

Features

- Safety yellow heater enclosure with safety screens on both air intake and output openings.
- Optional 25' long SO type cord, ready for plug attachment is available for each model
- Long life finned tubular elements
- Thermostat adjustment 40 to 100 deg F
- Magnetic contactor, automatic reset, hi limit cutout switch, fan only switch
- 10" wheels, 800 cfm 15kW units-65 lbs, 1100 cfm 30kW units – 83 lbs
- 15kW unit is 51,200 btu/hr, 30kW unit is 102,390 btu/hr
- 45kW unit available in 480 Vac 3 phase only
- 30kW heater is available in
- 15kW heater is available in 1 or 3 phase 240 1 ph, 240 3 ph, 480 3 ph
- 10kW heater is available in 1 phase 34,130 btu, 42A, 240 vac, 60 lbs
- Wall and ceiling mount models available
- Indoor use only, not for wet locations



How to calculate heat needed in sweet potato storage: $1\text{kW} = 3412 \text{ Btu}$, $\text{kW required} = \text{total main fan cfm} \times 1.05 \times \text{delta T (temp rise required range 1-5 deg F)} / (\text{divided by } 3,412 = \text{kW})$ - 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 power capacities. $\text{kW required (at } 1.5 \text{ cfm/Bu)} = 90,000 \text{ cfm} \times 1.05 \times 2 = 187,000 \text{ Btu/Hr. divided by } 3412 = 55 \text{ kW}$, 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 = $15\text{kW heater} = 15000 \text{ Watts} / 480 \text{ vac} = 31.25\text{A}$ (plus fan motor/control circuit likely 1-2 amps).

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

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