BETA
industrial

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>> ELECTRIC DUCT HEATER 01 - 03

ELECTRIC DUCT HEATER - EDH

ELECTRIC DUCT HEATER

DESCRIPTION & OPTIONS

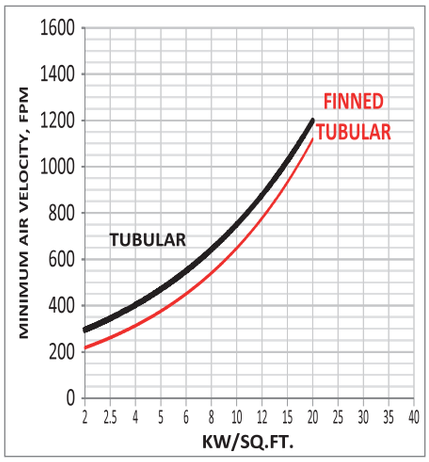
- Slip-in type electric heater made of galvanized steel of appropriate gauge.
- Configuration of the electric heater can be arranged as per customer requirements.
- Heating elements are available in Tubular and Finned Tubular types.
- Available in ON/OFF and MULTISTAGE electric controls.
- Primary over temperature protection is provided by auto reset thermal disc-type cutout.
- Air flow switch (requires min Pt total pressure of 0.07 inch WG at the face of the electric coil).

OPTIONS:

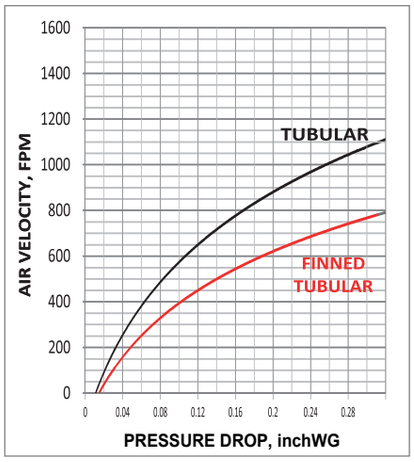
The following components can be provided upon request:

- Secondary over temperature protection with manual reset (push button) thermal disc-type cutout.
- 24V transformer & control fuse.
- Magnetic / safety contactors.
- Line and control terminal blocks.
- Up to 3 stages of heater control.
- Door-interlocking disconnect switch.
- Main power fuses.
- Electronic Flow Sensor can be provided.

MINIMUM AIR VELOCITY REQUIREMENTS:



HEATER'S ELEMENT PRESSURE DROP DATA:



∴ ALL DETAILS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

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HEATER CONTROL & POWER:

$$kW = CFM \times \Delta T°F / 3160 = m^3/h \times \Delta T°C / 2769$$

CONVENTIONAL STAGED CONTROL:

		1 PHASE	3 PHASE
SIZE	STAGES	220V	380V
100	1,2	3.5 kW	3.5 kW
150	1,2	6.0 kW	6.0 kW
200	1,2,3	11.0 kW	11.0 kW
250	1,2,3	11.5 kW	17.0 kW
300	1,2,3	11.5 kW	30.0 kW
350	1,2,3	11.5 kW	39.0 kW
400	1,2,3	11.5 kW	39.0 kW

Notes:

1- Low watt density elements (Max. 35W/in2)

2- Min. kW:
- Single Phase = 0.5 kW
- Three Phase = 1.5 kW

3- Min. based on air velocity of 200 FPM across the coil.

*** The Max Allowable KW shown is based on UL / NEC standards.**

**** The minimum air flow requirement for terminals with electric coils is the greater of 70 CFM/KW or the minimum allowable flow rate that can be accurately controlled. This allows proper operation of the electric coil and results in increased coil life with a maximum air temperature rise of 45° F to prevent thermal stratification in the space.**

***** Uniform flow through a coil results in optimum performance, and therefore, we recommend a minimum length of 48” of full size discharge duct after the air terminal.**

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HEATER'S STANDARD & OPTIONAL FEATURES:

ELEMENT TYPE:	□ TUBULAR	□ FINNED TUBULAR
ELEMENT CONSTRUCTION:	□ INCOLOY 800 Nickel Alloy (standard)	□ S.S. ELEMENT
POWER PHASE:	□ SINGLE	□ 3 PHASE
POWER VOLTAGE:	□ 220V	□ 380V
POWER FREQUENCY:	□ 50Hz	
CONTROL:	ON/OFF	
DISC-TYPE AUTOMATIC RE-SET THERMAL CUT-OUT	STANDARD	
MANUAL RE-SET THERMAL CUT- OUT	STANDARD	
AIR FLOW SWITCH (minimum 0.07" WG)	STANDARD □ fixed (PDN)	
MAGNETIC CONTACTORS	STANDARD	
TRANSFORMER	STANDARD	
DISCONNECT SWITCH	OPTIONAL: □ Disconnect switch (door interlock) (DS)	□ Toggle switch (TS)
TIME DELAY SWITCH	OPTIONAL: □ Thermal relay (RT)	
POWER FUSES	OPTIONAL: □ Line fuses (LF)	
CONTROL FUSES	OPTIONAL	
PILOT LIGHT	OPTIONAL: □ Line Power (LP) □ Stage ON (LS) □ Heating ON (LH) □ Overheat (LO) □ No airflow (LN)	
VOLT FREE CONTACTS	OPTIONAL	
AUTOMATIC CIRCUIT BREAKER	OPTIONAL	

ORDERING KEY

Ordering Key:

MEMBER

E	D	H	W	X	H	□.□ KW
ELECTRIC DUCT HEATER						
SIZE: W X H						
LOAD: □ . □ KW						

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