Roof mounted filter fans

KEY FEATURES

- 1 housing with 4 different airflow options
- Cover screws: ¼ turn to release / push to fasten
- Mounting features for Temperature Control and/or Alarm Thermostats

Options

- Voltage: DC or AC
- Type: Centrifugal or Axial
- Filter Media: G3 or Aluminium
- Mounting: Clips or screws

PRODUCT DESCRIPTION

Roof mounted filter fans are available in 4 different voltages, 24 V DC, 120V or 230 V and 400/460 V 3~.

These filter fans are designed for use in industrial enclosures in combination with one or more wall mounted inlet filters. Please refer to Appendix A for suitable types of inlet filters.

Alternatively, the roof mounted outlet filter can be used in conjunction with wall mounted inlet filter fans.

G3 filter media is used for IP 54 / Type 12, 3R applications whereas aluminium filter media is used for IP 21 / Type 1 applications.

G3 filter media can be accessed for replacement by unfastening the 2 quarter turn screws on the cover. Once replaced, the cover can be secured again by firmly pushing the screws.

Aluminium filter media can be accessed in the same way as the G3 filter media, but due to their rigid frame, the fan bracket must also be unscrewed to allow full access.

USER MANUAL

This instruction manual contains information and instructions to enable the user to work safely, correctly and economically on the unit. Understanding and adhering to the manual can help one:

- avoid any dangers.
- reduce repair costs and stoppages.
- extend and improve the reliability and working life of the unit.

PLEASE ENSURE TO USE THE RIGHT VERSION OF THE INSTRUCTION MANUAL SUITABLE FOR YOUR UNIT.

Intended use
To meet the conditions of use, all the information and instructions in the instruction manual must be adhered to.

LEGAL REGULATIONS

Liability
The information, data and instructions contained in this instruction manual are current at the time of going to press. We reserve the right to make technical changes to the unit in the course of its development. Therefore, no claims can be accepted for previously delivered units based on the information, diagrams or descriptions contained in this manual. No liability can be accepted for damage and production caused by:

- disregarding the instruction manual
- operating error
- inappropriate work on or with the unit
- the use of non-specified spare parts and accessories
- unauthorised modifications or changes to the unit by the user or his personnel
- the supplier is only liable for errors and omissions as outlined in the guarantee conditions contained in the main contractual agreement. Claims for damages on any grounds are excluded.

SAFETY INSTRUCTIONS

Upon delivery the unit is already meeting current technical standards and can therefore be safely taken into operation. Only authorised personnel are allowed to work on the unit. Unauthorised personnel must be prohibited from working on the unit. Operating personnel must inform their superiors immediately of any malfunction of the unit.
Please note that before starting to work on or with the unit, a procedure must be carried out inside the cabinet on which the unit is to be mounted.
Before commencing work inside the cabinet, the control cabinet manufacturer's instruction must be read with regards to:

- safety instructions.
- instructions on taking the cabinet out of operation.
- instructions on the prevention of unauthorised enclosure reconnection.

The electric equipment meets the valid safety regulations. One can find dangerous voltages (above 50 V AC or above 100 V DC):

- behind the enclosure doors.
- on the power supply in the unit housing.

The unit has to be operated according to the type plate and the wiring diagram, and must be protected externally from overloading and electrical faults via suitable protective devices.

APPENDIX A: Suitable inlet filters

Type 12 applications:
Use a min. of (x2) cut-out size 291 x 291mm inlet filters
3R applications:
Use a min. of (x2) cut-out size 291 x 291mm 3R inlet filters

APPENDIX B: Fuse recommendations

C'FUGAL:

• LoFlo	AC 120V	0.9 A (T)
• LoFlo	AC 230V	0.5 A (T)
• LoFlo	AC 400/460V	0.3 A (T)
• MidFlo	AC 120V	1.6 A (T)
• MidFlo	AC 230V	0.8 A (T)
• MidFlo	AC 400/460V	0.5 A (T)
• HiFlo	AC 120V	2.5 A (T)
• HiFlo	AC 230V	1.25 A (T)
• HiFlo	AC 400/460V	0.7 A (T)
• XtraFlo	AC 120V	4.0 A (T)
• XtraFlo	AC 230V	2.0 A (T)
• XtraFlo	AC 400/460V	1.1 A (T)

Axial:

• LoFlo	DC 24V	0.8 A (T)
• LoFlo	AC 120V	0.6 A (T)
• LoFlo	AC 230V	0.3 A (T)

TECHNICAL DATA

AC voltage:

- 120 V (60 Hz)
- 230 V (50/60 Hz)
- 400/460 V 3~ (50/60 Hz)

DC voltage:

- 24 V - only SELV DC power sources must be used

C'FUGAL	Type	Airflow	Max. Power
• LoFlo	AC	490 m^3/hr	80 W
• MidFlo	AC	630 m^3/hr	145 W
• HiFlo	AC	970 m^3/hr	230 W
• XtraFlo	AC	1,400 m^3/hr	370 W

AXIAL	Type	Airflow	Max. Power
• LoFlo	DC / AC	275 m^3/hr	24 / 57 W

Dimensions W x H x D: 457 x 457 x 147 mm

Fuse protection: External (not integrated)
Refer to **Appendix B** for fuse recommendations

Operating temperature excluding C'FUGAL XtraFlo: -10˚C - 55˚C (max. 95% r.H.)
Operating temperature C'FUGAL XtraFlo: -10˚C - 50˚C (max. 95% r.H.)

Mounting: Clips or (x4) M6 screws

Ingress protection (G3 / Alum. filter): IP 54 / IP 21

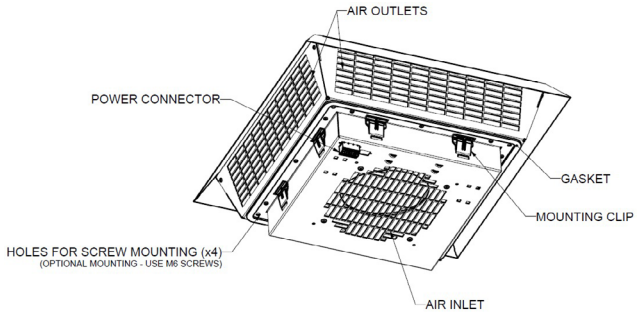
UL TYPE (G3 / Alum. filter): Type 12, 3R / Type 1

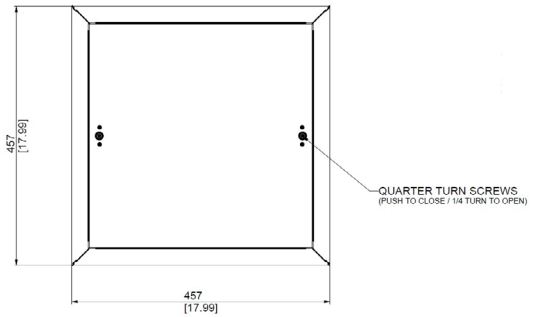
Weight (max): 8 kg

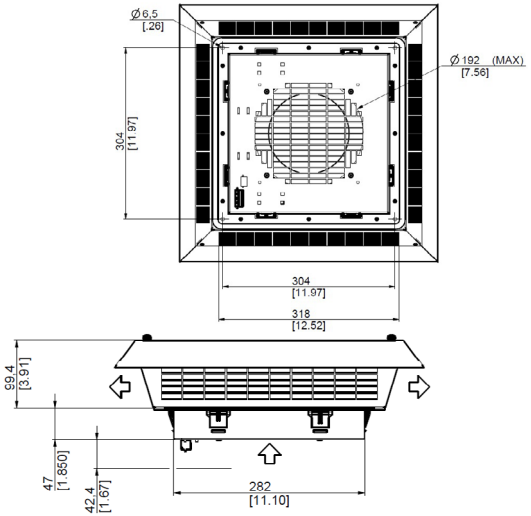
Materials:
- **Housing / Cover:** Mild steel powder coated RAL 7035
- **Grille / Fan Bracket:** Aluzinc

Approvals: CE, cURus

LAYOUT AND DIMENSIONS







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Clip mounting:

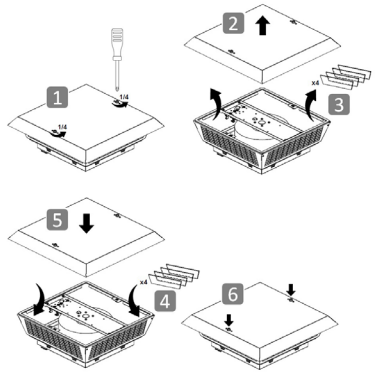
Lower the unit inside the cut out. To ensure correct seating and adequate compression of the sealing gasket, push firmly on all four corners of the unit until clicking of the mounting clips can no longer be heard.

Screw mounting:

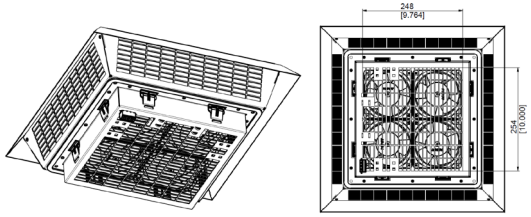
Lower the unit inside the cut out. To ensure correct seating and adequate compression of the sealing gasket, fasten the screws using a **MINIMUM TIGHTENING TORQUE** of 5 Nm.

G3 FILTER REPLACEMENT

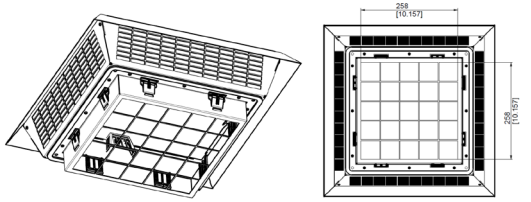
For the duration of the replacement the unit must be disconnected from the electrical supply.



AXIAL



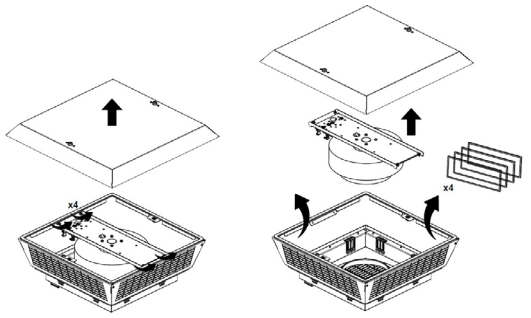
OUTLET FILTER



ALUMINIUM FILTER REPLACEMENT

For **AXIAL** the aluminium filter can be replaced as detailed in section G3 filter replacement.
For **C'FUGAL**, the fan bracket must be removed as detailed below to enable access to the aluminium filters.

Care must be taken to ensure that no wires are damaged during the process.



MOUNTING INSTRUCTIONS

Read this instruction sheet before installing the filter fan.
Only specialised personnel are allowed to install, maintain and clean the unit.

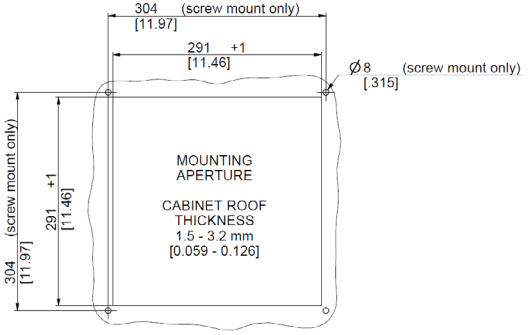
Such personnel must ensure that for the duration of the installation, maintenance and cleaning the unit is disconnected from the electrical supply

Installation

The product can be mounted to the enclosure using
- Integrated clips or
- (x4) M6 screws (screws are not provided)

ROOF CUTOUT DIMENSIONS

*Note: The (x4) 8 mm holes are **NOT REQUIRED** if using clips.*



ELECTRICAL CONNECTION

Check the serial label before making any connections to the power supply to ensure that current and voltage ratings are met. For the 24 VDC version, only SELV DC power sources must be used.