

LFH-15-440-T3-I

Temporary Fan Heater



LFH

Heavy-Duty Fan Heater



Advantages:

The LFH-15-440-T3-I Fan Heater combines superior electrical heating efficiency with simple functionality to provide a next-generation temporary heating solution for use in hazardous area environments where the explosive atmosphere is classified as Zone 1/2 and Zone 2/22. With class leading heat up, air flow, efficiency and safety, the LFH is the first high power, heavy duty temporary fan heater which can be safely ducted. Capable of raising the air temperature by an impressive 38°C from the heaters inlet to outlet. This class leading temperature increase offers twice the performance of conventional temporary heaters. This temperature rise is possible due to its patented heating technology and its ability to provide a constant heating output. This means 100% heat, 100% of the time.

The heater is constructed from stainless steel casing ensuring it is suitable for use in even the most harsh industrial environments. The LFH-15-440-T3-I is fitted with anti-static castors, lifting handles and local isolation switch. It can be simply switched on/off as and when heat is required. Ducting can be fitted to both inlet and outlet to help get the heat exactly where it's needed. Power cables and plugs can also be provided on request to suit end user requirements.

Technical Data:

Model	Kilowatts Output	Volts	T Class	Max Current (A)	Air ΔT (°C/°F)	
					50Hz	60Hz
LFH-15-440-T3-I	11	380	T3	18	28 / 50	23 / 41
	12.5	400	T3	19	32 / 58	26 / 48
	13.5	415	T3	20	34 / 61	28 / 50
	15	440	T3	21	38 / 68	31 / 56

- LFH-15-440-T3-I is suitable for use with voltages 380V - 440V
- Max currents include motor inrush.
- Air ΔT values measured at outlet.

Certification	ATEX Ex II 2 G D Ex db eb h IIB T2...T4 Gb Ex tb IIIC T300°C...T135°C Db IP65 CU TR (EAC) 1Ex db eb IIB T3...T4 Gb X Ex tb IIIC T200°C...T135°C Db X	IECEX Ex db eb h IIB T2...T4 Gb Ex tb IIIC T300°C...T135°C Db IP65 *IIB+H2 Available on request. Contact Thorne & Derrick
Dimensions	L540 x W600 x H600mm. Base Weight 55kg	
Materials	Casing: Stainless steel Impeller: PA66 30% glass and steel filled blades and epoxy coated aluminium hub Elements: Finned stainless steel tubular elements Ex d Enclosure: Anodised aluminium Ex e Enclosure: Stainless steel Motor Housing: Epoxy coated aluminium Duct Size: 20" x 7.6m Antistatic ducting	
Mounting	Anti-static castors.	
Rating	15kW @ 440V	
Voltage	Three-phase: 380V to 440V, 50/60Hz	

LFH-15-440-T3-I	LFH	
	At 50Hz	At 60Hz
Approx Air Velocity at Outlet (m/s)	6.0	6.3
Approx Volumetric Flow Rate (m³/hr)	2120	2240
Fan Speed (min⁻¹)	1380	1460
Motor Rating (kW)	1.1	1.1
Sound Pressure (dBA)	78	80

Typical Applications:

- Aircraft servicing areas
- Comfort heating
- Curing or drying paint
- Frost protection
- Offshore containers
- Oil & gas drilling rigs
- Oil refineries
- Paint stores
- Pipe wrapping / composite repairs
- Production platforms
- Ship applications: deck houses / pump stations / engine rooms
- Spray booths
- Temporary enclosures / habitats for maintenance work

- Stainless steel outer casing provides supreme protection, even in the harshest working environments
- Higher air flow allows for safe pressurising and heating of habitats for onsite repair works
- Various ducting options available upon request
- Bespoke protection device allows for operation in temperatures as low as -40°C
- Built in thermal protection monitor the heating elements to ensure temperature class is maintained
- Suitable for Zone 1/2 (IIB) hazardous areas
- Can be supplied on a long flying lead to get heat where you need it

Over-Temperature Protection:

The LFH heater is fitted with its own customised protection device, which allow them to operate consistently at ambient temperatures as low as -40°C, where normal thermal protection circuits would struggle to run below 0°C.

The heaters are also equipped with an inbuilt RTD sensor. This device constantly monitors the hottest part of the heating element in order to protect the unit from exceeding assigned T-Class temperatures (whether through fault or misuse).



Casing:

The LFH Fan Heater is designed with casings that have been designed to not only be tough and durable, but to also assist with air flow through the central air tunnel, ensuring that optimal thermal transfer can be achieved.

The LFH Utilises stainless steel for its casing, offering a bigger and more rugged heating solution.

Ducting:

Flexible ducting to direct warm air can be affixed to the LFH heater (using a stainless steel mounting bracket available in 7.6m lengths as standard) to get heat where you need it.

Suitable for onshore/offshore use - even in ambient temperatures as low as -40°C.

When BS EN 13463 was withdrawn in 2016, the BS EN ISO 80079 series of standard published two new standards, BS EN ISO 80079-36 and BS EN ISO 80079-37 to cover protection of non-electrical equipment for use in potentially explosive atmospheres by way of constructional safety.



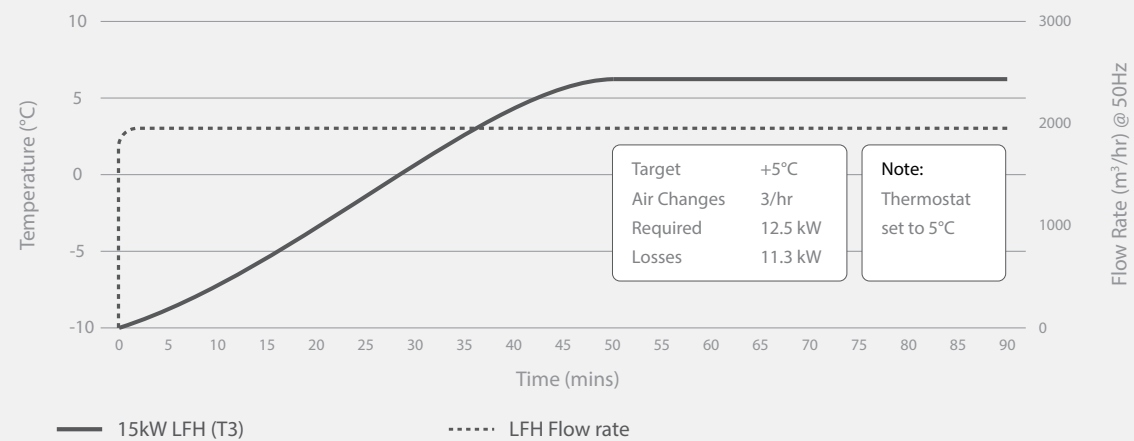
Products protected by constructional safety, control of an ignition source and liquid immersion have their ATEX markings suffixed by the letters 'c', 'b' and 'k' respectively. The new standards have compressed these three concepts into a single protection and allow the new Ex h marking to be used.

By including a fan in the design, the ATEX requirements in BS EN 14986:2017 were triggered, which calls on the requirement for constructional safety markings. The MFH and LFH fan heater ranges are marked with the Ex h markings, and have undergone additional testing over and above the standard electrical and mechanical requirements of the BS EN IEC 60079 range of standards in order to confirm compliance. Both fan heater model ranges are also certified to CU TR standard.

Performance Simulation

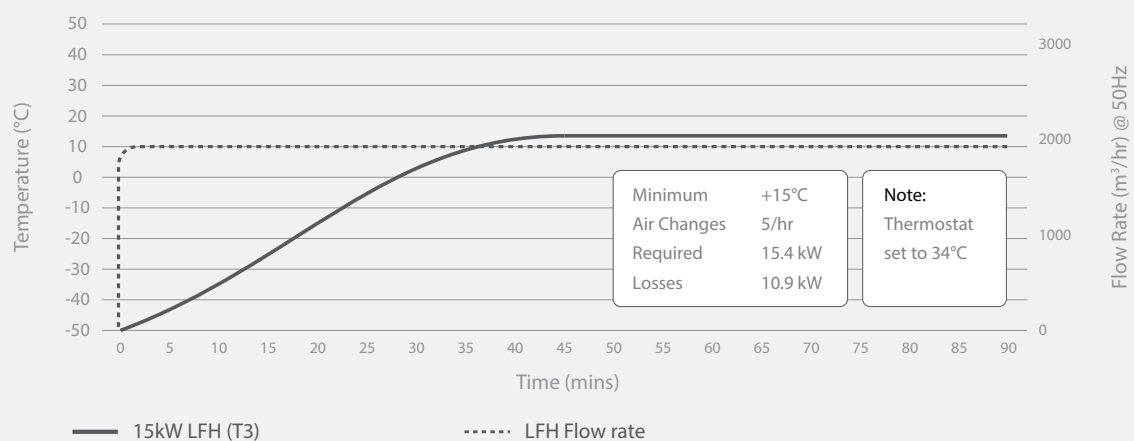
40ft Container

Uninsulated, Ambient -10°C



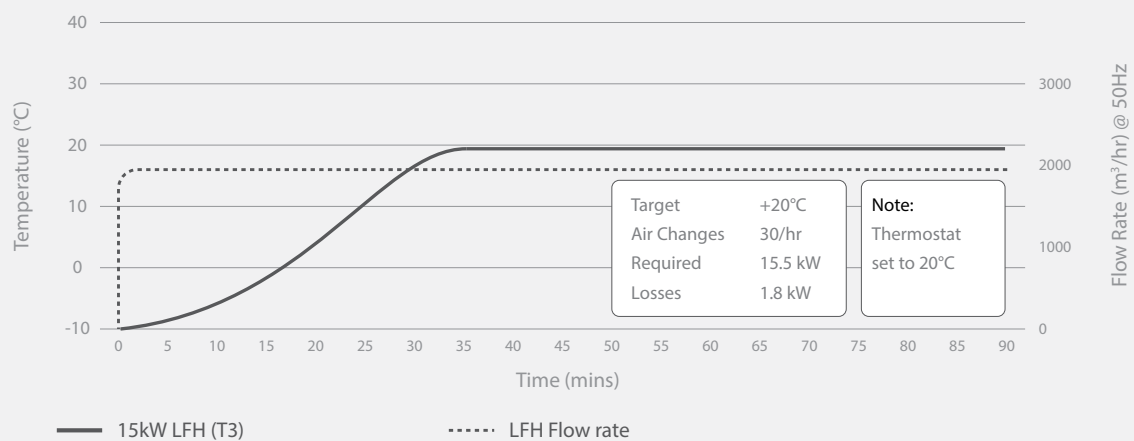
Large Battery / Switchgear Room

12 x 6 x 2.5 metres, 2" insulation, Ambient -50°C



Temporary Enclosure / Habitat for Maintenance

6 x 4 x 2.4 metres, 1" insulation, Ambient -10°C



Warranty, Packing & Ordering

Warranty

Our standard warranty is 18 months from date of despatch or 12 months from putting into service, whichever is earlier. Premiums for extended warranty on the motor and heating element parts only are available on request based on a maximum of 36 months from installation.

Packing

18mm pallet box for domestic (within UK) shipments or air/sea worthy packaging for export shipment



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