ISO 9001:2008 CERTIFIED

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CANAM pipe & supply

C SP® US
235730

Includes our EXCaliber™ HEAT EXCHANGER CORE

XEU1

3kW models & new thermostats now available!

Explosion-Proof Electric Air Heater For Hazardous Locations

Class I, Division 1 & 2, Groups C & D
Class II, Division 1 & 2, Groups F & G
Temperature Code T3B (3kW/35kW = T3A)

Class I, Zone 1 & 2, Groups IIA & IIB, T3

The **XEU1** series of explosion-proof electric air heaters is designed to meet the most demanding requirements of heavy industry. The harsh operating conditions of this industry require heating equipment that is safe, reliable, dependable, and available when you need it. **XEU1** unit heaters are designed to provide primary or supplementary heating for comfort or freeze protection in areas that are classified as hazardous locations (Gas and Dust atmospheres).

Designed for hazardous locations!

All **XEU1** models are **designed to meet U.S. and Canadian certi ication standards.** The three sizes of **XEU1** heaters include our ***ExCaliber*™** high performance liquid-to-air heat-exchanger cores that are available in **35 model choices** of voltage and heat output combinations to meet your specific requirements.

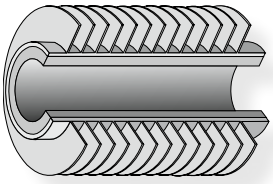
The rugged and versatile **XEU1** heater incorporates a high quality immersion heater, high performance fan and motor assembly, a sturdy 14 GA steel cabinet with epoxy/polyester powder-coating for corrosion resistance, large control enclosure with an extra port for convenient wiring of an external room thermostat, and enclosure O-rings to minimize moisture ingress.

XEU1 heaters are suitable for a wide variety of applications that include but are not limited to oil & gas drilling rigs, petrochemical facilities, refineries, chemical storage and handling facilities, paint storage areas, sewage treatment plants, aircraft servicing areas, grain elevators, coal preparation areas, and other areas containing combustible dusts (flour, wood, plastics, chemicals, etc.).

Rugged design, but easily maintained!

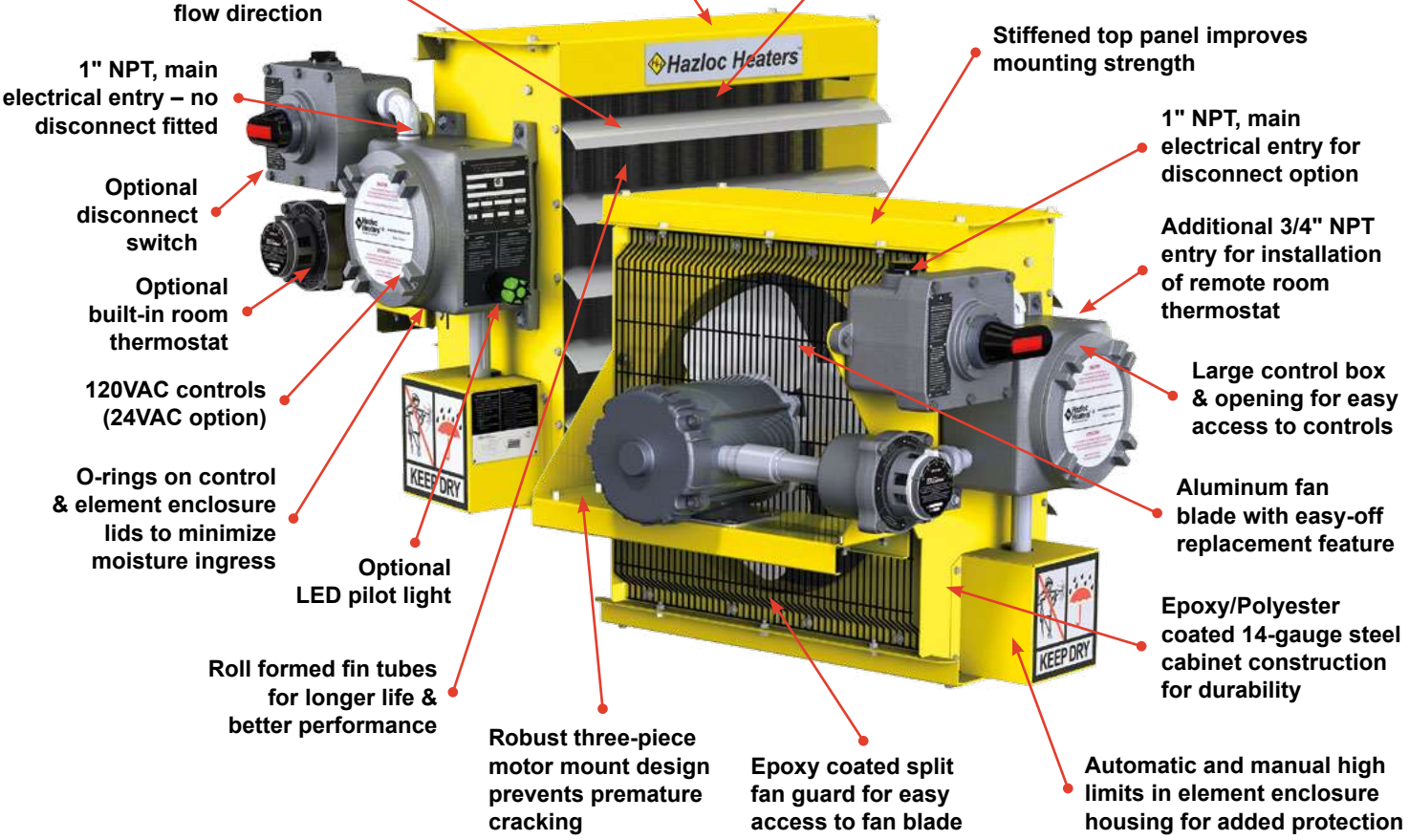
All **XEU1** heaters are designed for industrial applications with all features being heavy-duty to meet your most demanding environments and long-life expectations. Even with heavy-gauge steel construction used throughout the heater it does not inhibit maintenance of the product since the **XEU1** has been designed for easy field servicing with a removable heat exchanger core assembly, split fan guard, and replaceable automatic and manual reset high-limits. An added benefit is our 36-month heater warranty!

Maximum durability… rugged fin tubes!



All **XEU1** ***ExCaliber*™** liquid-to-air heat-exchanger cores are evacuated & sealed and are constructed using rugged carbon-steel tubes with copper-free, roll-formed aluminum fins to maximize heat transfer and carbon-steel headers for **maximum durability, resistance to corrosion, and longer life** in your demanding applications.

Dedicated to Performance and Reliability!



NOTE: XEU1 heaters must not be exposed to rain or snow. This applies to both installed and stored heaters.

Suitable for the following hazardous location classifications:

- **Class I, Division 1 & 2, Groups C & D, T3B (3kW/35kW = T3A)**
- **Class II, Division 1 & 2, Groups F & G, T3B (3kW/35kW = T3A)**
- **Class I, Zone 1 & 2, Groups IIA & IIB, T3**

Limited 36-month Warranty

The ***ExCaliber***™ vacuum sealed liquid-to-air heat exchanger core is constructed using rugged, copper-free, roll-formed aluminum fins and protected by a pressure relief device, automatic reset high limit, and a back-up manual reset high limit.

The **XEU1** heater has the highest air temperature rise, on average, in the industry across our complete kW range.

ExCaliber™ heat-exchanger core is easy to remove

XEU1 Model Coding

Heater Model Code & Option Codes

Model Code | **Option Codes**

XEU 1 - 12 - 100 - 480 3 60 - A - Y - B , **T1, D, P, etc.**

(stamped on separate field of data plate)

Model Series

Generation
For major revisions

Fan Size	
12 inches	**12**
16 inches	**16**
20 inches	**20**

Power Output		
3 kW	**030**	12 inch fan size
5 kW	**050**	12 inch fan size
7.5 kW	**075**	12 inch fan size
10 kW	**100**	12 inch fan size
15 kW	**150**	16 inch fan size
20 kW	**200**	16 inch fan size
25 kW	**250**	20 inch fan size
30 kW	**300**	20 inch fan size
35 kW	**350**	20 inch fan size

Heater Line Voltage		
208 Volts	**208**	3 to 15 kW sizes only
240 Volts	**240**	3 to 15 kW sizes only
480 Volts	**480**	All kW sizes
600 Volts	**600**	All kW sizes

Product Revision No.
For minor revisions

Factory Built-in Options	
N	No options selected
Y	Yes, options selected

Option Codes (stamped on separate field of data plate)	
T1	Thermostat **(BTX1-N-A)**
D	Disconnect Switch
P	Pilot Light **(Heat On)**
F	Continuous Fan
H1	Heresite Core
H2	Heresite Cabinet
H3	Heresite Core/ Cabinet

Includes louvers & fan blade > H2

Includes louvers & fan blade > H3

Control Voltage	
A	120VAC
B	24VAC (safer)

Frequency	
60	60 Hertz

Phase	
1	1 Phase
3	3 Phase

Refer to Page 7 for availability

All kW sizes

Model Code Format

When requesting a quote or ordering refer to Page 7 and then please follow the **"Model Code"** format above.

Example:

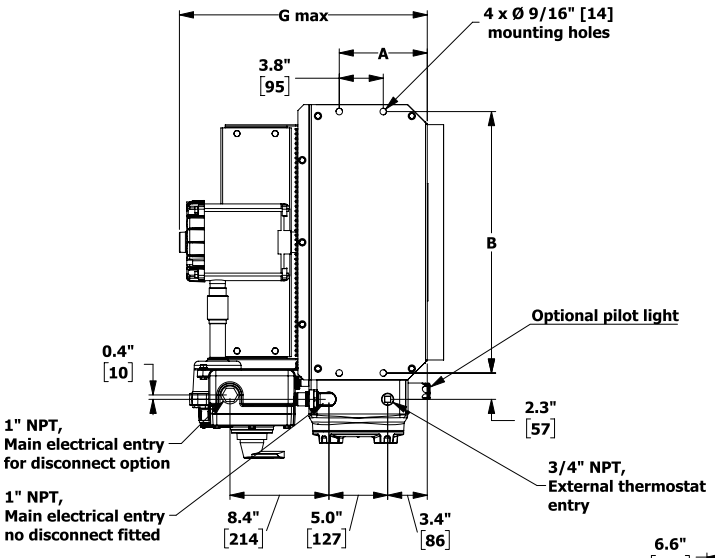
Model Code: **XEU1-12-100-480360-A-Y-B**

Option Code: **T1, D, P**

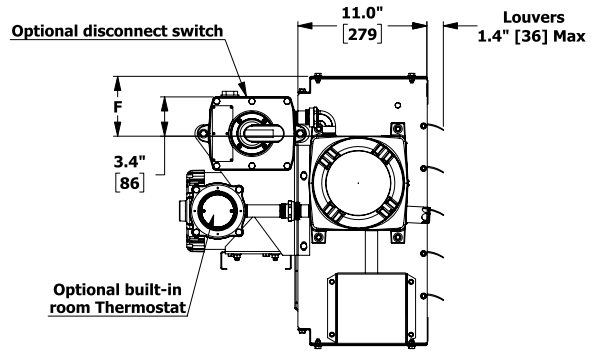
XEU1 Specifications By Model Size

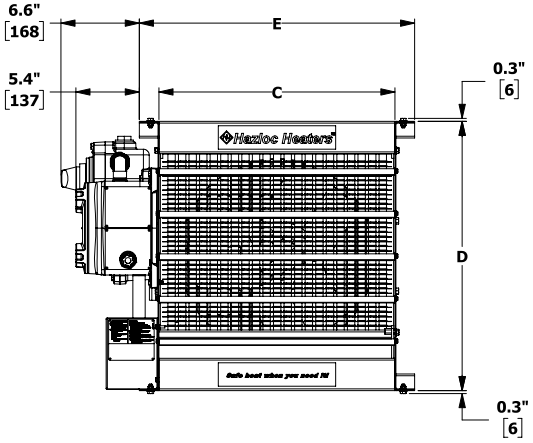
Model		XEU1-12				XEU1-16		XEU1-20		
Fan diameter	in (mm)	12 (304.8)				16 (406.4)		20 (508.0)		
Nominal kW		3	5	7.5	10	15	20	25	30	35
Air delivery	cfm m³/hr	350 595	400 680	600 1019	800 1359	1200 2039	1700 2888	2100 3568	3000 5097	3000 5097
Approximate air velocity	fpm m/s	422 2.1	479 2.4	718 3.6	958 4.9	808 4.1	1145 5.8	916 4.6	1309 6.6	1309 6.6
Approximate horizontal air throw	ft m	13 3.9	15 4.6	22 6.7	30 9.1	33 10.1	46 14.0	41 12.5	61 18.6	61 18.6
Motor power	hp (watts)	¼ (186)				¼ (186)		½ (373)		
Maximum mounting height (to underside of heater)	ft m	7 2.1	7 2.1	7.5 2.3	9.5 2.9	10 3.0	11 3.4	12 3.6	15 4.6	15 4.6
Approximate net weight (without disconnect) (with disconnect)	 lbs (kg) lbs (kg)	 129 (58.5) 142 (64.4)			 133 (60.3) 146 (66.2)	 161 (73.0) 174 (78.9)		 192 (87.1) 205 (92.9)		
Approximate shipping weight (without disconnect) (with disconnect)	 lbs (kg) lbs (kg)	 188 (85.3) 201 (91.2)			 192 (87.1) 205 (93.0)	 224 (101.6) 237 (107.5)		 261 (118.4) 274 (124.3)		
Wood crate dimensions Wood packaging material is in compliance with ISPM No. 15.	W x D x H in mm	31.5 x 29.5 x 29.25 800 x 749 x 743				35.5 x 29.5 x 31.75 902 x 749 x 806		39.5 x 29.5 x 35.75 1003 x 749 x 908		

XEU1 Physical Dimensions



Heater Size	12 (3-10kW)	16 (15-20kW)	20 (25-35kW)
Dim.	Inches (mm)	Inches (mm)	Inches (mm)
A	7.5 (191)	7.5 (191)	7.5 (191)
B	18.2 (462)	22.3 (566)	26.3 (668)
C	16.3 (414)	20.3 (516)	24.3 (617)
D	19.0 (483)	23.0 (584)	27.0 (686)
E	19.5 (495)	23.5 (597)	27.5 (699)
F	3.1 (79)	5.1 (130)	7.1 (180)
G	22.3 (566)	22.3 (566)	23.3 (592)





XEU1 General Specifications

	Certification	$_{C}CSA_{US}$ 235730 - Certified to Canadian and U.S. standards
Approvals	North American Hazardous Location Classifications	Class I, Division 1 & 2, Groups C & D Class II, Division 1 & 2, Groups F & G Temperature Code T3B (3kW/35kW =T3A)
		Class I, Zone 1 & 2, Groups IIA & IIB, T3
	Temperature Code	Division System - T3B 165°C (329°F); [3kW/35kW = T3A 180°C (356°F)] Zone System - T3 200°C (392°F)
Cabinet	Cabinet Material	14-gauge (0.075 in.) (1.9 mm) steel. Yellow epoxy/polyester powder coated with five-stage pretreatment, including iron phosphate.
	Fan Guard	Split design with close wire spacing. A 3/8 in. (9.5 mm) diameter probe will not enter. Black polyester powder coated.
	Louver Blades	Anodized extruded aluminum.
	Conduit Materials & Fittings	Plated steel and aluminum alloy for corrosion resistance.
	Fasteners	Zinc plated steel for corrosion resistance.
	Enclosures	Cast aluminum (non-copper alloy) NEMA Type 7 & 9 with O-ring.
	Mounting Holes	9/16” diameter holes – Four located on the top face of heater.
Motor/Fan	Motor Type	Explosion-proof, thermally protected, 1725 RPM permanently lubricated ball bearing type with 56 frame and “easy-off” fan blade replacement feature.
	Fan	Three-blade aluminum, steel spider and hub with 5/8 in. bore.
Heat Exchanger	Heating Elements	Long-life, low watt-density, high grade metal-sheathed
	Heat Transfer Fluid	Ethylene glycol and water including corrosion inhibitors.
	Header Material	Carbon steel.
	ExCaliber™ Core	Carbon steel headers and element housing with O-ring. Fin tubes are carbon steel tubes with copper-free, roll-formed aluminum fins @ 10 fins per in. Vacuum sealed. Coated with black, high-heat enamel.
Protection	Temperature High Limits	One automatic reset rated for 100,000 cycles, and one manual reset. Both are snap-action bimetal type, open on temperature rise.
	Pressure Relief	High-quality stainless steel pressure relief device.
Controls	Control Circuit	Built-in 120VAC or 24VAC control (24VAC recommended).
	Control Contactor	40 FLA (50A resistive per pole) Definite Purpose. Rated for 500,000 mechanical operations.
	Control Transformer	Multitap primary, 120VAC or 24VAC secondary.
	Fuse Protection	Thermal delay fuse with spare, .25” x 1.25” , 120VAC = 1/4A, 24VAC = 1A.
	Room Thermostat With Lockable Temperature Dial (option code T1)	Built-in, **BTX1-N-A** explosion-proof thermostat, 40°F to 80°F (5°C to 25°C). Conduit is factory sealed between enclosures. Wall mount thermostats also available. See Page 8. *Note: Optional **BLK1-N-A** thermostat conversion kit allows simple interchangeability from a built-in to a wall mount configuration.*
Load Isolation	Disconnect Switch (option code D)	Built-in, **XDC-01** explosion-proof disconnect switch, 600VAC, 50A max with lock-out feature. Conduit is factory sealed between enclosures. Also available in a wall mount version.
Additional Options	Pilot Light (option code P)	Built-in “Heat on” Green LED pilot light with lens guard.
	Continuous Fan (option code F)	Continuous fan operation. Circulates air and prevents gas pockets from forming.
	Heresite Coating (option code H1, H2, H3)	H1 = Heresite Core; or H2 = Heresite Cabinet (includes louvers & fan blade); or H3 = Heresite Core and Cabinet. *Note: Contact factory for Heresite delivery lead time.*
Operating Limits	Ambient Temperature	-40°F to 104°F (-40°C to 40°C). Storage: -58°F to 140°F (-50°C to 60°C)
	Maximum Altitude	10,000 ft (3048 m) above sea level.

XEU1 Heater Performance Data

kW (btu/hr)	Line Volts	Ø	Fan Dia. in.	Model See page 4 to complete model coding	Temperature Classification Code	Total Current A	Air Temp. Rise °F	Air Temp. Rise °C
3 (10236)	208	1	12	XEU1-12-030-208160 *	T3A	16.7	32.2	18.0
	240	1	12	XEU1-12-030-240160 *	T3A	14.9	32.2	18.0
	208	3	12	XEU1-12-030-208360 *	T3A	9.4	32.2	18.0
	240	3	12	XEU1-12-030-240360 *	T3A	8.3	32.2	18.0
	480	3	12	XEU1-12-030-480360 *	T3A	4.2	32.2	18.0
	600	3	12	XEU1-12-030-600360 *	T3A	3.3	32.2	18.0
5 (17060)	208	1	12	XEU1-12-050-208160 *	T3B	26.3	44.0	24.5
	240	1	12	XEU1-12-050-240160 *	T3B	23.2	44.0	24.5
	208	3	12	XEU1-12-050-208360 *	T3B	15.0	44.0	24.5
	240	3	12	XEU1-12-050-240360 *	T3B	13.1	44.0	24.5
	480	3	12	XEU1-12-050-480360 *	T3B	6.6	44.0	24.5
	600	3	12	XEU1-12-050-600360 *	T3B	5.2	44.0	24.5
7.5 (25590)	208	1	12	XEU1-12-075-208160 *	T3B	38.4	42.5	23.7
	240	1	12	XEU1-12-075-240160 *	T3B	33.7	42.5	23.7
	208	3	12	XEU1-12-075-208360 *	T3B	21.9	42.5	23.7
	240	3	12	XEU1-12-075-240360 *	T3B	19.1	42.5	23.7
	480	3	12	XEU1-12-075-480360 *	T3B	9.6	42.5	23.7
	600	3	12	XEU1-12-075-600360 *	T3B	7.6	42.5	23.7
10 (34120)	240	1	12	XEU1-12-100-240160 *	T3B	44.1	41.8	23.2
	208	3	12	XEU1-12-100-208360 *	T3B	28.9	41.8	23.2
	240	3	12	XEU1-12-100-240360 *	T3B	25.2	41.8	23.2
	480	3	12	XEU1-12-100-480360 *	T3B	12.6	41.8	23.2
	600	3	12	XEU1-12-100-600360 *	T3B	10.1	41.8	23.2
15 (51180)	208	3	16	XEU1-16-150-208360 *	T3B	42.7	40.6	22.6
	240	3	16	XEU1-16-150-240360 *	T3B	37.2	40.6	22.6
	480	3	16	XEU1-16-150-480360 *	T3B	18.6	40.6	22.6
	600	3	16	XEU1-16-150-600360 *	T3B	14.9	40.6	22.6
20 (68240)	480	3	16	XEU1-16-200-480360 *	T3B	24.6	38.0	21.1
	600	3	16	XEU1-16-200-600360 *	T3B	19.7	38.0	21.1
25 (85300)	480	3	20	XEU1-20-250-480360 *	T3B	31.3	39.1	21.8
	600	3	20	XEU1-20-250-600360 *	T3B	25.1	39.1	21.8
30 (102360)	480	3	20	XEU1-20-300-480360 *	T3B	37.3	32.6	18.2
	600	3	20	XEU1-20-300-600360 *	T3B	29.9	32.6	18.2
35 (119420)	480	3	20	XEU1-20-350-480360 *	T3A	43.3	37.9	21.1
	600	3	20	XEU1-20-350-600360 *	T3A	34.7	37.9	21.1

(*) Refer to page 4 for Control Voltage and Factory Built-in Option codes to complete entire model code for ordering.

Nomenclature/Useful Formulas/Conversions

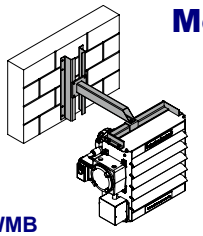
1 kW = 3,414 btu/hr; Final air temp. = Entering air temp. + Temp. rise; °C = 5/9 (°F - 32)

AC/DC Formulas			
To Find	**Direct Current**	**AC - 1 phase**	**AC - 3 phase**
Amps when horsepower is known	$\frac{HP \times 746}{E \times Eff}$	$\frac{HP \times 746}{E \times Eff \times PF}$	$\frac{HP \times 746}{1.73 \times E \times Eff \times PF}$
Amps when kilowatts is known	$\frac{kW \times 1000}{E}$	$\frac{kW \times 1000}{E \times PF}$	$\frac{kW \times 1000}{1.73 \times E \times PF}$
Amps when kVA is known	$\frac{KVA \times 1000}{E}$	$\frac{kVA \times 1000}{E}$	$\frac{kVA \times 1000}{1.73 \times E}$
Kilowatts	$\frac{I \times E}{1000}$	$\frac{I \times E \times PF}{1000}$	$\frac{I \times E \times 1.73\ PF}{1000}$
Kilovolt-Amps	$\frac{I \times E}{1000}$	$\frac{I \times E}{1000}$	$\frac{I \times E \times 1.73}{1000}$
Horsepower (output)	$\frac{I \times E \times Eff}{746}$	$\frac{I \times E \times Eff \times PF}{746}$	$\frac{I \times E \times Eff \times 1.73 \times PF}{746}$

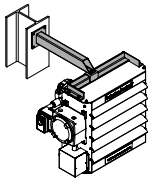
Where **I** = amps; **E** = phase-to-phase volts; **Eff** = efficiency expressed as a decimal; **PF** = power factor expressed as a decimal; **kW** = kilowatts; **KVA** = kilovolt amperes; **HP** = horsepower.

Accessories

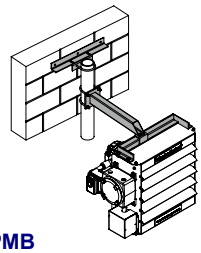
Mounting Brackets



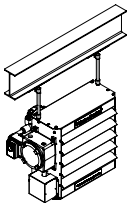
WMB
Wall Mounting Bracket
For use in buildings that have substantial walls. The Z sections provide additional support where necessary.



BMB
Basic Mounting Bracket
For applications where the support arm can be bolted or welded directly to structural steel or concrete.



PMB
Pipe Mounting Bracket
For buildings with insufficient strength to use other types of mounting brackets. Requires 3 in. pipe (3.5 in. O.D., min. Sch. 40, not supplied).



HMB
Hanging Mounting Bracket
Ideal and economical if adequate overhead structure exists. Requires 1/2 in. pipe, cut and threaded (min. Sch. 40 not supplied).

Note: When ordering mounting brackets, please specify the type of bracket preferred and the basic model code of the heater to be mounted. Example, **PMB-XEU1-16.** Mounting kits are made of carbon steel and coated with black enamel. Structural support of heater and bracket during transit is required.

Explosion-proof ExCaliber™ Series Thermostats, Remote Mount

BTX1-N-A (SPDT) Heating or Cooling (Bi-metal thermostat used on XEU1 heaters with built-in option code (T1) selected)

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; T6
-50°C ≤ T amb ≤ +40°C, IP66, Type 4
Class I, Zone 1 & 2, Ex db, Groups IIA, IIB, T6, Gb
Class I, Zone 1 & 2, AEx db, Groups IIA, IIB, T6, Gb
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; Ship wt - 3.5 lbs (1.6 kg)
22 Amps Resistive Load, 480VAC Max; 1/2HP @ 125VAC; 1HP @ 250VAC (suitable for 24VAC or 120VAC control circuit)

XET1-1-N-A (Electronic) Heating only (24VAC required)

Class I, Division 1 & 2, Groups B, C & D
Class II, Division 1, Groups E, F & G
Class II, Division 2, Groups F & G; Class III; T6
-50°C ≤ T amb ≤ +40°C, IP66, Type 4
Class I, Zone 1 & 2, Ex db, Groups IIA, IIB+H_2, T6, Gb
Class I, Zone 1 & 2, AEx db, Groups IIA, IIB+H_2, T6, Gb
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; Ship wt – 3.4 lbs (1.5 kg)
24VAC 50/60Hz; 1 Amp max continuous (suitable for 24 volt control circuit only)

BLK1-N-A Junction Box (Heater thermostat conversion kit)

The BLK1-N-A heater thermostat conversion kit allows simple interchangeability from a built-in to a wall mount configuration.

Explosion-proof Disconnect Switch, Remote Mount

XDC-01 (Disconnect switch used on XEU1 heaters with built-in option code (D) selected)

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
Ship wt – 12.0 lbs (5.4 kg)

XEU1 Engineering Specifications

1.0 General

1.1 The explosion-proof unit heater(s) shall be supplied and installed, in accordance with the plans and specifications, with ratings as listed in the schedule of electrical heating equipment, and shall be Hazloc Heaters' XEU1 series.

1.2 The unit heater(s) shall be $_{C}CSA_{US}$ certified for use in Class I, Divisions 1 & 2, Groups C & D; Class II, Divisions 1 & 2, Groups F & G; and Class I, Zones 1 & 2, Groups IIA & IIB Hazardous Locations and shall be rated for National Electric Code and Canadian Electric Code Temperature Code T3B, 165°C (329°F); [3kW/35kW = T3A, 180°C (356°F)] for Division System and T3, 200°C (392°F) for Zone System.

2.0 Heat Exchanger

2.1 The Heat Exchanger shall be a liquid-to-air type consisting of steel tubes with integral aluminum fins @ 10 fins per inch and be evacuated, sealed and painted with black, high heat enamel.

2.2 The heat exchanger shall be protected by a high-quality stainless steel pressure relief device with no serviceable parts.

2.3 The Heat Exchanger shall be filled and sealed to design level with a custom-blended, long-life solution of ethylene-glycol and water including inhibitors to provide superior corrosion protection.

2.4 The Heat Exchanger shall include heavy-duty immersion heating elements brazed into a heavy steel flange. The elements shall consist of high-quality resistance wire embedded in a magnesium oxide refractory and sheathed in a metal tubing. The heater is to be protected by two snap-action bimetal temperature high-limit cutouts. The primary high-limit shall be an automatic reset type rated for 100,000 cycles, and the secondary high-limit a manual reset type and will shut off the heater if the fluid temperature rises due to a lack of heat dissipation. The high-limits shall not be effected by altitude or changes in atmospheric pressure.

3.0 Fan and Motor Assembly

3.1 The Fan Assembly shall include a ball bearing, permanently lubricated, thermally protected explosion-proof motor rated for continuous duty at 40°C (104°F). The motor shaft shall provide a method for easy field replacement of fan blade assembly without the use of special tools.

3.2 The Fan shall be aluminum to prevent sparking. The Fan shall be directly connected to the motor, dynamically balanced, and designed specifically for the heater application.

3.3 The Fan shall be shielded with a heavy-duty steel wire, polyester-coated guard. To provide easy maintenance and cleaning of the fan and motor, the fan guard shall be of a two piece construction. The guard shall not allow a 3/8 in. (9.5 mm) probe to enter.

4.0 Control Center

4.1 The Control Center shall be completely factory pre-wired and tested, and enclosed in a NEMA 7 and 9 explosion-proof control enclosure with O-ring and a large threaded cover for easy access.

4.2 The Control Center shall include a 40 FLA (50A resistive per pole) Definite Purpose magnetic contactor sized to handle the heater and motor current, and shall be rated for 500,000 cycles operation. The encapsulated severe-duty coil shall be rated 120VAC or 24VAC (specify one) and separately fuse protected.

XEU1 Engineering Specifications (continued)

4.3 The Control Center shall include a control voltage transformer, the primary voltage being the same as the heater voltage and the secondary to be 120VAC or 24VAC (specify one).

4.4 The Control Center shall include a terminal block for thermostat connection.

4.5 The Control Center shall include in-line thermal delay fuse protection on secondary side of transformer. The fuse holder shall be mounted on the printed circuit board and contain both an operating fuse and a spare fuse.

5.0 Cabinet Assembly

5.1 The Cabinet Assembly shall be fabricated from 14 gauge steel with a baked epoxy/polyester powder coating over a 5-stage pretreatment including iron phosphate, for protection from corrosive atmospheres.

5.2 The Cabinet shall include four 9/16 inch (14.3 mm) mounting holes located on top face of heater.

5.3 Louver blades shall be individually adjustable and made of anodized extruded aluminum.

6.0 Mounting Brackets

6.1 The heater shall be provided with a steel Mounting Bracket, coated with black enamel, specifically designed to bear the weight of the heater assembly.

6.2 The Mounting Bracket shall be – (select one):

- ☐ Type WMB – Wall Mounting Bracket
- ☐ Type BMB – Basic Mounting Bracket
- ☐ Type PMB – Pipe Mounting Bracket
- ☐ Type HMB – Hanging Mounting Bracket

7.0 Room Thermostat Options

7.1 The heater shall be supplied with (select one):

- ☐ Built-in BTX1-N-A explosion-proof room thermostat mounted on the control enclosure side of the heater.
- ☐ Field installed remote mount BTX1-N-A explosion-proof thermostat.
- ☐ Field installed remote mount XET1-1-N-A explosion-proof thermostat (requires 24VAC control option).

8.0 Disconnect Switch Options

8.1 The heater shall be supplied with (select one):

- ☐ Built-in XDC-01 explosion-proof disconnect switch mounted on the control enclosure side of the heater.
- ☐ Field installed remote mount XDC-01 explosion-proof disconnect switch.

9.0 Additional Options

9.1 The heater shall be supplied with (select one or more):

- ☐ Built-in Pilot light (Heat On) mounted on front of control enclosure.
- ☐ Continuous fan operation.
- ☐ Heresite coated core.
- ☐ Heresite coated cabinet (includes louvers & fan blade).

Guide to Hazardous Locations
North America/ATEX/IECEx

Classification of Divisions and Zones			
Hazard Level	**Division Scheme**	**Zone Scheme**	**Definitions**
Continuous Hazard	Division 1	Zone 0 / Zone 20	A location in which an explosive atmosphere is continually present.
Intermittent Hazard		Zone 1 / Zone 21	A location in which an explosive atmosphere is likely to occur in normal operation.
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A location in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods.

Atmosphere Groups			
Substance	**Hazard Class**	**Division Groups**	**Zone Groups**
Acetylene	Class I Flammable Gases	Group A	IIC
Hydrogen		Group B	IIB+H_2
Ethylene		Group C	IIB
Propane		Group D	IIA
Methane		Group D	IIA[#]
Combustible Metal Dusts	Class II Combustible Dusts	Group E*	IIIC
Combustible Carbonaceuous Dusts		Group F	IIIB
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB
Combustible Fibers and Flyings	Class III Fibers and Flyings	Not Applicable	IIIA

* Group E is applicable to Class II, Division 1 only
[#] Methane is a Group IIA gas for non-mining applications

Temperature Codes		
Max. Surface Temperature	**NEC® 500 / CEC®**	**NEC® 500 / IEC – Group II**
450°C (842°F)	T1	T1
300°C (572°F)	T2	T2
280°C (536°F)	T2A	
260°C (500°F)	T2B	
230°C (446°F)	T2C	
215°C (419°F)	T2D	
200°C (392°F)	T3	T3
180°C (356°F)	T3A	
165°C (329°F)	T3B	
160°C (320°F)	T3C	
135°C (275°F)	T4	T4
120°C (248°F)	T4A	
100°C (212°F)	T5	T5
85°C (185°F)	T6	T6

Note: Consult the current NEC and CEC codes for the latest technical and installation information

North American transition to the zone system

The U.S. and Canada have recently revised installation codes to recognize an international 3-Zone area classification system for equipment used in hazardous locations.

In Canada, all new installations must use the 3-Zone system. Existing installations may continue to use the 2-Division system or opt to re-classify using the 3-Zone system.

In the U.S., all installations (both new and existing) can either use the 2-Division system or use the 3-Zone system.

Additional Products Available

HUH2
The HUH2 series of heat-exchanger unit heaters is designed for steam, hot water, glycol or other fluid circulating heating systems. Suitable for pressures and temperatures up to 400 psi and 550 °F respectively. Meets ASME requirements with a National CRN.

HHP2
The HHP2 high performance series of heat-exchanger unit heaters is designed for steam, hot water, glycol or other fluid circulating heating systems. Suitable for pressures and temperatures up to 450 psi and 550 °F respectively. Meets ASME requirements with a National CRN.

SRH2
The SRH2 series of heat-exchanger unit heaters is designed for steam applications on drilling rigs and is designed for pressures up to 150 psi. Meets ASME requirements with a National CRN.

AEU1
The AEU1 series of explosion-proof electric air heaters are designed to meet the ATEX/IECEx and EAC Ex certifications. The three sizes of AEU1 heaters are available in 230 or 400 V, 50 Hz and 480 V, 60 Hz models.

Limited 36-Month Warranty

Hazloc Heaters™ warrants all **XEU1** series of explosion-proof electric heaters against defects in materials and workmanship under normal conditions of use for a period of thirty-six (36) months from date of purchase based on the following terms:

1. The heater must not be modified in any way.
2. The heater must be stored, installed and used only in accordance with the owner's manual and attached data plate information.
3. Replacement parts will be provided free of charge as necessary to restore any unit to normal operating condition, provided that the defective parts be returned to us freight prepaid and that the replacement parts be accepted freight collect.
4. The complete heater may be returned to our manufacturing plant for repair or replacement (at our discretion), freight charges prepaid.
5. Contamination by dirt, dust, etc. or corrosion will not be considered as defects.
6. This warranty shall be limited to the actual equipment involved and, under no circumstances, shall include or extend to installation or removal costs, or to consequential damages or losses.

Exclusive Representative

For additional information or to order contact Canam Pipe & Supply with the link below.

CANAM pipe & supply

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