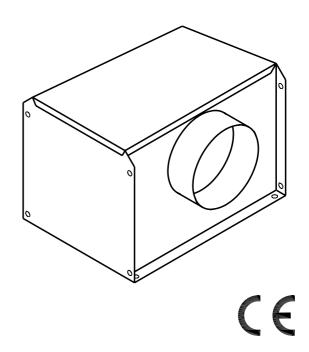


# FAN BOX IN-LINE CENTRIFUGAL FANS

OPERATION AND MAINTENANCE INSTRUCTIONS



### Stock Ref. Nos.

FB100B FB250P FB125B FB315B FB150B FB400B FB160B FB500B

FB200B

# Guardian Product Range

READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS
PLEASE LEAVE THESE INSTRUCTIONS WITH END USER



#### INSTALLATION AND WIRING INSTRUCTIONS FOR THE FAN BOX RANGE

#### IMPORTANT – READ THESE INSTRUCTIONS FULLY BEFORE COMMENCING THE INSTALLATION

DO NOT install this product in areas where the following may be present or occur: -

- Excessive oil or grease laden atmosphere.
- · Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures higher than 40°C or less than –5°C.
- Relative humidity above 95%.
- Possible obstructions which will hinder the access or removal of the fan.
- Sudden ductwork bends and transformations close to the fan.

#### **SAFETY GUIDANCE NOTES**

All wiring must be in accordance with current I.E.E. Regulations, or the appropriate standards of your country.

Ensure that the correct power supply (Voltage, Frequency and Phase) is available and complies with the rating label.

This fan is designed as an inline duct fan to be positioned between lengths of ducting. Short duct runs terminating within 1.5m of the fan, must incorporate suitable safety guards unless the fan is mounted higher than 2.3m.

Certain applications may require the installation of sound attenuations or other acoustic treatment to achieve acceptable noise levels in the ventilated area or the area surrounding the fan installation.

When the fan is used in a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.

Where a fan is used to supply air into a room, ensure that the fan intake is located a minimum of 600mm from any flue outlet.

### **GENERAL WIRING**

<u>WARNING</u>: - THE FAN AND ANCILLARY CONTROL EQUIPMENT <u>MUST</u> BE ISOLATED FROM THE POWER SUPPLY DURING INSTALLATION AND / OR MAINTENANCE. THE EQUIPMENT MUST BE EARTHED.

Fuses in the circuit should be regarded as only protecting the wiring against short circuits or earth faults; they are not suitable for overload protection.

The equipment should be protected with a local 2/3 pole isolator switch, having a contact separation of at least 3mm.

Select and follow the appropriate wiring diagram for the fan, controller and/or other devices being installed.

Remove the terminal box cover. Connect the power supply from the local isolator (via any appropriate controls) to the terminal box using appropriate cable gland.

Check the connections to the terminals have been made correctly and replace the cover. Ensure that all cable gland/grommet and terminal box cover fixing are tightened to prevent water ingress.

Connect the power supply, ensure that the fan and ancillary equipment is operating correctly.

#### **INSPECTION**

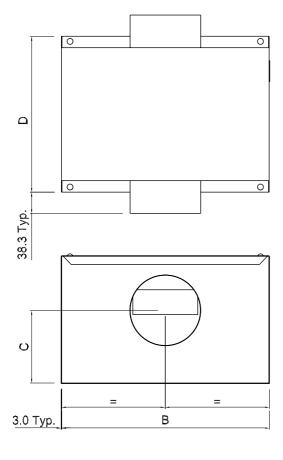
ISOLATE FROM POWER SUPPLY AND ENSURE POWER CANNOT BE RE-CONNECTED BEFORE ANY WORK IS CARRIED OUT

The fan should, at intervals appropriate to the installation, be inspected and cleaned to ensure there is no build up of dirt or other deposits on the impeller or the motor (CAUTION - Take care not to dislodge any balance weights which may be fitted to the impeller). If the fan is handling dust laden air, it is recommended that a filter is installed.

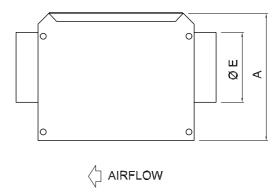
The fan motors are fitted with 'sealed for life' bearings and, under normal circumstances, should not require maintenance.

#### RESPONSIBILITY

Roof Units Limited, as suppliers of the equipment, cannot be responsible for the final installation and electrical connection of the product on site. We have made reasonable effort to offer guidance and assistance but the installer and electrical contractor on site have a responsibilty for ensuring the equipment is safely and securely installed and electrically/mechanically safe in accordance with statutory requirements. The fans are supplied as a component to be incorporated into a ventilation system. The final complete system installation, that includes the fans, MUST meet all relevant directives.



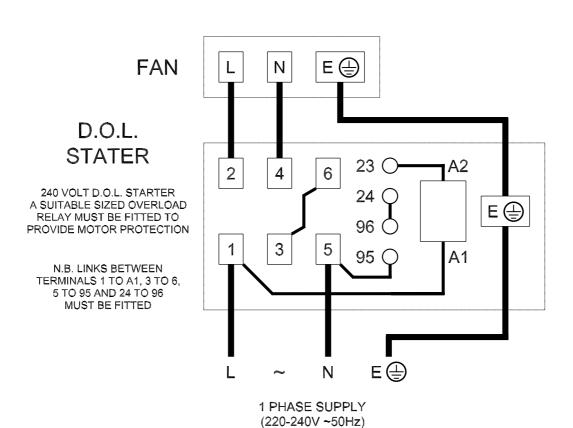
UNIT SIZE	А	В	С	D	E
100B	268	363	171	272	97
125B	268	363	171	272	122
150B	322	400	203	366	147
160B	322	400	203	366	157
200B	322	400	203	366	197
250B	472	614	320	499	247
315B	530	630	300	560	312
400B	530	630	300	560	397
500B	530	630	300	560	497





## FAN BOX IN-LINE FANS CONTROLLED BY D.O.L. STARTER

FB100B	FB250B
FB125B	FB315B
FB150B	FB400B
FB160B	FB500B
FB200B	





## FAN BOX IN-LINE FANS CONTROLLED BY AN ELECTRONIC SPEED CONTROLLER

FB100B FB125B FB150B FB160B FB200B	FB250B FB315B FB400B FB500B		FAN	
		SP CONTROLLER		L N U2 U1 AUX E
				PHASE SUPPLY

### FAN BOX IN-LINE FANS CONTROLLED BY A TRANSFORMER SPEED CONTROLLER

FB100B FB125B FB150B FB160B FB200B	FB250B FB315B FB400B FB500B		FAN	L N E
		SPM CONTROLLER	E	N L1 U2 U1
			E	⊕ N~L

(220-240V ~50Hz)

#### **Roof Units Guarantee**

Applicable only to products installed and used in the United Kingdom. For details of guarantee outside the United Kingdom contact your local supplier.

Roof Units guarantees its products for one year from the date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company's option replaced, without charge, provided that the product:

- 1) has been installed and used in accordance with the instructions given with each unit.
- 2) has not been connected to an unsuitable electricity supply. (The correct electricity supply voltage is shown on the product rating label attached to the unit.)
- 3) has not been subjected to misuse, neglect or damage.
- 4) has not been modified or repaired by any person not authorised by the company.

#### IF CLAIMING UNDER TERMS OF GUARANTEE

Please return the complete product, carriage paid to your original supplier or to Roof Units, by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing evidence of date and source of purchase.

As part of the policy of continuous product improvement Roof Units reserves the right to alter specifications without notice.



Fleming Way, Crawley, West Sussex. RH10 9YX

Tel: 01293 441570 Fax: 01293 534898

e-mail: RU@roofunitsltd.co.uk