

UNIFLOW SERIES 7 UNIT HEATER

OPERATING AND MAINTENANCE INSTRUCTIONS

IMPORTANT. IT IS ESSENTIAL TO ISOLATE THE UNIT FROM THE ELECTRICAL SUPPLY BEFORE CARRYING OUT ANY MAINTENANCE ON THE UNIT, ALSO TO ENSURE THAT THE POWER CANNOT BE ACCIDENTALLY RESTORED BY UNAUTHORISED PERSONNEL DURING MAINTENANCE.

Discrete electrical components must always be wired in accordance with the manufacturer's instructions with cable suited to the electrical data shown against item 14.

The motors are asynchronous induction type with squirrel-cage rotor, suitable for the following voltages:-

3 Phase: 380/415 volts 50Hz; 1 Phase: 220/240 volts 50Hz

Motor bearings are sealed for life, requiring no maintenance.

Each motor is fitted with built-in temperature sensing overload contacts (TP). These must be connected to the control circuit of the main contactor as indicated in the wiring diagrams to ensure full protection of the motor windings.

Access to the fan/motor assembly of the 'D' type downward discharge units can be gained via the hinged diffuser section.

Occasionally check that the fan/motor assembly is firmly bolted to the unit casework.

Occasionally check that the suspension arrangement is secure to the unit and firmly anchored.

The heating element should be cleaned from the inlet face by a vacuum cleaner, or from the outlet face by a compressed air jet.

Ensure that adequate frost protection is provided in order to prevent freezing within the heating element.

Pipework connections should allow free expansion of the heating element.

STEAM SYSTEMS.

12.1 Steam mains must be adequately trapped and vented prior to connection to the unit. The steam connection must be taken from the top of the mains.

12.2 The unit steam traps to be of the constant discharge type with built-in automatic air vent, e.g. float and thermostatic type (FT).

12.3 Where the steam trap is located below the condensate main, and the condensate must be lifted, the traps should be sized to allow for the back pressure at the trap discharge, viz., condensate line pressure drop plus hydraulic head created by height of lift.

12.4 During long shut-down periods make certain that all condensate is thoroughly purged from the heating element. Keep the casing clean and repaint when necessary.

ELECTRICAL DATA.

14.1 380/415 VOLT, 3 PHASE, 50 HZ.

MODEL NO.	MOTOR RATING (KW)	FLC (AMPS)	NOMINAL SPEED (RPM)
7-13-L3 (Y)	0.12	0.22	1200
7-13-N3 (#)	0.20	0.46	1390
7-16-L3 (Y)	0.12	0.22	1060
7-16-N3 (#)	0.20	0.47	1340
7-18-L3 (Y)	0.21	0.39	1075
7-18-N3 (#)	0.32	0.73	1320
7-21-L3 (Y)	0.31	0.54	930
7-21-N3 (#)	0.5	1.03	1270
7-24-L3 (Y)	0.45	0.85	1040
7-24-N3 (#)	0.661	.55	1350

N.B. When 3 phase motors are used in the dual speed (Y #) mode, the contactor overloads should be sized as for normal speed rating.

14.2 220/240 VOLT, 1 PHASE, 50 HZ.

MODEL NO.	MOTOR RATING (KW)	FLC (AMPS)	NOMINAL SPEED (RPM)
7-13-L1	0.07	0.37	850
7-13-N1	0.15	0.79	1385
7-16-L1	0.09	0.49	900
7-16-N1	0.22	1.05	1360
7-18-L1	0.11	0.56	790
7-18-N1	0.34	1.64	1310
7-21-L1	0.22	1.15	870
7-21-N1	0.48	2.30	1276
7-24-L1	0.29	1.60	885
7-24-N1	0.65	3.02	1270

SPARES.

When ordering spares from the above address, please quote the works order as stated on our acknowledgement of order and the serial and model numbers of each unit concerned. The latter numbers can be found on the unit rating plate located on the outside of the unit casing.