

Explosion-Proof Duct Heaters

XDF - Specification Sheet

1.0 Scope

Electric explosion-proof duct heaters shall be Caloritech™ type XDF, from CCI Thermal Technologies Inc., complete with all standard equipment and optional features as specified below.

2.0 General

2.1 The heater is to be cCSA_{US} certified with ratings as specified in 3.0.

2.2 The heater shall be provided with standard features and optional features as outlined in 4.0 and 6.0.

3.0 Specifications and Ratings

3.1 The duct heater shall be designed to heat air at _____ SCFM from _____ °F to _____ °F (_____ °C to _____ °C)

3.2 The heater shall be of the explosion-proof, duct type, catalog number _____,
rated _____ V, _____ Ø, _____ Hz., _____ kW.

Class _____, Divisions _____, Groups; _____,

Class _____, Divisions _____, Groups; _____,

3.4 The duct heater shall be marked with a _____ temperature code, or maximum surface temperature of _____.

3.5 The minimum rated airflow through the duct heaters shall be _____ SCFM.

3.6 The maximum outlet temperature of the duct heater shall not exceed _____ °F (_____ °C).

3.7 The duct heater is to be mounted in a horizontal duct section downstream / upstream from the customer supplied blower.

3.8 The duct heater shall be suitable for operation in a -40°F (-40°C) min. to 104°F (40°C) max. ambient temperature.

4.0 Standard Features - Duct Heater

4.1 The duct heater shall be supplied with a _____" (W) x _____" (H) x _____" (L) or _____ mm (W) x _____ mm (H) x _____ mm (L) carbon steel duct section with 1" (25 mm) wide mounting flange and painted ASA61 gray epoxy outside and high temperature aluminium inside.

4.2 The heating elements shall be (0.475"/12 mm) dia., extra heavy wall (0.095"/2.4 mm) finned tubular steel with nickel plated finish. Fins are to be fully brazed to the element sheath for maximum performance and efficiency.

4.3 The heating elements shall extend through CCI Thermal Technologies certified explosion-proof compression fittings in a patented **X-Max**® explosion-proof, extruded copper-free aluminium terminal housing(s) with _____" NPT power conduit entry and _____" NPT conduit entry for high limit thermocouple connection.

4.4 The heating elements shall be mounted as _____ removable heating bank(s) and wired to terminal blocks for _____ x _____ kW, _____ V, _____ phase heating circuits to be fully SCR controlled, ON/OFF control.

4.5 The duct heater shall be supplied with _____ 'J' type sheathed thermocouples welded or brazed to the element sheath for connection to customer supplied / factory installed certified high limit controllers. High limit set points will be factory preset.

4.6 Explosion-proof differential pressure switch shall be factory installed on the heater to prove that air is moving. Customer must ensure that the minimum airflow is maintained at all times. The differential pressure switch is to be:

field wired to the remote control panel

factory mounted onto the heater

4.7 The duct heater shall be mounted in a horizontal duct section with the terminal box(es) at the side.

4.8 The approximate weight of the duct heater shall be _____ lbs (_____ kg).

5.0 Standard Features - Control Package

5.1 Enclosure type (check one):

Type 4 - moisture-proof

Explosion-proof

5.2 Temperature control (check one):

Basic unit - customer supplied temperature control signal

Built-in temperature controller

SCR controller - customer supplied 4-20 mA control signal

SCR controller with built-in temperature controller

6.0 Optional Features and Equipment (check as desired):

Stainless steel duct section

Transition sections to _____" (W) x _____" (H) duct or _____" round duct or _____ mm (W) x _____ mm (H) duct or _____ mm round duct

Special temperature code of _____

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