

# XC explosionproof electric heaters

Cl. I, Div. 1 & 2, Groups B<sup>A</sup>, C, D (NEC)  
Cl. I, Zones 1 & 2, Group IIB + H<sub>2</sub><sup>A</sup> (IEC)  
NEMA 7B<sup>A</sup>CD

3A

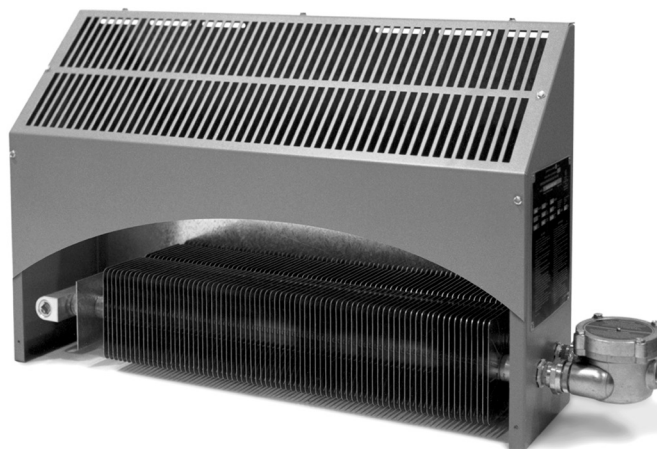
## Applications:

Single-phase XC explosionproof electric heaters are used:

- In areas where flammable liquids, gases or vapors are present
- For rugged locations, including:
  - Petroleum refineries, gasoline storage and dispensing areas
  - Wastewater treatment plants
  - Areas that use flammable liquids for cleaning parts in dip tanks
  - Petrochemical plants
  - Paint spraying areas
  - Aircraft hangars and fuel servicing areas
  - Hydrogen fuel cell and battery storage facilities
  - Natural gas plants
- In areas where flammable vapors or gases may be present due to accidental or abnormal conditions
- For standby heat to prevent process heat loss or for personnel comfort during maintenance/repair operations

## Features:

- Sloped top cabinet prevents objects that restrict airflow from being set on top
- Corrosion-resistant design with no exposed copper or brass – suitable for H<sub>2</sub>S environments
- High velocity airflow heats up area faster with better heat distribution
- 14 gauge steel cabinet for rugged reliability
- Short cabinet lengths take up less wall and floor space
- Optional built-in thermostat (Class I, Division 1, Groups C, D, and Zone 1, Group IIB models) reduces field installation costs
- Incoloy<sup>®</sup> 840 heating elements have longer life expectancy
- Radial embossed aluminum plate fins warp less for better heat transfer
- Galvanized steel mounting brackets for quick installation



## Certifications and compliances:

### NEC:

- Class I, Divisions 1 & 2, Groups B<sup>A</sup>, C, D

### IEC:

- Class I, Zones 1 & 2, Group IIB + H<sub>2</sub><sup>A</sup>

### UL standard:

- UL823

### CSA standard:

- C22.2 Nos. 25, 30, 46

### Environmental ratings:

- NEMA 7B<sup>A</sup>CD
- Temperature code: T2A – 280°C (536°F)

## Standard materials and finishes:

- Heating elements – resistance wire embedded in a magnesium oxide refractory and sheathed in an Incoloy 840 tube
- Finned tube assembly – aluminum tube with radial embossed aluminum plate fins
- Cabinet – 14 gauge (0.075"/1.90mm) steel, green/gray epoxy powder coated front and side panels; galvanized steel back panel

## Specifications:

| Nominal kW                    | 1.2                                                                                                                                                                               | 1.8         | 3.6         | 4.8         | 7.6          |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|--------------|
| Shipping weight in lbs. (kg.) | 61.3 (27.8)                                                                                                                                                                       | 61.3 (27.8) | 61.3 (27.8) | 88.4 (40.1) | 104.3 (47.3) |
| Enclosures                    | NEMA Type 7. For dry indoor use only. Do not immerse in water. Do not store or use in areas exposed to rain or snow.                                                              |             |             |             |              |
| Mounting brackets             | Two 14 gauge galvanized steel brackets                                                                                                                                            |             |             |             |              |
| Heating elements              | Two Incoloy 840 sheathed elements                                                                                                                                                 |             |             |             |              |
| Optional built-in thermostat  | Explosionproof room thermostat with 10 settings                                                                                                                                   |             |             |             |              |
| Cabinet material              | 14 gauge (0.075"/1.90mm) steel. Rear panel is galvanized. Front and side panels are baked green/gray epoxy powder coated with five stage pre-treatment, including iron phosphate. |             |             |             |              |
| Temperature code rating       | T2A – 280°C (536°F)                                                                                                                                                               |             |             |             |              |
| Temperature limitations:      |                                                                                                                                                                                   |             |             |             |              |
| Operational                   | -45°C to 40°C (-49°F to 104°F)                                                                                                                                                    |             |             |             |              |
| Storage                       | -45°C to 80°C (-49°F to 176°F)                                                                                                                                                    |             |             |             |              |

<sup>A</sup> Hydrogen applications only apply to heaters without built-in thermostats.

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3A

3A

## Ordering information:

Without built-in room thermostat –  
Class I, Div. 1 & 2, Groups B, C, D;  
Zones 1 & 2, Group IIB + H<sub>2</sub>

| Cat. #   | Unit wattage (kW) | Unit output (BTU/hr.) | Unit voltage | Unit amperage | Maximum circuit fuse amperage <sup>Ⓒ</sup> |
|----------|-------------------|-----------------------|--------------|---------------|--------------------------------------------|
| XC A1 N0 | 1.2               | 4097                  | 120          | 10.0          | 15                                         |
| XC A2 N0 | 1.2               | 4097                  | 208          | 5.8           | 15                                         |
| XC A3 N0 | 1.2               | 4097                  | 240          | 5.0           | 15                                         |
| XC A4 N0 | 1.2               | 4097                  | 480          | 2.5           | 15                                         |
| XC A5 N0 | 1.2               | 4097                  | 600          | 2.0           | 15                                         |
| XC A6 N0 | 1.2               | 4097                  | 277          | 4.3           | 15                                         |
| XC B1 N0 | 1.8               | 6146                  | 120          | 15.0          | 20                                         |
| XC B2 N0 | 1.8               | 6146                  | 208          | 8.7           | 15                                         |
| XC B3 N0 | 1.8               | 6146                  | 240          | 7.5           | 15                                         |
| XC B4 N0 | 1.8               | 6146                  | 480          | 3.8           | 15                                         |
| XC B5 N0 | 1.8               | 6146                  | 600          | 3.0           | 15                                         |
| XC B6 N0 | 1.8               | 6146                  | 277          | 6.5           | 15                                         |
| XC C2 N0 | 3.6               | 12292                 | 208          | 17.3          | 20                                         |
| XC C3 N0 | 3.6               | 12292                 | 240          | 15.0          | 20                                         |
| XC C4 N0 | 3.6               | 12292                 | 480          | 7.5           | 15                                         |
| XC C5 N0 | 3.6               | 12292                 | 600          | 6.0           | 15                                         |
| XC C6 N0 | 3.6               | 12292                 | 277          | 13.0          | 15                                         |
| XC D2 N0 | 4.8               | 16389                 | 208          | 23.1          | 25                                         |
| XC D3 N0 | 4.8               | 16389                 | 240          | 20.0          | 25                                         |
| XC D4 N0 | 4.8               | 16389                 | 480          | 10.0          | 15                                         |
| XC D5 N0 | 4.8               | 16389                 | 600          | 8.0           | 15                                         |
| XC D6 N0 | 4.8               | 16389                 | 277          | 17.3          | 20                                         |
| XC E2 N0 | 7.6               | 25950                 | 208          | 36.5          | 40                                         |
| XC E3 N0 | 7.6               | 25950                 | 240          | 31.7          | 35                                         |
| XC E4 N0 | 7.6               | 25950                 | 480          | 15.8          | 20                                         |
| XC E5 N0 | 7.6               | 25950                 | 600          | 12.7          | 15                                         |
| XC E6 N0 | 7.6               | 25950                 | 277          | 27.4          | 30                                         |

**Note:** Remote mounted explosionproof room thermostats are not suitable for Group B + IIC applications. Remote contactors are also required on all 600V heaters and heaters with a current draw greater than 22A (supplied and installed by others).

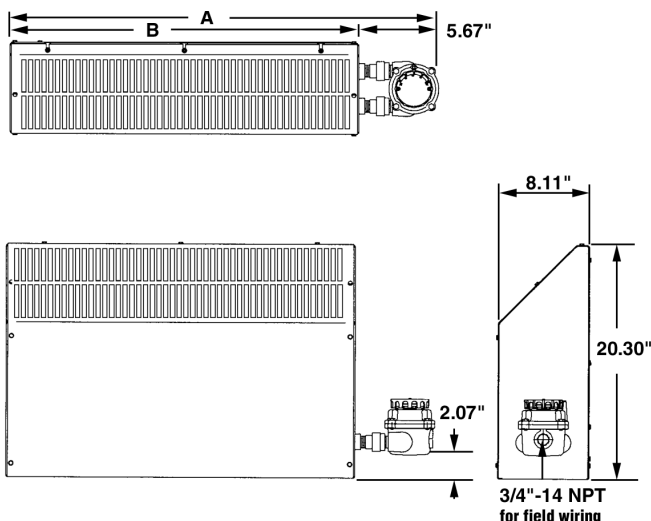
Remote mounted explosionproof room thermostats suitable for Group B, IIB + H<sub>2</sub> applications are a special order item.

Operation at lower than rated voltages will result in reduced kW output and amperage draw. Actual output (kW) = [(supply voltage)<sup>2</sup> ÷ (rated voltage)<sup>2</sup>] x rated unit wattage (kW).

With built-in room thermostat –  
Class I, Div. 1 & 2, Groups C, D;  
Zones 1 & 2, Group IIB

| Cat. #   | Unit wattage (kW) | Unit output (BTU/hr.) | Unit voltage | Unit amperage | Maximum circuit fuse amperage <sup>Ⓒ</sup> |
|----------|-------------------|-----------------------|--------------|---------------|--------------------------------------------|
| XC A1 B1 | 1.2               | 4097                  | 120          | 10.0          | 15                                         |
| XC A2 B2 | 1.2               | 4097                  | 208          | 5.8           | 15                                         |
| XC A3 B3 | 1.2               | 4097                  | 240          | 5.0           | 15                                         |
| XC A4 B4 | 1.2               | 4097                  | 480          | 2.5           | 15                                         |
| XC A6 B6 | 1.2               | 4097                  | 277          | 4.3           | 15                                         |
| XC B1 B1 | 1.8               | 6146                  | 120          | 15.0          | 20                                         |
| XC B2 B2 | 1.8               | 6146                  | 208          | 8.7           | 15                                         |
| XC B3 B3 | 1.8               | 6146                  | 240          | 7.5           | 15                                         |
| XC B4 B4 | 1.8               | 6146                  | 480          | 3.8           | 15                                         |
| XC B6 B6 | 1.8               | 6146                  | 277          | 6.5           | 15                                         |
| XC C2 B2 | 3.6               | 12292                 | 208          | 17.3          | 20                                         |
| XC C3 B3 | 3.6               | 12292                 | 240          | 15.0          | 20                                         |
| XC C4 B4 | 3.6               | 12292                 | 480          | 7.5           | 15                                         |
| XC C6 B6 | 3.6               | 12292                 | 277          | 13.0          | 15                                         |
| XC D3 B3 | 4.8               | 16389                 | 240          | 20.0          | 25                                         |
| XC D4 B4 | 4.8               | 16389                 | 480          | 10.0          | 15                                         |
| XC D6 B6 | 4.8               | 16389                 | 277          | 17.3          | 20                                         |
| XC E4 B4 | 7.6               | 25950                 | 480          | 15.8          | 20                                         |

## Dimensions (in inches):



| Heater kW rating | A                | B               |
|------------------|------------------|-----------------|
| 1.2 - 3.6        | 37.0" (940mm)    | 31.34" (796mm)  |
| 4.8              | 55.125" (1400mm) | 49.45" (1256mm) |
| 7.6              | 65.125" (1654mm) | 59.49" (1511mm) |

<sup>Ⓟ</sup>Hydrogen applications only apply to heaters without built-in thermostats.

<sup>Ⓒ</sup>Or equivalent breaker as per National Electrical Code and Canadian Electrical Code.