

ELECTRIC HEAT FEATURES & CAPACITIES

ELECTRIC HEAT STANDARD FEATURES

- Flanged construction for direct unit mounting, in blow thru configuration
- Listed for zero clearance installation
- Meets National Electrical Code requirements
- Ni-Chrome wire in ceramic insulators
- Stainless steel element terminals and hardware
- Element support brackets on maximum 3 1/2" centers
- Solid cover with continuous full height hinge
- Over temperature protection
- All internal wiring rated for 105°C minimum
- Airflow switch
- Incoming line power distribution block
- cETL Listed in compliance with UL/ANSI Standard 1995
- Single point power connection
- Heater factory mounted to unit with cETL listing as an assembly

OPTIONAL HEATER CONTROL

- Main incoming power disconnect (non-fused)
- Fusing (main) (per stage)
- Magnetic contactors wired for disconnecting operation
- Fan control package with heater interlock contacts (required for single point power connection)

USEFUL FORMULAS

$$kW^* = (kW^* = CFM \times \Delta T \times 1.085^{**}) / 3413$$

$$1\emptyset \text{ AMPs} = (kW \times 1000) / \text{Volts}$$

* 1kW = 3413 BTU/H

** Capacity at sea level

Altitude Considerations:

Reduce by 0.034 for each 1000 ft. of altitude above sea level.

Example: 5000 ft. / 1000 ft. = 5

$$5 \times 0.034 = 0.17$$

$$1.085 - 0.17 = 0.915$$

ELECTRICAL CALCULATIONS INFORMATION

- Refer to MCA/MOP Calculator at www.krueger-hvac.com for MCA and/or MOP calculations.
- Non-Fused Door Interlock Disconnect Switch shall be sized according to MCA.
- Main Fusing shall be sized according to MOP.

HEATER AMP CALCULATION	
VOLTAGE	AMPS PER KW
115 / 1	8.70
208 / 1	4.81
230 / 1	4.35
277 / 1	3.61
208 / 3	2.78
230 / 3	2.51
480 / 3	1.26



ELECTRIC HEAT kW LIMITS																		
UNIT VOLTAGE AND PHASE			UNIT SIZE															
			08		12		16		20		30 (SINGLE BLOWER)		40 (SINGLE BLOWER)		30 (DUAL BLOWER)		40 (DUAL BLOWER)	
			MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
SINGLE PHASE	115	kW	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0	5.0	5.5	5.0	5.5
		AMPs	26.1	43.5	26.1	43.5	26.1	43.5	26.1	43.5	26.1	43.5	26.1	43.5	3.5	47.8	43.5	47.8
	208	kW	3.0	9.0	3.0	9.0	3.0	9.0	3.0	9.0	3.0	9.0	3.0	9.0	6.0	11.0	6.0	11.0
		AMPs	14.4	43.3	14.4	43.3	14.4	43.3	14.4	43.3	14.4	43.3	14.4	43.3	28.8	52.9	28.8	52.9
	230	kW	3.0	11.0	3.0	11.0	3.0	11.0	3.0	11.0	3.0	11.0	3.0	11.0	6.0	13.0	6.0	13.0
AMPs		13.0	47.8	13.0	47.8	13.0	47.8	13.0	47.8	13.0	47.8	13.0	47.8	26.1	56.5	26.1	56.5	
277	kW	3.0	13.0	3.0	13.0	3.0	13.0	3.0	13.0	3.0	13.0	3.0	13.0	6.0	17.0	6.0	17.0	
	AMPs	10.8	46.9	10.8	46.9	10.8	46.9	10.8	46.9	10.8	46.9	10.8	46.9	21.7	61.4	21.7	61.4	
THREE PHASE	208	kW	3.0	13.0	3.0	16.0	3.0	16.0	3.0	16.0	3.0	16.0	3.0	16.0	6.0	24.0	6.0	24.0
		AMPs	8.3	36.1	8.3	44.4	8.3	44.4	8.3	44.4	8.3	44.4	8.3	44.4	16.7	66.6	16.7	66.6
	230	kW	3.0	13.0	3.0	18.0	3.0	18.0	3.0	18.0	3.0	18.0	3.0	18.0	6.0	26.0	6.0	26.0
		AMPs	7.5	32.6	7.5	45.2	7.5	45.2	7.5	45.2	7.5	45.2	7.5	45.2	15.1	65.3	15.1	65.3
	480	kW	3.0	13.0	3.0	20.0	3.0	20.0	3.0	26.0	3.0	26.0	3.0	26.0	6.0	38.0	6.0	38.0
		AMPs	3.8	16.3	3.8	25.1	3.8	25.1	3.8	32.6	3.8	32.6	3.8	32.6	7.5	47.7	7.5	47.7

NOTES:

1. Factory certified submittals available upon request.
2. Standard heater kW limits are maximum per unit size and voltage.
3. Heater should be sized for a maximum leaving air temperature of 104 °F.