

FXPH Flameproof Heaters

08/18799/4 Issue 4

Models : FXPH1/42/750, FXPH1/42/750/110, FXPH1/60/1000 - Single Element

FXPH2/42/1500, FXPH2/42/1500/110 & FXPH2/60/2000 - Double Elements



Dimensions

(millimetres)

Model(s)	Specification					
	Watts	Volts	'A'	'B'	Weight	Temp
FXPH1/42/750	750	240V	1067mm	870mm	14.7kg	T2
FXPH1/42/750/110	750	110V	1067mm	870mm	14.7kg	T2
FXPH1/60/1000	1000	240V	1524mm	1327mm	16.4kg	T2
FXPH2/42/1500	1500	240V	1067mm	870mm	20.3kg	T2
FXPH2/42/1500/110	1500	110V	1067mm	870mm	20.3kg	T2
FXPH2/60/2000	2000	240V	1524mm	1327mm	23.6kg	T2

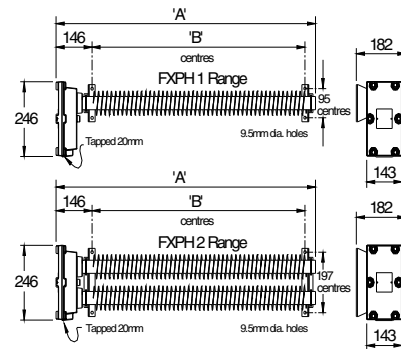


Fig. 1

THESE INSTRUCTIONS SHOULD BE READ CAREFULLY AND RETAINED FOR FUTURE REFERENCE.

IMPORTANT SAFETY ADVICE

THE HEATER SHOULD NOT BE CONNECTED UNTIL THE INSTRUCTION LEAFLET HAS BEEN READ FULLY.

THIS PRODUCT SHOULD ONLY BE USED IN HAZARDOUS AREAS FOR WHICH IT IS APPROVED, I.E. IT MUST ONLY BE USED IN ZONES 1 & 2. IT MUST NOT BE USED IN ZONE 0 WHERE POTENTIALLY EXPLOSIVE GAS MIXES WILL BE PRESENT FOR LONG PERIODS.

THE INSTALLATION OF THESE APPLIANCES MUST ALWAYS BE CARRIED OUT BY A SUITABLY QUALIFIED ELECTRICIAN WITH A FULL UNDERSTANDING OF REGULATIONS :

- ATEX 94/9/EC
- BS EN 60079-0 :2004
- BS EN 60079-1 :2004

AND BE IN ACCORDANCE WITH THE CURRENT IEE WIRING REGULATIONS AND RELEVANT BUILDING REGULATIONS.

THE HEATER SHOULD BE CAREFULLY REMOVED FROM ITS PACKING AND INSPECTED FOR ANY PHYSICAL DAMAGE WHICH MAY HAVE OCCURED DURING TRANSIT.

THE HEATER SHOULD BE STORED IN A WARM DRY ATMOSPHERE UNTIL INSTALLED.

DO NOT USE THE HEATER UNTIL IT IS CORRECTLY MOUNTED USING THE WALL BRACKETS SUPPLIED.

THE SURFACE TEMPERATURE OF THIS APPLIANCE IS CONSIDERABLE AND MUST BE TAKEN INTO ACCOUNT WHEN POSITIONING THE HEATER - see Fig. 3

THE HEATER IS DESIGNED FOR USE IN A II 2G EEx d IIB T2 ENVIRONMENT. LIQUID IMMERSION, OR USE OUTSIDE THESE CONDITIONS MUST NOT BE CARRIED OUT.

ALL CURRENT REGULATIONS, STANDARDS, AND RECOMMENDATIONS MUST BE COMPLIED WITH AT THE TIME OF INSTALLATION AND OPERATION.

THESE INSTRUCTIONS SHOULD BE READ IN CONJUNCTION WITH BS EN 60079-0:2004. FOR REGULATIONS CONCERNING INSTALLATION REFER TO BS EN 60079-14 AND FOR MAINTENANCE REFER TO BS EN 60079-17.

ALWAYS ISOLATE THE HEATER FROM THE SUPPLY BEFORE UNDERTAKING ANY MAINTENANCE WORK.

THE FLAMEPROOF TERMINAL BOX HAS ACCURATELY MACHINED THREADS AND SURFACES. CARE MUST BE TAKEN TO PREVENT THESE SURFACES BEING DAMAGED.

THE COVER IS SECURED WITH GRADE 8.8 SCREWS: (ISO/R898/1 M8x30, IF SUBSTITUTED, ONLY SCREWS OF THE SAME QUALITY OR BETTER MAY BE USED). SCREWS TO BE TIGHTENED WITH 12Nm OF TORQUE; MATING FACES OF THE ENCLOSURE TO BE CLEAN AND UNMARKED. CONTACT THE MANUFACTURER FOR REPLACEMENT SCREWS.

DO NOT COVER OR ENCLOSE THE HEATER .

Electrical connection

WARNING – THIS APPLIANCE MUST BE EARTHED

Verify that the electrical supply cable is sufficient for the rated loading. Check that the incoming supply conforms to the rated supply. The heater power circuit must be protected by a suitably rated over current device.

The supply cables used must be suitable for hazardous area installation, and for the temperature stated on the rating plate. They must be connected to the heater using **ATEX certified EEx d** cable glands designed for use with a female M20x1.5 parallel thread to BS ISO 262:1998.

Where the cable entry requires an adaptor, for size reduction, a suitable **ATEX certified EEx d** adaptor must be used.

If the supply cable is housed in a conduit, to protect wiring, a suitable **ATEX certified EEx d** adaptor must be used.

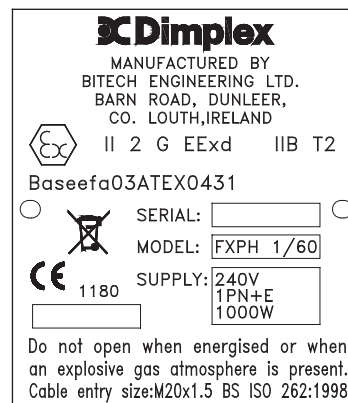
The incoming cables must be connected to the factory fitted heater terminals provided. **Do not alter any factory fitted wiring.**

Before energising the heater for the first time, ensure that the insulation resistance is at least 2 MΩ.

The heater is supplied with an earth stud, located inside the terminal box, which must be connected to earth.

After connection check the continuity of earth connections.

General characteristics



Type of protection : **EEx d IIB T2**
ATEX code: **II 2G**
Rated voltage: **220-240V**
Rated supply frequency: **50Hz**

Fig. 2 - Rating Plate sample

Definitions

EEx Electrical Apparatus for potentially explosive atmospheres.

d Flameproof enclosure 'd' (BS EN 60079-1: 2004)

IIB T2 Equipment for use in areas in which explosive atmospheres caused by gases, vapour, mists or air/dust mixtures are likely to occur. Gas of subdivision B and ignition temperature greater than 300° C.

II 2G Non-mining application, Group II Category 2 for use in gas/vapour/mist atmospheres.

Installation

The installation should be carried out by a suitably qualified electrician/engineer in accordance with applicable standards.

All electrical tests must be carried out in a safe area; not in the hazardous area.

The installer must ensure that any special conditions for safe use, detailed on the ATEX certification, are met.

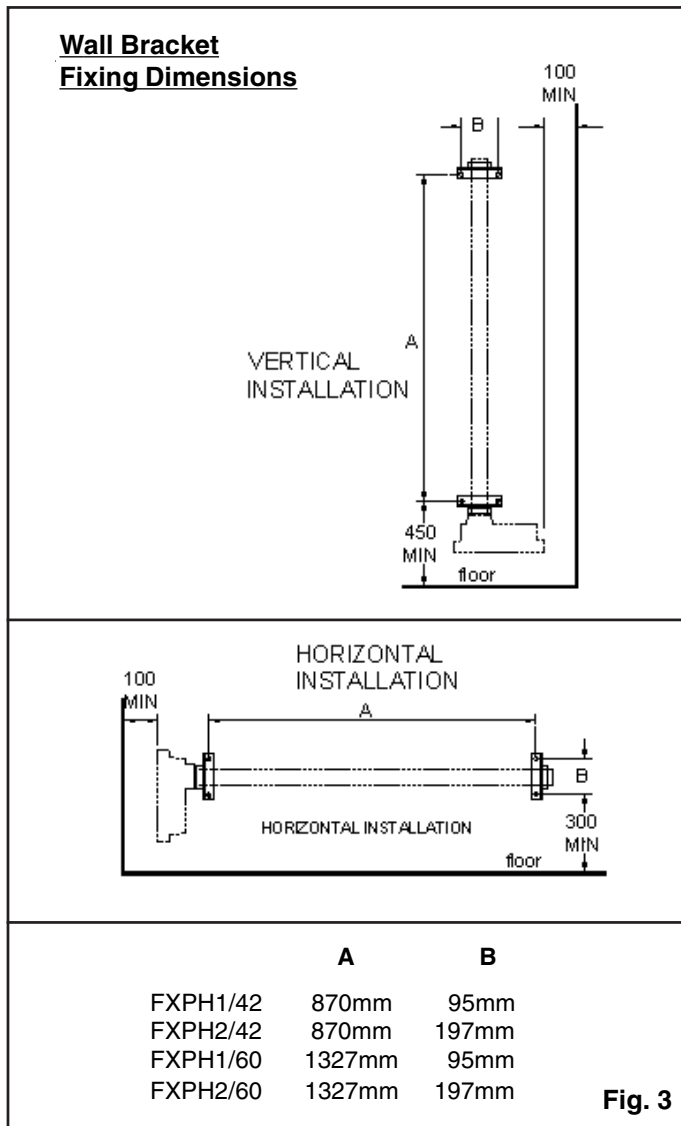
To remove the terminal cover, use a 13mm socket spanner. When refitting the cover, ensure that all the joint surfaces are clean and free of any debris and are unmarked.

Check that the heater supplied is suitable for the installation in the specific hazardous area (Zone 1 or Zone 2, gas group IIA, IIB, or IIC).

WARNING: The heater is NOT suitable for Zone 0 installations.

Verify that the temperature class marked on the heater's rating plate is suitable for the environment in which the heater is to be installed.

The heater must be installed using the supplied wall brackets prior to use. Mark, drill and fit suitable wall plugs in to a sound wall as detailed in Fig. 3 below. The heater can either be mounted in the horizontal or vertical plane. A minimum height of 300mm floor and 100mm from vertical wall must be maintained. The heater should not be connected until the instruction leaflet has been read fully.



Operation

If the environment into which the heater is being installed contains a hazardous gas, ensure the control enclosure is purged and free from any potentially flammable gaseous mixture before energising the heater.

It is important that all start up and operating procedures that are specified with any control panel feeding the heater are strictly followed.

Control equipment must be sited outside the hazardous environment or comply and be ATEX approved to the appropriate standard.

Cleaning and User Maintenance

All maintenance operations should be in accordance with EN 60079-17 (Table 1) and BS EN 60079-14.

All existing site safety regulations must be followed at all times.

Ensure that before any maintenance is carried out, there are no hazardous gases present.

The heater must be fully de-energized before any work is carried out.

The heater should be subject to a regular maintenance schedule with the following actions as a minimum:

- Check that the heater surfaces are clean and free from any deposits. The heater can be cleaned by wiping with a soft damp cloth. Neither abrasive cleaning powders nor furniture polish should be used.
- Check that the continuity and insulation resistance is a minimum of 2 MΩ.
- The internal wiring shall be clean and dry, with no apparent deterioration of the wiring insulation.
- All connections shall be tight, without signs of overheating.
- For heaters with multiple elements check the resistance against the figures recorded at first installation to ensure no individual element failure has occurred.
- When refitting the terminal cover, ensure the mating surfaces are in good order, and the screws are tightened to 12Nm. (Note: Do not lubricate threads before tightening)

Recycling

For electrical products sold within the European Community.



At the end of the electrical products useful life it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice in your country.

After Sales Service

Your product is guaranteed for one year from the date of purchase. Within this period, we undertake to repair or exchange this product free of charge provided it has been installed and operated in accordance with these instructions.

Should you require after sales information or assistance with this product please go to www.dimplex.co.uk where you will find our self help guide by clicking on "After Sales" or ring our helpdesk on 0845 600 5111 (UK) or 01 842 4833 (R.O.I.) .

Spare parts are also available on the website

www.dimplex.co.uk

Please retain your receipt as proof of purchase.

CE The product has been reviewed against the requirements of EN60079-0:2007 and EN60079-1:2004 in respect of the differences from EN50014:1997 & Amendments 1 & 2, & EN50018:2000 respectively. This covers the essential requirement of Directive 94/9/EC. The product also complies with the European Standard Electromagnetic Compatibility (EMC) EN55014, EN61000 and EN50366. These cover the essential requirements of EEC Directives 2006/95/EC and 2004/108/EC

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