

USER GUIDE



18KW FAN HEATER



WARNINGS



- Failure to follow these instructions may result in risk of personal injury or damage to the equipment.
- Damage due to a failure to follow these instructions will invalidate the warranty.
- The appliance must be commissioned & serviced by qualified engineers in compliance with local regulations.
- The appliance must be switched off and disconnected from the power supply before any work is carried out.
- There are no user controls inside the appliance casing.
- Do not cover the appliance.
- Do not use in the vicinity of a pool, bath or shower.
- An air gap of at least 300mm should be allowed at the rear of
- the unit to ensure a clear airflow. Do not site the unit close to
- soft fabrics or combustible materials. Do not obstruct the outlet grill.
- Allow the unit to cool by running fan only for a minimum of 5 minutes before switching off.
- Do not disconnect the appliance from the supply under load.
- For internal use only. Do not use out of doors.
- Extension cables should be correctly rated for the load, fully unwound and never run through water or over sharp edges.
- Ensure that locking castors are engaged before running the unit.
- This unit can operate with a maximum of 10M of 300mm duct. Ducting should be kept as taut and straight as possible.
- The machine is not phase rotationally sensitive.
- This is a class 1 product and requires an Earth connection.
- Warning! Fan liable to start without warning.
- Do not use this appliance with plastic ducting.

TECHNICAL SPECIFICATIONS. FFHT32-18	
Heating capacity.	18 kw
Power supply.	400v. 3P+N+E. 32A. 50Hz.
Maximum running current.	28A
Airflow.	1533.6 M3h
Weight .	29.5 kg
Noise level at 3M.	73 dB(A)
IP Rating.	IP20
Maximum operating temperature.	40 °C +/- 3°C
Maximum ducting length (300mm duct) See P6.	10M
Temperature rise at 15 °C ambient. (Nominal)	74 °C

Specifications:

The FFHT32 is an 18kw 3 phase industrial electric fan heater.

The appliance is connected to a 400v 32Amp 3P+N+E 50Hz power supply and comes fitted with the appropriate 5 pin plug. A neutral is required. This appliance requires an Earth connection.

The machine is not phase rotationally sensitive

The FFHT32 is fitted with a high quality axial fan which will allow it to operate with up to 10M of 300mm duct.

The FFHT32 is fitted with an onboard thermostat as standard. It is also supplied with a remote thermostat as standard.

The FFHT32 is supplied with locking castors to the front of the machine.



Setup and operation:

To start:

- Please note ! the control panel is at the rear of the appliance.
- Site the appliance on a firm level surface and apply the castor brakes. Do not operate the unit without applying the brakes.
- Connect the machine to the appropriate power supply.
- Switch the fan rocker switch to I. (please note! the heat rocker switches will not operate the heating elements unless the fan switch is on).
- Switch the heat rocker switch to I- 12kw or I+II- 18kw.
- Set the thermostat to the desired temperature.

To stop:

- Switch the heat rocker switches to 0 and allow the fan to run for a minimum of five minutes to cool the machine. Failure to follow this procedure will damage sensitive components and invalidate the warranty.
- Switch the fan rocker switch to 0 when the heat has dissipated.
- If the heat has not fully dissipated the fan may 'run on' automatically.
- If the heater is not in regular daily use disconnect from the power supply.



THERMOSTAT

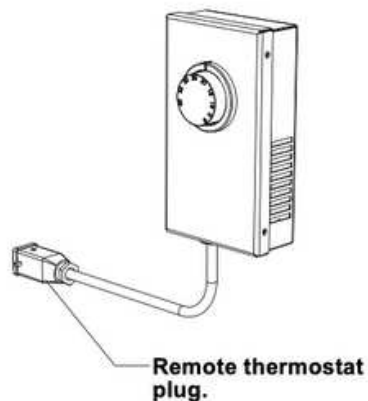
Using the remote thermostat:

Set the onboard thermostat to 0. Please note! failure to set the onboard thermostat to 0 will prevent the remote thermostat from operating.

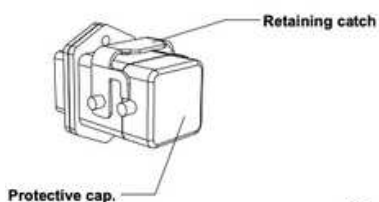
Lift the retaining catch and remove the protective cap from the remote thermostat socket. The thermostat socket is located on the control panel at the rear of the machine.

Fit the remote thermostat plug to the socket and secure in place with the retaining catch.

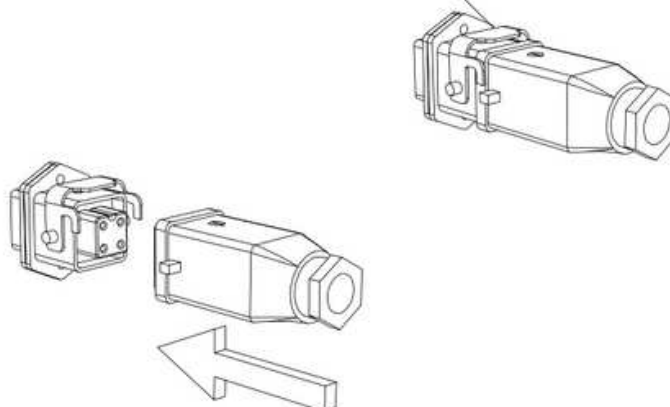
The remote thermostat is now ready for use. Always refit the protective cap when not in use.



Remote thermostat socket::



Retaining catch engaged.



PROTECTIVE /SAFETY DEVICES

- The FFHT32 is fitted with a safety limit thermostat. This is a fail-safe device. Should the maximum design operating temperature be exceeded it will shut down the heater. This device requires a manual reset and should only operate in the event of a fault. Any activation of this safety device should be investigated by a competent engineer.
- The FFHT32 is fitted with a limit thermostat. Should the maximum operating temperature be exceeded it will shut down the heating elements and leave the fan running. This device will automatically reset once the temperature falls to an acceptable level.
- The machine is fitted with an automatic fan run-on thermostat. If the machine is shut down without running on fan only for 5 minutes to cool down, this device will activate and allow the fan to keep running. This should not be used to routinely shut down the machine.

MAINTANECE

Fan motors, elements and switch gear are not customer serviceable components. General maintenance should include regular inspection of:

- 1: Mains cable. Check for signs of damage to the insulation. Replace if necessary.
- 2: Air intake & outlet grills: ensure grills are free from accumulated debris. blow out with compressed air if required.
- 3: Fixings: Check all fixings are present and secure.

Maintenance carried out by a competent person:

- 1: Internal cables should be inspected for signs of heat damage and replaced when necessary.
- 2: All cable connections should be regularly check and tightened. Particular attention should be paid to the connections at the contactors.
- 3: Regularly check the contactors for signs of heat. Replace if necessary.



TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	SOLUTION
NO HEAT OUTPUT.	FANS AND OR HEATING NOT SWITCHED ON.	CHECK ALL SWITCHES ARE ON.
	THERMOSTAT INCORRECTLY SET.	TURN THERMOSTAT KNOB FULLY CLOCKWISE.
	POWER SUPPLY INTERRUPTED.	CHECK POWER SUPPLY.
	FAULTY ROCKER SWITCH.	CHECK SWITCHES AND REPLACE IF NECESSARY.
	FAULTY THERMOSTAT.	CHECK THERMOSTAT AND REPLACE IF NECESSARY.
	FAULTY CONTACTOR.	CHECK CONTACTOR AND REPLACE IF NECESSARY.
REMOTE THERMOSTAT NOT SWITCHING THE HEATING ELEMENTS	ONBOARD THERMOSTAT INCORRECTLY SET	SET ONBOARD THERMOSTAT TO 0. (SEE P 5)
	REMOTE THERMOSTAT PLUG INCORRECTLY FITTED	GO THROUGH FITTING STEPS ON P5.
SAFETY LIMIT THERMOSTAT HAS ACTIVATED	AMBIENT ROOM TEMPERATURE TOO HIGH	DO NOT OPERATE IN AN AMBIENT TEMPERATURE ABOVE 40°C.
	EXCESSIVE DUCT LENGTH OR POORLY ROUTED DUCTING	SHORTEN DUCT LENGTH OR RE-ROUTE
	FAN MOTOR FAILURE	TEST FAN MOTOR AND REPLACE IF REQUIRED.
	CORRECT SHUTDOWN PROCEDURE NOT FOLLOWED	ALLOW THE MACHINE TO FULLY COOL AND FOLLOW CORRECT SHUTDOWN PROCEDURE. (SEE P4)
	FAILED SAFETY LIMIT THERMOSTAT	THE SAFETY LIMIT THERMOSTAT IS A FAIL-SAFE DEVICE. CHECK THE CAPILLARY TUBE AND BULB FOR SIGNS OF DAMAGE. REPLACE IF REQUIRED.
FAN MOTOR NOT RUNNING.	POWER SUPPLY INTERRUPTED.	CHECK POWER SUPPLY.
	FAN MOTOR OVER HEATED	THE FAN MOTOR HAS A HIGH TEMPERATURE PROTECTIVE DEVICE FITTED INTO THE WINDINGS. ALLOW THE MACHINE TO FULLY COOL AND ATTEMPT TO START.
	FAULTY ROCKER SWITCH	REPLACE ROCKER SWITCH
TEMPERATURE RISE INSUFFICIENT.	THE MACHINE SHOULD DELIVER A TEMPERATURE RISE OF APPROXIMATELY 74°C AT AMBIENT TEMPERATURE OF 15°C. SHOULD THE MACHINE FAIL TO DO THIS CHECK THE POWER SUPPLY AND THAT THE THERMOSTAT IS TURNED FULLY CLOCKWISE. IT SHOULD BE NOTED THAT THE MAXIMUM AMBIENT TEMPERATURE THE MACHINE WILL RUN AT IS 40°C +/- 3°C. ABOVE THIS THE HEATING ELEMENT CONTACTORS WILL NOT OPERATE.	