

## MFH 'The Bulldog'® Portable Fan Heaters



EXHEAT Industrial's MFH 'The Bulldog' Portable Fan Heater is the world's first truly portable hazardous area fan assisted heater. The Bulldog uses a patented design (GB1614657.3) that combines efficiency with simple functionality to provide a portable heating solution for use in hazardous environments where the atmosphere is classified as Zone 1/2 (IIB+H2) or Zone 21/22 (IIC). Certified to the new BS EN ISO 80079-36:2016 and BS EN ISO 80079-37:2016 standards for constructional safety, The Bulldog comes ready to 'plug and play' with the option of fitting a plug, or hard wiring to an isolator unit.

The casing is moulded from a steel reinforced polymer which makes The Bulldog tough and durable. Using adjustable feet, the heater can be angled to allow for flexibility in its positioning and, with its compact design, can be easily stored or transported.

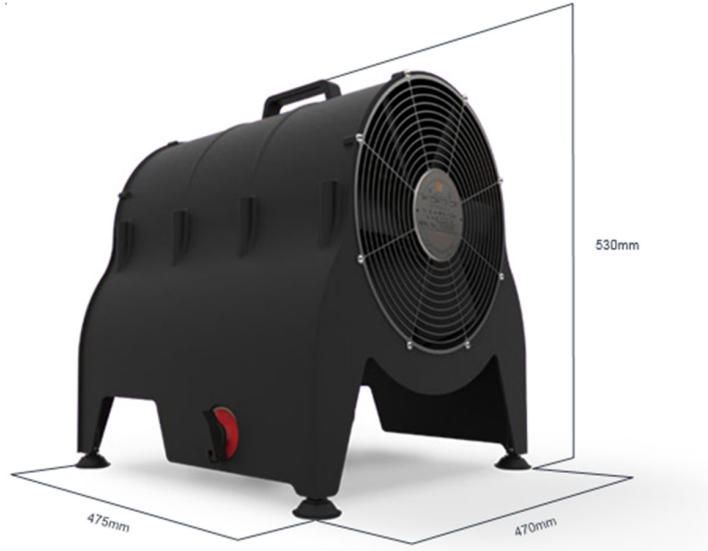
The Bulldog can be used with or without ducting to provide a warm stream of air that can be felt metres away, even in ambient temperatures as low as -40°C and up to +40°C. The heater can optionally be fitted with an additional safety device above and beyond the requirements of the certification.

### FEATURES

- Portable and lightweight, allowing for single user manipulation / operation. Can be supplied on a long flying lead to get heat where you need it.
- Up to 6kW. The heater can be directed at an engineer working in a larger space, or at the same time, warm a mid-sized room to a comfortable operating temperature for all within.
- The Bulldog's design increases efficiency, providing a warmer flow of air for the operator at up to 5m.
- Suitable for ambient temperatures as low as -40°C and up to +40°C.
- Available in T3 and T4 temperature classes.

### TYPICAL APPLICATIONS

- Fabric maintenance
- Localised heating
- Offshore containers
- Oil drilling
- Oil refineries
- Paint curing
- Paint stores
- Production platforms
- Spray booths



<b>Certification</b>	<b>ATEX</b> Ⓜ Ex II 2 G D Ex h EX db eb IIB+H2 T3...T4 Gb Ex tb IIIC T200°C...T135°C Db IP65  <b>CU TR (EAC)</b> 1Ex db e IIB+H2 T3...T4 Gb X Ex tb IIIC T200°C...T135°C Db X	<b>IECEX</b> Ex db eb IIB+H2 T3...T4 Gb Ex tb IIIC T200°C...T135°C Db IP65  <b>CSA (USA/CAN)</b> Approval upcoming
<b>Dimensions</b>	L475 x W470 x H530mm. Base weight 28kg	
<b>Main Materials</b>	<b>Casing:</b> PA66 30% with EMI shielding <b>Impeller:</b> PA66 30% with EMI shielding with epoxy coated aluminium hub <b>Elements:</b> Finned stainless steel tubular elements <b>Ex d Enclosure:</b> Anodised extruded aluminium <b>Ex e Enclosure:</b> Stainless steel <b>Motor Housing:</b> Epoxy coated aluminium	
<b>Mounting</b>	Adjustable feet at each corner allow for a stable standing on uneven surfaces. Wall mounting bracket option available (will require remote isolator for heater access/operation). Anti-static castors available.	
<b>Rating</b>	Up to 6kW	
<b>Temp Class</b>	Available in T3 and T4 temperature classes	
<b>Voltage</b>	<b>Single-Phase:</b> 110V to 277V <b>Three-Phase:</b> 380V to 690V, 50/60Hz	



## Hazardous Area Electric Heaters & Controls

Model	Voltage *	Phase **	Nominal Output (kW)	Air Flow (m <sup>3</sup> /hr)		Air Temp. Delta (°C/°F) ***		Max Current (A) ****
				50Hz	60Hz	50Hz	60Hz	
<b>MFH – T3 Class</b>								
MFH-5.5-220	220	1	5.5	1050	1260	16.2 / 29.2	13.5 / 24.3	25.6
MFH-6-230	230		6			17.7 / 31.8	14.7 / 26.5	26.7
MFH-5.5-240	240		5.5			16.2 / 29.2	13.5 / 24.3	23.5
MFH-6-254	254		6			17.7 / 31.8	14.7 / 26.5	24.2
MFH-6-277	277		6			17.7 / 31.8	14.7 / 26.5	22.3
MFH-5.5-380	380	3	5.5			16.2 / 29.2	13.5 / 24.3	9.0
MFH-6-400	400		6			17.7 / 31.8	14.7 / 26.5	9.3
MFH-5.5-415	415		5.5			16.2 / 29.2	13.5 / 24.3	8.3
MFH-6-440	440		6			17.7 / 31.8	14.7 / 26.5	8.5
MFH-6-480	480		6			17.7 / 31.8	14.7 / 26.5	7.8
MFH-6-600	600		6	17.7 / 31.8	14.7 / 26.5	6.4		
MFH-6-690	690		6	17.7 / 31.8	14.7 / 26.5	5.6		
<b>MFH – T4 Class</b>								
MFH-2.5-110	110	1	2.5	1050	1260	7.4 / 13.3	6.1 / 11.1	23.3
MFH-3-120	120		3			8.8 / 15.9	7.4 / 13.3	25.6
MFH-2.75-220	220		2.75			8.1 / 14.6	6.8 / 12.2	13.1
MFH-3-230	230		3			8.8 / 15.9	7.4 / 13.3	13.6
MFH-2.75-240	240		2.75			8.1 / 14.6	6.8 / 12.2	12.1
MFH-3-254	254		3			8.8 / 15.9	7.4 / 13.3	12.4
MFH-3-277	277		3			8.8 / 15.9	7.4 / 13.3	11.4
MFH-2.75-380	380	3	2.75			8.1 / 14.6	6.8 / 12.2	4.8
MFH-3-400	400		3			8.8 / 15.9	7.4 / 13.3	4.9
MFH-2.75-415	415		2.75			8.1 / 14.6	6.8 / 12.2	4.4
MFH-3-440	440		3			8.8 / 15.9	7.4 / 13.3	4.6
MFH-3-480	480		3			8.8 / 15.9	7.4 / 13.3	4.3
MFH-3.7-600	600		3.7			10.9 / 19.6	9.1 / 16.4	4.2
MFH-3.7-690	690		3.7			10.9 / 19.6	9.1 / 16.4	3.7

\* Voltage tolerance +0/-10%.

\*\* Minimum SWA multicore cables required: 3Ph 380V-690V heaters require 4mm<sup>2</sup>, 1Ph 220V-277V T4 heaters require 4mm<sup>2</sup>, 110V-120V T4 & 220V-277V T3 heaters require 6mm<sup>2</sup>, 110V-120V T3 heaters require 10mm<sup>2</sup>.

\*\*\* ΔT (Delta T) refers to the air temperature difference at the inlet and outlet. For example, if the ambient is +6°C and the ΔT (temperature rise) is 15°C, then the outlet will be +21°C.

\*\*\*\* The maximum current includes the maximum motor inrush.

All values based on 25m cable lengths and an acceptable voltage drop of 4% at +40°C ambient.