

MFH 'The Bulldog'® Offshore Portable Fan Heaters



EXHEAT Industrial's MFH 'The Bulldog' Offshore Portable Fan Heater is the world's first truly portable hazardous area fan assisted heater. The Offshore Bulldog uses a patented design (GB1614657.3), utilising additional salt-water resistant materials to provide a portable heating solution for use in offshore 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 Offshore 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 Offshore 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.

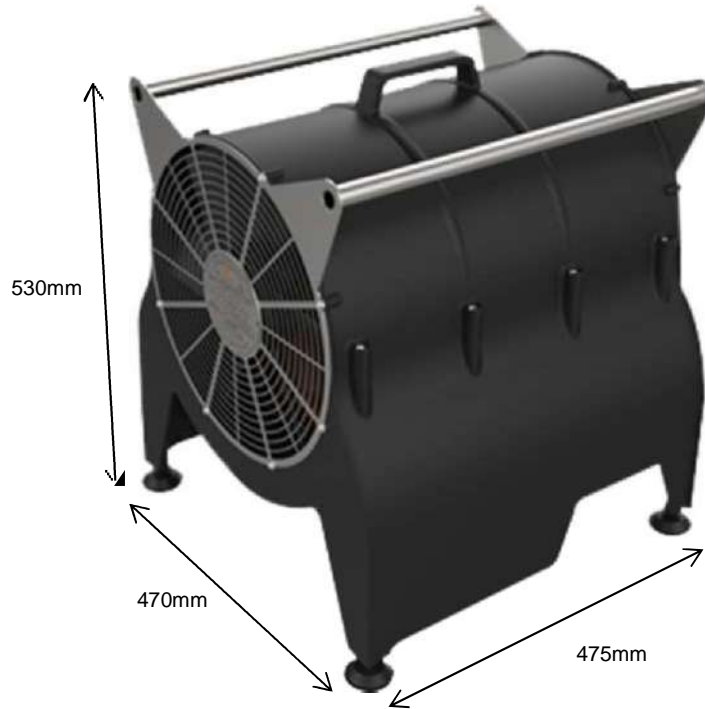
The Offshore Bulldog can be used with or without ducting to provide a warm stream of air that can be felt metres away, even in ambient temperatures as low as -40°C and up to +40°C. The heater can optionally be fitted with an additional safety device above and beyond the requirements of the certification.

FEATURES

- Authorized and certified for offshore applications / installations
- Offshore design includes a standard local isolator, anti-static castors and two side handles
- 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.
- Rental units available, approved for North Sea use.

TYPICAL APPLICATIONS

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



Certification	ATEX Ⓜ Ex II 2 G D Ex h Ex db eb IIB+H2 T3...T4 Gb Ex tb IIIC T200°C...T135°C Db IP65 CU TR (EAC) 1Ex db e IIB+H2 T3...T4 Gb X Ex tb IIIC T200°C...T135°C Db X	IECEX Ex db eb IIB+H2 T3...T4 Gb Ex tb IIIC T200°C...T135°C Db IP65 CSA (USA/CAN) Approval upcoming
Dimensions	L475 x W470 x H530mm. Base weight 28kg	
Main Materials	Casing: PA66 30% with EMI shielding Cabling: BS6883 certified, salt resistant and suitable for marine use Impeller: PA66 30% with EMI shielding with epoxy coated aluminium hub Elements: Finned stainless steel tubular elements Ex d Enclosure: Anodised extruded aluminium Ex e Enclosure: Stainless steel Motor Housing: Epoxy coated aluminium	
Mounting	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.	
Rating	Up to 6kW	
Temp Class	Available in T3 and T4 temperature classes	
Voltage	Single-Phase: 110V to 277V Three-Phase: 380V to 690V, 50/60Hz	
Rental Units	Rental Offshore MFH units available, approved for North Sea use. Rental design comes with ducting adaptor and earth leakage protection (30mA sensitivity) as standard (additional flexible ducting available).	

Model	Voltage *	Phase **	Nominal Output (kW)	Air flow (m³/hr)		Air Temp. Delta (°C/°F) ***		Max Current (A) ****
				50Hz	60Hz	50Hz	60Hz	
MFH – T3 Class								
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
MFH – T4 Class								
MFH-2.5-110	110	1	2.5	1050	1260	7.4 / 13.3	7.4 / 13.3	23.3
MFH-3-120	120		3			8.8 / 15.9	8.8 / 15.9	25.6
MFH-2.75-220	220		2.75			8.1 / 14.6	8.1 / 14.6	13.1
MFH-3-230	230		3			8.8 / 15.9	8.8 / 15.9	13.6
MFH-2.75-240	240		2.75			8.1 / 14.6	8.1 / 14.6	12.1
MFH-3-254	254		3			8.8 / 15.9	8.8 / 15.9	12.4
MFH-3-277	277		3			8.8 / 15.9	8.8 / 15.9	11.4
MFH-2.75-380	380	3	2.75			8.1 / 14.6	8.1 / 14.6	4.8
MFH-3-400	400		3			8.8 / 15.9	8.8 / 15.9	4.9
MFH-2.75-415	415		2.75			8.1 / 14.6	8.1 / 14.6	4.4
MFH-3-440	440		3			8.8 / 15.9	8.8 / 15.9	4.6
MFH-3-480	480		3			8.8 / 15.9	8.8 / 15.9	4.3
MFH-3.7-600	600		3.7			10.9 / 19.6	10.9 / 19.6	4.2
MFH-3.7-690	690		3.7			10.9 / 19.6	10.9 / 19.6	3.7

* Voltage tolerance +0/-10%.

** Minimum SWA multicore cables required: 3Ph 380V–690V heaters require 4mm², 1Ph 220V-277V T4 heaters require 4mm², 110V-120V T4 & 220V-277V T3 heaters require 6mm², 110V-120V T3 heaters require 10mm².

*** 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.



Accessories

The MFH Offshore heaters come with the following optional accessories:

- **Cable and Plug:** Rated armoured cable with certified plug, supplied loosely if required (speak to your installer for pre-fitted options)
- **Earth Leakage Protection:** Integral earth leakage protection (available as standard on rental units)
- **Emergency Stop Button:** Installed locally as standard (optionally, supplied loose)
- **Indicating Lamps:** Visually indicates when heater is live and energised
- **Isolator:** Fitted isolator, with up to 1 x M32 cable entry. May be mounted remotely (requires additional cabling).
- **Thermostat:** Room/air sensing thermostats can be set to control heating elements, motor, or both.
- **Ducting:** Flexible PVC ducting options available (with duct adaptor supplied as standard for rental units)
- **Mounting:** Various mounting options available, including anti-static castor wheels, wall-mount brackets, and fixed rubber feet



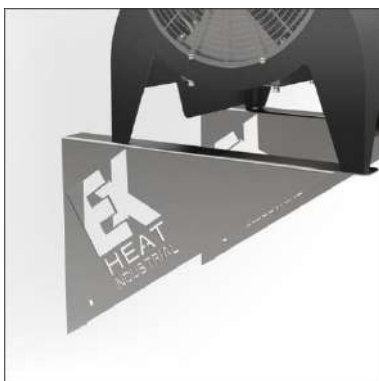
E-stop



Thermostat



Isolator



Wall Mounting Brackets



Ducting



Anti-static Castors