required.
- Horizontal or vertical blade axis.

Advantages of the mechanism.
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

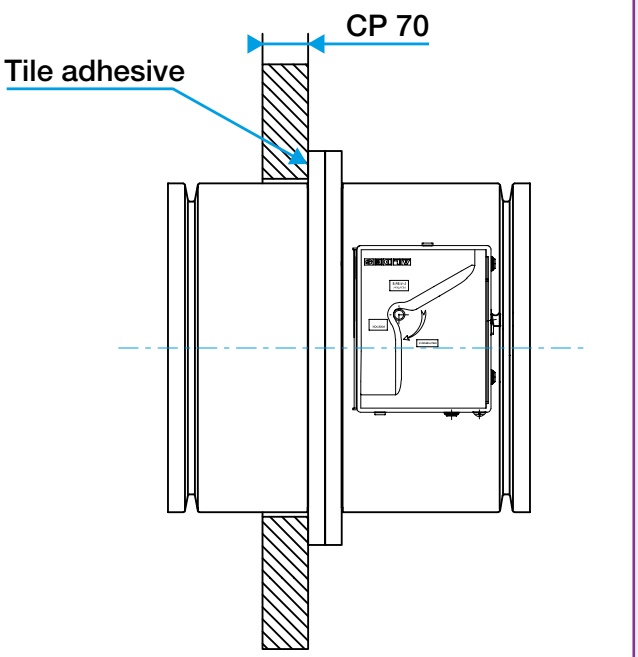
SURFACE-MOUNTED INSTALLATION ON PLASTER BRICK WALL

- Opening = nominal dimensions + 10 mm.
- Apply adhesive mortar to wall side of fire damper.
- Place the damper against the wall and anchor it in place using VBA screws. The opening through the wall should be free of adhesive.

CIRCULAR ISONE+/Ap



RECTANGULAR ISONE+/Ap



Reminder of codes: Circular ISONE+/Ap: 11043440 to 11043449
Rectangular ISONE+/Ap: 11043295.

Classification reports available on www.aldes.fr.

ISONE + surface mounted fire damper

CE 1812

Circular and rectangular ISONE+/Ap offset from a GEOSTAFF fire damper duct.

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1100 and 1101.

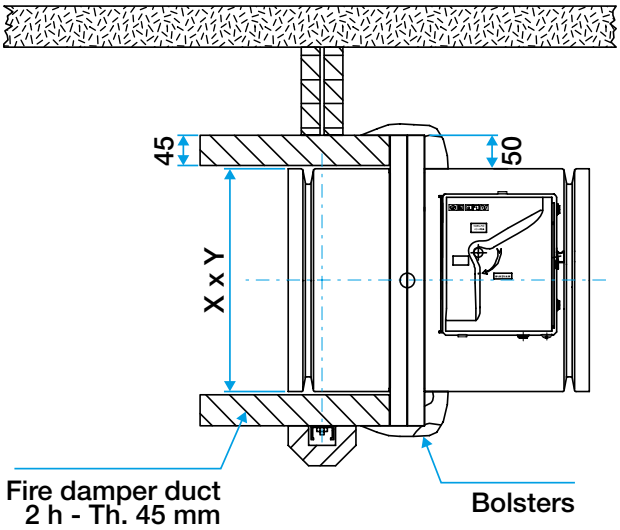
Advantages

- Simple and economic to install.
- No grouting required.
- Standard equipment only.
- Modular installation to adapt to site configuration.

OFFSET INSTALLATION OF FIRE DAMPER DUCT

ISONE+/Ap succeeded in fire resistance tests and reports are available for the two following assembly methods:

- Screwed and glued on GEOSTAFF brand 2-hour vertical duct fire damper.
- Offset and padded on branded horizontal duct.



Reminder of codes: Circular ISONE+/Ap: 11043440 to 11043449
Rectangular ISONE+/Ap: 11043295.

Classification reports available on www.aldes.fr.

ISONE + surface mounted fire damper

CE 1812

Circular ISONE+/Ap

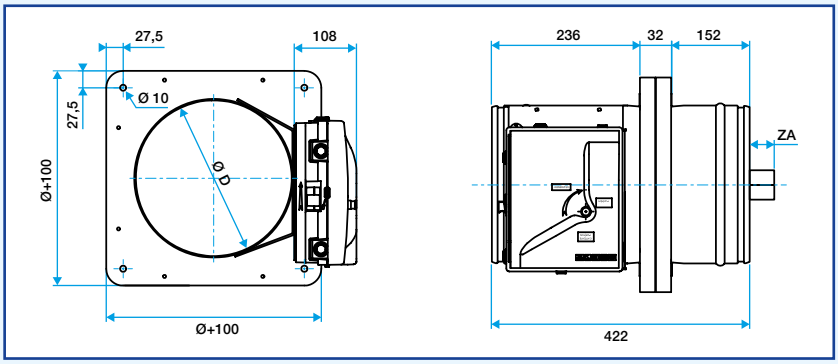
Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1100.

Advantages

- Ideal in a hopper installation (only one side accessible).
- Simple and cheap to install, authorised for lightweight partitions and horizontal GEOSTAFF ducts.
- No grouting or suspension elements required.
- Horizontal or vertical blade axis.
- Airtight - Class B from EN 1751.

DIMENSIONS (mm) – WEIGHT (kg)



Ø D	Overall W x H	Excess blade ZA	Weight
100	260x260	-	8
125	260x260	-	8
160	260x260	-	7.5
200	300x300	-	9.5
250	350x350	-	10.5
315	415x415	-	11.5
355	455x455	10	12.5
400	500x500	20	16
450	550x550	40	17.5
500	600x600	70	19.5

RANGE with choice of options

Thermal fuse 70°C included.
For Ø < 160 mm, 2 RCC reductions are supplied.

Designation	Code
ISONE+/Ap D100	11043440
ISONE+/Ap D125	11043441
ISONE+/Ap D160	11043442
ISONE+/Ap D200	11043443
ISONE+/Ap D250	11043444
ISONE+/Ap D315	11043445
ISONE+/Ap D355	11043446
ISONE+/Ap D400	11043447
ISONE+/Ap D450	11043448
ISONE+/Ap D500	11043449

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24V Option Code	48V Option Code
FCU1 open position contact for FTE	OPT43301		
DCU1 closed position contact for FTE	OPT43302		
FCU1 + DCU1 open/closed position contacts for FTE	OPT43303		
VDS "Power emission" electromagnetic trip device 24/48V + FCU1 contact		OPT43304	OPT43306
VDS "Power emission" electromagnetic trip device 24/48V + FCU1 + DCU1 contacts		OPT43305	OPT43307
VM "Power cut-off" electromagnetic trip device 24/48V + FCU1 contact		OPT43308	OPT43310
VM "Power cut-off" electromagnetic trip device 24/48V + FCU1 + DCU1 contacts		OPT43309	OPT43311
VDS trip device 24/48V + FCU1 contact + EHOP30s reset motor		OPT43312	OPT43314
VDS trip device 24/48V + FCU1 + DCU1 contacts + EHOP30s reset motor		OPT43313	OPT43315
VM trip device 24/48V + FCU1 contact + EHOP30s reset motor		OPT43316	OPT43318
VM trip device 24/48V + FCU1 + DCU1 contacts + EHOP30s reset motor		OPT43317	OPT43319

Designation	Code
FCU2 + DCU2 open/closed position contacts	OPT43320

Designation	Code
Airtight seals	-

ISONE + surface mounted fire damper

CE 1812

Rectangular surface-mounted ISONE+

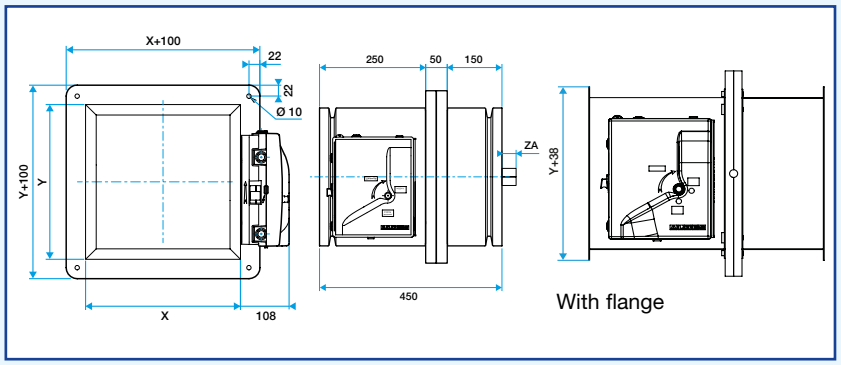
Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1100.

Advantages

- Ideal in a hopper installation (only one side accessible).
- Simple and cheap to install, authorised for lightweight partitions and horizontal GEOSTAFF ducts.
- No grouting or suspension elements required.
- Horizontal or vertical blade axis.
- Airtight - Class B from EN 1751.

DIMENSIONS (mm)



ZA: fin movement.

Y	200	250	300	350	400	450	500	550	600	650	700	750	800
ZA	0	0	0	0	17	42	47	72	97	122	147	172	197

WEIGHT (KG) & RANGE with selection of options

Thermal fuse 70°C included.

Code	11043295 - EI 60 S - EI 90 S*												
Height	Width X												
Y	200	250	300	350	400	450	500	550	600	650	700	750	800
200	11	12	14	15	16	17	18	20	21	-	-	-	-
250	12	13	16	17	18	19	20	22	23	24	25	27	-
300	13	14	16	17	18	20	21	22	23	25	27	28	29
350	14	16	17	18	20	21	22	24	25	27	28	29	31
400	15	17	18	20	21	23	24	25	27	28	29	31	32
450	-	18	20	21	23	24	25	27	28	29	31	32	33
500	-	19	21	22	24	25	27	28	29	31	32	33	35
550	-	-	22	24	25	27	28	29	31	32	33	35	37
600	-	-	23	25	27	28	29	31	32	33	35	37	38

* Installed within a frame (See Page 125).

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24V Option Code	48V Option Code
FCU1 open position contact for FTE	OPT43301		
DCU1 closed position contact for FTE	OPT43302		
FCU1 + DCU1 open/closed position contacts for FTE	OPT43303		
VDS "Power emission" electromagnetic trip device 24/48V + FCU1 contact		OPT43304	OPT43306
VDS "Power emission" electromagnetic trip device 24/48V + FCU1 + DCU1 contacts		OPT43305	OPT43307
VM "Power cut-off" electromagnetic trip device 24/48V + FCU1 contact		OPT43308	OPT43310
VM "Power cut-off" electromagnetic trip device 24/48V + FCU1 + DCU1 contacts		OPT43309	OPT43311
VDS trip device 24/48V + FCU1 contact + EHOP30s reset motor		OPT43312	OPT43314
VDS trip device 24/48V + FCU1 + DCU1 contacts + EHOP30s reset motor		OPT43313	OPT43315
VM trip device 24/48V + FCU1 contact + EHOP30s reset motor		OPT43316	OPT43318
VM trip device 24/48V + FCU1 + DCU1 contacts + EHOP30s reset motor		OPT43317	OPT43319

Designation	Code
FCU2 + DCU2 open/closed position contacts	OPT43320
Connection flange	-

ISONE + circular fire damper

CE 1812

Circular ISONE+ - flush-mounted

ISONE+ EM

ISONE+ FdP

Advantages

- Ø160 mm body
- Authorised for installation in walls and floors.
- Traditional grouting with mortar.
- Double range up to Ø 315 mm:
  - FdP = low pressure loss,
  - EM = minimum size.
- Airtight - Class B from EN 1751.

FIELD OF APPLICATION

- Compartmentalisation of commercial premises (Public buildings, High rise buildings, commercial or industrial premises etc.).

DESCRIPTION

- Consists of 2 metal sleeves on both sides of an assembly of refractory material.
- The upgradable mechanism box is positioned on a sleeve. This box is set back from the blade itself to avoid it being sealed into the partition during installation of the damper.
- CIRCULAR FLUSH-MOUNTED ISONE+ features 2 ranges:
  - ISONE+ FdP: designed to minimise the pressure losses created by the airflow passing through,
  - ISONE+ EM: presents a minimum overall dimension.

INSTALLATION

- Flush-mounted in a 110 mm concrete wall.
- Embedded through a concrete tile - no specific fixings or hangings required for installation.
- Traditional grouting with mortar.
- The mechanism box is fitted flush against the wall or tile.
- The aeraulic connection must not apply stress on the damper.

RANGE WITH CHOICE OF OPTIONS

- ISONE+ FdP up to Ø 315 mm.
- ISONE+ EM up to Ø 1,000 mm.

See following pages.

AVAILABLE OPTIONS

- **Mechanism equipment**
  (see page 134 or page 135).
- **Aeraulic and airtight connection**
  Airtight seals.
- **Customisable labelling**
  Name of the work site, customer, installation area, etc.

ISONE+ FdP PRESSURE LOSSES

	Speed in duct (m/s)											
	2		4		6		8		10		12	
Ø D	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP
(mm)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)
100	57	**3**	113	**10**	170	**23**	226	**40**	283	**63**	339	**90**
125	88	**2**	177	**8**	265	**18**	353	**32**	442	**50**	530	**72**
160	145	**3**	290	**10**	434	**23**	579	**40**	724	**63**	869	**90**
200	226	**2**	452	**7**	679	**16**	905	**28**	1131	**44**	1357	**63**
250	353	**1**	707	**5**	1060	**11**	1414	**20**	1767	**31**	2121	**45**
315	561	**1**	1122	**5**	1683	**11**	2244	**20**	2806	**31**	3367	**45**

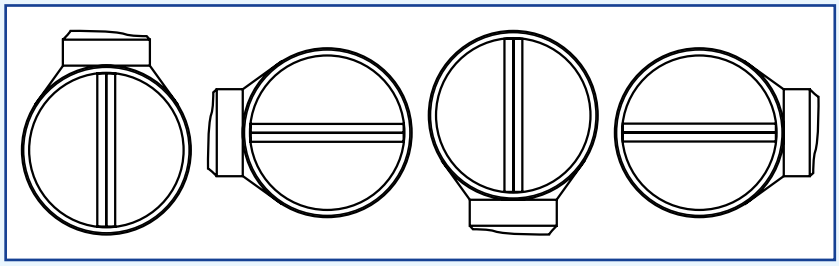
Pressure loss in Pa for a flow rate in m³/h or a speed in m/s.

ISONE+ EM PRESSURE LOSSES

	Speed in duct (m/s)											
	2		4		6		8		10		12	
Ø D	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP	Q	ΔP
(mm)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)	(m^3/h)	(Pa)
100	57	**5**	113	**19**	170	**43**	226	**76**	283	**119**	339	**171**
125	88	**8**	177	**31**	265	**70**	353	**124**	442	-	530	-
160	145	**21**	290	**85**	434	-	579	-	724	-	869	-
200	226	**9**	452	**34**	679	**77**	905	-	1131	-	1357	-
250	353	**6**	707	**24**	1060	**54**	1414	**96**	1767	-	2121	-
315	561	**7**	1122	**27**	1683	**61**	2244	**108**	2806	-	3367	-
355	713	**5**	1425	**21**	2138	**47**	2851	**84**	3563	**131**	4276	-
400	905	**4**	1810	**16**	2714	**36**	3619	**64**	4524	**100**	5429	-
450	1145	**4**	2290	**14**	3435	**32**	4580	**56**	5726	**88**	6871	**126**
500	1414	**3**	2827	**11**	4241	**25**	5655	**44**	7069	**69**	8482	**99**

Pressure loss in Pa for a flow rate in m³/h or a speed in m/s.

MECHANISM POSITIONING UNIMPORTANT



Circular ISONE+ EM (minimum size) and FdP (low pressure loss) flush-mounted in concrete wall - EI 120 S - 500 Pa

EM

FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1096 and 1098.

Advantages

Installation advantages
- Standard economic mortar.
- Unsealed mechanism.
- Horizontal or vertical blade axis.

Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

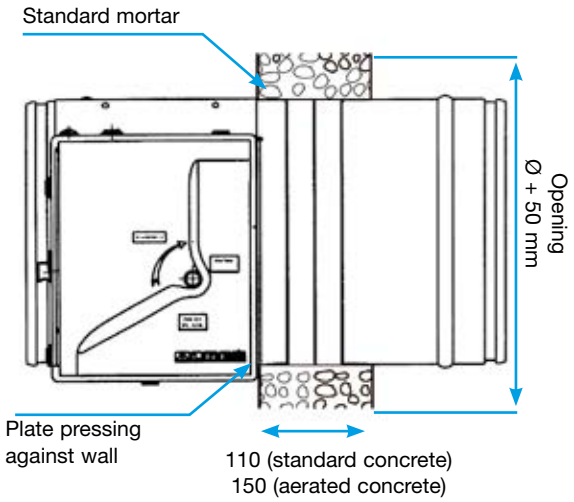
CONCRETE 110 MM

- Opening according to diagram.
- Grouting using standard mortar.

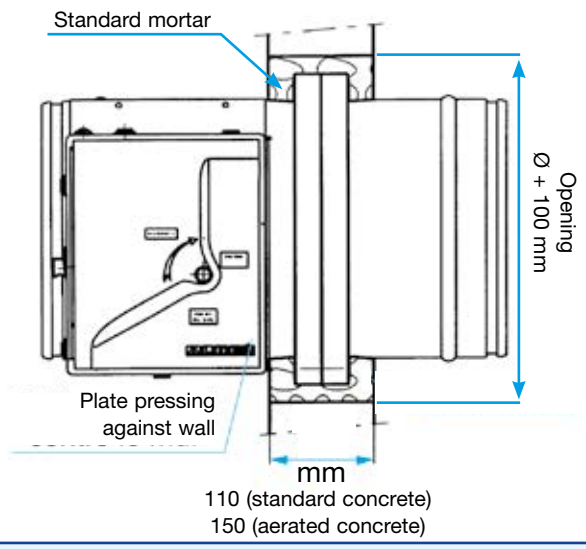
AERATED CONCRETE 150 mm (Siporex, Xella, Ytong, etc.)

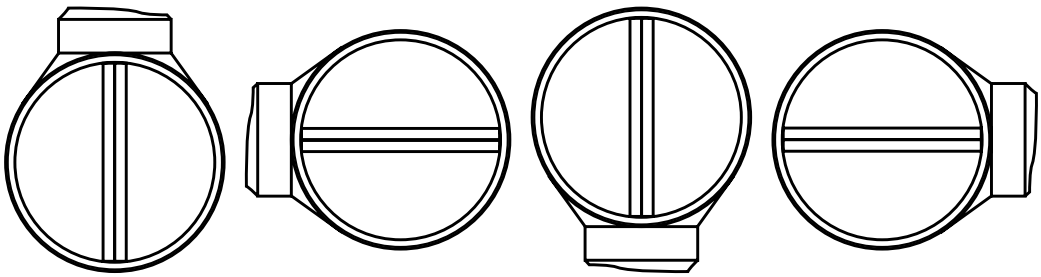
- Opening according to diagram.
- Grouting using mortar for aerated concrete.

CIRCULAR ISONE+ EM: Minimum dimensions (opening)



CIRCULAR ISONE+ FDP: Low pressure loss





CE certificates and classification reports available on www.aldes.fr.

ISONE + circular fire damper

CE 1812

Circular ISONE+ EM (minimum size) and FdP (low pressure loss) flush-mounted in concrete slab - EI 120 S - 500 Pa

EM

FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1096 and 1098.

Advantages

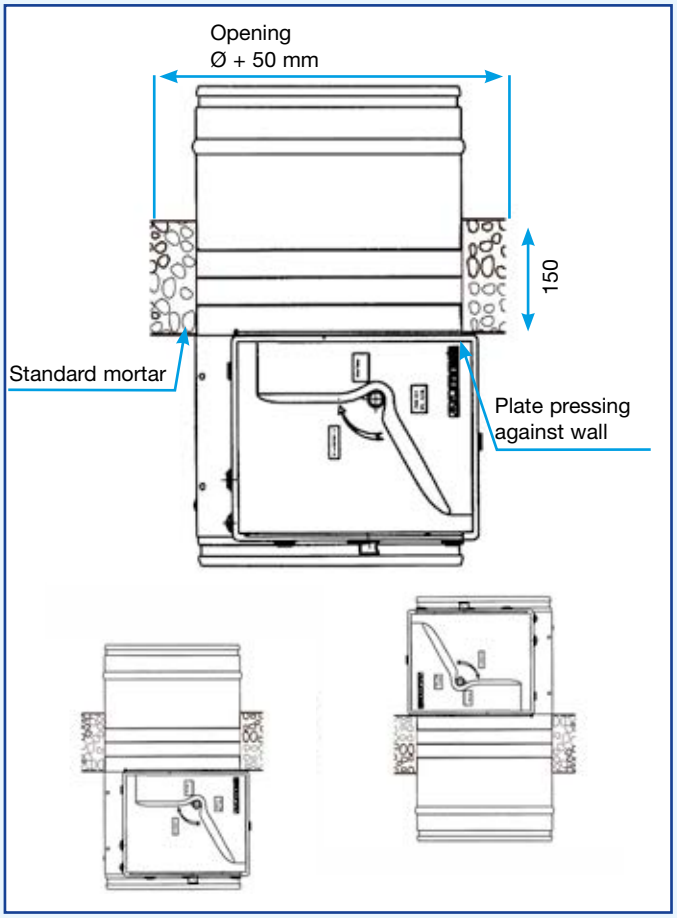
Installation advantages
- Simply sealed into place, no support necessary.
- Mechanism above or below slab.

Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

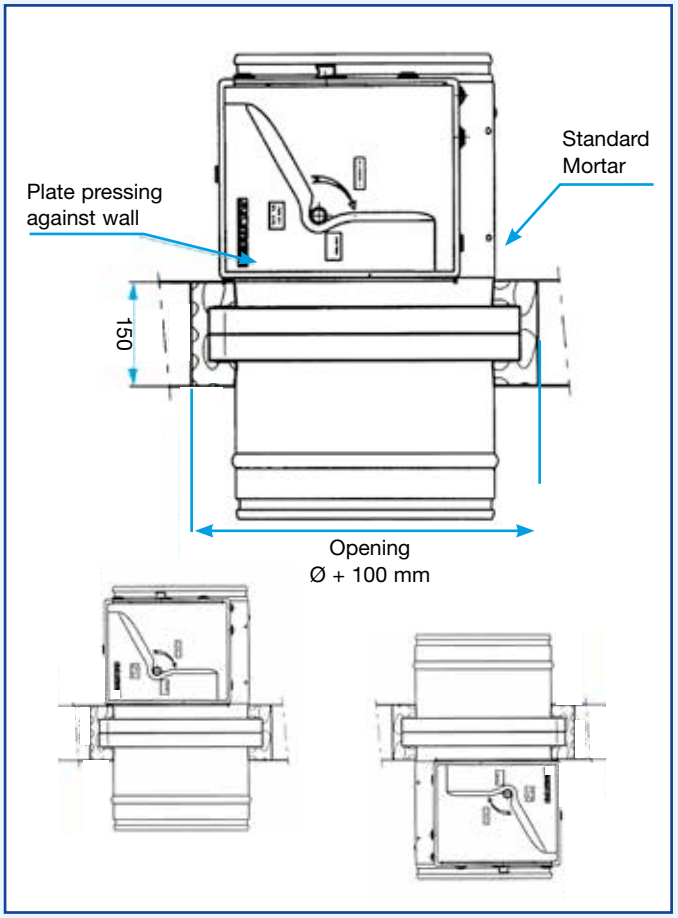
CONCRETE 150 MM
- Opening according to diagram.
- Grouting using standard mortar.

AERATED CONCRETE 150 mm (Siporex, Xella, Ytong, etc.)
- Opening according to diagram.
- Grouting using mortar for aerated concrete.

CIRCULAR ISONE+ EM: Minimum dimensions (opening)



CIRCULAR ISONE+ FDP: Low pressure loss



CE certificates and classification reports available on www.aldes.fr.

Circular ISONE+ EM and FdP flush-mounted in plaster brick partition wall - EI 90 S - 500 Pa or EI 120 S - 500 Pa

EM

FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1096 and 1098.

Advantages

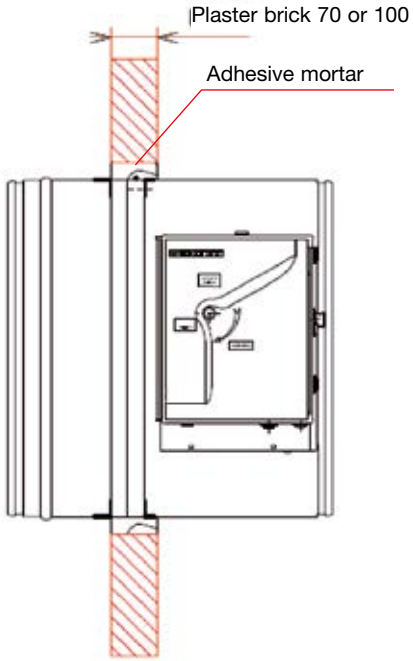
Installation advantages
- Simple to mount.
- Offset mechanism = simplified grouting.

Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

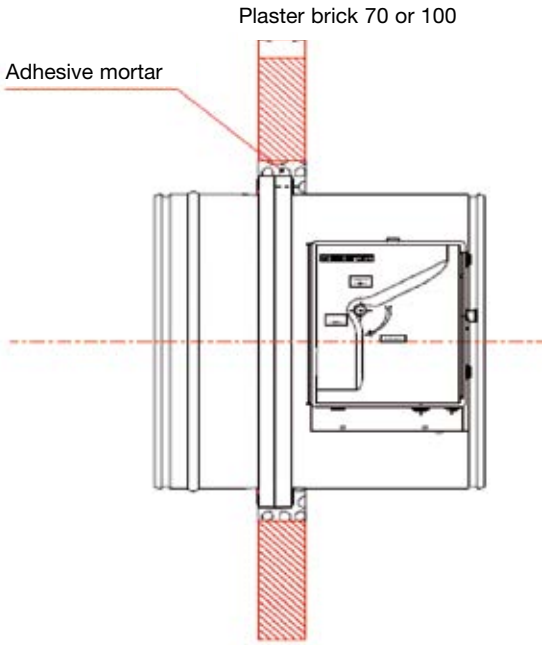
FLUSH-MOUNTED INSTALLATION IN PLASTER BRICK WALL 70 MM OR 100 MM

- Opening: EM = Ø + 50 mm – FdP = Ø + 100 mm.
- Offset mechanism, push mechanism against wall.
- Standard adhesive mortar.
- EI 90 S on 70 mm plaster blocks
- EI 120 S on 100 mm plaster blocks.

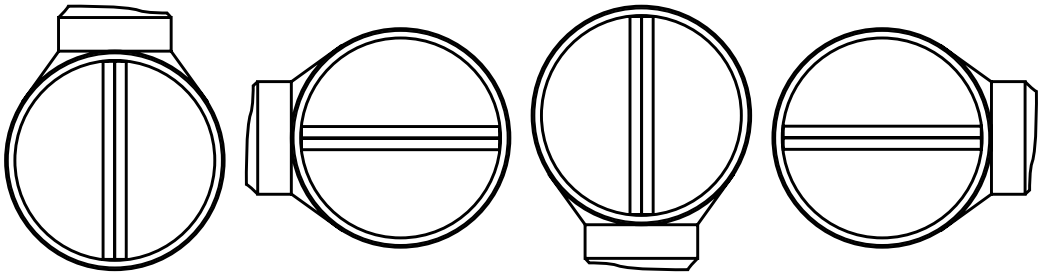
CIRCULAR ISONE+ EM



CIRCULAR ISONE+ FDP



POSITION OF MECHANISM INDIFFERENT ANYWHERE IN 360°



CE certificates and classification reports available on www.aldes.fr.

ISONE + circular fire damper

CE 1812

Circular flush-mounted ISONE+ EUROPE FdP: low pressure loss

ISONE+ FdP

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1098

Advantages

- Ø160 mm body.
- Reduced pressure losses.
- Embedded into slab - no fixings or hangings.
- Horizontal or vertical blade axis.
- Airtight - Class B from EN 1751.

FIRE PROTECTION RATING

- EI 120 S - 500 Pa on 150mm concrete slabs and 150mm cellular concrete.
- EI 90 S on 70mm plaster blocks.
- EI 120 S on 100 mm plaster blocks.

INSTALLATION

- Embedded in a 100mm vertical concrete wall.
- Embedded through a concrete slab - no fixings or hangings.
- Traditional grouting with mortar.
- Offset mechanism on the wall or slab.

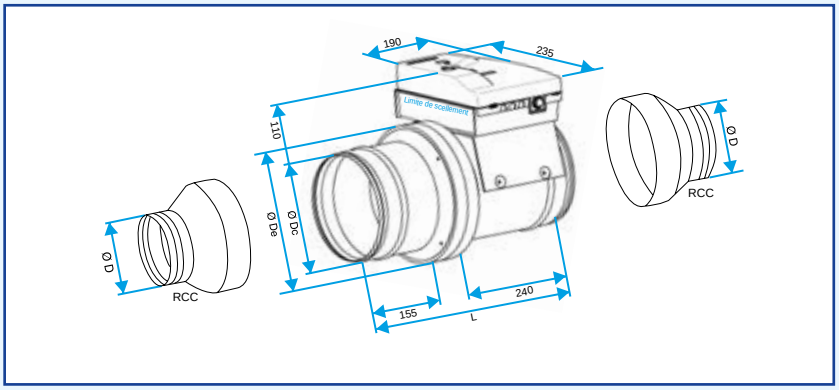
RANGE WITH CHOICE OF OPTIONS

Thermal fuse 70°C included.

Designation	Code
ISONE+ EUROPE EIS FDP Ø 100*	11043430
ISONE+ EUROPE EIS FDP Ø 125*	11043431
ISONE+ EUROPE EIS FDP Ø 160	11043432
ISONE+ EUROPE EIS FDP Ø 200	11043433
ISONE+ EUROPE EIS FDP Ø 250	11043434
ISONE+ EUROPE EIS FDP Ø 315	11043435

* From a body of Ø 160 mm

DIMENSIONS (MM) – WEIGHT (KG)



Ø D	Ø opening	L	Ø Dc	Ø Overall	Weight
100	210	537*	160	200	7
125	210	422	160	200	7
160	210	422	160	200	7
200	260	422	200	250	8
250	310	422	250	300	9
315	375	440	315	365	10.5

* Total length including the 2 adapted reducers.

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336
Airtight seals	-

Circular flush-mounted ISONE+ EUROPE EM: minimum dimensions

Isone+ EM

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1096

Advantages

- Ø160 mm body
- Minimum dimensions.
- Embedded into slab - no fixings or hangings.
- Horizontal or vertical blade axis.
- Airtight - Class B from EN 1751.

FIRE PROTECTION RATING

- EI 120 S - 500 Pa in 150mm concrete slab and 150mm cellular concrete.
- EI 90 S on 70mm plaster blocks, EI 120 S on 100 mm plaster blocks.

INSTALLATION

- Embedded in a 100mm vertical concrete wall.
- Embedded through a concrete slab - no fixings or hangings.
- Traditional grouting with mortar.
- Offset mechanism on the wall or slab.

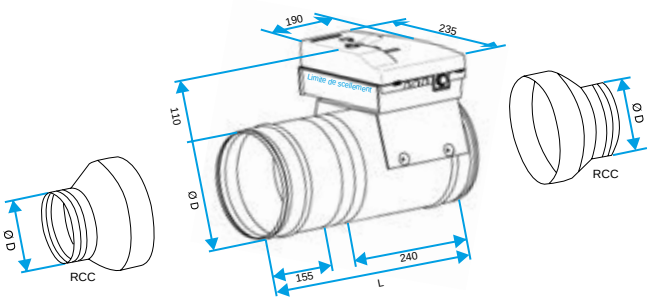
RANGE WITH CHOICE OF OPTIONS

70°C thermal fuse included.

Designation	Code
ISONE+ EUROPE EIS EM Ø 100*	11043417
ISONE+ EUROPE EIS EM Ø 125*	11043418
ISONE+ EUROPE EIS EM Ø 160	11043419
ISONE+ EUROPE EIS EM Ø 200	11043420
ISONE+ EUROPE EIS EM Ø 250	11043421
ISONE+ EUROPE EIS EM Ø 315	11043422
ISONE+ EUROPE EM Ø 355	11043386
ISONE+ EUROPE EM Ø 400	11043387
ISONE+ EUROPE EM Ø 450	11043388
ISONE+ EUROPE EM Ø 500	11043389
ISONE+ EUROPE EM Ø 560	11043390
ISONE+ EUROPE EM Ø 630	11043391
ISONE+ EUROPE EM Ø 710	11043392
ISONE+ EUROPE EM Ø 800	11043393
ISONE+ EUROPE EM Ø 900	11043394
ISONE+ EUROPE EM Ø 1000	11043395

* From a body of Ø 160 mm

DIMENSIONS (MM) – WEIGHT (KG)



Ø D	Ø opening	L	Ø D	ZA	ZB	Weight
100	180	537*	160	-	-	6.5
125	180	532*	160	-	-	6.5
160	180	422	160	-	-	6.5
200	220	422	200	-	-	7.5
250	270	422	250	-	-	8
315	335	440	315	-	-	10
355	375	440	355	-	-	11.5
400	450	440	400	-	-	15
450	500	440	450	16	-	16.5
500	550	440	500	40	-	19
560	650x650**	550	600x600	43	-	33
630	720x720**	550	670x670	76	-	38
710	800x800**	550	750x750	114	14	45
800	890x890**	550	840x840	165	65	55
900	990x990**	550	940x940	215	115	66
1,000	1,090x1,090**	550	1,040x1,040	265	165	79

* Total length including the 2 adapted reducers.

** EM rectangular body fitted with rings for connection to a circular ventilation network.

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336
Airtight seals	-

ISONE + with a BF/BLF Mechanism

ISONE+ circular fire damper with a BF/BLF Mechanism

DESCRIPTION

- All ISONE+ fire dampers can house the BF/BLF mechanism equipped with its 72° fuse (BAE 72), and a closed (FC) contact and open (DC) contact.

FIRE PROTECTION RATING EN 15650

- EI 120 S – 500 Pa in 150 mm concrete slab and 150 mm cellular concrete.
- EI 90 S Pa on 70mm plaster blocks, EI 120 S on 100mm plaster bocks.

INSTALLATION

- Identical to ISONE with an Aldes mechanism.

RANGE WITH CHOICE OF OPTIONS

- ISONE+ Ø FdP: low pressure loss

Description	Code
ISONE+ EUROPE-EIS-D100-FDP-M	11043460
ISONE+ EUROPE-EIS-D125-FDP-M	11043461
ISONE+ EUROPE-EIS-D160-FDP-M	11043462
ISONE+ EUROPE-EIS-D200-FDP-M	11043463
ISONE+ EUROPE-EIS-D250-FDP-M	11043464
ISONE+ EUROPE-EIS-D315-FDP-M	11043465

- ISONE+ Ø EM: minimum space requirement

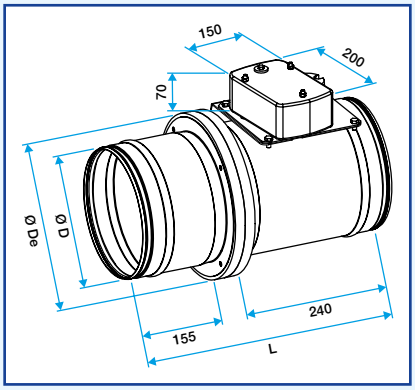
Description	Code
ISONE+ EUROPE-EIS-D100-EM-M	11043470
ISONE+ EUROPE-EIS-D125-EM-M	11043471
ISONE+ EUROPE-EIS-D160-EM-M	11043472
ISONE+ EUROPE-EIS-D200-EM-M	11043473
ISONE+ EUROPE-EIS-D250-EM-M	11043474
ISONE+ EUROPE-EIS-D315-EM-M	11043475
ISONE+ EUROPE-D355 EM-M	11043476
ISONE+ EUROPE-D400 EM-M	11043477
ISONE+ EUROPE-D450 EM-M	11043478
ISONE+ EUROPE-D500 EM-M	11043479
ISONE+ EUROPE-D560 EM-M	11043480
ISONE+ EUROPE-D630 EM-M	11043481
ISONE+ EUROPE-D710 EM-M	11043482
ISONE+ EUROPE-Ø800-EM-M	11043483
ISONE+ EUROPE-Ø900-EM-M	11043484
ISONE+ EUROPE-Ø1000-EM-M	11043485

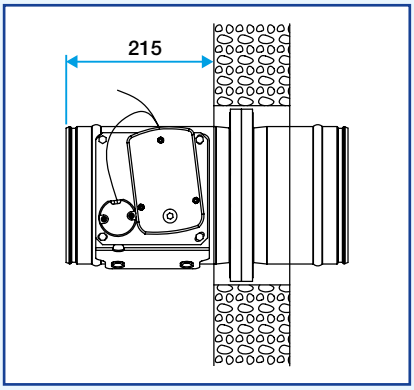
AVAILABLE OPTIONS

Description	Code
MECHANISM BLF24V-BAE72-FC-DC	OPT43326
MECHANISM BLF 230V-BAE72-FC-DC	OPT43327
MECHANISM BF 24V-BAE72-FC-DC	OPT43328
MECHANISM BF 230V-BAE72-FC-DC	OPT43329
Airtight seals	-

All mechanisms are equipped with:
- FC/DC signalling contacts (open/closed position),
- A 72° fuse.

DIMENSIONS (MM) – WEIGHT (KG)





Dimensions Ø D, Ø De, L identical to Isones with an Aldes mechanism.

TECHNICAL DETAILS

4 mechanism models	BLF		BF	
	24 V	230 V	24 V	230 V
Rated Voltage	AC 24 V 50 / 60 Hz - DC 24 V	AC 230 V 50 / 60 Hz	AC 24 V 50 / 60 Hz - DC 24 V	AC 230 V 50 / 60 Hz
Consumption (resetting)	5 W	6 W	7 W	8 W
Permanent Consumption (Excl. Resetting)	2.5 W	3 W	2 W	3 W
Resetting time	40 to 75 s	40 to 75 s	140 s	140 s
Cable length:	1 m	1 m	1 m	1 m
- motor	2 x 0.75 mm^2	2 x 0.75 mm^2	2 x 0.75 mm^2	2 x 0.75 mm^2
- FC/DC contacts	6 x 0.75 mm^2	6 x 0.75 mm^2	6 x 0.75 mm^2	6 x 0.75 mm^2
Weight	1.6 kg	1.7 kg	2.8 kg	3.1 kg

- Degree of protection: IP 54.
- Temperature in use: -40° to +50° C

ELECTRICAL CONNECTIONS: see page 118.

Rectangular flush-mounted ISONE+

Isone+ EM

Isone FdP

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1099

Advantages

- Authorised for installation in walls and floors.
- Offset wall-mounted mechanism for traditional grouting with mortar.
- Double range:
  - FdP = low pressure loss,
  - EM = minimum size.
- Airtight - Class B from EN 1751.

FIELD OF APPLICATION

- Compartmentalisation of commercial premises (Public buildings, High rise buildings, commercial or industrial premises etc.).

DESCRIPTION

- Consists of 2 metal sleeves on both sides of an assembly of refractory material.
- The upgradable mechanism box is positioned on a sleeve. This box is set back from the blade itself to avoid it being sealed into the partition during installation of the damper.

INSTALLATION

- Flush-mounted in a 110 mm concrete wall.
- Embedded through a concrete tile - no specific fixings or hangings required for installation.
- Traditional grouting with mortar.
- The mechanism box is fitted flush against the wall or tile.
- The aeraulic connection must not apply stress on the damper.

RANGE

- Embedded rectangular Isone featuring 2 ranges:
  - Isone FdP: designed to minimise pressure losses created by the airflow passing through,
  - Isone EM: presents a minimum overall dimension.

AVAILABLE OPTIONS

- **Mechanism equipment:** see page 141, 143 and 144.
- **Customisable labelling:** Name of the work site, customer, installation area, etc.
- **Connection flanges.**

ACCESSORIES

Rings for oblong connections.

ISONE FdP PRESSURE LOSSES

The values given below are pressure losses in Pa, for air velocity at 4 m/s.

Height Y	Width X												
	200	250	300	350	400	450	500	550	600	650	700	750	800
200	21	13	18	17	16	15	15	14	14	-	-	-	-
250	9	7	10	9	9	8	8	8	7	7	12	12	-
300	8	7	7	6	11	14	14	15	15	14	15	16	17
350	6	5	5	5	12	11	11	10	10	11	11	11	11
400	16	10	8	10	9	8	8	8	8	8	8	8	8
450	-	9	12	9	8	7	6	6	6	6	6	6	6
500	-	16	10	8	7	6	6	5	5	5	5	5	5
550	-	-	10	7	6	5	5	5	4	4	4	4	4
600	-	-	9	7	5	5	4	4	4	4	4	4	4

Pressure loss in Pa for a speed in duct of 4 m/s.
For all other speeds V: ΔP (Pa) = ΔP (read) x V^2 / 16.

ISONE EM PRESSURE LOSSES

The values given below are pressure losses in Pa, for air velocity at 4 m/s.

Height Y	Width X																									
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
200	129	56	59	54	50	47	45	44	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250	46	68	36	33	30	29	28	27	26	26	50	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	37	30	27	24	50	49	48	48	53	54	55	56	58	60	61	-	-	-	-	-	-	-	-	-	-	-	-
350	31	25	22	20	36	35	34	33	36	36	36	36	36	37	38	38	39	48	-	-	-	-	-	-	-	-	-
400	77	49	38	33	30	28	27	27	27	27	27	27	27	27	27	28	28	33	33	37	38	-	-	-	-	-	-
450	-	46	35	30	27	25	23	23	23	22	22	22	22	22	22	22	25	25	28	28	28	29	29	29	-	-	-
500	-	45	33	28	24	22	21	20	20	19	19	19	19	18	18	21	21	23	23	23	23	23	23	23	24	24	24
550	-	-	32	26	23	21	20	19	18	17	17	17	17	16	18	18	20	20	20	20	20	20	20	20	20	20	20
600	-	-	32	26	22	20	18	17	17	16	16	15	15	16	16	18	17	17	17	17	17	17	17	17	17	17	18
650	-	-	-	25	22	19	18	17	16	15	15	14	15	15	16	16	16	16	16	16	16	16	16	16	16	16	-
700	-	-	-	25	21	19	17	16	15	15	14	15	15	15	15	15	15	15	14	14	14	14	14	14	14	-	-
750	-	-	-	-	21	19	17	16	15	14	15	14	15	14	14	14	14	14	13	13	13	13	13	13	-	-	-
800	-	-	-	-	24	20	18	17	16	15	14	15	14	14	13	13	13	13	13	13	13	12	12	-	-	-	-
850	-	-	-	-	-	20	18	17	15	15	15	14	14	13	13	13	12	12	12	12	12	12	-	-	-	-	-
900	-	-	-	-	-	20	18	16	15	15	14	14	13	13	12	12	12	12	12	12	11	-	-	-	-	-	-
950	-	-	-	-	-	-	18	16	15	14	14	13	13	12	12	12	12	11	11	11	-	-	-	-	-	-	-
1,000	-	-	-	-	-	-	18	16	15	14	13	13	12	12	12	11	11	11	11	-	-	-	-	-	-	-	-
1,050	-	-	-	-	-	-	-	16	15	14	13	13	12	12	11	11	11	11	-	-	-	-	-	-	-	-	-

Pressure loss in Pa for a speed in duct of 4 m/s. For all other speeds V: ΔP (Pa) = ΔP (read) x V^2 / 16.

Rectangular ISONE + Fire damper

CE 1812

Rectangular ISONE+ flush-mounted in concrete wall - EI 120 S - 500 Pa

Isone+ EM

Isone FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1097 and 1099.

Advantages

Installation advantages
- Standard economic mortar.
- Unsealed mechanism.
- Horizontal or vertical blade axis.

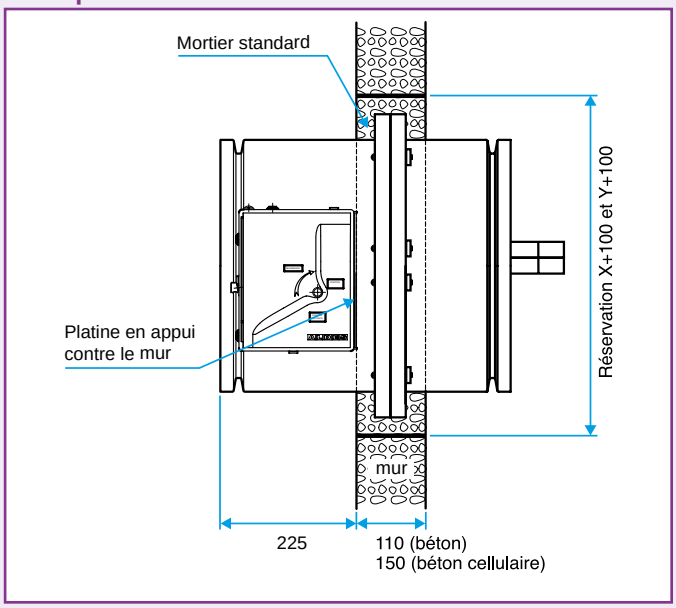
Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

INSTALLATION IN CONCRETE WALL

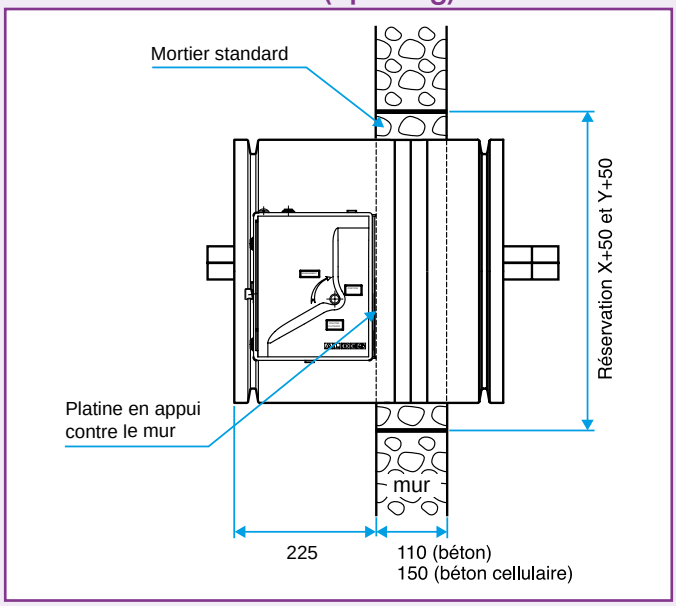
Concrete 110 mm or aerated concrete 150 mm (Siporex, Xella, Ytong...

- Opening according to diagram.
- Sealed in place using standard mortar or aerated concrete mortar

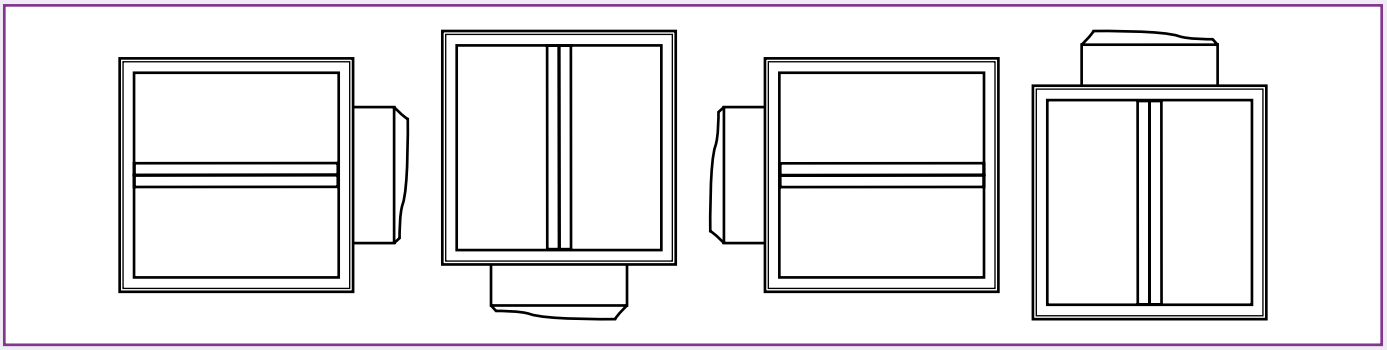
RECTANGULAR ISONE+ FDP: Low pressure loss



RECTANGULAR ISONE+ EM: Minimum dimensions (opening)



POSITION OF MECHANISM INDIFFERENT ANYWHERE IN 360° (except 800 x 600 version)



CE certificates and classification reports available on www.aldes.fr.

Rectangular ISONE+ EM and FdP flush-mounted in concrete slab - EI 120 S - 500 Pa

Isone+ EM

Isone FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1097 and 1099.

Advantages

Installation advantages

- Simply sealed into place, no support necessary.
- Mechanism above or below slab.

Advantages of the mechanism

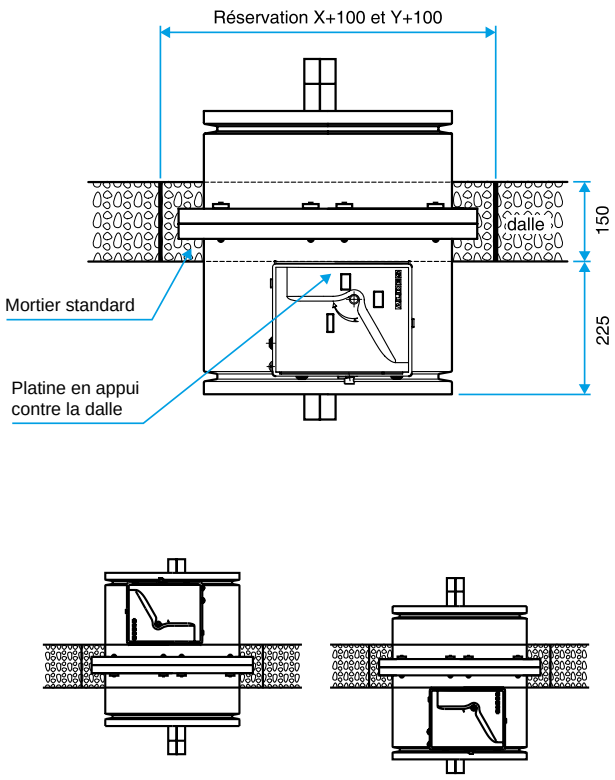
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

INSTALLATION IN CONCRETE SLAB

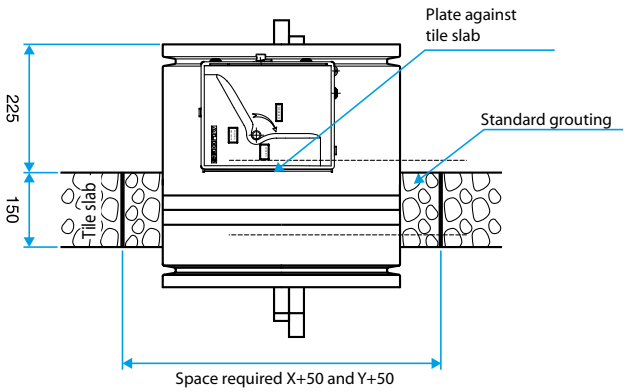
Concrete 110 mm or aerated concrete 150 mm (Siporex, Xella, Ytong...

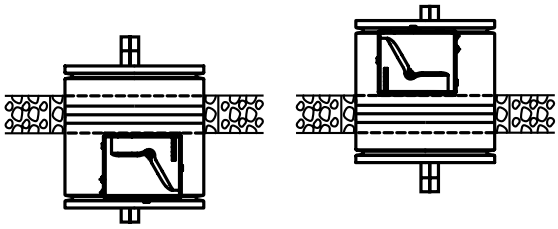
- Opening according to diagram.
- Sealed in place using standard mortar or aerated concrete mortar

RECTANGULAR ISONE+ FDP: Low pressure loss



RECTANGULAR ISONE+ EM: Minimum dimensions (opening)





CE certificates and classification reports available on www.aldes.fr.

Rectangular ISONE + Fire damper

CE 1812

Rectangular ISONE+ EM and FdP flush-mounted in plaster brick partition wall - EI 90 S - 500 Pa or EI 120 S - 500 Pa

Isone+ EM

Isone FdP

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1097 and 1099.

Advantages

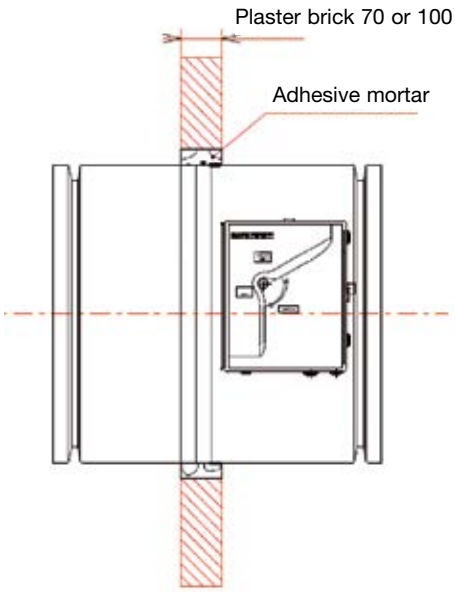
Installation advantages
- Standard economic mortar.
- Unsealed mechanism.
- Horizontal or vertical blade axis.

Advantages of the mechanism
- Dual voltage 24/48 V.
- Sufficient space to house fire safety control unit (CMSI) equipment.

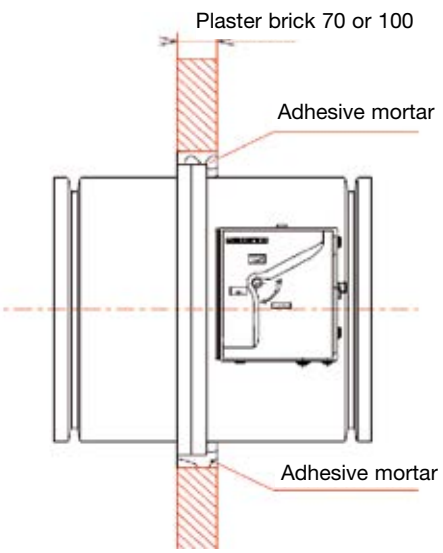
FLUSH-MOUNTED INSTALLATION IN PLASTER BRICK WALL 70 MM OR 100 MM

- Opening: EM = X + 50 / Y + 50 – FdP = X + 100 / Y + 100.
- Offset mechanism, push mechanism against wall.
- Standard adhesive mortar.
- EI 90 S on 70 mm plaster blocks
- EI 120 S on 90 mm plaster blocks.

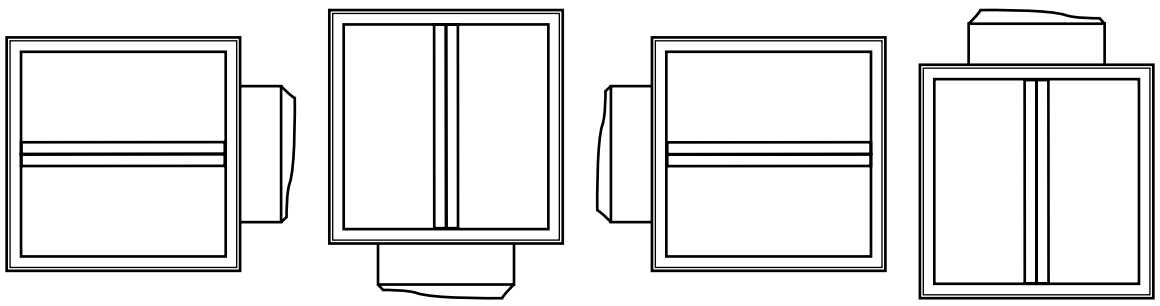
RECTANGULAR ISONE+ EM (except > 800 x 600):



RECTANGULAR ISONE+ FDP:



POSITION OF MECHANISM INDIFFERENT ANYWHERE IN 360° (EXCEPT VERSIONS > 800 X 600)



CE certificates and classification reports available on www.aldes.fr.

Rectangular ISONE + Fire damper

CE 1812

Rectangular flush-mounted ISONE+ Europe FdP: low pressure loss

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1099

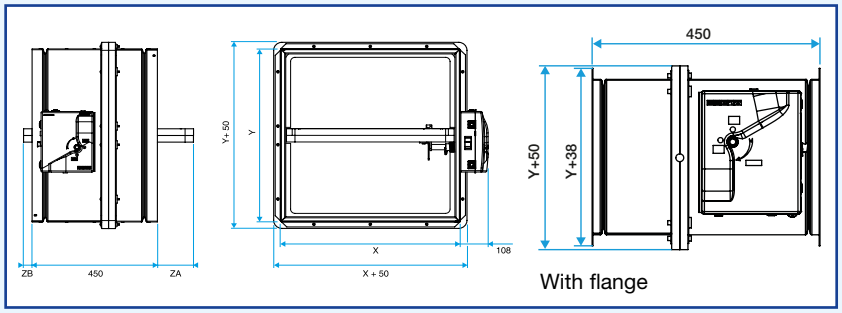
Advantages

- Reduced pressure losses.
- Embedded into tile slab - no fixings or hangings.
- Horizontal or vertical blade axis.
- Light weight.
- Airtight - Class B from EN 1751.

FIRE PROTECTION RATING

- EI 120 S - 500 Pa in concrete slab 150 mm & aerated concrete 150 mm.
- EI 90 S on 70 mm plaster blocks, EI 120 S on 100 mm plaster blocks.
- EI 90 S in aerated concrete 100 mm (Dim. max 800 x 600 mm)

DIMENSIONS (MM)



With flange

ZA, ZB: fin movement.

Y	<= 350	400	450	500	550	600
ZA	0	16	42	66	92	116
ZB	0	0	0	0	0	16

WEIGHT (KG) & RANGE WITH SELECTION OF OPTIONS

70°C thermal fuse included.

Height Y	Width X												
	200	250	300	350	400	450	500	550	600	650	700	750	800
200	9	10	12	13	14	15	16	17	18				
250	10	11	13	14	15	16	17	18	19	20	21	22	
300	12	13	14	15	17	18	19	20	21	22	23	24	25
350	13	14	15	17	18	19	20	21	23	24	25	26	27
400	14	15	17	18	19	20	22	23	24	25	27	28	29
450		16	18	19	20	22	23	24	26	27	28	30	31
500		17	19	20	22	23	24	26	27	29	30	31	33
550			20	21	23	24	26	27	29	30	32	33	35
600			21	23	24	26	27	29	30	32	34	35	37

FdP PM code 11043342 FdP MM code 11043343

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336
Connection flange	-

Rectangular ISONE + Fire damper

CE 1812

Rectangular flush-mounted ISONE+ EM: minimum dimensions

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1097

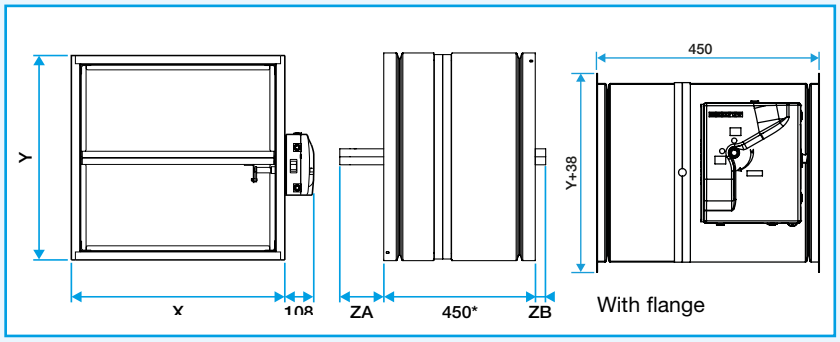
Advantages

- Minimum dimensions and space requirements.
- Embedded into tile slab - no fixings or hangings.
- Horizontal or vertical damper axis (except > 800 x 600).
- Airtight - Class B from EN 1751.

FIRE PROTECTION RATING

- EI 120 S - 500 Pa in concrete slab 150 mm & aerated concrete 150 mm.
- EI 90 S on 70 mm plaster blocks.
- EI 120 S on 100 mm plaster blocks.
- EI 90 S in aerated concrete 100 mm (Dim. max 800 x 600 mm)

DIMENSIONS (mm)



ZA, ZB: fin movement. (*) 430 up to 250 x 250.

Y	200	250	300	350	400	450	500	550	600
ZA	0	0	0	0	0	20	45	68	93
ZB	0	0	0	0	0	0	0	0	0
Y	**650**	**700**	**750**	**800**	**850**	**900**	**950**	**1,000**	**1,050**
ZA	116	141	164	195	220	245	270	295	320
ZB	16	41	64	95	120	145	170	195	220

Height Y \ Width X	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
200																											
250	11043340 EM-PM																										
300																											
350																											
400																											
450						11043341 EM-MM																					
500																											
550																											
600																											
650																		11043344 EM-GM									
700																											
750																											
800																											
850																											
900																											
950												11043345 EM-TGM															
1,000																											
1,050																											

EI 120 S EI 90 S (For EI 120 S use ISONE 1500)

aldes

Rectangular flush-mounted ISONE+ EM: minimum dimensions

Did you know?

- Approved fire damper in slab sealed with traditional mortar, no suspension support.
- EN 15650: 1812-CPD-1097

Advantages

- Minimum dimensions and space requirements.
- Embedded into tile slab - no fixings or hangings.
- Horizontal or vertical damper axis (except > 800 x 600).
- Easily installed in series with optimised air flow passage.
- Airthight - Class B from EN 1751.

WEIGHT (KG) & RANGE WITH SELECTION OF OPTIONS

70°C thermal fuse included.

Height Y	Width X																											
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
200	9	9	11	12	13	14	15	16	17																		
250	9	10	12	13	14	15	16	17	18	19	20	21															
300	11	12	13	14	15	16	17	18	19	20	21	23	24	25	26												
350	12	13	14	15	17	18	19	20	21	22	23	24	25	26	28	29	30	33									
400	13	14	15	17	18	19	20	21	22	24	25	26	27	28	30	31	32	35	36	37	38						
450		15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	36	37	38	40	41	42	43	44			
500		16	17	19	20	21	23	24	25	27	28	29	31	32	33	37	38	39	41	42	43	44	45	46	47	48	49
550			18	20	21	23	24	26	27	28	30	31	33	34	37	39	40	45	43	44	46	47	47	48	49	50	51
600			19	21	22	24	25	27	28	30	31	33	34	38	39	41	42	44	45	47	48	50	50	51	52	53	54
650				22	24	25	27	28	30	32	33	35	38	40	41	43	44	46	48	49	50	52	52	53	54	55	
700				23	25	26	28	30	31	33	35	38	40	42	43	45	47	48	50	52	53	55	54	55	56		
750					26	28	29	31	33	35	38	40	42	43	45	47	49	51	53	55	56	56	56	57			
800					29	31	33	33	36	38	40	42	44	45	47	49	51	53	55	57	58	58	58				
850						32	34	36	38	40	42	44	45	47	49	51	53	55	57	59	60	62					
900						25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55						
950							28	30	32	34	36	38	40	42	44	46	48	50	52	54							
1,000							29	31	33	35	37	39	41	43	45	47	49	51	53								
1,050								32	34	36	38	40	42	44	46	48	50	52									

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336
Connection flange	-

ISONE + with a BF/BLF Mechanism

ISONE+ rectangular fire damper with a BF/BLF Mechanism

FIRE PROTECTION RATING EN 15650

- EI 120 S – 500 Pa in 150 mm concrete slab and 150 mm cellular concrete.
- EI 90 S Pa on 70mm plaster blocks, EI 120 S on 100 mm plaster bocks.

RANGE WITH CHOICE OF OPTIONS

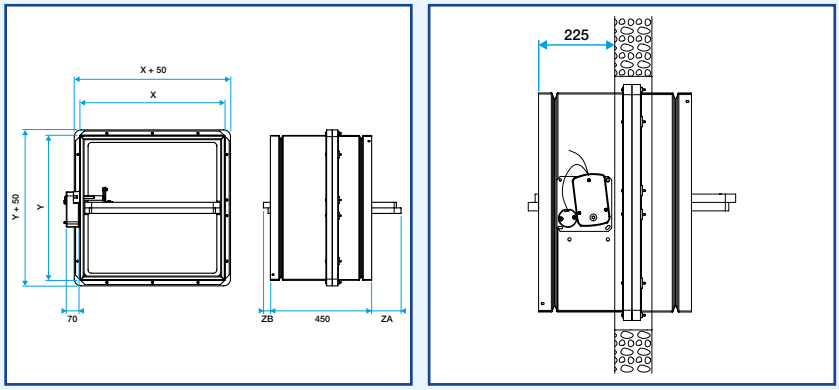
Description	Code
ISONE+ EUROPE RECT EM PM-M	11043450
ISONE+ EUROPE RECT EM MM-M	11043451
ISONE+ EUROPE RECT FDP PM-M	11043452
ISONE+ EUROPE RECT FDP MM-M	11043453
ISONE+ EUROPE RECT EM GM-M	11043454
ISONE+ EUROPE RECT EM TGM-M	11043455

AVAILABLE OPTIONS

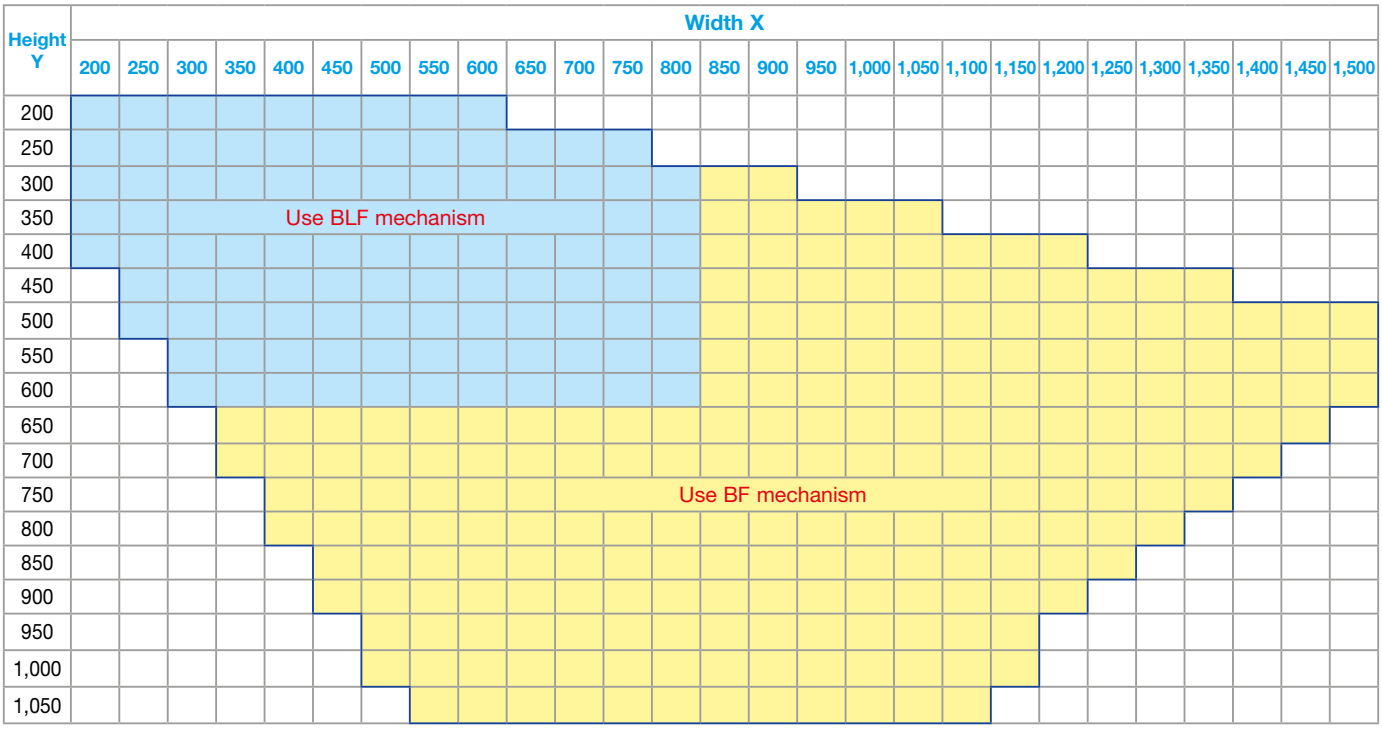
Description	Code
MECHANISM BLF24V-BAE72-FC-DC	OPT43326
MECHANISM BLF 230V-BAE72-FC-DC	OPT43327
MECHANISM BF 24V-BAE72-FC-DC	OPT43328
MECHANISM BF 230V-BAE72-FC-DC	OPT43329
Connection flange	-

All mechanisms are equipped with:
- FC/DC signalling contacts (open/closed position),
- A 72° fuse.

DIMENSIONS (MM)



Dimensions identical to ISONE dampers with an Aldes mechanism.



Rectangular ISONE fire damper

CE 1812

ISONE Europe 1500

Compliance

CE 1812 - CPR - 1016.

Advantages

- Sealed using traditional mortar, no fixing accessories required.
- Upgradeable mechanism: all equipment can be connected by hand.
- Dual voltage trip (24/48 V): prevents control errors.
- Easy cabling thanks to the removable terminals.
- Series installation using standard shutters.

FIELD OF APPLICATION

Compartmentalisation of commercial premises (public buildings, High rises buildings, commercial or industrial premises, etc.).

DESCRIPTION

- Consists of 2 metal sleeves on both sides of an assembly of refractory material.
- The upgradable mechanism box is positioned on a sleeve. This box is set back from the blade itself to avoid it being sealed into the partition during installation of the damper.

FIRE PROTECTION RATING

- EI 120 S – 1500 Pa on 110 mm concrete wall and 100 mm cellular concrete.
- EI 240 S – 1500 Pa on 175 mm concrete wall and 150 mm cellular concrete.
- EI 90 S – 1500 Pa on 110 mm concrete slabs
- EI 240 S – 1500 Pa on 150 mm concrete slabs.
- EI 180 S – 500 Pa on 150 mm concrete slabs and 150 mm concrete wall or cellular concrete.

INSTALLATION

- Embedded into a 150 mm concrete wall or into 100 mm of aerated concrete.
- Embedded into a concrete slab of 150 mm (up to 600 x 600 mm).
- Traditional grouting with mortar.
- Damper blade shaft must be horizontal.

AVAILABLE OPTIONS

- Mechanism equipement see: page 146 and 148.
- ISONE 1500 can house the BF/BLF mechanism: see page 144.

ISONE 1500 PRESSURE LOSS

Pressure loss: ΔP in Pa at speed of 4 m/s in duct

Height Y	Width X																										
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
200	33	33	31	28	26	23	21	18	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250	28	27	27	25	23	21	20	18	17	15	14	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	22	22	22	22	21	20	19	18	17	15	14	13	12	11	11	-	-	-	-	-	-	-	-	-	-	-	-
350	19	18	17	15	12	10	9	9	9	9	9	9	9	9	9	9	9	9	-	-	-	-	-	-	-	-	-
400	14	13	12	10	10	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	-	-	-	-	-	-
450	-	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	-	-	-	-
500	-	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
550	-	-	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-
600	-	-	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-
650	-	-	-	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-
700	-	-	-	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-
750	-	-	-	-	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-
800	-	-	-	-	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	-	-	-	-	-	-
850	-	-	-	-	-	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-
900	-	-	-	-	-	5	5	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
950	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-
1,000	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-

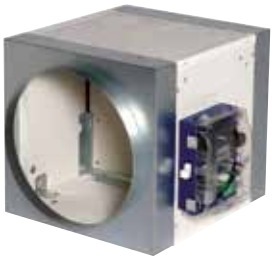
Note: to determine pressure loss at a given speed V: $\Delta P = \Delta P(4\ m/s) \times V^2 / 16$.

Ø	160	200	250	315	355	400	450	500	560	630	710	800	900	1000
	25	19	15	13	10	8	7	7	6	6	5	5	5	5

Rectangular ISONE fire damper

CE 1812

ISONE 1500 with casing



Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1016.

Advantages

- Sealed using traditional mortar, no fixing accessories required.
- Upgradeable mechanism: all equipment can be connected by hand.
- Dual voltage trip (24/48 V): prevents control errors.
- Easy cabling thanks to the removable terminals.

RANGE WITH BF/BLF MECHANISM

Designation	Code
ISONE-Europe-1500 Ø 160-M	11043202
ISONE-Europe-1500 Ø 200-M	11043203
ISONE-Europe-1500 Ø 250-M	11043204
ISONE-Europe-1500 Ø 315-M	11043205
ISONE-Europe-1500 Ø 355-M	11043206
ISONE-Europe-1500 Ø 400-M	11043207
ISONE-Europe-1500 Ø 450-M	11043208
ISONE-Europe-1500 Ø 500-M	11043209
ISONE-Europe-1500 Ø 560-M	11043210
ISONE-Europe-1500 Ø 630-M	11043211
ISONE-Europe-1500 Ø710-M	11043212
ISONE-Europe-1500 Ø 800-M	11043213
ISONE-Europe-1500 Ø 900-M	11043214
ISONE-Europe-1500 Ø 1000-M	11043215

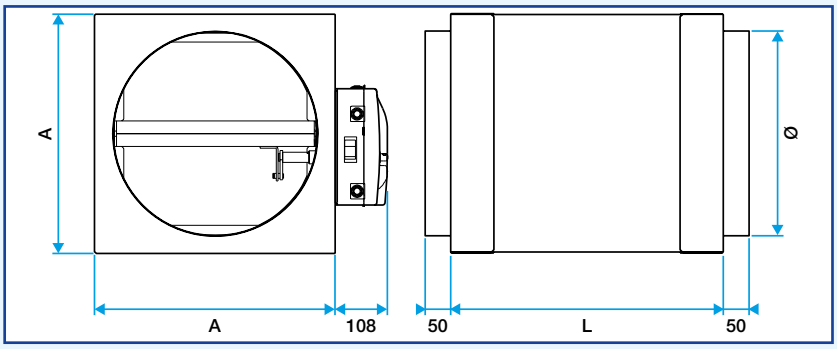
RANGE with choice of options

70°C thermal fuse included.

Designation	Code
ISONE-Europe-1500 Ø 160	11043078
ISONE-Europe-1500 Ø 200	11043079
ISONE-Europe-1500 Ø 250	11043080
ISONE-Europe-1500 Ø 315	11043081
ISONE-Europe-1500 Ø 355	11043082
ISONE-Europe-1500 Ø 400	11043083
ISONE-Europe-1500 Ø 450	11043084
ISONE-Europe-1500 Ø 500	11043085
ISONE-Europe-1500 Ø 560	11043086
ISONE-Europe-1500 Ø 630	11043087
ISONE-Europe-1500 Ø710	11043088
ISONE-Europe-1500 Ø 800	11043089
ISONE-Europe-1500 Ø 900	11043090
ISONE-Europe-1500 Ø 1000	11043091

To obtain a 125 mm diameter fire damper, order 2 reducers (11143575) as a complement to a 160 mm fire damper.
To obtain a 100 mm diameter fire damper, order 2 reducers (11143574) as a complement to a 160 mm fire damper.

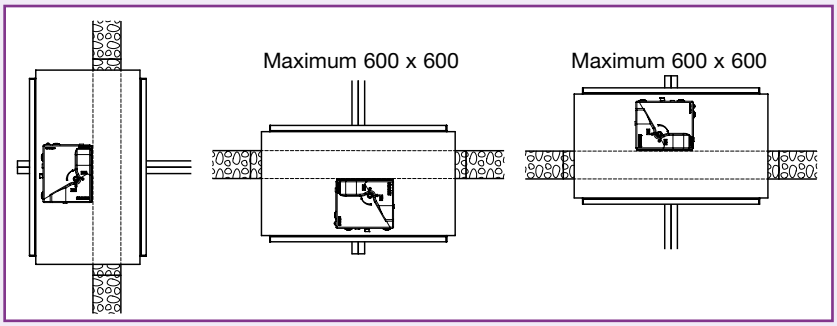
DIMENSIONS (mm)



Ø	160	200	250	315	355	400	450
A	265		315	365	415	465	515
L	415		415	415	480	530	580

Ø	500	560	630	710	800	900	1,000
A	565	615	715	765	865	965	1,065
L	630	565	600	680	770	870	970

INSTALLATION



- Space requirements (mm) = (A+50) x (A+50).

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336

Rectangular ISONE fire damper

CE 1812

ISONE 1500 with sleeve

Compliance

- CE 1812 - CPR - 1016.
- Series installation
  - EI 120S - 500 Pa,
  - EI 90S - 1500 Pa.

Advantages

- Sealed using traditional mortar, no fixing accessories required.
- Upgradeable mechanism: all equipment can be connected by hand.
- Dual voltage trip (24/48 V): prevents control errors.
- Easy cabling thanks to the removable terminals.
- Series installation using standard shutters.

FIRE PROTECTION

Installation in series

- EI 120 S - 500 Pa
- EI 90 S - 1500 Pa

DESCRIPTION

- Rectangular duct in refractory material, sleeves attached to the ends to aid connection to a rectangular network.
- Mobile damper blade, in refractory material, closing against the stops.
- Upgradeable ISONE mechanism.

INSTALLATION

- Embedded into a 110 mm concrete wall or into 100 mm of aerated concrete.
- Embedded into a concrete slab of 150 mm (up to 600 x 600 mm).
- Sealed using traditional mortar, no fixing accessories required.
- Space requirements (mm) = (X+100) x (Y+100).
- Damper blade shaft must be horizontal.
- For sections not covered by the pricing list, use installations of units in series, taking the appropriate dimensions.

- **Installation in series:**

Validated:
- EI 90S - 1500 Pa,
- EI 120S - 500 Pa.

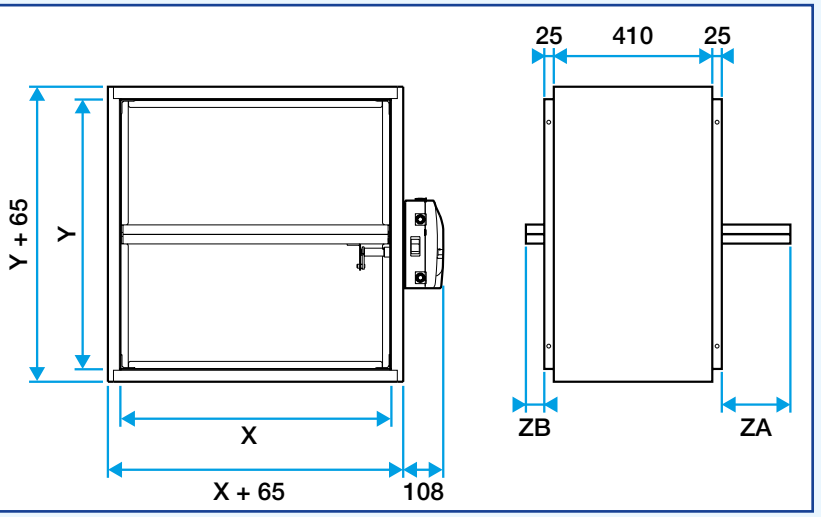
When installing a vertical assembly of a maximum of four 1200x800 mm dampers, for a maximum duct of 2470 x 1670 mm.
Select the damper dimensions by subtracting 70 mm, which corresponds to the thicknesses of the two touching faces.
Example for a series of 1800 x 1200 mm, it is possible to use 4 x X Y dampers:
X = (1800 - 70) / 2 = 865 mm,
Y= (1200 - 70) / 2 = 565 mm.

It is extremely simple to install the ISONE 1500 units in series:
1 - Stick the touching faces of the dampers together using the appropriate adhesive (Code 11043056).
2 - Secure the faces in contact using 5 x 40 mm screws, spaced every 150 mm (approx.).
3 - When connecting using offset flanges, it may be necessary to notch the sleeves by a few mm.

ACCESSORIES

Designation	Code
Adhesive for ISONE 1500 series	11043056

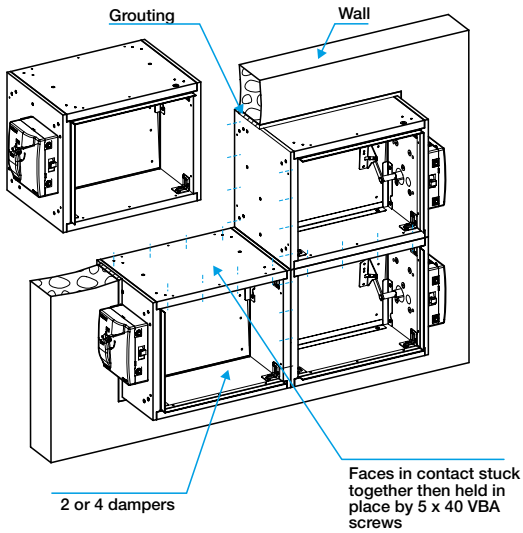
DIMENSIONS (mm)



Y	up to 300	350	400	450	500	550	600
ZA	0	10	35	60	85	110	135
ZB	0	0	0	0	0	0	5

Y	650	700	750	800	850	900	950	1,000
ZA	160	185	210	235	260	285	310	335
ZB	30	55	80	105	130	155	180	205

INSTALLATION IN SERIES



Rectangular ISONE fire damper

CE 1812

ISONE 1500 with sleeve

Compliance

- CE 1812 - CPR - 1016.
- Series installation
  - EI 120S - 500 Pa,
  - EI 90S - 1500 Pa.

Advantages

- Sealed using traditional mortar, no fixing accessories required.
- Upgradeable mechanism: all equipment can be connected by hand.
- Dual voltage trip (24/48 V): prevents control errors.
- Easy cabling thanks to the removable terminals.
- Series installation using standard shutters.

WEIGHT (KG) & RANGE WITH CHOICE OF OPTIONS

- Thermal fuse 70 °C included.
- Can be installed in series: use the specific glue for assembly of the ISONE 1500 standard shutters (Code 11043056).

Height Y	Width X 200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
200	17	18	20	21	23	24	25	27	28	-	-	-	-	-	-	-
250	18	20	21	23	24	26	27	29	30	33	35	36	-	-	-	-
300	20	21	23	24	26	28	29	31	32	35	37	38	40	41	43	-
350	21	23	24	26	28	29	31	33	34	37	39	41	42	44	45	47
400	23	24	26	28	29	31	33	35	36	39	41	43	44	46	48	50
450	-	26	28	29	31	33	35	36	38	42	43	45	47	49	50	52
500	-	27	29	31	33	35	37	38	40	44	45	47	49	51	53	55
550	-	-	31	33	35	36	38	40	42	46	48	50	52	53	55	57
600	-	-	32	34	36	38	40	42	44	48	50	52	54	56	58	60
650	-	-	-	37	39	42	44	46	48	51	53	56	58	60	62	64
700	-	-	-	39	41	43	45	48	50	53	56	58	60	62	64	67
750	-	-	-	-	43	45	47	50	52	56	58	60	62	65	67	69
800	-	-	-	-	44	47	49	52	54	58	60	62	65	67	69	72
850	-	-	-	-	-	49	51	53	56	60	62	65	67	69	72	74
900	-	-	-	-	-	50	53	55	58	62	64	67	69	72	74	77
950	-	-	-	-	-	-	55	57	60	64	67	69	72	74	77	79
1,000	-	-	-	-	-	-	57	59	62	66	69	71	74	77	79	82

Height Y	Width X 1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
350	49	50	-	-	-	-	-	-	-	-	-
400	51	53	55	56	58	-	-	-	-	-	-
450	54	56	57	59	61	63	65	66	-	-	-
500	57	58	60	62	64	66	68	70	71	73	75
550	59	61	63	65	67	69	71	73	75	77	-
600	62	64	66	68	70	72	74	76	78	-	-
650	66	68	70	72	74	77	79	81	-	-	-
700	69	71	73	75	77	80	82	-	-	-	-
750	71	74	76	78	80	83	-	-	-	-	-
800	74	76	79	81	83	-	-	-	-	-	-
850	77	79	82	84	-	-	-	-	-	-	-
900	79	82	84	-	-	-	-	-	-	-	-
950	82	85	-	-	-	-	-	-	-	-	-
1,000	85	-	-	-	-	-	-	-	-	-	-

Designation	Code
ISONE-EUROPE-1500 RECT	11043058
ISONE-EUROPE-1500 RECT-M	11043059

AVAILABLE OPTIONS

Choose mechanism equipment from the table below.

Select equipment (indicate trip voltage in order for factory adjustment and testing)	FTE Option Code	24 V Option Code	48 V Option Code
FCU1 open position for "FTE"	43301		
DCU1 closed position contact for "FTE"	43302		
FCU1 + DCU1 open/closed position for "FTE"	43303		
VDS "Power emission" electromagnetic trip device 24/48 Isone		43331	43332
VM "Power cut-off" electromagnetic trip device 48 Isone		43333	43334

Designation	Code
FCU1 open position for " VDS or VM or EHOP"	43337
FCU1 + DCU1 open/closed position for "VDS or VM or EHOP"	43338
EHOP 30S ISONE	43335
Protective Cover	43336

MINISONE circular fire damper

CE 1812

Flush-mounted MINISONE

MINISONE Ø 315

MINISONE Ø 160

Compliance

Compliant with CE marking as per EN 15650: 1812-CPR-1079.

Advantages

- Reduced pressure losses.
- Attaches directly to smaller diameter ducts, no need for reduction fittings.
- Aeraulic connections fitted with lip seals.
- Airtight - Class B from EN 1751.

FIELD OF APPLICATION

- Compartmentalisation of commercial premises (Public buildings, commercial or industrial sites, etc.).

DESCRIPTION

- Comprises a galvanised steel tunnel and a mobile 20 mm-thick blade made of refractory material.
- The trip device unit is attached to the tunnel. It is positioned offset to the blade so that only one part is sealed in the wall during installation.
- Automatic trip device activated at 70 °C by thermal fuse.
- Kits contacts accessories.
- Lip seals for class B airtight seal as per standard EN 1751.

FIRE PROTECTION RATING

- EI 60 S – 500 Pa – Ve (i ⟷ o): 110 mm concrete wall or 100 mm aerated concrete wall.
- EI 60 S – 500 Pa – Ve (i ⟷ o): Thin plasterboard partition wall.

INSTALLATION

- Flush-mounted in a concrete wall or lightweight partition.
- Vertical assembly only.
- Sealed using standard mortar (concrete wall) or standard mortar / aerated concrete mortar for an aerated concrete wall.
- Sealed using rockwool and plaster mortar (lightweight partitions).
- The mechanism box is fitted flush against the wall. This must remain accessible even after the damper is fitted (Ensure an inspection hatch is fitted for this purpose).
- The aeraulic connection must not apply stress on the damper.

STANDARD AUTO-CONTROL RANGE

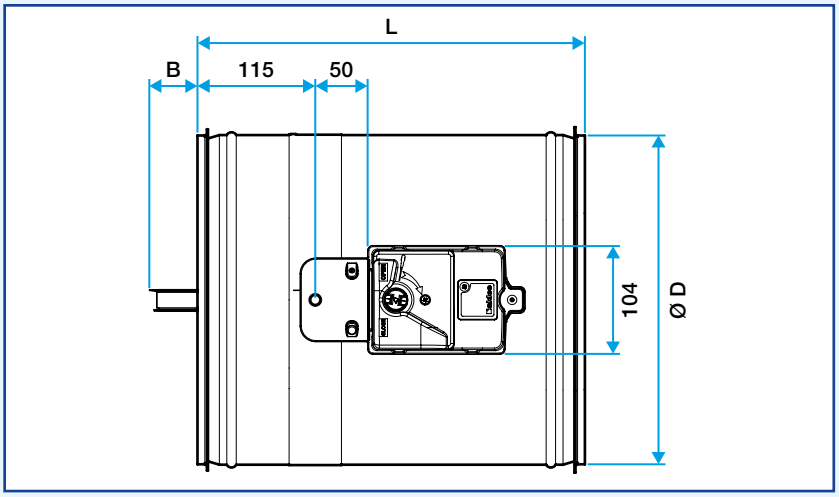
70 °C thermal fuse included.

Designation	With a FTE 70°C
Minisone Ø 100 mm	11043230
Minisone Ø 125 mm	11043231
Minisone Ø 160 mm	11043232
Minisone Ø 200 mm	11043233
Minisone Ø 250 mm	11043234
Minisone Ø315mm	11043235

ACCESSORIES

Designation	Code
MINISONE FCU + DCU contact kit	11043263
MINISONE FCU or DCU contact kit	11043262

DIMENSIONS (MM)



Ø D (mm)	Ø opening (mm)	L (mm)	B (mm)	Weight (Kg)
100	150	385	-	1.3
125	175	385	-	1.5
160	210	370	-	1.9
200	260	370	-	2.7
250	310	370	17	3.4
315	375	370	48	4.5

PRESSURE LOSS

	Speed in duct (m/s)											
	2		4		6		8		10		12	
Ø D (mm)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)
100	57	**4**	113	**14**	170	**32**	226	**56**	-	**-**	-	-
125	88	**2**	177	**7**	265	**16**	353	**28**	442	**44**	530	**63**
160	145	**1**	290	**4**	434	**9**	579	**16**	724	**25**	869	**36**
200	226	**1**	452	**4**	679	**9**	905	**16**	1,131	**25**	1,357	**36**
250	353	**1**	707	**3**	1,060	**7**	1,414	**12**	1,767	**19**	2,121	**27**
315	561	**1**	1,122	**2**	1,683	**5**	2,244	**8**	2,806	**13**	3,367	**18**

MINISONE circular fire damper

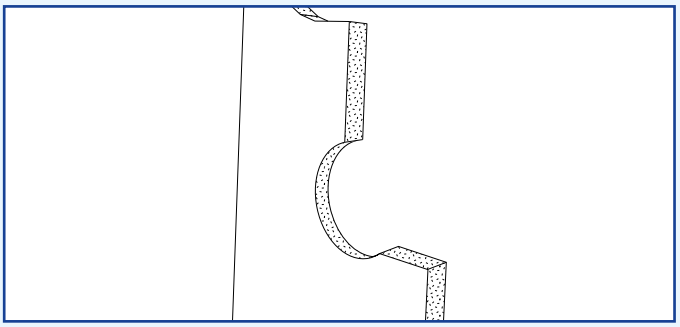
CE 1812

MINISONE flush-mounted in concrete wall - EI 60 S - 500 Pa

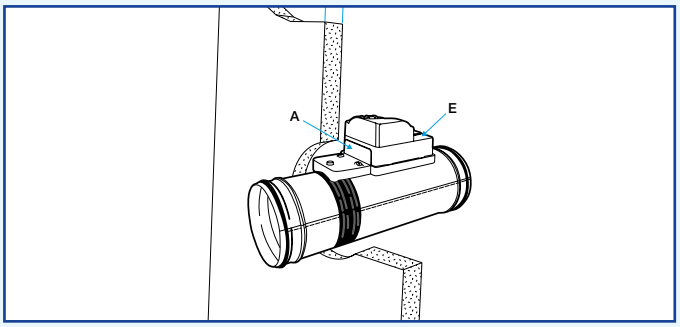
MINISONE Ø 315

MINISONE Ø 160

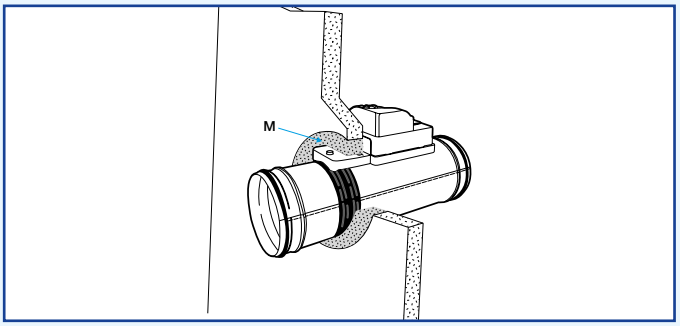
110 MM CONCRETE WALL OR 100 MM AERATED CONCRETE WALL



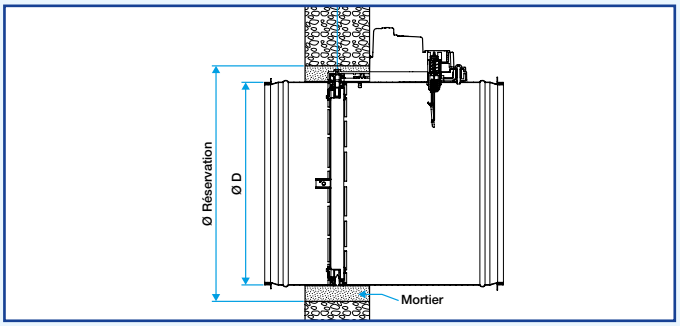
A - Ensure an opening of at least Ø + 50 mm in the wall.



B - Position the damper with the support face (A) against the wall. The mechanism (E) must remain accessible.



C - Fill the seal (M) using standard mortar (concrete wall) or standard mortar / aerated concrete mortar for an aerated concrete wall.



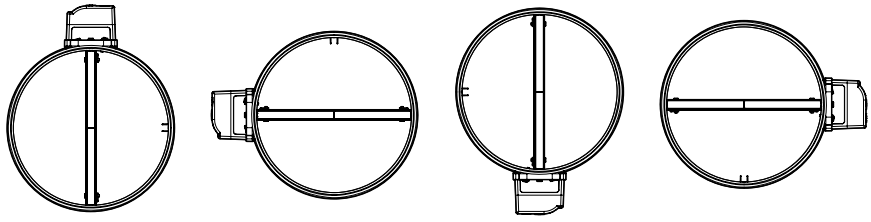
D - MINISONE flush-mounted in a concrete wall.

Visit www.aldes.com or your nearest ALDES branch for more details. Respect the rating reports.

OPENING FOR MOUNTING

Thickness of wall	Mortar used	Diameter of opening
Concrete 110 mm	Standard mortar	Ø D damper + 50 mm
Aerated concrete 100 mm	Aerated concrete mortar	Ø D damper + 50 mm
Aerated concrete 100 mm	Standard mortar	Ø D damper + 50 mm

MECHANISM POSITION



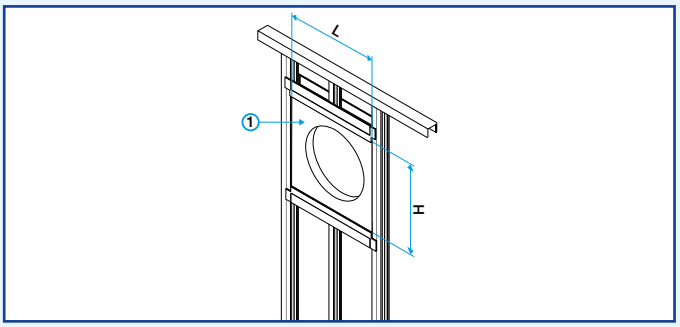
Note: the mechanism box must remain accessible after installing the damper. Ensure an inspection hatch is installed.

MINISONE flush-mounted in flexible wall - EI 60 S - 500 Pa

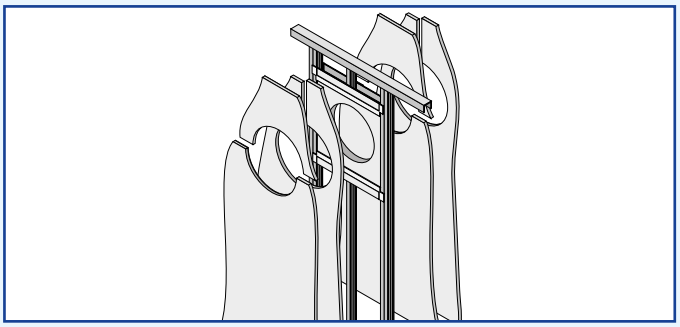
MINISONE Ø 315

MINISONE Ø 160

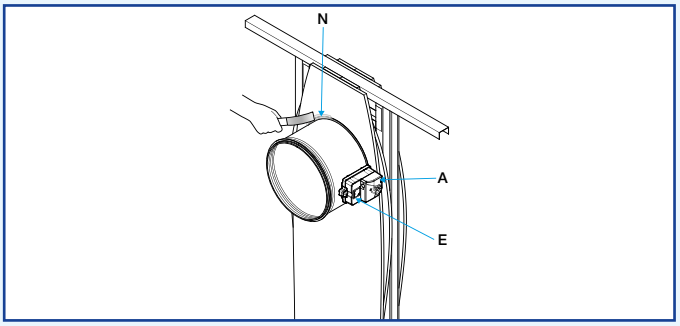
STANDARD 98/48 PLASTERBOARD PARTITION (1H FIRE RATING)



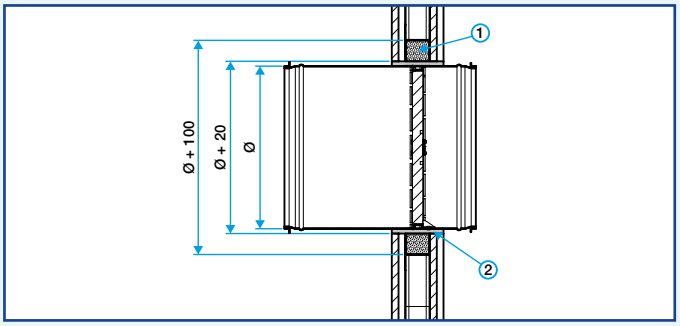
A - Cut rail sections to create the top and bottom of the framework, leaving a free passage (H x L) of Ø + 20 mm in the wall. Insert rockwool ① cut to size beforehand (square of Ø + 100 mm) with a hole maximum size Ø + 20 mm.



B - Present and attach the plaster boards cut to shape to Ø + 20 mm maximum.



C - Position the damper with the support face (A) against the wall. The mechanism (E) must remain accessible. Seal with plaster mortar (N).



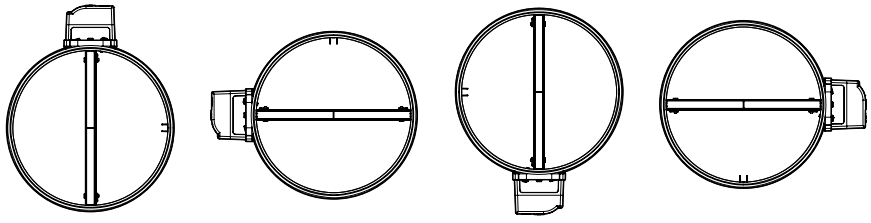
D - MINISONE flush-mounted in lightweight partition wall.
① Rockwool
② Plaster mortar seal

Visit www.aldes.com or your nearest ALDES branch for more details. Respect the rating reports.

OPENING FOR MOUNTING

Thickness of wall	Mortar used	Diameter of opening
Lightweight partition wall	Rockwool then plaster mortar seal	Ø D damper + 20 mm

MECHANISM POSITION



Note: the mechanism box must remain accessible after installing the damper. Ensure an inspection hatch is installed.

Terminal dampers

CE 1396

Terminal fire dampers CF1/CF2

Compliance

- Complies with CE markings from EN 15650: No. 1396-CPD - 0055.

FIELD OF APPLICATION

- Items to insert in the end section of an air duct to maintain the fire protection rating for the wall penetrated.
- Compartmentation in end section
- CMEV ductwork..

DESCRIPTION

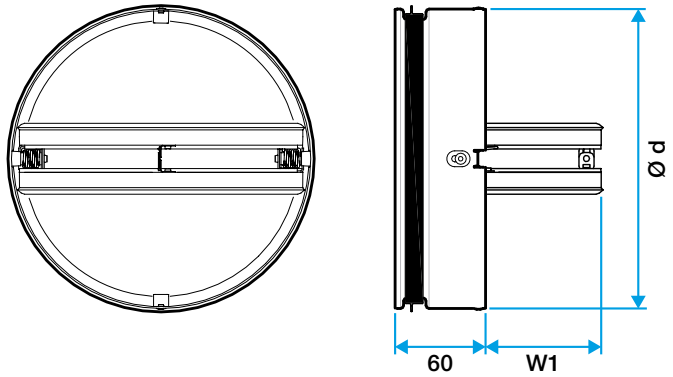
- CE certified as per EN15650.
- Fire protection rating:
  - CF1 = EI 60 S - (Ve Ho i<->o) at 300 Pa,
  - CF2 = EI 120 S - (Ve Ho i<->o) at 300 Pa.

RANGE

Ø (mm)	Designation	Code
100	CF1-D100-(EI60S)	11040430
125	CF1-D125-(EI60S)	11040431
150	CF1-D150-(EI60S)	11040432
160	CF1-D160-(EI60S)	11040433
200	CF1-D200-(EI60S)	11040434
100	CF2-D100-(EI120S)	11040435
125	CF2-D125-(EI120S)	11040436
150	CF2-D150-(EI120S)	11040437
160	CF2-D160-(EI120S)	11040438
200	CF2-D200-(EI120S)	11040439

DIMENSIONS (MM) – WEIGHT (KG)

(mm)	d (mm)	EI 60/120 S W1 (mm)	EI 60 S	EI 120 S
			Weight (kg)	
100	98.5	27	0.3	0.3
125	123.5	39.5	0.4	0.4
150	148.5	52	0.4	0.6
160	158.5	57	0.5	0.6
200	198.5	77	0.7	0.9



PRESSURE LOSS

Ø D (mm)	Speed in duct (m/s)									
	2		4		6		8		10	
	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)	Q (m^3/h)	ΔP (Pa)
100	57	**12**	113	**50**	170	-	226	-	283	-
125	88	**6**	177	**22**	265	**50**	353	**90**	442	-
140	111	**4**	222	**15**	333	**34**	443	**60**	554	**95**
150	127	**3**	254	**12**	382	**27**	509	**50**	636	**75**
160	145	**3**	290	**10**	434	**22**	579	**40**	724	**60**
180	183	**2**	366	**7**	550	**26**	733	**38**	916	**40**
200	226	**1**	452	**5**	679	**12**	905	**20**	1,131	**30**

CE 1396

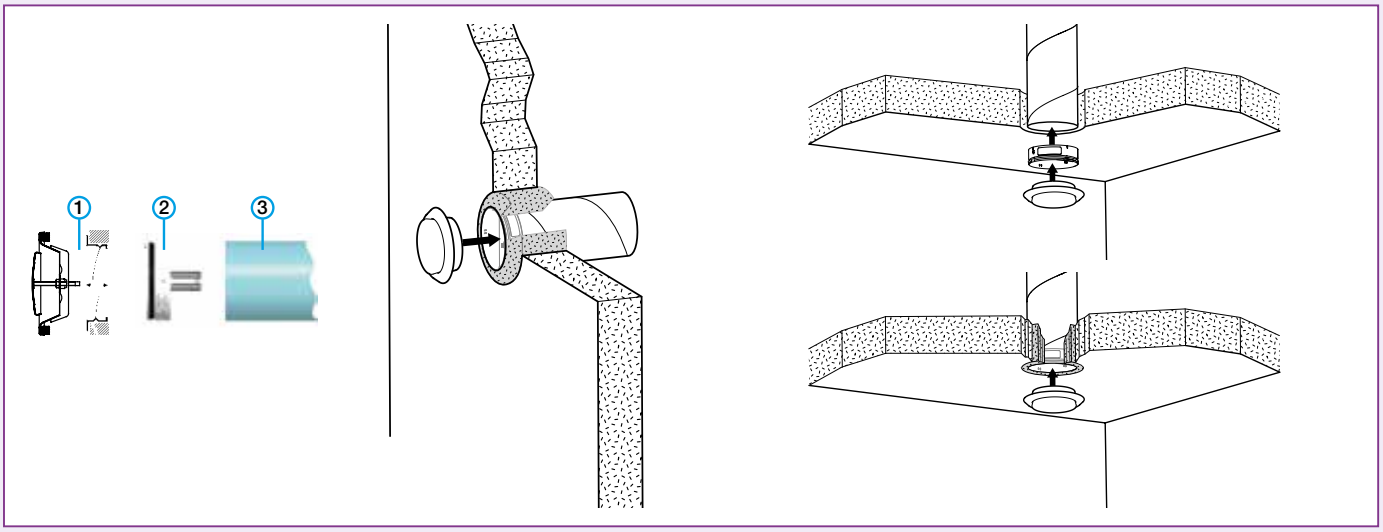
Terminal fire dampers CF1/CF2

Compliance

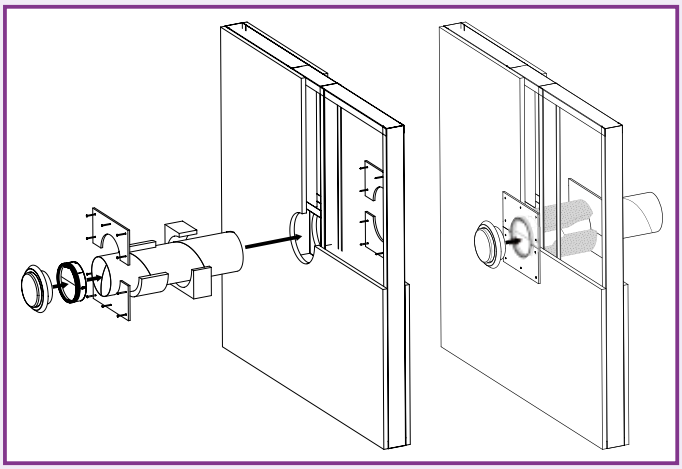
- Complies with CE markings from EN 15650: No. 1396-CPD - 0055.

INSTALLATION

1 = Type SR 143 metallic-cored grille with sleeve.
2 = CF1 or CF2 cartridge.
3 = Duct.



Terminal fire damper sealed using plaster/mortar/concrete.



Installation of a terminal fire damper using mineral wool and cover plates.

Terminal dampers

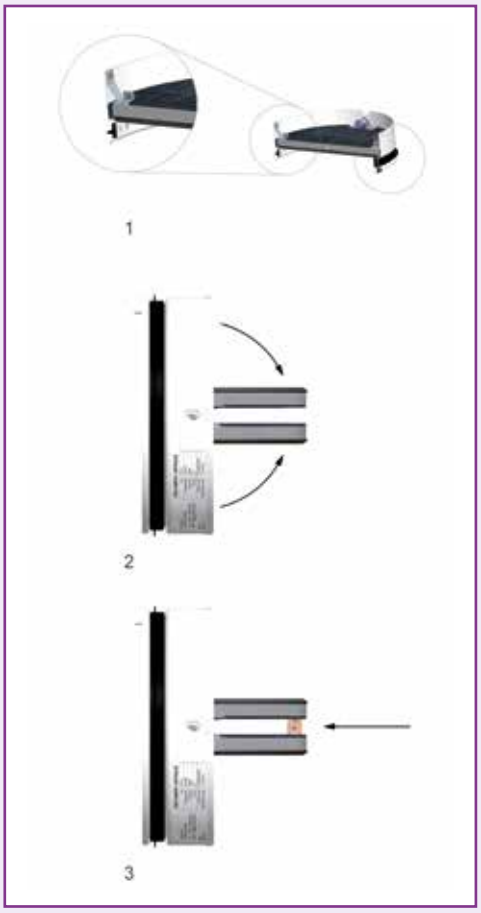
CE 1396

Terminal fire dampers CF1/CF2

Compliance

- Complies with CE markings from EN 15650: No. 1396-CPD - 0055.

INSTALLATION - ACTIVATION



1 - Push two release springs.
2 - Position blades at horizontal.
3 - Insert thermal fuse.

Resetting a terminal fire damper.

'ALDES CONTROL' PACK

Advantages

- Extremely useful in checking that a fire damper is working, independently of the Fire Safety Control System (CMSI).
- Portable.

FIELD OF APPLICATION

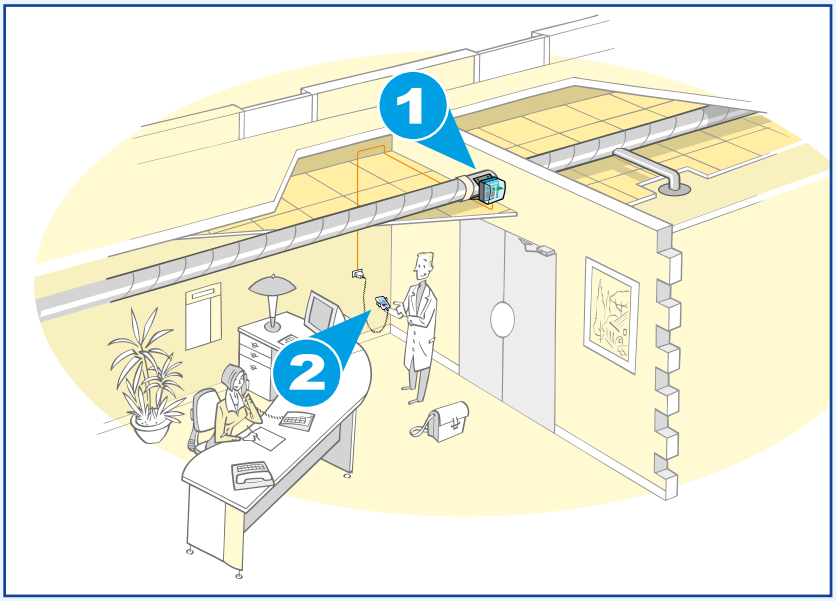
To perfect and facilitate the various controls, verifications and adjustments that precede any start-up of an installation, ALDES has designed and marketed a portable **automatic** functions controller **called "ALDES CONTROL"**, which is autonomous and can be recharged from the mains supply. Its ergonomics and simplicity of use make it an indispensable tool for safety/security professionals.

Once it has been connected to the electrical terminal of an ALDES fire damper or smoke exhaust damper using a quick-fit multi-pin connector, it allows the simulation of the various centralised control system sequences and the **testing of the functions** of all of the components present such as:

- **The electromagnetic power emission** tripping device by a series of time-delayed impulses,
- **The position indicator contacts**, using green and red LEDs to show the standby or safety position status,
- **The resetting servo-motor** with a unit energised indicator throughout the cycle's duration,
- **The priority management of the safety position** on the fire damper or smoke exhaust damper,
- **The correct electrical connection** for all the components on the single or plug-in terminal.

In addition, the voltage is automatically selected (24 or 48 VDC) for the correct operation of the equipment, and ensures about one hundred or so successive tests without recharge in the case of a complete configuration.

EXAMPLES OF USE



①: ISONE fire damper. ②: Aldes Control Pack.

RANGE

Abbreviation	Désignation	Code
ISONE ALDES CONTROL PACK	Function tester NF S 61-937 for SHUTTER or DAMPER.	11041695
CONTROL PACK bag kit	Protective transport bag	11041697
16 pin comb kit	Removable adapter for 16-pin Weidmuller terminal	11041770
VRFI-VANTONE cable kit	CABLE KIT WAGO + comb 12 pins - VRFI -VANTONE (before Sept. 2005)	11041699
Cable kit ISONE 10-pins - VANTONE	Cable kit ISONE 10-pins - VANTONE (after Sept. 2005)	11041696
CONTROL PACK charger kit		11041698
OPTONE cable kit		11044386

* Includes: 1 controller, 1 protective bag, 1 charger, 1 ISONE 10-pin cable.

VRFI fire damper mechanism

VRFI - upgradable since 1987!

Advantages

- Can be upgraded at any time since 1987!
- Simplified maintenance.
- Proven reliability.

DESCRIPTION

The VRFI mechanism is fully upgradeable, all the components can be mounted in the original mechanism box, either directly when the part is delivered or later using appropriate kits.

The unit is fixed in place using screws (supplied).

ACTIVATION EQUIPMENT

- **CM:** manual control fitted on all dampers. Red rotary lever mounted on mobile cover for manual tripping without removing the cover.
- **FTE:** Thermal fuse link reacting to a set temperature (70°C), does not require a power source to be tripped. The fuse component is placed on a detachable support. It is possible to change just the fuse.
- **VDS or VM:** electromagnetic trip device operating via power emission (VDS) or power cut-off (VM).
  - Voltage 24 or 48 V DC.
  - Power consumption: VDS < 3.5 W, VM < 2 W.

SIGNAL EQUIPMENT

- **FCU:** single-pole stroke-end contact used to transmit damper position information (closed), to the central fire safety control unit for example.
- **DCU:** single-pole stroke-start contact used to transmit damper position information (open).
- **FCB:** dual-pole stroke end contact.
- **DCB:** dual-pole stroke start contact.

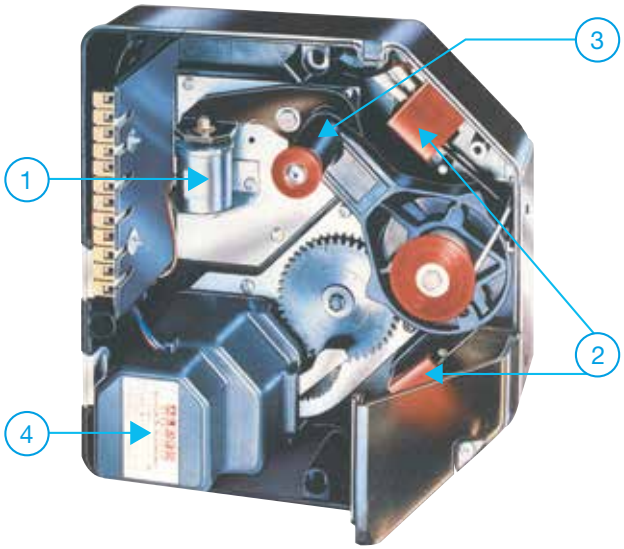
VRFI MECHANISM KITS

Designation	Code
Thermal fuse link kit FTE 70°	11041750
Bag of 10 thermal fuse links FTE 70°	11041753
Bag of 10 fuses 70° VRFI 09/00*	11043401
Electromagnet kit VDS 24 V DC 3.5W (I)	11041754
Electromagnet kit VDS 48 V DC 3.5W (I)	11041755
Electromagnet kit VM 24 V DC 3.5W (I)	11041758
Electromagnet kit VM 48 V DC 3.5W (I)	11041759
FCU or DCU contact kit (VRFI)	11041762
FCU or DCU contact kit (VRFI)	11041763
FCB contact kit for VRFI	11041764
DCB contact kit for VRFI	11041765
B20s motor kit 24/48 V - 0.7A VRFI	11041777
VRFI/ISONE 16 pin connectivity kit	11041947
VRFI/ISONE 10 pin connectivity kit	11041928

Attention: these codes refer to spare parts.
* Fuses reserved for VRFI produced after September 2000.

Designation	Code
Full fixed and mobile cover sub-assembly	11041767
Main black box (bare)	11042999
Quarter-turn screws for mobile cover	11042995

VRFI MECHANISM



1: Electromagnetic trip device.
2: Signal contacts.
3: Reset lever.
4: B20S reset motor.

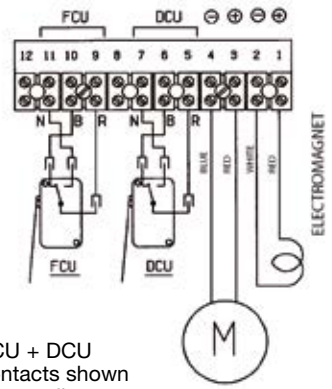
RESET EQUIPMENT

- **MANUAL RESET** is possible on all VRFI dampers, simply actuate the reset lever (after removing the cover).
- **RESET MOTOR** used to reset the damper to standby position after being tripped, with no manual intervention on the damper which may be difficult to access (simulation, periodical inspections, etc.).

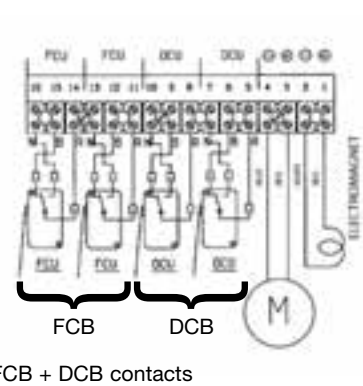
  This motor is fully built in to the original box (3 screws).

  Characteristics:
  - Maximum intensity consumption: 700 mA.
  - Voltage: 24 or 48 V DC or AC.
  - Cycle length: < 30 sec.

ELECTRICAL CONNECTION ON ALL VRFI DAMPERS



FCU + DCU contacts shown on standby.



FCB + DCB contacts shown on standby.

Provisions concerning all fire dampers

Information concerning all fire dampers

GENERAL DATA

- A fire damper is a dual-position closure device:
  - standby position - blades open.
  - safety position - blades closed.
- A fire damper must be fitted with a thermal fuse.
- A fire damper must be able to be reset after cold tripping.

ALDES FIRE DAMPERS

- ALDES fire dampers fitted with a VRFI or ISONE mechanism are fully adaptable since 1987.
- All ALDES fire dampers are individually inspected before being packed.

Recommendations for all fire dampers

STORAGE PRIOR TO INSTALLATION

- These devices should be stored in an enclosed, dry and frost-protected location, away from the weather. They should not be stacked any higher than the original factory packaging.
- They should be arranged to prevent damage to mechanisms of moving parts, and to avoid deformations of the device body due to excess loads or humidity.

PROTECTING THE EQUIPMENT DURING INSTALLATION

- Although the fire damper, and more particularly its mechanism, is protected by a synthetic material cover, it should be protected from projections of any kind (mortar, paint, sprayed cladding, etc.) that may affect the operation of the trip devices and signalling devices.
- The equipment should also be protected against the risk of water run-off or high condensation, both for the refractory part and the metal parts, or electromagnetic components.
- All suitable precautions should be taken to prevent premature ageing of the equipment before they are put into service in completed installations.
- Wedging and filling in order to seal devices in place correctly should not cause deformations likely to adversely affect the operation of the fire damper.

EQUIPMENT INSPECTION PRIOR TO ACTIVATION OF SYSTEMS

- The dampers should be maintained in mechanical standby position before the ventilation systems are effectively put into service, so as not to apply forces to the retention devices or trip devices until the normal operating conditions are met.

MAINTENANCE

- Take all suitable precautions for performing work on the mechanism of a rotating mechanism that features gears and powerful springs.
- As all the elements should be powered using Very Low Safety Voltage, earthing is not necessary. We recommend that work be done with power off, to prevent short circuits that may damage the device.
- The cover protecting the mechanism must be replaced in the correct position after each time it is removed.
- Depending on the type of building, periodical test manoeuvres are planned (see NF S 61933). We recommend a minimum of one annual manoeuvre inspection.

Replacement and Maintenance

- In 1984, ALDES took over SGEI, France's leading company in the field of fire dampers and smoke extraction dampers. Even today, ALDES can provide quick and easy replacements for these products.

Replacement

Fire dampers
p. 159

Cartridges
p. 164

Smoke extraction dampers
p. 165

Smoke extraction fans
p. 167

Replacement of Fire Dampers

The fire dampers listed below were manufactured by SGEI prior to 1984. Their replacement can be optimised by using the current models from the first section.

V series: Offset blade which works with gravity

- VRF P1 = Fire Damping 1 h / Flame Resistant 1 h CTICM Report - 1977.
- VRF P2 = Fire Damping 2 h / Flame Resistant 2 h CTICM Report - 1977.
- VRF 2 = Fire Damping 2 h / Flame Resistant 4 h CSTB Report - 1975.
- VCF 24 = Fire Damping 4 h / Flame Resistant 4 h CSTB Report - 1971.
- Normally open or normally closed.
- Installation in series.
- Connected using sleeves, flanges or shells.
- Upgradable mechanism:
  - FTE for Normally Open version.
  - VM or VDS.
  - FCU, DCU, FCB or DCB.
  - CM.

CCF 2: Blade outside the air flow which works with gravity (also CCF 2AP, CCF P2 & CCF P2AP)

- Fire damping - 1 hour or 2 hours without pressure loss.
- Normally open.
- CSTB Report - 1972.
- Up to 500 mm - slot fitted onto the casing shell.
- FTE 70° with inspection hatch.
- DCU.

Our current range of fire dampers can easily replace SGEI models.

For circular ducts:

ISONE® FdP

For rectangular DUCTS:

ISONE/Ap

ISONE rectangular

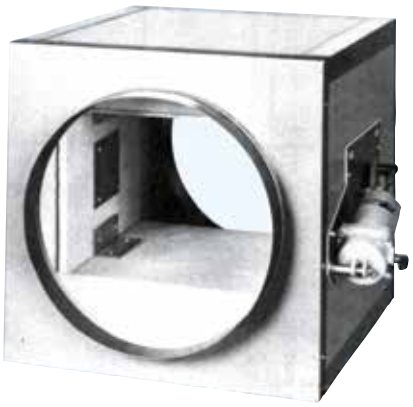
ISONE 1500

Replacement of Fire Dampers

GLOSSARY

- FTE = Thermal Fuse.
- VM = Current breaking electromagnet.
- VDS = Current making electromagnet.
- FCU = End of travel contact.
- DCU Start of travel contact.
- CM = Manual contact.

VRCF 2: Damper with rotating drum



- Fire damping 2 h & flame resistant 2 h without pressure loss.
- Normally open or normally closed.
- Report by the CTICM -1977.
- Up to 500 mm - slot fitted onto the casing shell.
- FTE for Normally Open version.
- VM or VDS.
- FCU and/or DCU.
- Reset motor.

VRFU: universal fire damper (any air flow and fire direction)

There are no spare parts for these mechanisms. It is still possible to adapt a VRFI mechanism using the U/I kit - see page 161.

- Without pressure loss:
  - VRFU P1 = Fire Damping 1 h / Flame Resistant 1 h: CTICM Report - 1977,
  - VRFU P2 = Flame Damping 2 h / Flame Resistant 2 h: CTICM Report - 1977,
  - VRFU 2 = Flame Damping 2 h / Flame Resistant 4 h: CTICM Report - 1975,
  - VCFU 24 = Flame Damping 4 h / Flame Resistant 4 h: CSTB Report - 1974.
- With pressure loss:
  - The VRFU P2 was qualified for Fire Damping 2 h / 500 Pa as per the Decree of the 21st April 1983,
  - VRFU 2.15 = Fire Damping 2 h at 1500 Pa: CCTICM Report - 1980.
- Normally open or normally closed.
- Fitted with an intumescent seal.
- Connected using sleeves, flanges or shells.
- Installation in series.
- Upgradable VRFU mechanism:
  - FTE for Normally Open version,
  - VM or VDS,
  - FCU and/or DCU,
  - CM,
  - Reset motor.

VRFU mechanism

- In the event that the body of the VRFU is still in good condition, it is possible to change just the mechanism.

Kit U/I - See next page

Kit U/I: Adaptation of VRFI mechanism to VRFU fire damper

FIELD OF APPLICATION

The U/I adapter kit has been especially created to enable "U" series dampers to be upgraded to a compact and monobloc solution for VRFI type dampers and to take advantage of the most recent innovations available for this family of products.

The aim is also to fulfil the new safety standard for buildings, NF-S 61.937 from December 1990, which has replaced the IT 247 technical instruction from March 1982.

Finally, the main objective is to be able to securely reset the electrical equipment remotely and reliably.

To achieve this, Aldes sub-assemblies for tripping, indicating and resetting offer safety regulations and can only be assured by an advanced level of industrialisation.

From this perspective, an older damper from the "U" series is capable of everything that a VRFI mechanism can do.

In the case where the NF-S 61.937 standard is required, it would be advisable to consult the relevant authority.

Required equipment

- Basic sub-assembly (mounting-plate, pin, box, etc.) : code 110 41.599.
- Arm puller, code 111 41.609.
- Hole saw HD Ø25 mm (for FTE adaptation only), code 110 41.610.

Optional equipment

- 70° thermal fuse: FTE.
- Electric tripping device by 24 or 48 Vdc impulse: VDS.
- Electric tripping device by 24 or 48 Vdc break: VM.
- Single-pole open position switch contact: DCU.
- Single-pole closed position switch contact: FCU.
- Bipolar open position switch contact: DCB.
- Bipolar closed position switch contact: FCB.
- Electrical reset motor B 20 S 24/48 V: REARELEC.

The control equipment is mounted and connected to a standardised 12-pin terminal block terminal block or a special 16-pin block- as required.

ORIGINAL VRFU DAMPER MECHANISM

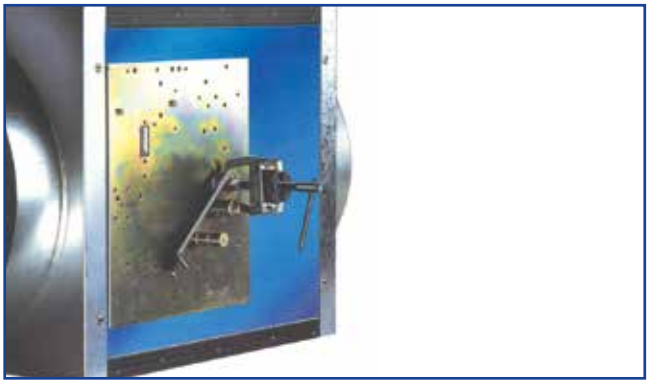
Once you have ensured that the damper to be transformed is in good working order (internally and externally) and once you have checked that it is possible to remove the fixed part of the metal cover, it may be necessary to increase the size of the openings in the walls in order to install the new box.

The opening can be resealed once the tests and checks have been completed.

STRIPPING THE VRFU MECHANISM PANEL

Remove all of the equipment present in view no. 1 and then place the arm puller at the end of the pin so that it pushes underneath the arm (make sure the arm blocking clip is removed).

Screw in the extractor screw, ensuring that it remains in line with the damper pin until the arm is completely free.



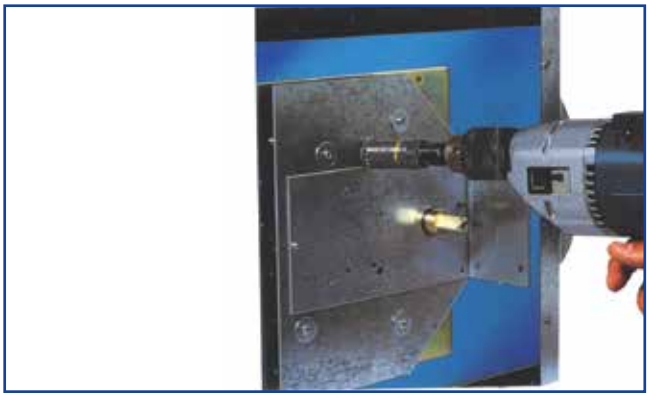
FITTING THE ADAPTER PLATE TO THE VRFU PLATE

Insert the self-lubricating washer provided (2).

Push on the intermediate adapter shaft (3) then tighten the two locking screws.

Introduce the mounting-plate (4) by fixing it to the new shaft, ensure it is aligned then attach it using the 4 screws and washers (5).

If a thermal fuse is used, it will be necessary to perforate the original steel plate using the high-durability hole saw (14) as well as the damper refractory using a low-speed drill; the metal barrel set against the mounting-plate will guide this operation.



Kit U/I: Adaptation of VRFI mechanism to VRFU fire damper

SETTING UP THE MECHANISM BOX

Position the base of the black box by sliding it against the counter-plate until the two adjustment fins are flush with the special metal extension.

Insert the two screws (7), then the three screws (8) which are also used to attach the resetting motor (15) (these screws are self-tapping).

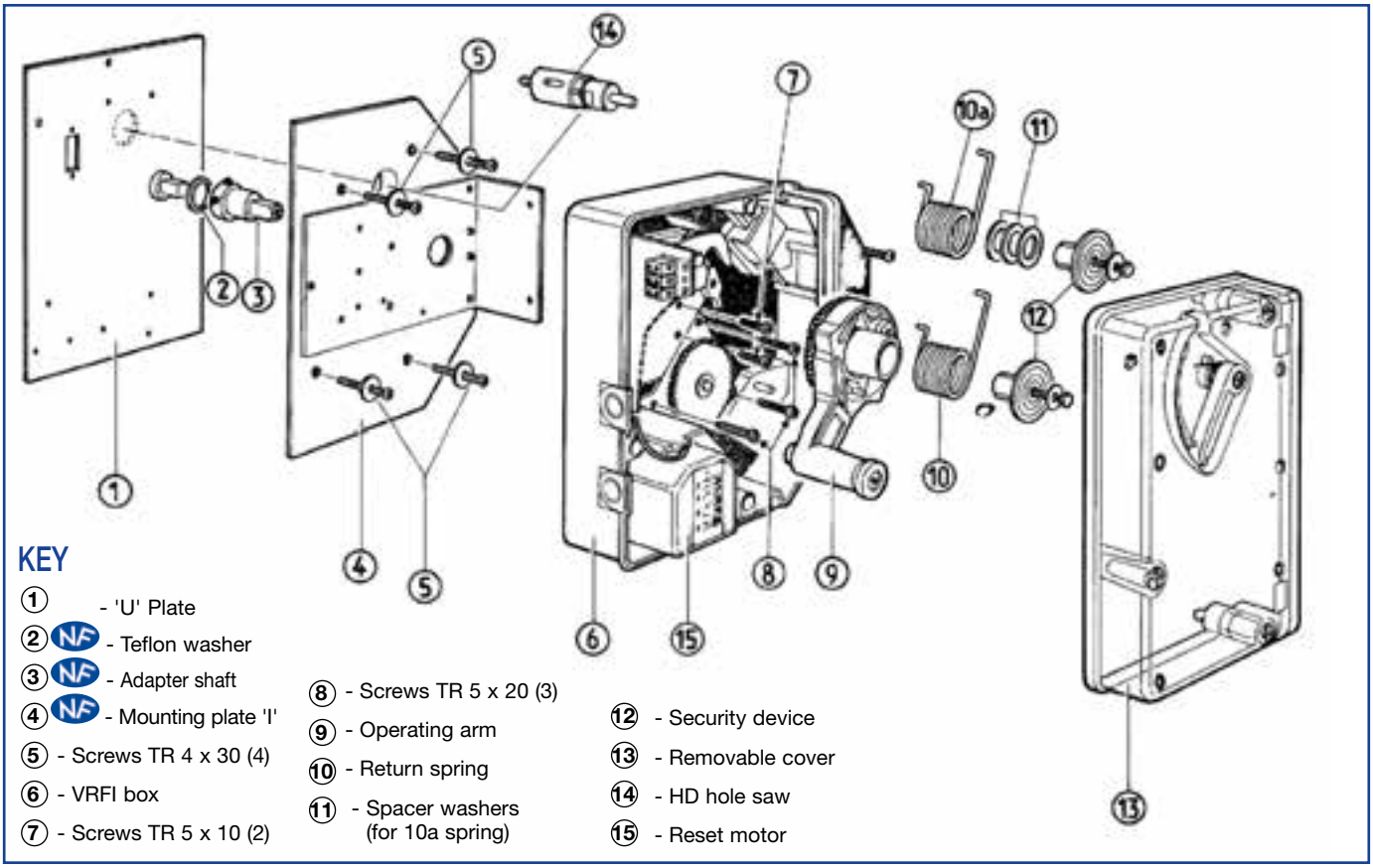
Fit the operating arm (9), the return spring (10) by pinching it lightly and then the two support parts (12) and screw the central screw (the spring 10a, which is bigger, is supplied for dampers for which the size and/or resetting require it).

FINAL CONFIGURATION OF THE MODIFIED VRFU DAMPER

Operate the control lever freely, making sure that all elements are properly attached and then proceed with testing the electrical trip and resetting controls, once you have checked the various connections to the terminal. Attach the removable part of the cover (13) to the box.

Finally, and only if everything is in good working order, reseal the wall as necessary (fixed and opaque part of the cover only).

EXPLODED VIEW OF THE U/I ADAPTER KIT



KEY

1. - 'U' Plate
2. NF - Teflon washer
3. NF - Adapter shaft
4. NF - Mounting plate 'I'
5. - Screws TR 4 x 30 (4)
6. - VRFI box
7. - Screws TR 5 x 10 (2)
8. - Screws TR 5 x 20 (3)
9. - Operating arm
10. - Return spring
11. - Spacer washers (for 10a spring)
12. - Security device
13. - Removable cover
14. - HD hole saw
15. - Reset motor

Replacement function controller

'CMSI/SIMUL'

'ALDES CONTROL' PACK

ALDES CONTROL PACK FUNCTION CONTROLLER

To perfect and facilitate the various controls, verifications and adjustments that precede the start of any installation, ALDES has designed **and marketed** a portable automatic **functions controller** called "ALDES CONTROL", which is autonomous and can be recharged from the mains supply. Its ergonomics and simplicity of use make it an indispensable tool for safety/security professionals.

Once it has been connected to the electrical terminal of an ALDES fire damper or smoke exhaust damper using a quick-fit multi-pin connector, it allows the simulation of the various centralised control system sequences and the **testing** of the functions of all of the components present such as:

- **The electromagnetic** emission tripping device powered by a series of time-delayed impulses,
- **The position indicator contacts, using green and red LEDs to show** the standby or safety position status,
- **The reset servo-motor** with a power indicator lit whist the cycle is active,
- **Priority given to the safety position** on the fire damper or smoke exhaust damper (D.A.S.),
- **The correct electrical connection** for all the components on the single or plug-in terminal.

In addition, the voltage is automatically selected (24 or 48 VDC) for the correct operation of the equipment, and ensures about one hundred or so successive tests without recharge in the case of a complete configuration.

Replacement of cartridges

The following damper cartridges are no longer manufactured. No more spare parts exist. Their replacement can be optimised by using the current models from the first section.

CVI: With intumescent blades

- Damping 1 h & 2 h / Flame resistant 2 h.
- CTICM Report - 1977, test without pressure loss.
- Normally open.
- Ø 100, 125 or 160 mm.
- No possible equipment, except for the 70°C fuse.

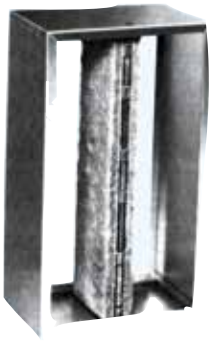
CF 1

CPF - Circular

- Damping 1/2 h / Flame resistant 2 h.
- CTICM Report - 1975, test without pressure loss.
- Normally open.
- Ø 100 to 400 mm.
- No possible equipment, except for the 70°C fuse.

CF 2

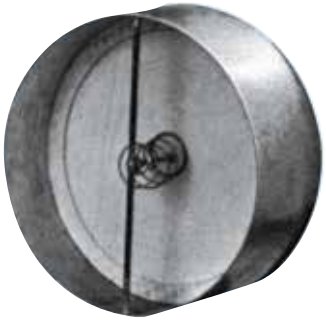
Rectangular CPFR



- Damping 1/2 h / Flame resistant 2 h.
- CTICM Report - 1975, test without pressure loss.
- Normally open.
- X = 100 to 350 mm, Y = 200 to 500 mm.
- No possible equipment, except for the 70°C fuse.

ISONE rectangular

SV 1 - SV 2



- Damping 1 h & 2 h / Flame resistant 1 h & 2 h.
- Thermal fuse nut.
- CSTB Report - 1972, test without pressure loss.
- Normally open.
- Ø 100 to 200 mm.
- No possible equipment, except for the 70°C fuse.

CF 1

Replacement of dampers

The following dampers are no longer manufactured. They can be replaced by current models.
➔ The old SGEI, GCF and GDF type dampers can be replaced with the current models bearing the same name.

PCF: Gate type damper

- PCF 1 = damping 1 h.
- PCF 2 = damping 2 h.
- 1 flap only.
- Embedded or wall mounted versions.

FOLLOWING ON FROM CE MARKING, OBLIGATORY SINCE THE 1ST FEBRUARY 2013
SEE PAGES 86-87

VANTONE

VRFU: tunnel damper

- Previously known as 'clapet NF' (Normally closed damper), the VRFU tunnel damper was sold up until 1987.

VRFI-DES

GMAD: Air inlet with mobile fins

- Conforms to NF-S 61.937.
- Facade mounting.
- No damping degree.

CAMELEONE

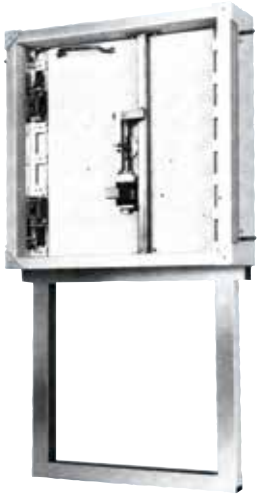
or OXYTONE

Replacement of dampers

GLOSSARY

- VM = Current breaking electromagnet - VDS = Current making electromagnet - FCU = End of travel contact - DCU Start of travel contact - CM = Manual contact

GVT 2 S: Transfer guillotine damper

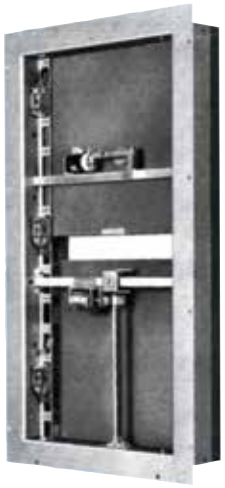


- Damping 2 h.
- Flame resistant 2 h.
- Normally closed.
- CTICM Report - 1975.
- VM or VDS.
- FCU and/or DCU.
- CM.

FOLLOWING ON FROM CE MARKING, OBLIGATORY SINCE THE 1ST FEBRUARY 2013
SEE PAGES 86-87

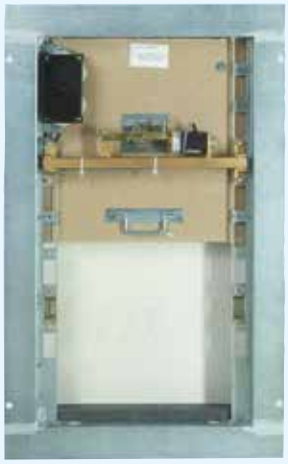
GCF-CF1H30

GCF 2 AVP: 3-position guillotine damper



- Damping 2 h.
- Flame resistant 2 h.
- Normally closed.
- Additional 'ventilation' setting.
- Two tripping devices.
- CSTB Report - 1974.
- VM or VDS.
- FCU and/or DCU.
- CM.

GCF*-CF1H30



* "Ventilation" position is no longer available.

PVF: Gate type damper (SGEI generation)

- Damping 1 h.
- Damping 2 h.
- Flame resistant 2 h.
- Normally closed.
- Mechanism in a protected magazine.
- VM or VDS.
- FCU and/or DCU.
- CM.

PVF generation ALDES or VANTONE or VANTONE-M

Replacement of smoke exhaust fans

CDA & CYCLONE II smoke exhaust dampers

- Class 400°C - 2 H.
- Direct drive.

- Class 400°C - 2 H.
- Belt & pulley drive.

CYCLONE F 400

For 'smoke extraction only' applications

CYCLONE & EXONE smoke extraction casing

- Class 400°C - 2 H.
- Belt & pulley drive.

- Class 400°C - 2 H.
- Direct drive.

EXONE F400

EXONE F400 For a "mixed smoke exhaust" installation.

AXONE relay box

- First relay unit with integrated emergency service shutdown.
- Conforms to NF-S 61.937.
- Single or 3-phased.
- 1 or 2 speed(s).

- First electronic relay box.
- Conforms to NF-S 61.937.
- Single or 3-phased.
- 1 or 2 speed(s).

AXONE micro II

Certified since 01.01.2000.

VELONE1 smoke exhaust roof fan

- Class 400° - 2h.
- Direct drive.
- Manufactured up to May 2007.

New VELONE

Spare parts - Dampers

ISONE mechanism on ISONE, ISONE/Ap & VRFIsone dampers

THERMAL TRIP

Description	Code
Kit FTE 70° ISONE	11043400
Packet of 10 fuses - 70° ISONE - VRFI after 09.2000	11043401
Packet of 10 fuses - 100°C ISONE	11043414

Electromagnetic & manual tripping device

Description	Code
VDS 24/48 VDC electromagnet kit	11043407
VM 24/48 VDC electromagnet kit	11043408
Manual tripping kit	11043411

SIGNALLING CONTACTS

Description	Code
FCU1 kit - ISONE without electromagnet	11043402
DCU1 kit - ISONE without electromagnet	11043403
FCU1 + DCU1 kit ISONE without electromagnet	11043404
FCU1 kit - ISONE with electromagnet	11043405
FCU1 + DCU1 kit ISONE with electromagnet	11043406
FCU2 + DCU2 Kit	11043409

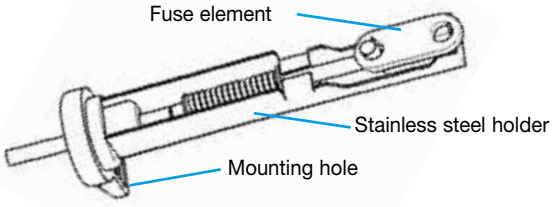
RESET MOTOR

Description	Code
Reset motor kit	11043410

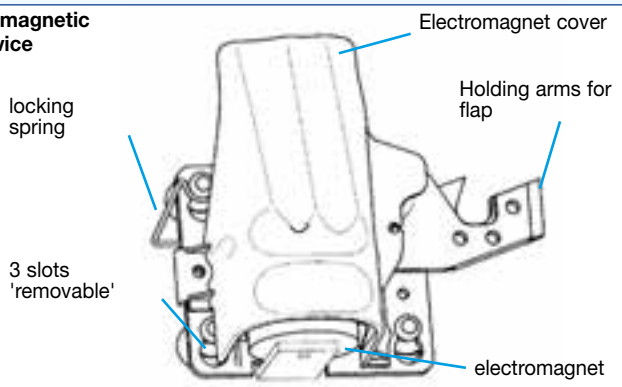
MISCELLANEOUS

Description	Code
Complete transparent cover	11043413
Blue main control box + manual control	11043412
10-pin connector terminal (electromagnet, motor, FCU1, DCU1)	11041930
6-pin connector terminal - Terminals 1 to 6 (FCU1 + DCU1)	11041931
6-pin connector terminal - Terminals 11 to 16 (FCU2 + DCU2)	11041932

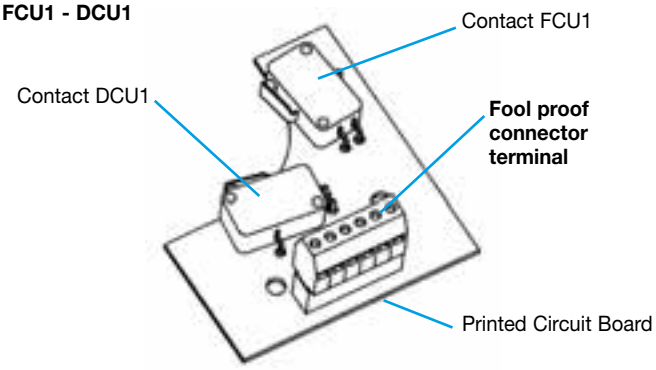
Thermal fuse link



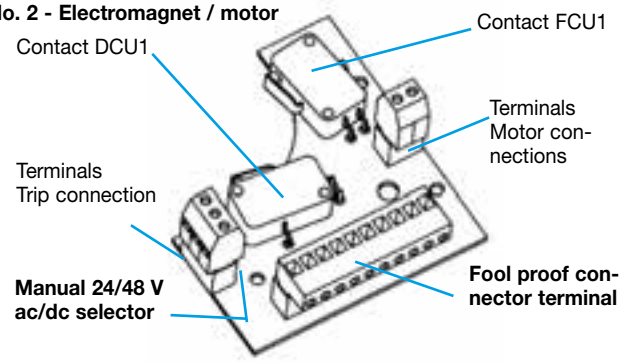
Electromagnetic trip device



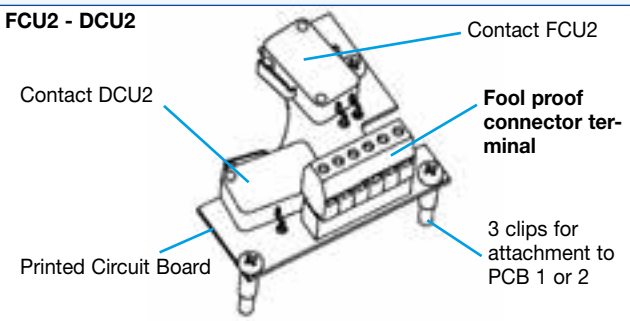
PCB 1 - FCU1 - DCU1



Board No. 2 - Electromagnet / motor



PCB 3 - FCU2 - DCU2



ISONE and ISONE/Ap bodies

CONCENTRIC CIRCULAR REDUCERS

Description	Code
RCC Ø 160-100 ISONE	11143574
RCC Ø 160-125 ISONE	11143575
RCC Ø 200-100 ISONE/AP	11041933
RCC Ø 200-125 ISONE/AP	11041934
RCC Ø 200-160 ISONE/AP	11041935

Aeraulic airtight seal kits

Description	Code
1 seal Ø 100	11184763
1 seal Ø 125	11184764
1 seal Ø 160	11184765
1 seal Ø 200	11184766
1 seal Ø 250	11184767
1 seal Ø 315	11184768
1 seal Ø 355	11184769
1 seal Ø 400	11184770
1 seal Ø 450	11184771
1 seal Ø 500	11184772

Oblong Ring Mounting for rectangular ISONE

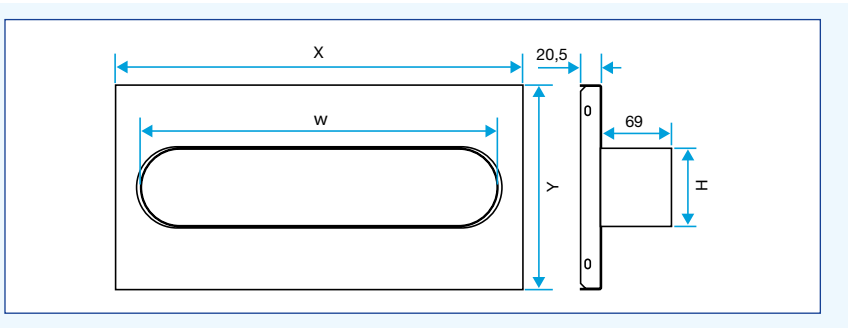
FIELD OF APPLICATION

- Used to connect an oblong ductwork to a rectangular Isone fire damper.

DESCRIPTION

- Galvanised steel shell suitable for an ISONE rectangular damper.
- Use two ring mountings to connect a damper on each side.

X x Y = dimensions of rectangular ISONE.
W x H = dimensions of oblong ducts.



RANGE

X x Y (mm)	W x H (mm)	Code
400 x 200	360 x 80	11043350
400 x 200	350 x 150	11043351
500 x 200	450 x 100	11043352
350 x 200	325 x 130	11043353
450 x 200	425 x 130	11043354
550 x 200	490 x 130	11043355
450 x 200	410 x 165	11043356
500 x 200	475 x 156	11043357
600 x 200	545 x 165	11043358
750 x 250	700 x 165	11043359
550 x 250	515 x 215	11043360
700 x 250	675 x 215	11043361
950 x 350	880 x 215	11043362
700 x 300	645 x 265	11043363
900 x 300	850 x 265	11043364
1000 x 350	975 x 265	11043365
850 x 350	820 x 320	11043366
1000 x 350	950 x 320	11043367
800 x 450	765 x 415	11043368
950 x 450	895 x 415	11043369
650 x 350	620 x 320	11043370

VRFI mechanism

THERMAL TRIP

Description	Code
FTE 70°C VRFI kit	11041750
Packet of 10 70°C fuses for ISONE VRFI - after 01/09/2000	11043401
Packet of 10 100°C fuses for VRFI - after 01/09/2000	11043414

Electromagnetic trip device

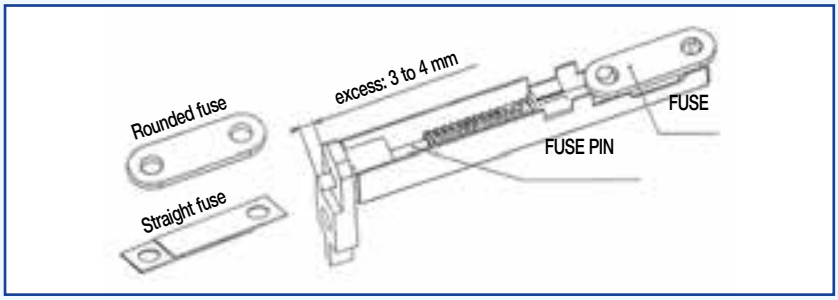
Description	Code
VDS 24 Vdc electromagnet kit	11041754
VDS 48 Vdc electromagnet kit	11041755
VDS 230 VDA electromagnet kit	11041756
VM 24 Vdc electromagnet kit	11041758
VM 48 Vdc electromagnet kit	11041759
VDS 230 VDA electromagnet kit	11041760

SIGNALLING CONTACTS

Description	Code
FCU or DCU kit	11041762
FCU + DCU kit	11041763
FCB kit	11041764
DCB kit	11041765

IDENTIFICATION OF THE THERMAL FUSE LINK OF THE VRFI

– Before 01.09.2000: thermal fuse link bi-chromate galvanised steel pin with straight-edge fuse (not available).
– After 01.09.2000: thermal fuse link white galvanised steel pin with rounded-edge fuse.



1 - Once the fuse has been mounted, check that the fuse pin juts out by 3 to 4 mm.
2 - Rounded fuse with white galvanised fuse pin.
3 - Straight fuse with bi-chromate galvanised fuse pin.

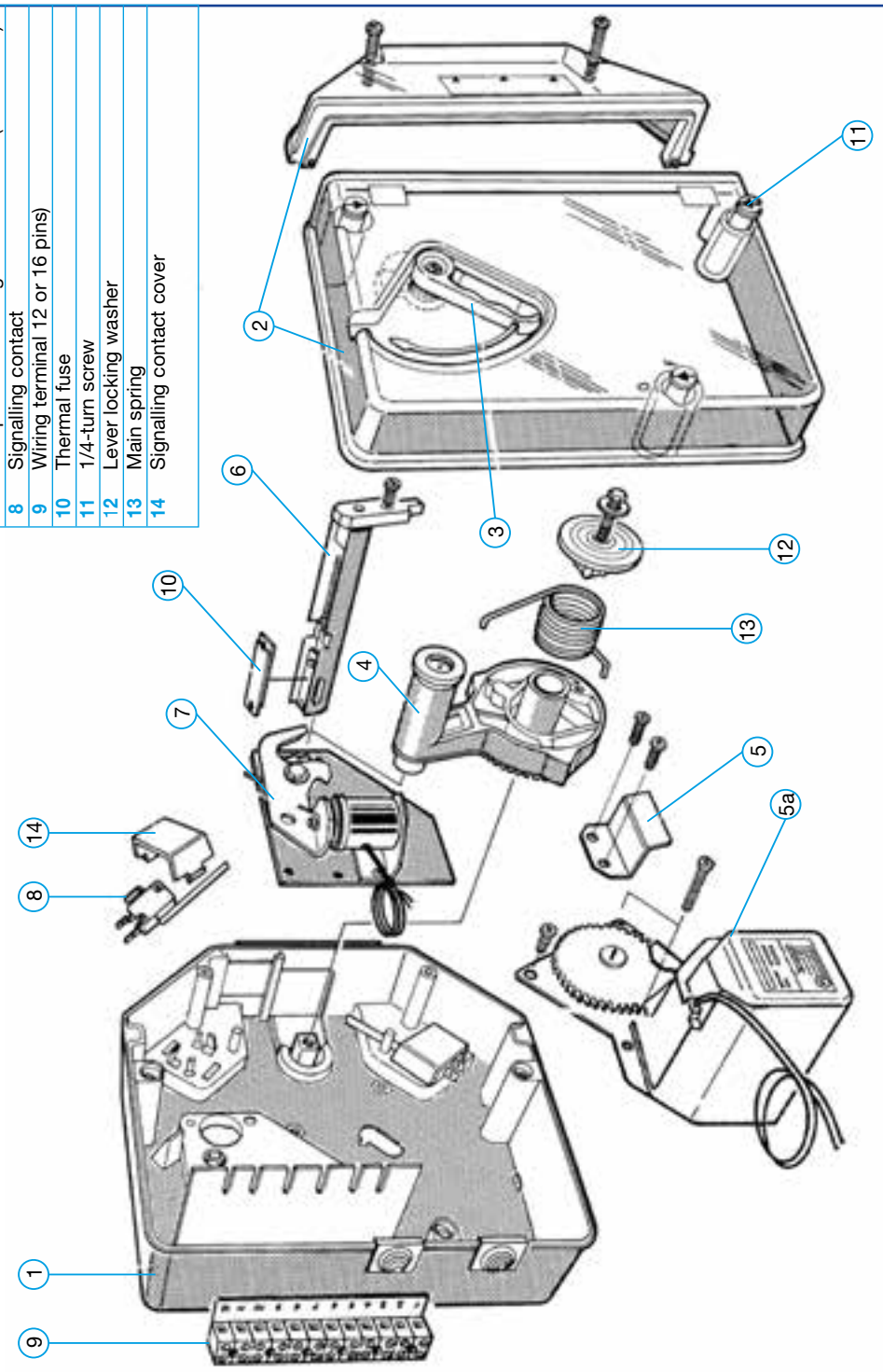
- Fuses with rounded edges sold since 1st September 2000 should be positioned on thermal fuse links with a white galvanised pin.
- Straight-edge fuses are no longer available. Replacing them requires the thermal fuse link to be changed.

RESET MOTOR

Description	Code
Motor kit - B 20 S 24/48V	11041777
230/24 Vac kit for B 20 S (not compliant with NF-S 61.937)	11041778

Spare parts - Dampers

1 Bottom of box mechanism
2 Protective covers
3 Manual controls
4 Operating level
5 Anti-backdraft
5a Reset motor
6 Thermal fuse holder
7 Complete electromagnet mechanism (VM or VDS)
8 Signalling contact
9 Wiring terminal 12 or 16 pins)
10 Thermal fuse
11 1/4-turn screw
12 Lever locking washer
13 Main spring
14 Signalling contact cover



Exploded drawing of VRFI mechanism

MISCELLANEOUS

Description	Code
Fixed & mobile cover sub-assembly (2) + (3) + (11)	11041767
Main black box (bare) (1)	11142999
Packet of 10 1/4 turn screws for mobile cover (11)	11142995
Packet of 5 springs - Ø 2.8 (13)	11142954
Packet of 5 springs - Ø 3.5 (13)	11142924
Aftersales Spring kit (13)	11041914
Reset lever kit (12) + (4)	11080794
Connectivity kit VRFI/ISONE 10 pin	11141928
Connectivity kit VRFI/ISONE 16 pin	11141947

Flange insulation for VRFI/Ap

Description	Code
VRFI/Ap flange insulation kit	11041295
Cover kit for VRFI/Ap flange insulation	11041296
VRFI/Ap flange insulation kit	11041297

CF and PF cartridges

THERMAL FUSES

Description	Code
Packet of 10 thermal fuses - 70°C	11040321

Spare parts - Dampers

VANTONE gate type dampers and all PVF models (after January 1992)

Electromagnetic trip device

Description	Code
VDS 24 VDC lock	11041896
VDS 48 VDC lock	11041897
VM 24 VDC lock	11041898
VM 48 VDC lock	11041899
Square head safety kit (high rise buildings) for lock	11045000
Lock latch from 1995 onwards	11041946

BODY

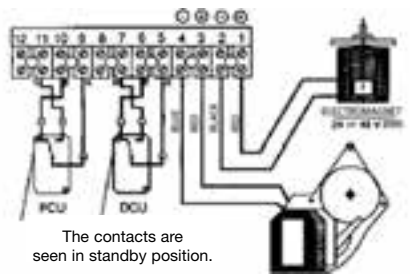
Description	Code
Mechanism cover for fixing grille using metric screws	11041926
Mechanism cover for 1/4 turn screws	11045016
STOPAIR sealing kit (50 metres)	11041867
VANTONE backdraft kit	11044115
VANTONE ring + threaded rod	11048811

SIGNALLING CONTACTS

Description	Code
VANTONE PVF FCU or DCU kit (since 01/1992)	11041876
VANTONE PVF FCB or DCB kit (since 01/1992)	11041868
Unpluggable terminal support kit	11041975
10-pin unpluggable terminal kit	11041976
6-pin unpluggable terminal kit	11041977

VANTONE prior to September 2005

VANTONE PF, CF & VANTONE M with simple contacts: FCU + DCU.

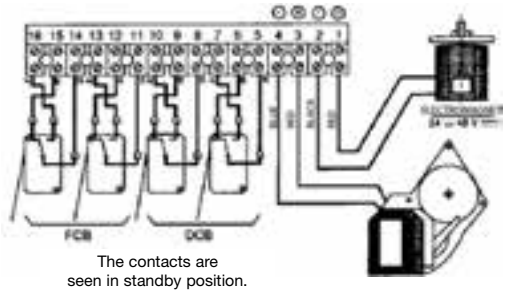


The contacts are seen in standby position.

Classic terminal

Motor B20S 24 or 48 V~ (for Vantone M only).

VANTONE PF, CF & VANTONE M with double contacts: FCB + DCB.



The contacts are seen in standby position.

Classic terminal

B20S motor 24 or 48 V (for Vantone M only).

VANTONE-M gate type dampers and all PVFM models

RESET MOTOR

Description	Code
Motor B 20 S 24/48 kit	110 41.797

SIGNALLING CONTACTS

Description	Code
FCU or DCU VANTONE-M, PVFM Kit	11041796

Electromagnetic trip device

Idem VANTONE, see above.

BODY

Description	Code
VANTONE-M/PVFM mechanism cover for metric screws	11041925
VANTONE-M/PVFM mechanism cover for 1/4 turn screws	11045039
STOPAIR sealing kit (50 metres)	11041867

PVF gate type dampers (before January 1992)

Electromagnetic tripping device (rotating)

Description	Code
VDS rotating 24 VDC	11044106
VDS rotating 48 VDC	11044107
VM rotating 24 VDC	11044108
VM rotating 48 VDC	11044109

SIGNALLING CONTACTS

Description	Code
FCU kit (large contact)	11041791
DCU kit (large contact)	11041792

BODY

Description	Code
VANTONE-M/PVFM mechanism cover for metric screws	11041926
VANTONE-M/PVFM mechanism cover for 1/4 turn screws	11045016
STOPAIR sealing kit (50 metres)	11041867

OPTONE gate type dampers

Description	Code
S.E Trip OPTONE.H VDS 24Vdc	11148068
S.E Trip OPTONE VDS 24Vdc	11148757
S.E Trip OPTONE VDS 48Vdc	11148756
S.E Trip OPTONE VM 24Vdc	11148130
S.E Trip OPTONE VM 48Vdc	11148134

Description	Code
S.E trim OPTONE.H	11148544
SE finned core (OPTONE + GRILLE)	21121526
SE Electronic unit OPTONE	11148443
SE Comb OPTONE	21121501
Accessories kit - OPTONE fixings	11148523
LOCKTONE MOTOR KIT	11044398

Spare parts - Dampers

GFA Alu grilles

SPARE PARTS

Description	Code
Fixing rail for 1/4 turn GFA fitting	11041927
Bag of 20 metric screws kit	11041921
Bag of 20 clips kit	11041922
Bag of 10 1/4 turn slotted head screws	11041923
Bag of 10 1/4 turn square head safety screws	11041924
Hinge kit (2 hinges)	11041915
Bag of 20 GFA fixing plates	11048924

REMINDER OF DAMPER GRILLE CODES

Description	Code
Alu PVF 1V GFA	11045026
Alu PVF 2V GFA	11045146
VANTONE 1V GFA steel	11045561
VANTONE 2V GFA steel	11045562
VANTONE-M GFA steel	11045564

* GFA Alu PVF-M: select GFA Alu PVF 1V with Y + 50 mm.
The steel GFAs have 45 x45 mm meshing.

PCF gate type dampers

Electromagnetic tripping device (after March 1995)

Description	Code
VDS 24 Vdc lock	11041900
VDS 48 Vdc lock	11041901
VM 24 Vdc lock	11041902
VM 48 Vdc lock	11041903

GCF-GDF transfer guillotine dampers

(ROTATING) ELECTROMAGNETIC TRIP for GCF

SIGNALLING CONTACTS

Description	Code
DCU or FCU - GCF - GDF kit	11041875

MISCELLANEOUS

Description	Code
GCF - GDF box kit	11041879

70°C thermal fuse link for GDF

Description	Code
Fuse sub-assembly + holder - After March 1995	11041916

Note: No fuse - spare parts only

CAMELEONE and OXYTONE

Electromagnetic trip device

Description	Code
Kit VDS 24 Vdc - Cameleone	11044067
Kit VDS 48 Vdc - Cameleone	11044068
Kit VM 24 Vdc - Cameleone	11044069
Kit VM 48 Vdc - Cameleone	11044070

SIGNALLING CONTACTS

Description	Code
FCU kit - Cameleone	11044065
DCU kit - Cameleone	11044066
FCU + DCU kit- Cameleone	11044071
Packet of 10 contacts - Cameleone	11044072

MISCELLANEOUS

Description	Code
Cameleone	
BSIA 24/48 making current connection box	11186256
BSIA 24/48 breaking current connection box	11186585
Belimo BLF 24V motor	11186583
Belimo BLF 48V motor	11186584
Oxytone	
FCU Kit	11044190
DCU Kit	11044191
FCU + DCU kit	11044192
FCB + DCB Kit	11044193

OXYTONE LAMES 2012-2013 bladed air inlet

Please consult us.

OXYTONE PANNEAU & OXYTONE PANNEAU 2012

Please consult us.

CYCLONE F400 casings

BELT

Description	Code
Belt section SPZ - LP 1420	11039379
Belt section SPZ - LP 1437	11039380
Belt section SPZ - LP 1450	11039381
Belt section SPZ - LP 1587	11039382
Belt section SPZ - LP 1650	11039383
Belt section SPA - LP 1737	11039384
Belt section SPA - LP 1750	11039385
Belt section SPA - LP 1782	11039386
Belt section SPA - LP 1950	11039387
Belt section SPA - LP 2000	11039388
Belt section SPA - LP 2240	11039389
Belt section SPB - LP 2120	11039390
Belt section SPB - LP 2180	11039391
Belt section SPB - LP 2650	11039392
Belt section SPB - LP 2800	11039393
Belt section SPB - LP 3000	11039394
Belt section SPZ - LP 1800	11039455
Belt section SPB - LP 2580	11039456
Belt section SPZ - LP 1562	11039477
Belt section SPZ - LP 1600	11039478
Belt section SPZ - LP 1700	11039479
Belt section SPZ - LP 1737	11039480
Belt section SPZ - LP 1750	11039481
Belt section SPA - LP 1882	11039482
Belt section SPA - LP 1900	11039483

BELT

Description	Code
Belt section SPA - LP 2120	11039484
Belt section SPA - LP 2180	11039485
Belt section SPA - LP 2430	11039486
Belt section SPB - LP 2240	11039487
Belt section SPB - LP 2300	11039488
Belt section SPB - LP 2360	11039489
Belt section SPB - LP 2430	11039490
Belt section SPB - LP 2530	11039491
Belt section SPB - LP 2900	11039492
Belt section SPB - LP 3170	11039493
Belt section SPB - LP 3250	11039494

S/A SCROLL SHAFT BAR BEARING

Description	Code
S/A SCROLL SHAFT BAR BEARING CYCLONE 225	11100269
S/A SCROLL SHAFT BAR BEARING CYCLONE 250	11100270
S/A SCROLL SHAFT BAR BEARING CYCLONE 280	11100271
S/A SCROLL SHAFT BAR BEARING CYCLONE 315	11100272
S/A SCROLL SHAFT BAR BEARING CYCLONE 400	11100273
S/A SCROLL SHAFT BAR BEARING CYCLONE 500	11100274

MOTOR MOUNT

Description	Code
CYCLONE F400 - CC270 motor support	11039396
CYCLONE F400 - CC430 motor support	11039397
CYCLONE F400 - CC490 motor support	11039398

MOTOR

Description	Code
CYCLONE F400 - 400V 4P 1.1kW motor	11039400
CYCLONE F400 - 400V 4P 1.5KW motor	11039401
CYCLONE F400 - 400V 4P 2.2KW motor	11039402
CYCLONE F400 - 400V 4P 3KW motor	11039403
CYCLONE F400 - 400V 4P 4KW motor	11039404
CYCLONE F400 - 400V 4P 5.5KW motor	11039405
CYCLONE F400 - 400V 4P 7.5KW motor	11039406
CYCLONE F400 - 400V 4P 11KW motor	11039407
CYCLONE F400 - 400V 4P 15KW motor	11039408
CYCLONE F400 - 400V 4P 22KW motor	11039409
CYCLONE F400 - 400V 4-8P 1.1/0.26 motor	11039410
CYCLONE F400 - 400V 4-8P 1.7/0.36 motor	11039411
CYCLONE F400 - 400V 4-8P 2.3/0.5 motor	11039412
CYCLONE F400 - 400V 4-8P 3/0.65 motor	11039413
CYCLONE F400 - 400V 4-8P 3.5/0.7 motor	11039414
CYCLONE F400 - 400V 4-8P 5/1 motor	11039415
CYCLONE F400 - 400V 4-8P 6.8/1.4 motor	11039416
CYCLONE F400 - 400V 4-8P 10.5/2.2 motor	11039417
CYCLONE F400 - 400V 4-8P 15.5/2.7 motor	11039418
CYCLONE F400 - 400V 4-8P 22.5/4.4 motor	11039419
CYCLONE F400 - 400V 4-6P 1/0.3 motor	11039420
CYCLONE F400 - 400V 4-6P 1.5/0.45 motor	11039421
CYCLONE F400 - 400V 4-6P 2.5/0.8 motor	11039422
CYCLONE F400 - 400V 4-6P 3/1 motor	11039423
CYCLONE F400 - 400V 4-6P 4.5/1.5 motor	11039424
CYCLONE F400 - 400V 4-6P 6/2 motor	11039425
CYCLONE F400 - 400V 4-6P 10.5/3.5 motor	11039426
CYCLONE F400 - 400V 4-6P 16/5 motor	11039427
CYCLONE F400 - 400V 4-6P 23/7.2 motor	11039428

MOTOR HOOD

Description	Code
MOTOR BONNET CYCLONE F400 250	11100275
MOTOR BONNET CYCLONE F400 315-355	11100276
MOTOR BONNET CYCLONE F400 400	11100277
MOTOR BONNET CYCLONE F400 500	11100278

Spare parts - Fans

CYCLONE F400 casings

VARIABLE DRIVE PULLEY

Description	Code
Variable pulley - 1 PDV 93 AL 24	11039430
Variable pulley - 1 PDV 121 AL 24	11039431
Variable pulley - 1 PDV 121 AL 28	11039432
Variable pulley - 2 PDV 121 AL 24	11039433
Variable pulley - 2 PDV 121 AL 28	11039434
Variable pulley - 2 PDV 138 AL 28	11039435
Variable pulley - 2 PDV 138 AL 38	11039436
Variable pulley - 2 PDV 138 AL 42	11039437
Variable pulley - 2 PDV 160 AL 28	11039438
Variable pulley - 2 PDV 160 AL 38	11039439
Variable pulley - 2 PDV 160 AL 42	11039440
Variable pulley - 2 PDV 180 AL 38	11039441
Variable pulley - 2 PDV 180 AL 42	11039442
Variable pulley - 2 PDV 180 AL 48	11039443
Variable pulley - 2 PDV 160 AL 48	11039444

FIXED PULLEY

Description	Code
Fixed pulley - 140.2 SPB AL 38	11039447
Fixed pulley - 140.2 SPB AL 42	11039448
Fixed pulley - 160.2 SPB AL 38	11039449
Fixed pulley - 160.2 SPB AL 42	11039450
Fixed pulley - 160.2 SPB AL 48	11039453
Fixed pulley - 180.2 SPB AL 30	11039457
Fixed pulley - 106.2 SPZ AL 24	11039458
Fixed pulley - 106.2 SPZ AL 28	11039459
Fixed pulley - 125.2 SPZ AL 28	11039460
Fixed pulley - 132.2 SPA AL 28	11039461
Fixed pulley - 132.2 SPZ AL 38	11039462
Fixed pulley - 132.2 SPA AL 38	11039463
Fixed pulley - 132.2 SPB AL 38	11039464
Fixed pulley - 132.2 SPB AL 42	11039465
Fixed pulley - 150.2 SPB AL 48	11039466
Fixed pulley - 140.2 SPA AL 28	11039467
Fixed pulley - 150.2 SPB AL 28	11039468
Fixed pulley - 140.2 SPA AL 38	11039469
Fixed pulley - 150.2 SPB AL 38	11039470
Fixed pulley - 140.2 SPA AL 42	11039471
Fixed pulley - 150.2 SPB AL 42	11039472
Fixed pulley - 180.2 SPB AL 38	11039473
Fixed pulley - 180.2 SPB AL 42	11039474
Fixed pulley - 180.2 SPB AL 48	11039475
Fixed pulley - 75.1 SPZ AL 20	11039363
Fixed pulley - 80.1 SPZ AL 20	11039364
Fixed pulley - 80.2 SPZ AL 20	11039365
Fixed pulley - 85.2 SPZ AL 20	11039366
Fixed pulley - 95.2 SPZ AL 20	11039367
Fixed pulley - 95.2 SPA AL 25	11039368
Fixed pulley - 112.2 SPA AL 25	11039369
Fixed pulley - 132.2 SPA AL 25	11039370
Fixed pulley - 180.2 SPA AL 30	11039371
Fixed pulley - 140.2 SPB AL 30	11039372
Fixed pulley - 150.2 SPB AL 30	11039373
Fixed pulley - 160.2 SPB AL 30	11039374
Fixed pulley - 224.2 SPB AL 35	11039375

Note: The fixed pulley can be adapted into a motor pulley or a receiver pulley.

Attention: The diameter of the shaft is specified in the descriptions with the letters AL (bore).

Spare parts - Fans

VELONE roof fans CE

1 speed single-phase electric motors

Description	Code
1.1 kW motor - 4 poles	11121809
0.75 kW motor - 4 poles	11121909
0.37 kW motor - 4 poles	11121910
0.24 kW motor - 4 poles	11121911

2 speed three-phase electric motors

Description	Code
Motor 2-sp BI 400V 4-6P 0.75/0.25kW	11121808
Motor 2-sp BI 400V 4-6P 1.10/0.30KW	11121807
Motor 2-sp BI 400V 4-6P 1.50/0.37KW	11121805
Motor 2-sp BI 400V 6-8P 1.10/0.55kW	11121804
Motor 2-sp BI 400V 6-8P 2.20/1.30KW	11121803
Motor 2-sp BI 400V 6-8P 4/1.10KW	11121802
Motor 2-sp DAH 400V 4-8P 0.60/0.15kW	11121801
Motor 2-sp DAH 400V 4-8P 0.80/0.20KW	11121800
Motor 2-sp DAH 400V 4-8P 1.20/0.30KW	11121799
Motor 2-sp DAH 400V 4-8P 1.60/0.40KW	11121795
Motor 2-sp DAH 400V 6-12P 2.20/0.55kW	11121794
Motor 2-sp DAH 400V 6-12P 3/0.55kW	11121792
Motor 2-sp DAH 400V 6/12P 1.10/0.22kW	11121791

1 speed three-phase electric motors

Description	Code
Motor 1-sp 230-400V 4P 0.37kW	11121842
Motor 1-sp 230-400V 4P 0.55KW	11121841
Motor 1-sp 230-400V 4P 0.75KW	11121840
Motor 1-sp 230-400V 4P 1.1KW	11121839
Motor 1-sp 230-400V 4P 1.5KW	11121838
Motor 1-sp 230-400V 6P 0.18kW	11121833
Motor 1-sp 230-400V 6P 0.37KW	11121832
Motor 1-sp 230-400V 6P 0.55KW	11121831
Motor 1-sp 230-400V 6P 1.1KW	11121830
Motor 1-sp 230-400V 6P 2.2KW	11121829
Motor 1-sp 230-400V 6P 3KW	11121828
Motor 1-sp 230-400V 6P 5.5KW	11121827
Motor 1-sp 230-400V 8P 0.37kW	11121817
Motor 1-sp 230-400V 8P 0.55KW	11121816
Motor 1-sp 230-400V 8P 1.1KW	11121815
Motor 1-sp 230-400V 8P 1.5KW	11121814
Motor 1-sp 230-400V 8P 3KW	11121813

Roof fan transformer kit - replacing a VELONE 1 with a VELONE 2 (May 2007)

Description	Code	
VELONE base frame kit 533 / VELONE2	11021090	Transforms VELONE1 Size 1 base - dimension 533 x 533 into VELONE2 **Size 1** base 533 x 533 mm
VELONE base frame kit 698 / VELONE2	11021091	Transforms VELONE1 Size 2 base - dimension 698 x 698 into VELONE2 **Size 1** base 533 x 533 mm **+ Size 2** 698 x 698
VELONE base frame kit 698 / VELONE2	11021092	Transforms VELONE1 Size 3 base - dimension 834 x 834 into VELONE2 **Size 2** base 698 x 698 mm **+ Size 3** 834 x 834
VELONE base frame kit 984 / VELONE2	11021093	Transforms VELONE1 Size 4 base - dimension 984 x 984 into VELONE2 **Size 3** base 834 x 834 mm **+ Size 4** 984 x 984

Replacing a VT roof fan with a VELONE 2 (May 2007)

Description	Code	
KIT VT 535 / VELONE 2 base 533	11021099	Velone 2 - Size 1
KIT VT 750 / VELONE 2 base 533	11021098	Velone 2 - Size 1

Note: These kits are used to adapt an installation, remember to check the aeraulic characteristics.

A sales network at your service

Agencies

The Aldes Sales network employs 200 people and boasts 18 sales agencies, storage warehouses and 6 regional distribution hubs.

Aldes Bordeaux
22, rue Gustave Eiffel - CS 20005
33693 Mérignac Cedex
Phone 05 56 34 28 79 - Fax 05 56 34 34 25
Departments: 16-17-24-33-40-47-64

Aldes Clermont-Ferrand
ZI du Brézet Est - 11, rue Pierre Boulanger
63100 Clermont-Ferrand
Phone 04 73 74 68 00 - Fax 04 73 90 48 67
Departments: 03-15-19-23-42-43-63-87

Aldes Dijon
10, rue Joseph-Jacquard
21300 Chenôve
Phone 03 80 52 38 74 - Fax 03 80 52 35 85
Departments: 21-25-39-58-70-71-89-90

Aldes Grenoble
ZAC des Ruires - Secteur A
1, rue Irène Joliot Curie - 38320 Eybens
Phone 04 76 14 74 50 - Fax 04 76 25 26 33
Departments: 38-73-74

Aldes Lille
Rue Jean Monnet - ZA du Grand Logis - Lompret
59840 Pérenchies
Phone 03 20 22 40 42 - Fax 03 20 22 28 79
Departments: 02-08-10-51-59-62-80

Aldes Lyon
50 rue Jean Zay - Multi parc de Parilly - Bât K
69800 Saint Priest
Agence Rhône
Phone 04 78 78 89 89 - Fax 04 78 78 89 80
Departments: 69
Agence Ain - Vallée du Rhône
Phone 04 78 78 88 66- Fax 04 78 78 88 60
Departments: 01-07-26

Marseille : Aldes Aubagne
ZI les Paluds II
507, avenue des Paluds - 13400 Aubagne
Phone 04 42 62 80 20 - Fax 04 42 62 80 29
Departments: 13-83 (West)-84

Aldes Montpellier
ZAC Garosud
96, rue Mehdi Ben Barka
34070 Montpellier
Phone 04 67 42 16 16 - Fax 04 67 69 03 65
Departments: 11-30-34-48-66

Aldes Nancy
55, impasse Henri Becquerel
Zone Industrielle - 54710 Ludres
Phone 03 83 25 79 79 - Fax 03 83 25 78 81
Departments: 52-54-55-57-88 (South-West)

Aldes Nantes
12, rue Jan Palach - ZAC de la Lorie
BP 80405 - 44819 Saint-Herblain Cedex
Phone 02 40 92 15 10 - Fax 02 40 92 14 27
Departments: 44-49-56-85

Aldes Nice
Routes des Cistes - Euro 95 - Bât. B
ZI Les trois moulins - BP 164
06603 Antibes Cedex
Phone 04 97 21 28 10 - Fax 04 93 33 19 13
Departments: 04-05-06-2A-83 (East)-98-2B

Paris : Aldes La Courneuve
75, rue Rateau - Bât C5
93127 La Courneuve Cedex
Phone 01 43 11 10 10 - Fax 01 48 36 14 72
Departments: 60-75-92-93-95

Paris : Aldes Vitry
19, quai Jules Guesde
94400 Vitry
Phone 01 43 91 65 65 - Fax 01 43 91 48 89
Departments: 77-78-91-94

Aldes Rennes
Route de Lorient - ZA Les Trois Marches Nord
35132 Vezin Le Coquet
Phone 02 99 14 51 60 - Fax 02 99 14 57 92
Departments: 22-29-35-53

Aldes Rouen
ZI Parc de la basse Seine
Rue de la grande Epine - BP 553
76800 Saint Etienne du Rouvray
Phone 02 32 19 50 50 - Fax 02 35 61 05 73
Departments: 14-27-50-61-76

Aldes Strasbourg
13, rue du Port du Rhin - BP 18
67000 Strasbourg
Phone 03 88 60 13 10 - Fax 03 88 61 54 10
Departments: 67-68-88 (Nord-est)

Aldes Toulouse
5, rue Caulet - ZAC Saint-Martin du Touch
31300 Toulouse
Phone 05 34 60 44 60 - Fax 05 34 60 50 67
Departments: 09-12-31-32-46-65-81-82

Aldes Tours
27, rue du Colombier
37700 Saint-Pierre-des-Corps
Phone 02 47 63 15 15 - Fax 02 47 32 08 23
Departments: 18-28-36-37-41-45-72-79-86

General Public Division
20, boulevard Joliot Curie - 69694 Vénissieux Cedex
Phone 04 78 77 14 99 - Fax 04 78 77 14 90

Promotion and Specification Division, France
19, quai Jules Guesde - 94400 Vitry-sur-Seine
Phone 01 43 91 65 65 - Direct 01 43 91 65 55
Fax 01 43 91 48 89

Central Warehouse in Mions (69)
- National logistics and storage hub.
- Manufacture of ducts and accessories.
- Surface area of 18,600 m².

Within your agency you can find:
- All product information (showroom, document library, etc.).
- A list of local training courses and events in the agency.
- All the services (advice, equipment rental, permanent stock, etc.) you need.

6 regional regional distribution hubs
- Lyon • Marseille • Nantes • Paris • Strasbourg
- Toulouse

Subsidiaries

EUROPE

Germany
Aldes Lufttechnik
Fanny-Zobel-Str. 5,
D-12435 Berlin
Phone: +49 30 532 19 000
Fax: +49 30 532 19 001
www.aldes.de

Belgium
Aldes Benelux
Rue Jean Verkruys 60
B-4681 Hermalle s/Argenteau
Phone: +32 2725 1380
Fax:+ 32 27 25 1753
www.aldesbenelux.com

Spain
Alder Venticontrol
Poligono Industrial Prado Overa
C/Puerto Pajares, 29
28919 Leganes (MADRID)
Phone: +34 91 428 20 12
Fax:+34 91 746 31 32
www.alderventicontrol.es

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20 boulevard Joliot Curie
69200 Vénissieux
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Fax: + 33(0)4 78 76 15 97
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Via Gran Bretagna, 35
41122 Modena (MO)
Phone: +39 059 315 707
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14010 DUSINO S. MICHELE
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Fax:+39 01 41 93 04 70
www.climovent.com

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Aldes Canada
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Saint-Léonard-d'Aston - Québec
CANADA JOC 1MO
Phone: +1 819 399-3400 | +1 800 262-0916
Fax: +1 819 399-4001
www.aeromatic-aldes.com

United States
American Aldes Ventilation Corporation
Northgate Center Business Park
4521 19th Street Court E, Ste 104
BRADENTON FL34203
Phone: +1 941 351 34 41
Fax:+1 941 351 34 42
www.americanaldes.com

MIDDLE EAST/ INDIAN OCEAN

United Arab Emirates
Aldes Middle East (FZE)
P.O. Box 8653, SHARJAH
Phone: +971 6 5578285
Fax:+971 6 5578405
www.aldes.ae

Mauritius
Aldes Mauritius Island
Industrial Estate
La Tour Koenig
Pointe Aux Sables
ILE MAURICE
Phone: + 230 234 2628
Fax: + 230 234 2665
www.aldes-reunion.com

Réunion island
Aldes Réunion
15 rue du Maine
ZAC Moufia
97400 SAINTE CLOTILDE
Phone: +262 97 96 81
Fax:+262 28 78 94
www.aldes-reunion.com

ASIA

China
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22F, No.1016 Dingxi Road
Shanghai. 200050
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Fax:+86 21 62 26 91 15
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The Aldes Group is currently represented in more than 100 countries worldwide with a network of subsidiaries and distributors.

Aldes Head Office

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Your contact in France*:
International Department

20, boulevard Irène Joliot Curie
69694 Vénissieux Cedex – France
E-mail : aldes_international@aldes.com
Phone: + 33 (0)4 78 77 15 34
Fax: + 33 (0)4 78 77 15 56

Staff:
Export managers, in-house technicians and administrative assistants are available to help.

Design:
A dedicated team to supply the required information and advice.
A team of experts in technical design and costing studies.

* For any country in which Aldes does not have a subsidiary, please contact our International Department.

Improving air quality and thermal comfort

Studies carried out on air quality inside buildings show the presence of a multitude of pollutants that are dangerous to health. At the same time, the building construction industry is confronted with an equally significant challenge - the reduction of greenhouse gases. Aldes products and global solutions enable the industry to be fully capable of dealing with this important health and environmental issue, in accordance with the Grenelle Environment Forum and the requirements of RT2012.

AFAQ ISO 9001

Aldes Test Centre, fully adapted technical resources

For high performance products and customised solutions, the Aldes Test Centre uses human and technical skills to advise and support its customers throughout the testing period until they are fully satisfied.
This means that Aldes can offer high quality products in terms of aeraulics, acoustics and aesthetic design, which also respect energy performance requirements.

ECO-REPONSES

Way ahead of the regulations.

RT 2012 Since the beginning, Aldes has always anticipated new regulations by putting productsn on the market with high-performance aeraulic, acoustic and energy saving qualities, which even exceed standard requirements. That's why products such as air diffusers (Twisted, Techlined), the micro-watt range of low energy fans (inoVEC micro-watt, Bahia Compact micro-watt), heat recovery ventilation systems (Dee Fly, DFE, DFR), the Modulated Ventilation system for Commercial Premises, ducts and accessories with Virtuo-fix seals, T.Zen domestic Températion® systems and the T.Flow thermodynamic water heater are already fully validated by the new RT2012 regulations.

Aldes is committed to protecting the environment.

As an active member of the Collective Action Group "Isolons la Terre contre le CO2" (Let's insulate the Earth against CO2), Aldes has committed itself, together with 9 other industrial leaders in the construction sector, to a large-scale plan to reduce greenhouse gas emissions and energy consumption in buildings. This Collective Action Group was responsible for the "Effinergie" energy efficiency label.

ISOLONS LA TERRE CONTRE LE CO_2

effinergie
Qualité de vie et économie d'énergie

Go further with Aldes

help
DIAGNOSTIC
DESIGN
PRODUCTION
MAINTENANCE

In addition to its training programmes, Aldes also offers services to support those who are involved in their own specific capacity at each stage of the process, from project diagnosis to maintenance, in order to promote the smooth operation of systems.
For indoor air quality and the comfort and safety of occupants, there are 4 types of services available:

Help with diagnostics

For new construction and retrofit projects, Aldes supplies its know-how in aeraulics to help you to analyse your buildings and recommends the best solution to suit your requirements.

Examples:

- Rental of measuring instruments.
- Measurement of a building's permeability.
- Measurement of a duct's permeability to air.
- Assistance with the inspection of installations.

Production support

Aldes teams are on hand in agencies or in the field to support you with the efficient installation of quality systems.

Examples :

- Installation guides.
- Participation, at your request, in a site coordination meeting.
- Help with checking the smooth operation of the installation and adjustment following test measures carried out on request.

Maintenance support

To ensure that the installations maintain their performance over the long term and that their maintenance is as simple as possible, Aldes offers you various services.

Examples :

- Technical information on the products for your installation.
- Spare parts management.
- Proposition of a standard maintenance contract for certain products.
- Offer of an extended warranty period (for certain products and under certain conditions).

Waste Electrical and Electronic Equipment

The WEEE and ROHS European Directives have been transposed into French law.
Aldes has opted to render the eco-participation visible for all its electronic and electrical equipment, using the symbol of the crossed-out wheeled bin to identify them.
The eco-participation is invoiced by the producer and passed on in identical form right down to the end user for «household» class waste.
Aldes is a member of the ADEME group of producers.
Aldes is a member of the «Eco-Systèmes» environmental organisation, which collects and processes WEEE. The price list is available on www.eco-systemes.fr

Battery recycling

Some of our equipment uses batteries. In accordance with decree 2009-1139 of 22 September 2009, information concerning the identification, insertion and removal of batteries is included in the instruction leaflets. At the end of their service life, batteries should be taken to appropriate collection points.

REACH European Regulation

(Registration, Evaluation, Authorisation of Chemical substances).
In accordance with the REACH directive, regulation no. 1907/2006/CE, we provide our customers with the information featured in article 33.1 of the regulation for all products sold containing items on the list of chemical substances, which is regularly reviewed by the European Agency for chemical products.

Paper recycling

Aldes prints its catalogues on PEFC paper from sustainably-managed forests. At the end of their life, catalogues should be taken to an appropriate collection point.

PEFC ecofollo

Packaging recycling

Once the products have been installed, packaging should be sorted and disposed of at appropriate collection points.

Notes

For more information on the fire protection solution,
contact your Aldes sales advisor, visit aldes.com or go to

Fire_Protection_9_Comp_ED_Gb_1 - 11/2015 - RCS Lyon 956 506 828 - Aldes reserves the right to modify its products at any time to introduce new technologies. - Crédit photos : Getty Images