Commercial Industrial Suspended Unit Heater.

Features

Color almond.

Finish Standard: epoxy/polyester powder paint.

Voltage 208V, 240V, 277V, 347V, 480V, 600V, 1 or 3-phase. Some units may be field converted from 3 to 1-phase.

Construction 18 and 20-gauge steel. Adjustable louvres to direct air flow. High-limit temperature control with automatic reset.

Fan Totally enclosed factory-lubricated ball bearing motor (except for 15 to 25kW at 208/240V). 58 dBA fan (2 to 10kW), 67 dBA fan (15 to 30kW) and 77 dBA fan (40 to 60kW). Thermally-protected motor mounted in cold compartment. Fan delay purges heater of residual heat.

Heating element Tubular heating elements; stainless steel (2 to 10kW); finned steel (15 to 60kW). Concentric disposition of heating elements. Factory sealed element upon request.

Control Factory-installed contactor and 240/208V control circuit standard (with transformer if necessary), 24V relay, with or without transformer available. 120V control circuit available. Built-in thermostat available- Recommended – any thermostat or control relay can be connected to the heater terminal block

Installation Not for residential use, Horizontal mounting: 2 to 30kW: **wall or ceiling using the supplied brackets which allow 360 deg rotation. 40 to 60kW: ceiling only secured by the supplied 4 hooks of suspension.**

• Vertical mounting (except option -MD): 2 to 60kW: using 4 threaded rods 1/2 in. X 13 UNC (not included). Diffuser cones available (except option -MD). Maximum recommended height (horizontal): 2 to 10kW: 8 ft. (2.4 m), 15 to 30kW: 10 ft. (3 m), 40 to 60kW: 15 ft. (4.5 m). Protective screen allows minimum horizontal mounting height: 2 to 30 kW 6 ft. (1.8 m), 40 to 60kW: 8 ft. (2.4 m). **85deg F maximum operating ambient temperature.**

Size

Warranty 3-year warranty against defects.

Application Commercial hall, warehouse, stairwell, factory, mining, agriculture.

How to calculate heat needed in sweet potato storage: 1kW = 3412 Btu, kW required = total main fan cfm X 1.05X delta T (temp rise required range 1-5 deg F)/(divided by 3,412=kW) required – horizontal circular ventilation is required for proper product heating.

Typical 60k Bu sweet potato storage temp rise should be 1-5 deg F, electric heat sizing is limited so 0.5 to 1 deg F would be sized correctly to available capacities. kW required (at 1.5 cfm/Bu) = 90,000cfm X 1.05 X 2/3412 =55 kW, at 1 deg F temp rise 27.7 kW, at 0.5 deg temp rise 13.8 kW. Temp rise would be considered as temp differential between incoming air and mixed outgoing heated air. Amps are watts divided by Voltage = 15kW heater = 15000Watts/480 vac=31.25A (plus fan motor/control circuit likely 1-2 amps).

Exclusions: Actual physical installation and electrical hook up is not included. If electrical is not available gas heat exchanger would be recommended with 15-20A 120 vac circuit only.

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