

Scarth Road, Sowerby Woods Industrial Estate, Barrow-in-Furness, Cumbria, LA14 4RF Telephone: +44 (0)1229 835555 Facsimile: +44 (0)1229 870332 Email: enquiries@moduflow.co.uk www.moduflow.co.uk

Powerflo Roof Fans



The base and cowl are manufactured in glass fibre reinforced polyester resin and are impervious to weather. As such the product will have a long life under normal weather conditions.

When required, soaker sheets are available as optional extras, factory moulded to suit roof profiles.

Maintenance is minimal. External access to the fan is made easy by the removal of the fan cowl.

Features

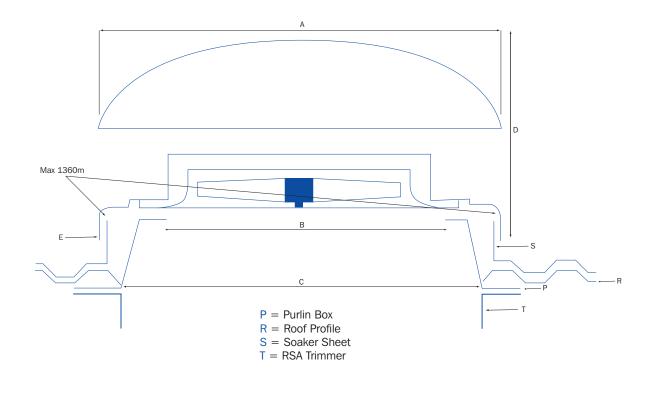
- · GRP cowl resistant to UV light
- Various sizes, 315 to 710 are protected to IP65
- 800 to 1000 IP55
- Class F motor insulation
- Temperatures up to 70°C
- Aluminium impellers
- 3 Year Warranty
- A full range of accessories are available

Powerflo Roof Fans

	Α	В	С	D	E	S	
Unit	Weather	Purlin box	Purlin box base/	Unit	Weatherskirt	Soaker sheet	Weight
ref	Cowel sq	Aperture	Roof aperture	height	Base sq	Kerb - sq	Kg
PF315	555	350	515	340	520/555	510	6.5
PF350	675	400	680	380	660/695	650	8.5
PF 400	765	510	780	460	755/795	750	12
PF 450	765	510	780	460	755/795	750	12
PF 500	995	620	910	50	920/960	890	21
PF560	995	620	910	550	920/960	890	21
PF630	1115	780	950	650	1010/1055	1000	27
PF710	1115	780	950	650	1010/1055	1000	27
PF800	1410	910	1150	750	1125/1170	1130	34
PF1000	1630	1140	1390	750	1360/1405	1365	45

DIMENSIONS & WEIGHTS

All dimensions indicated are nominal and subject to design change. The right to alter specification is reserved. Owing to the hand lay process, all weights are indicative and subject to variation.

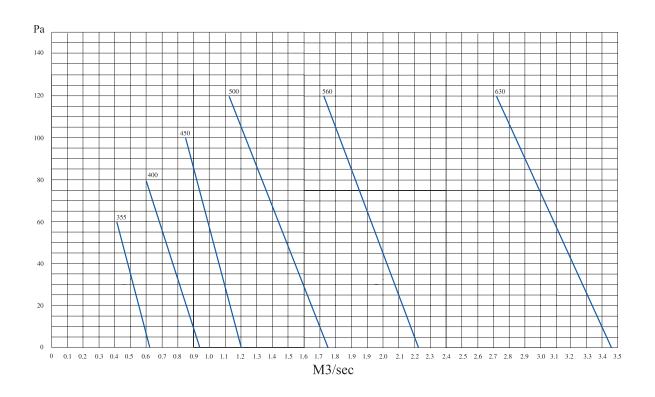


PERFORMANCE

The range shown here incorporates fan units having FID performance at 4 pole speed. Alternative fans of different characteristics and running at different speeds are available. Please check with Sales Office

Fan Code prefix applies to all models	Model	Fan Size	Volume FID cfm m³/h		Approx kw	Sound dba
	400	355	1590	2700	0.20	58
Single phase supply	100	400	2295	3900	0.30	61
PF-14/Fan size	500	450	3530	6000	0.50	64
		500	4765	8100	0.75	69
3 phase supply PF-34/Fan size	600	560 630	6415 8180	10900 13900	1.10 1.50	70 73

Dimensions in millimetres



EC DECLARATION OF INCORPORATION FOR PARTY COMPLETED MACHINERY. (MACHINERY DIRECTIVE 2006/42/EC, ANNEX II.I.B)

Manufacturer:	Moduflow Fan Systems Ltd. Scarth Road Sowerby Woods Industrial Estate Barrow-in-Furness Cumbria LA14 4RF
Type of Machinery:	Fan used for moving air or other gases.
Model:	POWERFLO ROOF FANS

Manufacturer's Ref / Serial No:

L hereby declare that the Essential Health and Safety Requirements of Directive 2006/42/EC that are listed in Annex 1 of this Declaration are applied and fulfilled and that the relevant technical documentation is compiled in accordance with part B of Annex VII of the Directive.

Relevant information on the partly completed machinery will be supplied electronically or by post, without prejudice to the intellectual property rights of the manufacturer, in response to a reasoned request by the national authorities.

I furthermore declare that fans manufactured by Moduflow Fan Systems Ltd. are driven by AC induction motors and are inherently compliant with the requirements of the Electromagnetic Compatibility Directive (2004/108/EEC) if supplied with a truly sinusoidal AC supply. Where the fan motor is supplied via a frequency converter or other electronic control, verification of compatibility together with cabling should be sought from the control supplier.

This partly completed machinery must not be put into service until the final machinery or installation into which it is to be incorporated has been declared in conformity with th provisions of Directive 2006/42/EC, where appropriate.

Manufacturer's Representative: R P Whitworth.

Signature:

Date:

Position: Director

ANNEX I

(EC DECLARATION OF INCORPORATION FOR PARTY COMPLETED MACHINERY)

Essential health and safety requirements relating to the design and construction of the Partly Completed Machinery.

The following Essential Health and Safety Requirements of Directive 2006/42/EC Annex 1.1, are applied and fulfilled as appropriate

- 1.1.3 Materials and products
- 1.1.5 Design of machinery to facilitate its handling 1.3.1 Risk of loss of stability
- 1.3.2 Risk of break-up during operation 1.3.4 Risk due to surfaces, edges or angles
- 1.3.6 Risk related to variations in operating conditions
- 1.5.1 Risk related to electricity supply
- 1.5.4 Errors of fitting
- 1.5.6 Fire
- 1.5.7 Explosion 1.5.9 Vibrations
- 1.5.10 Radiation
- 1.5.11 External radiation
- 1.5.13 Emissions of hazardous materials and substances
- 1.6.4 Operator intervention
- 1.7.1 Information and warnings on the machinery
- 1.7.3 Marking of machinery (as appropriate without CE mark)
- 1.7.4 Instructions
- 1.7.4.1 General principles for the drafting of instructions
- 1.7.4.2 Contents of the instructions 1.7.4.3 Sales literature

Presumption of conformity with the above listed EHSRs is by application of relevant parts of the following standards

Applied harmonized standards in particular: EN ISO 12100-1:2003+A1:2009, EN ISO 12100-2:2003+A1:2009, EN 60204-1:2006+A1:2009, EN ISO 5801:2008 (BS 848-1:2007).

Applied national standards in particular: BS 848-2.1:2004 (BS ISO 13347-1:2004), BS 848-6:2003 (BS ISO 14695:2003), BS 848-7:2003 (ISO 14694:2003).

INFORMATION FOR SAFE INSTALLATION. OPERATION AND MAINTENANCE OF MODUFLOW LTD VENTILATION EQUIPMENT

To comply with EC Council Directives 2006/42/EC Machinery Directive. To be read in conjunction with the relevant Product Documentation [see 2.1]

1.0 GENERAL

1.1 The equipment referred to in this Declaration of Incorporation is supplied by Moduflow Ltd to be assembled into a ventilation system which may or may not include additional components.

The entire system must be considered for safety purposes and it is the responsibility of the installer to ensure that all the equipment is installed in compliance with the manufacturers recommendations and with due regard to current legistation and codes of practice.

2.0 INFORMATION SUPPLIED WITH THE EQUIPMENT

2.1 Each item of equipment is supplied with a set of documents which provides the the information required for safe installation and maintenance of the equipment. This may be in the form of a Data sheet and/or Installation and Maintenance instruction. 2.2 Each unit has a rating plate attached to its outer casing. The rating plate contains essential data relating to the equipment such as serial number, unit code and electrical data. Any further data that may be required will be found in the documentation. If any item is unclear or more information is required, contact Saverfan.

2.3 Where warning labels or notices are attached to the unit, the instructions given must be adhered to.

3.0 TRANSPORTATION, HANDLING AND STORAGE.

3.1 Care must be taken at all times to prevent damage to the equipment. Note that shock to the unit may result in the balance of the impeller being affected. 3.2 When handling the equipment, care should be taken with corners and edges and that the weight distribution within the unit is considered. Lifting gear such as slings or ropes must be arranged so as not to bear on the casing or impeller/motor. 3.3 Equipment stored on site prior to installation should be protected from the weather and steps taken to prevent the ingress of contaminants

4.0 OPERATIONAL LIMITS

4.1 It is important that the specified operation limits for the equipment are adhered to e.g. operation air temperatures, air borne contaminants and unit operation. 4.2 Where installation accessories are supplied with the specified equipment e.g. wall mounting brackets or anti-vibration mounts, they are to be used to support the equipment only. Other system components must have separate provision for support. 4.3 Flanges and connection spigots are provided for the purpose of joining to ductwork systems. They must not be used to support the ductwork

5.0 INSTALLATION REQUIREMENTS

In addition to the particular requirements given for the individual product, the following general requirements should be noted.

- 5.1 Where access to any part of equipment which moves, or can become electrically live are not prevented by the equipment panels or by fixed installation detail
- [e.g ducting], then guarding to the appropriate standard must be fitted. 5.2 The electrical installation of the equipment must comply with the requirements of the relevant local electrical standards.

6.0 COMMISSIONING REQUIREMENTS

6.1 General pre-commissioning checks relevant to safe operation consist of the following:

- Ensure that no foreign bodies are present within the fan or casing.
- Check electrical safety, eg. Insulation and earthing.
- Check guarding of system. Check operation of Isolators/controls.
- Check fastenings for security.
- 6.2 Other commissioning requirements are given in the relevant product documentation.
- 7.0 OPERATIONAL REQUIREMENTS
- 7.1 Equipment access panels must be in place at all times during operation of the

unit and must be secured with the original fastenings. 7.2 If failure of equipment occurs or is suspected then it should be taken out of service until a competent person can effect repair or examination. [Note that certain ranges of equipment are designed to detect and compensate for fan failure].

8.0 MAINTENANCE REQUIREMENTS

8.1 Specific maintenance requirements are given in the relevant documentation.8.2 It is important that the correct tools are used for the various tasks required.

8.3 If the access panels are to be removed for any reason the electrical supply to the unit must be isolated.

- 8.4 A minimum period of 2 minutes should be allowed after electrical disconnection before access panels are removed. This will allow the impeller to come to rest. **NB:** Care should still be taken however since airflow generated at some other point in
- the system can cause the impeller to 'windmill'.

8.5 Care should be taken when removing and storing access panels in windy conditions.