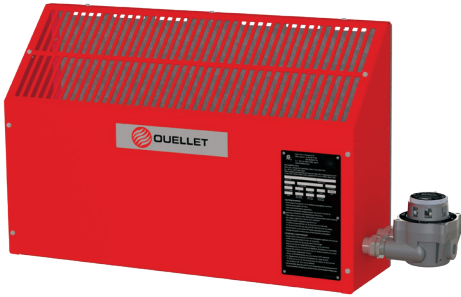


# OPXA Explosion-Proof Sloped Top Convector Heater



## Features

### Color

- Standard: red.

### Voltage

- 120V, 208V, 240V, 277V, 347V, 480V, 600V, 1 or 3-phase.

### Construction

- Sloped top. 14-gauge galvanized steel back panel. 14-gauge carbon steel front and side panels with epoxy/polyester powder-coating.

### Heating element

- Low temperature convection.
- Linear high-limit temperature control with automatic reset.
- Sealed junction box.
- Incoloy® 800 tubular heating element with radial-embossed aluminum fins.

### Watt density

- Varies according to temperature code.

### Standards

- CSA C22.2 No.30, No. 60079-0, No.60079-1, No.46, No. 60529, No. 94.2.
- ANSI/UL 823, 60079-0, 60079-1.
- ANSI/IEC 60529.
- UL 50E.

### Classification

- North American Hazardous Location:
- Class I, Division 1 and 2, Groups B, C and D (T2B or T3A).

- Class I, Zone 1 and 2, Ex db, Groups IIA, IIB+H2, Gb
- Class I, Zone 1 and 2, AEx db, Groups IIA, IIB+H2, Gb
- Ta = -50 °C to +40 °C, IP66, Type 4, (T2 ou T3).

### Temperature code

- Division System – T2B 260 °C (500 °F) or T3A 180 °C (356 °F).
- Zone System – T2 300 °C (572 °F) or T3 200 °C (392 °F).

### Ingress protection

- IP66 and Type 4.

### Control

- Built-in thermostat or wall thermostat available.

### Installation

- Built-in wall bracket.
- Minimum mounting distances of 8 in. (20 cm) above the floor and 18 in. (45 cm) from the ceiling.

### Warranty

- 1-year warranty against defects.

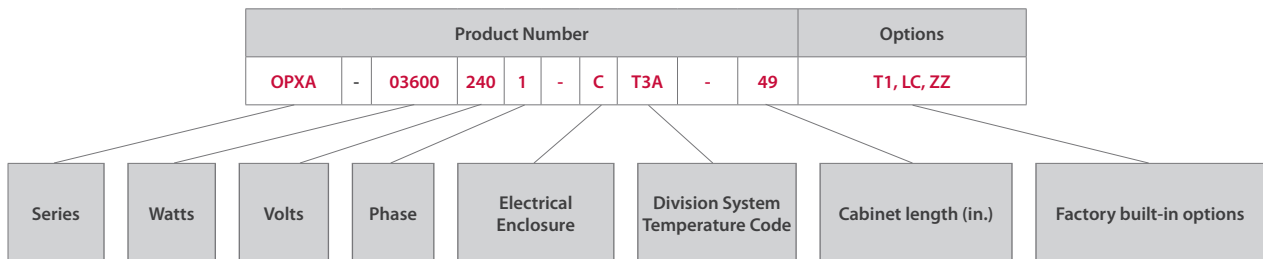
### Application

- Paint room, chemical storage, petrochemical plant, oil refinery, dry cleaning plant, mining industry.

Consult the Electrical Code in your area before installing this unit

## Codification example

Required sequence when ordering



				Product # <sup>1</sup> To order, replace the "X" with the electrical enclosure code A or B or C		Price		Built-in bi-metal thermostat T1	Wall mount bi-metal thermostat OUE-BTX1-N-B	Wall mount electronic thermostat OUE-XET1-1-W-N-A	Your own control device	Cabinet length in.
kW	Volts (ph)	Amp.	Enclosure A and B	Enclosure C	Enclosure A and B	Enclosure C						
<b>T2B (260 °C / 500 °F) Division System Temperature Classification Rating</b>												
<b>T2 (300 °C / 572 °F) Zone System Temperature Classification Rating</b>												
3.6	208 (1)	17.3	OPXA03600-2081-X-T2B-31	6345.00	4500.00		C	A or B or C	B	A or B or C	C	31
3.6	208 (3)	10.0	OPXA03600-2083-X-T2B-31	8520.00	6675.00		Not available	A or B	B	A or B or C	C	31
3.6	240 (1)	15.0	OPXA03600-2401-X-T2B-31	6345.00	4500.00		C	A or B or C	B	A or B or C	C	31
3.6	240 (3)	8.7	OPXA03600-2403-X-T2B-31	8520.00	6675.00		Not available	A or B	B	A or B or C	C	31
3.6	600 (1)	6.0	OPXA03600-6001-X-T2B-31	6345.00	4500.00		Not available	A or B	B	A or B or C	C	31
3.6	600 (3)	3.5	OPXA03600-6003-X-T2B-31	9845.00	8000.00		Not available	A or B	B	A or B or C	C	31
4.8	208 (1)	23.1	OPXA04800-2081-X-T2B-49	10220.00	8375.00		Not available	A or B	B	A or B or C	C	49
4.8	208 (3)	13.3	OPXA04800-2083-X-T2B-49	10720.00	8875.00		Not available	A or B	B	A or B or C	C	49
4.8	240 (1)	20.0	OPXA04800-2401-X-T2B-49	10220.00	8375.00		C	A or B or C	B	A or B or C	C	49
4.8	240 (3)	11.5	OPXA04800-2403-X-T2B-49	10720.00	8875.00		Not available	A or B	B	A or B or C	C	49
4.8	600 (1)	8.0	OPXA04800-6001-X-T2B-49	10220.00	8375.00		Not available	A or B	B	A or B or C	C	49
4.8	600 (3)	4.6	OPXA04800-6003-X-T2B-49	10720.00	8875.00		Not available	A or B	B	A or B or C	C	49
7.6	208 (1)	36.5	OPXA07600-2081-X-T2B-59	11920.00	10075.00		Not available	A or B	B	A or B or C	C	59
7.6	208 (3)	21.1	OPXA07600-2083-X-T2B-59	12620.00	10775.00		Not available	A or B	B	A or B or C	C	59
7.6	240 (1)	31.7	OPXA07600-2401-X-T2B-59	11920.00	10075.00		Not available	A or B	B	A or B or C	C	59
7.6	240 (3)	18.3	OPXA07600-2403-X-T2B-59	12620.00	10775.00		Not available	A or B	B	A or B or C	C	59
7.6	600 (1)	12.7	OPXA07600-600-X-T2B-59	11920.00	10075.00		Not available	A or B	B	A or B or C	C	59
7.6	600 (3)	7.3	OPXA07600-6003-X-T2B-59	12620.00	10775.00		Not available	A or B	B	A or B or C	C	59
10	208 (3)	27.8	OPXA10000-2083-X-T2B-71 <sup>2</sup>	-	11275.00		Not available	Not available	Not available	C	C	71
10	240 (3)	24.1	OPXA10000-2403-X-T2B-71 <sup>2</sup>	-	11275.00		Not available	Not available	Not available	C	C	71
10	600 (1)	16.7	OPXA10000-6001-X-T2B-71 <sup>2</sup>	-	11275.00		Not available	Not available	Not available	C	C	71
10	600 (3)	9.6	OPXA10000-6003-X-T2B-71 <sup>2</sup>	-	11275.00		Not available	Not available	Not available	C	C	71
<b>T3A (180 °C / 356 °F) Division System Temperature Classification Rating</b>												
<b>T3 (200 °C / 392 °F) Zone System Temperature Classification Rating</b>												
0.6	347 (1)	1.7	OPXA00600-3471-X-T3A-31	4 595.00	2 750.00		C	A or B or C	B	A or B or C	C	31
1.2	120 (1)	10.0	OPXA01200-1201-X-T3A-31	-	2 755.00		C	C	Not available	C	C	31
1.2	208 (1)	5.8	OPXA01200-2081-X-T3A-31	5 305.00	3 460.00		C	A or B or C	B	A or B or C	C	31
1.2	208 (3)	3.3	OPXA01200-2083-X-T3A-31	5 875.00	4 030.00		Not available	A or B	B	A or B or C	C	31
1.2	240 (1)	5.0	OPXA01200-2401-X-T3A-31	5 305.00	3 460.00		C	A or B or C	B	A or B or C	C	31
1.2	240 (3)	2.9	OPXA01200-2403-X-T3A-31	5 875.00	4 030.00		Not available	A or B	B	A or B or C	C	31
1.2	347 (1)	3.5	OPXA01200-3471-X-T3A-31	9 295.00	7 450.00		C	A or B or C	B	A or B or C	C	31
1.2	600 (1)	2.0	OPXA01200-6001-X-T3A-31	5 305.00	3 460.00		Not available	A or B	B	A or B or C	C	31
1.6	347 (1)	4.6	OPXA01610-3471-X-T3A-49	9 795.00	7 950.00		C	A or B or C	B	A or B or C	C	49
1.8	120 (1)	15.0	OPXA01800-1201-X-T3A-31	-	4 200.00		C	C	Not available	C	C	31
1.8	208 (1)	8.7	OPXA01800-2081-X-T3A-31	6 045.00	4 200.00		C	A or B or C	B	A or B or C	C	31
1.8	208 (3)	5.0	OPXA01800-2083-X-T3A-31	6 645.00	4 800.00		Not available	A or B	B	A or B or C	C	31
1.8	240 (1)	7.5	OPXA01800-2401-X-T3A-31	6 045.00	4 200.00		C	A or B or C	B	A or B or C	C	31
1.8	240 (3)	4.3	OPXA01800-2403-X-T3A-31	6 645.00	4 800.00		Not available	A or B	B	A or B or C	C	31
1.8	600 (1)	3.0	OPXA01800-6001-X-T3A-31	6 045.00	4 200.00		Not available	A or B	B	A or B or C	C	31
2.54	347 (1)	7.3	OPXA02540-3471-X-T3A-59	10 095.00	8 250.00		C	A or B or C	B	A or B or C	C	59
3.34	347 (1)	9.6	OPXA03340-3471-X-T3A-71	10 955.00	9 110.00		C	A or B or C	B	A or B or C	C	71
3.6	208 (1)	17.3	OPXA03600-2081-X-T3A-49	8 520.00	6 675.00		C	A or B or C	B	A or B or C	C	49
3.6	208 (3)	10.0	OPXA03600-2083-X-T3A-49	9 895.00	8 050.00		Not available	A or B	B	A or B or C	C	49
3.6	240 (1)	15.0	OPXA03600-2401-X-T3A-49	8 520.00	6 675.00		C	A or B or C	B	A or B or C	C	49
3.6	240 (3)	8.7	OPXA03600-2403-X-T3A-49	9 895.00	8 050.00		Not available	A or B	B	A or B or C	C	49
3.6	600 (1)	6.0	OPXA03600-6001-X-T3A-49	8 520.00	6 675.00		Not available	A or B	B	A or B or C	C	49
3.6	600 (3)	3.5	OPXA03600-6003-X-T3A-49	9 895.00	8 050.00		Not available	A or B	B	A or B or C	C	49
5	208 (1)	24.0	OPXA05000-2081-X-T3A-71	10 620.00	8 775.00		Not available	A or B	B	A or B or C	C	71
5	208 (3)	13.9	OPXA05000-2083-X-T3A-71	13 120.00	11 275.00		Not available	A or B	B	A or B or C	C	71
5	240 (1)	20.8	OPXA05000-2401-X-T3A-71	10 620.00	8 775.00		C	A or B or C	B	A or B or C	C	71
5	240 (3)	12.0	OPXA05000-2403-X-T3A-71	13 120.00	11 275.00		Not available	A or B	B	A or B or C	C	71
5	600 (1)	8.3	OPXA05000-6001-X-T3A-71	10 620.00	8 775.00		Not available	A or B	B	A or B or C	C	71
5	600 (3)	4.8	OPXA05000-6003-X-T3A-71	13 120.00	11 275.00		Not available	A or B	B	A or B or C	C	71

<sup>1</sup> X = A (120VAC, large electrical enclosure), B (24VAC, large electrical enclosure), C (Line voltage, small electrical enclosure [Y junction box]).

Large electrical enclosure A and B include a contactor, transformer, and printed circuit board with fuses.

If using your own temperature control device, a remote contactor may be required. Customers can also supply their own remote mount control circuit/enclosure.

Ensure control devices comply to local electrical code and meets the heater's electrical ratings and is suitable for the area's hazardous atmosphere classification.

<sup>2</sup> All 10 kW heaters include a 1/4" (6.35 mm) diameter 304 stainless steel safety guard pre-installed over the outlet grills.

Supply voltage must be within +/- 10% of rated heater voltage. Actual output (kW) = [(Line voltage)<sup>2</sup> ÷ (Rated voltage)<sup>2</sup>] x Rated unit wattage (kW).

For best heat distribution and comfort, a wall mount thermostat is recommended.

Note: BTX1 and XET1 thermostats are not designed to switch three-phase heaters directly. A factory built-in electrical enclosure (A or B),

or customer supplied, remote mount, "Control Circuit" is required.

Standard color is red.

277V and 480V are available upon request.

# OPXA

## Accessories

### Explosion-Proof ExCaliber™ Series Thermostats

#### OUE-BTX1-N-B (SPDT) heating or cooling:

This is the bi-metal thermostat used on OPXA heaters with built-in option code (T1) and electrical enclosure "C" selected. Wall mount version requires electrical enclosure "A" or "B" or "C" depending on model.



Class I, Division 1 & 2, Groups B, C & D	Class I, Zone 1 & 2, Ex db, Groups IIA, IIB+H <sub>2</sub> , T6, Gb
Class II, Division 1, Groups E, F & G	Class I, Zone 1 & 2, AEx db, Groups IIA, IIB+H <sub>2</sub> , T6, Gb
Class II, Division 2, Groups F & G; Class III; T6-50°C ≤ T amb ≤ +40°C, IP66, Type 4	Class II, Zone 21 & 22, Ex tb, Groups IIIA, IIIB & IIIC, T85°C, Db Class II, Zone 21 & 22, AEx tb, Groups IIIA, IIIB & IIIC, T85°C, Db

Temperature adjustment range: 40°F to 80°F (5°C to 25°C); 3/4" - NPT conduit opening on top and bottom. 22A resistive load, 480VAC Max; 1/2 HP@125 VAC; 1 HP@ 250VAC (suitable for 24V or 120V control circuit).

Note: If ExCaliber™ series wall mount thermostats are being used with 600V OPXA heaters, heaters with a current draw greater than 22A, or on any 3-phase heaters, then order the heaters with electrical enclosure "A" or "B". If using your own temperature control device, a remote contactor may be required. Ensure control devices comply to local electrical code and meets the heater's electrical ratings and is suitable for the area's hazardous atmosphere classification.

#### OUE-XET1-1-W-N-A (electronic) heating only:

Wall mount version requires heater electrical enclosure "B". If a wall mount thermostat is ordered without heater electrical enclosure "B", then an external 24VAC power supply and control circuit is required (supplied and installed by others).



Class I, Division 1 & 2, Groups B, C & D	Class I, Zone 1 & 2, Ex db, Groups IIA, IIB+H <sub>2</sub> , T6, Gb
Class II, Division 1, Groups E, F & G	Class I, Zone 1 & 2, AEx db, Groups IIA, IIB+H <sub>2</sub> , T6, Gb
Class II, Division 2, Groups F & G; Class III; T6-50°C ≤ T amb ≤ +40°C, IP66, Type 4	Class II, Zone 21 & 22, Ex tb, Groups IIIA, IIIB & IIIC, T85°C, Db Class II, Zone 21 & 22, AEx tb, Groups IIIA, IIIB & IIIC, T85°C, Db

Temperature adjustment range: 40°F to 80°F (5°C to 25°C); 3/4" - NPT conduit opening on top and bottom. 20 to 36VAC 50/60 Hz; 1A max. continuous (suitable for 24V control circuit only).

### Field Installation & Retrofit Kits

#### Built-in thermostat field installation kits for OPXA series:

These two field installed built-in thermostat kits are for adding a

OUE-BTX1-N-B or OUE-XET1-1-W-N-A thermostat to an OPXA heater with electrical enclosure "A" (120VAC) or "B" (24VAC) and includes the electrical wires, 3/4" conduit seal, conduit nipples, sealing compound (water/cement plastic pouch) and sealing fiber. The conduit seal is certified for use in Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III. Installation must be inspected on site as per the local electrical code.



#### BTX1-FIK:

This kit is suitable for installation of a OUE-BTX1-N-B thermostat on an OPXA heater with electrical enclosure "A" (120VAC) or "B" (24VAC). Thermostat not included.

#### XET1-FIK :

This kit is suitable for installation of an OUE-XET1-1-W-N-A thermostat on an OPXA heater with electrical enclosure "B" (24VAC) only. Thermostat not included.



#### OUE-BLK1-W-N-A trousse rétrofit en chantier:

The heater thermostat conversion kit allows simple interchangeability from a built-in thermostat to a wall mount configuration.

### Explosion-Proof Disconnect Switch, Remote Mount

#### OUE-XDC-01: Disconnect switch - Not suitable for Group B or Group IIB+H<sub>2</sub> (Hydrogen) gas atmosphere:

Class I, Division 1 & 2, Groups C & D; Class II, Division 1, Groups E, F & G; Class II, Division 2, Groups F & G; Class III

Class I, Zone 1 & 2, Grp IIA & IIB, T5

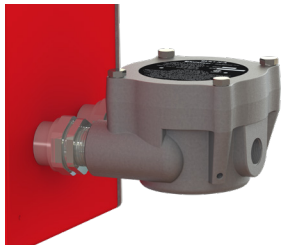
600V, 50A max.; 15 HP@208/240V, 3-phase; 30 HP@480/600V, 3-phase; 2 HP@120V, 1-phase; 7.5 HP@240V, 1-phase



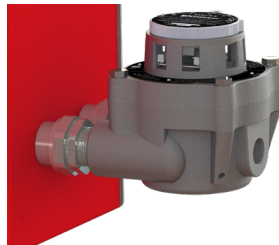
Options

Product # Kit	Product # Factory installed*	Price	Description
-	T1	890.00	Built-in thermostat, bi-metal (not available with 600V models, any 3-phase models, or 1- phase models that have a line current exceeding 22A)
-	LC	30.00	Left side electrical enclosure (standard location is on the right side)
-	ZZ	-	Special build (factory use only)
OUE-BTX1-N-B	-	890.00	Wall mount bi-metal hazardous location thermostat. Note: Requires one heater electrical enclosures A or B or C, depending on heater model selected.
OUE-XET1-1-W-N-A	-	986.00	Wall mount electronic hazardous location thermostat. Note: Requires heater electrical enclosure B.
OUE-XDC-01	-	1939.00	Wall mount hazardous location disconnect switch. Note: Not suitable for Group B or Group IIB+H2 (Hydrogen) gas atmosphere.
BTX1-FIK	-	300.00	This field installation kit is suitable for installation of a OUE-BTX1-N-B thermostat directly to the heater with Electrical Enclosure "A" (120VAC) or "B" (24VAC). Thermostat not included.
XET1-FIK	-	300.00	This field installation kit is suitable for installation of an OUE-XET1-1-W-N-A thermostat directly to the Heater with Electrical Enclosure "B" (24VAC) only. Thermostat not included.
BLK1-W-N-A	-	321.00	Heater thermostat conversion kit allows interchangeability from a built-in thermostat, with enclosure "C" to a wall mount configuration.

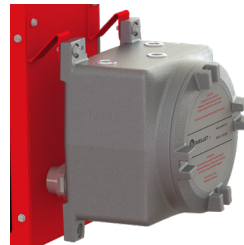
Electrical Enclosure



Electrical Enclosure "C"  
Line voltage



Electrical Enclosure "C"  
Line voltage with optional built-in thermostat "T1"



Electrical Enclosure "A" (120VAC) or "B" (24VAC)



Left side Electrical Enclosure  
Option Code "LC"

