

REZNOR[®]

Sample Specification

Model UDXC

SEPARATED COMBUSTION CONVERTIBLE, GAS-FIRED, POWER VENTED UNIT HEATERS

GENERAL SECTION

Provide (82%, 83%) thermal efficiency, power vented, gas-fired unit heaters manufactured as Reznor[®] brand UDX units designed for use in building areas where higher reliability is required, and venting is either vertical or horizontal. The base unit shall contain an indirect heat exchanger and axial fan assembly.

FUEL

All units shall be equipped for use with natural gas. Gas connection shall be external to the cabinet for ease of installation and service. All units shall be field convertible to propane for future use flexibility.

HEAT EXCHANGER

The unit heater shall be equipped with a multi-cell, 4 pass serpentine style steel heat exchanger. Heat exchanger tubes shall be press fabricated of (titanium stabilized, corrosion resistant aluminized steel) (409 stainless steel) (316 stainless steel). All heat exchangers shall be fabricated with no welding or brazing. All heat exchanger cells shall be designed with an aerodynamic cross section to provide maximum airflow, minimum static pressure, and minimum fouling.

BURNER

The units shall incorporate a single burner assembly with a single orifice. The burner shall have a continuous wound close pressed stainless-steel ribbon separating the flame from the burner interior. All units shall have a single venturi tube and orifice supplying fuel to a one-piece burner housing. Each heat exchanger cell shall use balanced draft induction to maintain optimum flame control.

CONTROLS

Controls shall include a (single-stage) (two-stage) gas valve; direct spark multi-try ignition with electronic flame supervision with timed lockout integrally controlled via a printed circuit control board. The control board shall also incorporate a diagnostic 7 segment error code display, DIP switches for fan overrun settings, and a relay for fan only operation. All units shall be equipped with a safety limit switch.

All controls shall be enclosed in the unit housing to protect them from accidental damage that could be caused by factors in the building that would adversely affect external controls.

(Multi-heater controls shall be utilized to control up to 5 unit heaters with a single input).

SEPARATED COMBUSTION, COMBUSTION AIR, AND VENTING

The unit shall have a factory-installed power venter device to draw combustion air through an inlet in the rear of the cabinet. The unit shall be convertible to separated combustion to facilitate future alterations to building use or needs. The conversion to separated combustion shall be field installable.

The combustion air/venting system shall include a vibration isolated power venter motor and wheel assembly and a combustion air pressure switch. Unit Sizes 30-125 shall include a flame rollout switch. Unit sizes 30-100 can be

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common vented without the need of additional accessories. The unit shall have external vent connection for easy connection to vent piping.

ELECTRICAL

Operation shall be controlled by an integrated circuit board that includes a diagnostic 7 segment display simplifying troubleshooting. Supply voltage connections are made at the circuit board. 24-volt control connections shall be made on an externally mounted terminal strip with connections (W1, W2, R, C and G).

Each unit shall be equipped for use with 115/1-volt power supply. (Stepdown transformers shall be available to be field installed for use with (208) (230) (460) volt power supply.)

CABINET

The cabinet shall be low profile with a pre-coat or powder coat RAL 9003 white paint finish. The cabinet shall be constructed so that screws are not visible from the bottom, front, or sides. Unit construction shall incorporate a removeable front face with integrated horizontal louvers. The front face assembly will contain a beveled front corner on the control side for additional cabinet rigidity. All units shall be manufactured with a tooled drawn supply air orifice on the rear panel to reduce fan inlet noise.

The unit shall be designed for ceiling suspension featuring 3/8"-16 female threads (hanger kits for 1" pipe) at both 2-point and 4-point locations with no additional adapter kits. Sizes 150-400 above shall utilize 4 point hanging. (Hanger kit for ceiling mounting shall be available for Sizes 30-125.)

The cabinet shall be equipped with 1 red painted and balance black painted, roll-formed horizontal louvers. Louvers shall be spring held and adjustable for directing airflow. ((Vertical louvers) (downturn nozzles) (downturn nozzles with vertical louvers) shall be added.)

The cabinet shall be equipped with a full safety fan guard with no more than ½ inch grill spacing on Sizes 30- 125 or no more than 1 inch on Sizes 150-400. The (open drip proof) (enclosed) motor and fan assembly shall be resiliently mounted to the cabinet to reduce vibration and noise.

The unit shall be designed with a full opening, removeable, hinged service door complete with a ¼ turn latch for closure (two latches on capacities 100-400). Additionally, the door shall be affixed to the unit heater housing with a safety strap for added safety. All components in the gas train, all standard electrical controls, and the power venter shall be within the service compartment.

Minimum top clearance from combustibles shall be 1" for Sizes 30-125 and 4" for Sizes 150-400. Minimum bottom clearance from combustibles shall be 1" for all sizes. Minimum clearance from combustibles on non- service side shall be 1" for Sizes 30-125 and 2" for Sizes 150-400

CERTIFICATIONS

Unit(s) shall be listed by Intertek to the current revision of ANSI Z83.8 and CSA 2.6 for commercial/industrial installation. Sizes 30-125 shall be Listed for use in non-living spaces adjacent to living spaces such as residential garages or workshops.

Manufacturer must have a minimum of 100 years' experience in the manufacture of gas fired unit heaters.