# HLA Series Hazardous Location Fan Forced Unit Heater

### FAN-FORCED SUSPENDED UNIT HEATERS 3-25 KW FOR CLASS I, GROUP C & D, DIVISION 1 & 2 AND CLASS II, GROUPS E, F & G, DIVISIONS 1 & 2.



Shown with optional pilot light and disconnect switch



Manufactured in U.S.A.

- Designed for rugged industrial applications in hazardous locations where the possibility of explosion or fire exists due to the presence of certain flammable gases, vapors, powdered metals or dust.
- Permanently sealed, liquid to air, finned tube heat exchanger core.
- Ethylene Glycol to water mixture used as a heat transfer fluid in the heater core, providing -45° C. (-49° F) freeze damage protection.
- High-performance electric motor driven fan blows air across finned tubes to effect uniform heat transfer and area heat distribution.
- Manual Reset capillary type limit provides high temperature regulation and is rated for 6,000 cycles of service.
- Stainless steel and aluminum pressure relief valve for overpressure.
- A back-up contactor is included for additional protection.
- 14 Gauge steel cabinet powder coated epoxy paint finish contains heater core, motor, and fan assembly.
- Narrow gap safety fan guard shields all moving parts.
- Adjustable louvers allow directional control of air.
- Copper conductor wires enclosed in rigid metal conduits carry all electrical power.
- Box lugs furnished for field connections within approved enclosure.
- ABS (America's Bureau of Shipping) type approved.

### Product Specifications

### Heat Exchanger and Elements:

Heavy walled, liquid filled heat exchanger with three-immersion type copper sheathed elements. The elements shall have the highest quality nickel-chromium resistance wire encased in a magnesium oxide dielectric and be hermetically sealed into the heat exchanger core. The heat transfer fluid is Ethylene-glycol solution for operation to -49 degrees F (– 45 degrees C). Stainless steel and aluminum pressure relief valve for overpressure.

### Thermal Cutout High Limit Protection and Optional Pilot Light:

The capillary type manual reset thermal cutout shall be rated for 6000 cycles of service and mounted in the liquid filled heat exchanger. An optional pilot light to indicate manual reset tripped, if safe operating temperatures are exceeded, is located on control enclosure.

### Motor:

The motor shall be a permanent split capacitor type, permanently lubricated, ball bearing type. The motor shall be rated for hazardous location and operate at rated voltage of heater single phase, 60 Hz, 1725 RPM.

### **Control Enclosure:**

All controls shall be factory installed and wired in a hazardous location enclosure. Contactors and back-up contactors are heavy duty type and break all ungrounded conductors and be rated for 100,000 cycles at full load. Standard 24-Volt control circuit shall be supplied by internal class II transformer. An optional factory wired integral thermostat or standard terminal block for field wiring to optional remote wall thermostat are wired in control panel.

### **Disconnect Switch:**

Factory mounted and wired hazardous location disconnect switch is available as optional accessory.

### Cabinet With Adjustable Louvers:

The Cabinet shall be 14 Gauge, cold rolled steel with powder coated epoxy finish. Plated fan guards with less than <sup>1</sup>/<sub>4</sub> inch spacing to cover motor and fan shall conform to OSHA Requirements.

### Note:

Before selecting a hazardous location electric heater refer to Article 500 or other applicable standard referenced in the National Electric Code.



Liquid-to-air heat exchanger



Optional built-in thermostat



Hazardous Location Rated Motor

#### Rating Definitions

**CLASS I:** Equipment does not have surface operating temperature in excess of the ignition temperature of the specific gas or vapor.

**Application Examples:** 

- Offshore and land based drilling rigs, petroleum exploration and testing facilities.
- Petroleum refineries, gasoline storage and dispensing areas.
- Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations.
- Petrochemical companies that manufacture chemicals from gas or oil.
- Dry cleaning facilities where vapors from cleaning fluids may be present.
- Aircraft hangers and fuel servicing areas.
- Utility gas plants and operations involving storage and handling of liquefied petroleum or natural gas.

**GROUP C:** Atmospheres such as but not limited to acetaldehyde, allyl alcohol, hydrogen sulfide, ethylene, carbon monoxide, or other gases or vapors of equivalent hazard.

**GROUP D:** Atmospheres such as but not limited to acetone, alcohol, gasoline, lacquer solvent vapors, natural gas, propane or other gases or vapors of equivalent hazard.

**CLASS II:** Equipment does not have surface temperature greater than the ignition temperature of the specified dust.

Application Examples:

- Coal preparation plants and other carbon handling or processing areas.
- Grain elevators, flour and feed mills.
- Plants which manufacture, use or store Magnesium or Aluminum powders.
- Plants that have chemical or metallurgical processes.
- Producers of starch products or candy.
- Spice grinding plants, sugar plants and cocoa plants.

**GROUP E:** Atmosphere containing combustible metal dust regardless of resistivity, or other combustible dust of similar hazard characteristics having resistivity of less than 10<sup>5</sup> OHM - Centimeter.

GROUP F: Atmosphere containing carbon black, charcoal, coal or coke dust.

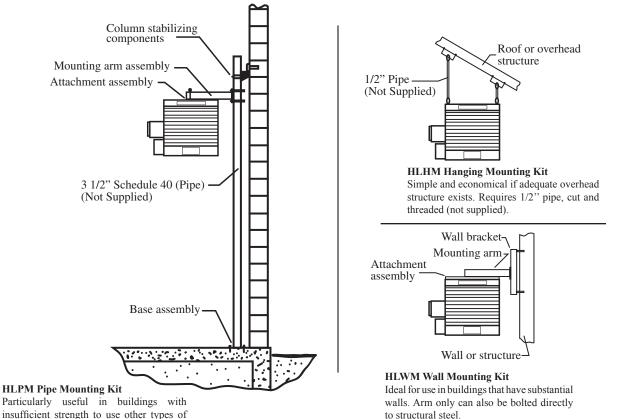
**GROUP G:** Atmospheres containing combustible dust having resistivity of 10<sup>5</sup> OHM-Centimeter or greater.

**DIVISION I:** A location in which ignitable concentrations of flammable material exist under normal operating conditions.

**DIVISION II:** Locations in which flammable materials will normally be confined within closed containers and escape only in the case of accidental rupture, breakdown or during maintenance operations. Any equipment approved for Division I is automatically also approved for Division II.

# HLA Series Hazardous Location Fan Forced Unit Heater

Mounting Bracket Kits



Particularly useful in buildings with insufficient strength to use other types of mounts. Requires 3 1/2" pipe (4" O.D. not supplied).

| UPC#<br>686334 | NUMBER   | USE WITH<br>HEATERS | WT.     |
|----------------|----------|---------------------|---------|
| 734288         | HLPM37   | 3.0 KW - 7.5 KW     | 37 lbs. |
| 734295         | HLPM1015 | 10.0 KW             | 38 lbs. |
| 734301         | HLPM1525 | 15.0 KW - 25.0 KW   | 40 lbs. |
| 734318         | HLHM     | ALL                 | 5 lbs.  |
| 734325         | HLWM37   | 3.0 KW - 7.5 KW     | 27 lbs. |
| 734332         | HLWM10   | 10.0 KW             | 28 lbs. |
| 734349         | HLWM1525 | 15.0 KW - 25.0 KW   | 29 lbs. |

EPET Series and HLT Series Hazardous Location Thermostats For Single Phase





#### *Features*

- SPDT & DPDT Models
- Heat or cool campatible
- Celcius and Farenheit temperature scale
- Bi-Metal or capillary sensor
- Snap action switch
- Casting tapped top and bottom for 3/4" conduit
- 1/2" thick cast aluminum housing
- Dimension 5.75" x 6.375" x 5.57'

Motor Rating (full load): 3/4 HP @ 125V, 1 1/2 HP @250V Pilot Duty Rating 125VA @ 24VAC NEMA Class Seven Div. 1 Approved Class I Group C & D, Class II Group E, F, & G Not rated for Group B Range 50° - 90° F

| UPC#<br>686334 | MODEL  | DESCRIPTION      | LOAD RATINGS          | RANGE    |  |  |  |  |  |
|----------------|--|------------------|-----------------------|----------|--|--|--|--|--|
| 538077         | EPETD8D  | DPDT - Bi-Metal  | 22A @120-277VAC       | 50-90°F  |  |  |  |  |  |
| 538107         | EPETD8S  | SPDT - Bi-Metal  | 22A @120-277VAC       | 50-90°F  |  |  |  |  |  |
| 528078         | EPETP8D  | DPDT - Bi-Metal  | 22A @120-480VAC       | 50-90°F  |  |  |  |  |  |
| 528061         | EPETP8S  | SPDT - Bi-Metal  | 22A @120-480VAC 50-90 |          |  |  |  |  |  |
| 523158         | HLT-1  | SPDT - Capillary | 22A @120-277VAC       | 40-110°F |  |  |  |  |  |
| 523165         | HLT-2  | DPDT - Capillary | 22A @120-277VAC       | 40-110°F |  |  |  |  |  |
|                | Master ctn: 4 pcs, 24 lbs (varies slightly by model), 16" x 14.5" x 6" |                  |                       |          |  |  |  |  |  |
|                |  |                  |                       |          |  |  |  |  |  |

EPET Series incorporate plastic knob & Bi-Metal Sensor housing.

HLT Series incorporates screwdriver temperature adjustment slot and all metal housing. External bulb and capillary sensor.

# HLA Series Hazardous Location Fan Forced Unit Heater

Standard Hazardous Location Models

| UPC#<br>686334 | MODEL                 | ĸw  | BTU's | VOLTS | РН | AMPS | Control<br>Voltage | Temp<br>Rise °F | Air<br>Throw | CFM  | Recom'd<br>Mounting Ht. | WT.     |
|----------------|-----------------------|-----|-------|-------|----|------|--------------------|-----------------|--------------|------|-------------------------|---------|
| 734356         | HLA 12-208160-3.0-24  |     |       | 208   | 1  | 16.3 |                    |                 |              |      |                         |         |
| 734004         | HLA 12-208360-3.0-24  |     |       | 208   | 3  | 9.8  |                    |                 |              |      |                         |         |
| 734011         | HLA 12-240160-3.0-24  | 3   | 10250 | 240   | 1  | 14.8 | ]                  | 16.5            |              |      | 8'                      | 167 lb. |
| 734028         | HLA 12-240360-3.0-24  |     |       | 240   | 3  | 8.6  |                    |                 |              |      |                         |         |
| 734035         | HLA 12-480360-3.0-24  |     |       | 480   | 3  | 4.3  |                    |                 |              |      |                         |         |
| 734363         | HLA 12-208160-5.0-24  |     |       | 208   | 1  | 26   | ]                  |                 |              |      |                         |         |
| 734059         | HLA 12-208360-5.0-24  |     |       | 208   | 3  | 15.4 |                    |                 | 27.6 24'     |      |                         |         |
| 734066         | HLA 12-240160-5.0-24  | 5   | 17100 | 240   | 1  | 23.1 | ]                  | 27.6            |              | 580  | 8'                      | 167 lb. |
| 734073         | HLA 12-240360-5.0-24  |     |       | 240   | 3  | 13.4 |                    |                 |              |      |                         |         |
| 734080         | HLA 12-480360-5.0-24  |     |       | 480   | 3  | 6.7  | 1                  |                 |              |      |                         |         |
| 734370         | HLA 12-208160-7.5-24  |     |       | 208   | 1  | 38   | ]                  |                 |              |      |                         |         |
| 734103         | HLA 12-208360-7.5-24  |     |       | 208   | 3  | 22.3 |                    |                 |              |      |                         |         |
| 734110         | HLA 12-240160-7.5-24  | 7.5 | 25600 | 240   | 1  | 33.6 | 24                 | 41.4            |              |      | 8'                      | 167 lb. |
| 734127         | HLA 12-240360-7.5-24  |     |       | 240   | 3  | 19.4 |                    |                 |              |      |                         |         |
| 734134         | HLA 12-480360-7.5-24  |     |       | 480   | 3  | 9.7  | 1                  |                 |              |      |                         |         |
| 734158         | HLA 16-208360-10.0-24 |     |       | 208   | 3  | 29.3 | 1                  |                 |              |      |                         |         |
| 734165         | HLA 16-240160-10.0-24 |     | 04450 | 240   | 1  | 44   |                    | 04.7            | 40           | 4500 | 10                      | 100 11- |
| 734172         | HLA 16-240360-10.0-24 | 10  | 34150 | 240   | 3  | 25.5 | 1                  | 21.7            | 40'          | 1500 | 10'                     | 193 lb. |
| 734189         | HLA 16-480360-10.0-24 |     |       | 480   | 3  | 12.7 | ]                  |                 |              |      |                         |         |
| 734202         | HLA 20-208360-15.0-24 |     |       | 208   | 3  | 43.5 |                    |                 |              |      |                         |         |
| 734219         | HLA 20-240360-15.0-24 | 15  | 51200 | 240   | 3  | 38.1 |                    | 19.2            |              |      | 13'                     | 193 lb. |
| 734226         | HLA 20-480360-15.0-24 |     |       | 480   | 3  | 19   |                    |                 | 43'          | 2450 |                         |         |
| 734240         | HLA 20-480360-20.0-24 | 20  | 68300 | 480   | 3  | 25.1 |                    | 26.2            |              |      | 13'                     | 225 lb. |
| 734264         | HLA 20-480360-25.0-24 | 25  | 85400 | 480   | 3  | 31.1 |                    | 32.8            |              |      | 13'                     | 225 lb. |

## Factory Installed Accessories & Physical Dimensions

| SUFFIX  |        |                                       |         | DES    | CRIPTIC   | N        |    |   |      |               |   |
|---------|--------|---------------------------------------|---------|--------|-----------|----------|----|---|------|---------------|---|
| Т       |        | In                                    |         |        |           |          |    |   |      |               |   |
| 120     | Contr  | ol transf                             | dd 120) | -      | ſ         |          |    |   |      |               |   |
| 208     |        | 208/                                  |         | -      | l         |          |    |   |      |               |   |
| 240     |        | (Delete 24 suffix and add 208 OR 240) |         |        |           |          |    |   |      |               |   |
| D       |        |                                       |         | Discor | nnect Sw  | vitch    |    |   |      | -             | • |
| Р       |        |                                       |         | Pi     | lot Light |          |    |   |      |               |   |
|         |        |                                       |         |        |           |          |    |   | (Rea | r View)       |   |
| MODEL   | Α      | в                                     | (       | C      | D         | F        | F  | G | 1    | 1" NP         | T |
| WODEL   | ~      | 5                                     | 3 ph.   | 1 ph.  | 5         | <u>د</u> | Ľ  | 3 |      | <b>Market</b> | 6 |
| HI & 12 | 17 3/4 | 22 3/8                                | 10 3/4  | 20 5/8 | 16 1/4    | 10 1/2   | 14 | 3 |      |               |   |

5/8" UNC THREADS (Front View) В \_1 1/2" 6 5/8" A E5/16" E (Side View) D

HLA 12

HLA 16

HLA 20

17 3/4

20 3/4

24 3/4

19 3/4

20 3/4

22 1/2

22 3/8

26 3/8

30 3/8

20 5/8

21 5/8

N/A

16 1/4

20 1/4

24 1/4

10 1/2

11 1/2

12 1/2

14

18

22

3

4

4 1/2

. V

# FEP Series Single Phase Hazardous Location Wall Convector

|        |               | Class 1, G   |       |       | ILE PHASE |      | ° F               |               |  |
|--------|---------------|--------------|-------|-------|-----------|------|-------------------|---------------|--|
| LISTED | UPC<br>686334 | MODEL        | WATTS | BTU's | VOLTS     | AMPS | CABINET<br>LENGTH | WT.<br>(LBS.) |  |
|        | 445146        | FEP-1812-1RA |       |       | 120       | 15.0 |                   |               |  |
|        | 445153        | FEP-1820-1RA |       |       | 208       | 8.7  |                   |               |  |
|        | 445160        | FEP-1824-1RA | 1800  | 6143  | 240       | 7.5  | 34"               | 50            |  |
|        | 445177        | FEP-1827-1RA |       |       | 277       | 6.5  |                   |               |  |
|        | 445184        | FEP-1848-1RA |       |       | 480       | 3.8  |                   |               |  |
|        | 445191        | FEP-3620-1RA |       |       | 208       | 17.3 |                   |               |  |
|        | 445207        | FEP-3624-1RA |       |       | 240       | 15.0 |                   |               |  |
|        | 445214        | FEP-3627-1RA | 3600  | 12286 | 277       | 13.0 | 34"               | 54            |  |
|        | 445221        | FEP-3648-1RA |       |       |           | 480  | 7.5               |               |  |
|        | 445238        | FEP-3657-1RA |       |       | 600       | 6.0  |                   |               |  |
|        | 445245        | FEP-3820-1RA |       |       | 208       | 18.3 |                   |               |  |
|        | 445252        | FEP-3824-1RA | 3800  | 12969 | 240       | 15.8 | 58"               | 80            |  |
|        | 445269        | FEP-38271-RA | 5000  | 12000 | 277       | 13.7 | 50                | 00            |  |
|        | 445276        | FEP-3848-1RA |       |       | 480       | 7.9  |                   |               |  |
|        | 445283        | FEP-7620-1RA |       |       | 208       | 36.5 |                   |               |  |
|        | 445290        | FEP-7624-1RA |       |       | 240       | 31.7 |                   |               |  |
|        | 445306        | FEP-7627-1RA | 7600  | 25938 | 277       | 27.4 | 58"               | 85            |  |
|        | 445313        | FEP-7648-1RA |       |       | 480       | 15.8 |                   |               |  |
|        | 445320        | FEP-7657-1RA |       |       | 600       | 12.7 |                   |               |  |

|        |        | Class 1, G   |      |       | iLE PHASI<br>on 1 & 2 1 |      | i° F |    |
|--------|--------|--------------|------|-------|-------------------------|------|------|----|
| LISTED | 445337 | FEP-0812-1RA |      |       | 120                     | 6.7  |      |    |
|        | 445344 | FEP-0820-1RA |      |       | 208                     | 3.8  |      |    |
|        | 445351 | FEP-0824-1RA | 800  | 2730  | 240                     | 3.3  | 34"  | 50 |
|        | 445368 | FEP-0827-1RA |      |       | 277                     | 2.9  |      |    |
|        | 445375 | FEP-0848-1RA |      |       | 480                     | 1.7  |      |    |
|        | 445382 | FEP-1612-1RA |      |       | 120                     | 13.3 |      |    |
|        | 445399 | FEP-1620-1RA |      |       | 208                     | 7.7  |      |    |
|        | 445405 | FEP-1624-1RA | 1600 | 5460  | 240                     | 6.7  | 34"  | 54 |
|        | 445412 | FEP-1627-1RA | 1000 | 5460  | 277                     | 5.8  | 34   | 94 |
|        | 445429 | FEP-1648-1RA |      |       | 480                     | 3.3  |      |    |
| n<br>n | 445436 | FEP-1657-1RA |      |       | 600                     | 2.7  |      |    |
| C).    | 445443 | FEP-1712-1RA |      |       | 120                     | 14.2 |      |    |
| h gray | 445450 | FEP-1720-1RA |      |       | 208                     | 8.2  |      |    |
| inish. | 445467 | FEP-1724-1RA | 1700 | 5802  | 240                     | 7.1  | 58"  | 80 |
| tom of | 445474 | FEP-1727-1RA |      |       | 277                     | 6.1  |      |    |
| 1 ,    | 445481 | FEP-1748-1RA |      |       | 480                     | 3.5  |      |    |
| lement | 445498 | FEP-3420-1RA |      |       | 208                     | 16.3 |      |    |
|        | 445504 | FEP-3424-1RA |      |       | 240                     | 14.2 |      |    |
|        | 445511 | FEP-3427-1RA | 3400 | 11604 | 277                     | 12.3 | 58"  | 85 |
| mostat | 445528 | FEP-3448-1RA |      |       | 480                     | 7.1  |      |    |
| ated.  | 445535 | FEP-3457-1RA |      |       | 600                     | 5.7  |      |    |

## Factory Installed Control Options

| SUFFIX* | DESCRIPTION  | SUFFIX** | DESCRIPTION  |
|---------|--|----------|--|
| T1      | EPETD8S single pole thermostat factory mounted to 120V -<br>480V units | C1-TD    | Control section with transformer, 24V contactor, SP thermostat<br>(40°F - 90°F) and disconnect switch (all units)            |
| Т2      | EPETD8D double pole thermostat factory mounted to 120V -<br>480V units | C1-TDP   | Control section with transformer, 24V contactor, SP thermostat<br>(40°F - 90°F), disconnect switch & pilot light (all units) |

\*Remove - RA suffix and add new suffix. \*\*Remove - RA suffix and add new suffix (Not NEMA washdown rated or rated for Group B atmospheres)

# FEP Series Three Phase Hazardous Location Wall Convector

• ABS (American Bureau of Shipping) type approved.

- Cabinet size 18" high, 9" wide.
- Bottom In Top Out air flow.
- Wall mounting bracket supplied.
- Units can not be operated in room ambients exceeding  $104^{\circ}F(40^{\circ}C)$ .
- Heavy duty 16 Gauge steel with gray epoxy textured powder coated finish.
- 9" minimum clearance from bottom of heater to floor required.
- Stainless steel cartridge element inserted into aluminum finned copper sheath.
- Standard unit (without EPET thermostat or control section) is NEMA 4 rated.

|               |                      |                       |       | -     |          |                   |               |
|---------------|----------------------|-----------------------|-------|-------|----------|-------------------|---------------|
|               | T-<br>Class 1, Group | 2A SERIE<br>B, C, & D |       |       | C / 536° | F                 |               |
| UPC<br>686334 | MODEL                | WATTS                 | BTU's | VOLTS | AMPS     | CABINET<br>LENGTH | WT.<br>(LBS.) |
| 483056        | FEP-1820-3RA         |                       |       | 208   | 5.0      |                   |               |
| 483063        | FEP-1824-3RA         | 1800                  | 6143  | 240   | 4.3      | 34"               | 50            |
| 486224        | FEP-1848-3RA         |                       |       | 480   | 2.2      |                   |               |
| 483070        | FEP-3620-3RA         |                       |       | 208   | 10.0     |                   |               |
| 483087        | FEP-3624-3RA         | 3600                  | 12286 | 240   | 8.7      | 34"               | 54            |
| 486231        | FEP-3648-3RA         |                       |       | 480   | 4.3      |                   |               |
| 483094        | FEP-3820-3RA         |                       |       | 208   | 10.5     |                   |               |
| 483100        | FEP-3824-3RA         | 3800                  | 12969 | 240   | 9.1      | 58"               | 80            |
| 486248        | FEP3848-3RA          |                       |       | 480   | 4.6      |                   |               |
| 483117        | FEP-7620-3RA         |                       |       | 208   | 21.1     |                   |               |
| 483124        | FEP-7624-3RA         | 7600                  | 25938 | 240   | 18.3     | 58"               | 85            |
| 486255        | FEP-7648-3RA         |                       |       | 480   | 9.2      |                   |               |





Unit with in-built EPET line voltage thermostat (Suffix T1 or T2)

| 486255 | FEP-7648-3RA   |          |          | 480        | 9.2                     |     |    |
|--------|----------------|----------|----------|------------|-------------------------|-----|----|
|        |                |          |          |            |                         |     |    |
|        |                |          | S THREE  |            |                         |     |    |
|        | Class 1, Group | B, C & D | Division | 1 & 2 180° | <mark>C / 356°  </mark> | F   |    |
| 483131 | FEP-0820-3RA   |          |          | 208        | 2.2                     |     |    |
| 483148 | FEP-0824-3RA   | 800      | 2730     | 240        | 1.9                     | 34" | 50 |
| 486262 | FEP-0848-3RA   |          |          | 480        | 0.9                     |     |    |
| 483155 | FEP-1620-3RA   |          |          | 208        | 4.4                     |     |    |
| 483162 | FEP-1624-3RA   | 1600     | 5460     | 240        | 3.8                     | 34" | 54 |
| 486279 | FEP-1648-3RA   |          |          | 480        | 1.9                     |     |    |
| 483179 | FEP-1720-3RA   |          |          | 208        | 4.7                     |     |    |
| 483186 | FEP-1724-3RA   | 1700     | 5802     | 240        | 4.1                     | 58" | 80 |
| 486286 | FEP-1748-3RA   |          |          | 480        | 2.0                     |     |    |
| 483193 | FEP-3420-3RA   |          |          | 208        | 9.4                     |     |    |
| 483209 | FEP-3424-3RA   | 3400     | 11604    | 240        | 8.2                     | 58" | 85 |
| 486293 | FEP-3448-3RA   |          |          | 480        | 4.1                     |     |    |

## Factory Installed Control Options

| SUFFIX** | DESCRIPTION   | *      |
|----------|---|--------|
| C1-TD    | Control section with transformer, 24V contactor, SP thermostat (40°F - 90°F) and disconnect switch (all units)            | a<br>w |
| C1-TDP   | Control section with transformer, 24V contactor, SP thermostat (40°F - 90°F), disconnect switch & pilot light (all units) | ) G    |

LIPC#

\*\*Remove - RA suffix and add new suffix (Not NEMA washdown rated or rated for Group B atmospheres)

## Remote Mounted Hazardous Location Thermostats For Single Or Three Phase FEP Series





| 686334 | MODEL  | DESCRIPTION                            | LOAD RATINGS              | RANGE                     |  |  |  |  |  |
|--------|--|--|---------------------------|---------------------------|--|--|--|--|--|
| 538077 | EPETD8D  | DPDT - Bi-Metal                        | 22A @120-277VAC           | 50-90°F                   |  |  |  |  |  |
| 538107 | EPETD8S  | SPDT - Bi-Metal                        | 22A @120-277VAC           | 50-90°F                   |  |  |  |  |  |
| 528078 | EPETP8D  | 22A @120-480VAC                        | 50-90°F                   |                           |  |  |  |  |  |
| 528061 | EPETP8S  | 50-90°F                                |                           |                           |  |  |  |  |  |
| 523158 | HLT-1  | HLT-1 SPDT - Capillary 22A @120-277VAC |                           |                           |  |  |  |  |  |
| 523165 | HLT-2  | DPDT - Capillary                       | 22A @120-277VAC           | 40-110°F                  |  |  |  |  |  |
|        | Master ctn: 4 pcs, 24 lbs (varies slightly by model), 16" x 14.5" x 6" |  |                           |                           |  |  |  |  |  |
|        | EPET Series incorporates plastic knob & Bi-Metal Sensor housing.       |  |                           |                           |  |  |  |  |  |
|        | a aaroudrivar tomporatur   | adjustment elet and all r              | notal hausing. Extarnal h | ulb and conjillant concor |  |  |  |  |  |

(ETL)

HLT Series incorporates screwdriver temperature adjustment slot and all metal housing. External bulb and capillary sensor.

## **EPET Series Parameters**

Dimensions: Finish: Type: Height 5 5/8", Width 6 3/8", Depth 4 1/2" Silver-Gray Single or Double Pole Range: 50° - 90° F Motor Rating: (full load) 1 1/2 HP @ 250V Rating: 22A @ 125-277VAC; 125VA @ 24VAC Rated: Class I Group C & D, Class II Group E, F, G Thermostat is not rated for use in Group B environments.

## 5500 Series Washdown Fan Forced Unit Heater



• Heavy-duty 304 16 Gauge stainless steel shroud.

- 316 stainless construction available.
- Nema 4x non-metallic control panel.
- 24-Volt transformer and control panel.
- 3-position switch (off-heat-fan).
- Capillary thermostat with stainless steel sensor.

FIG. 3

- Automatic reset thermal cutout.
- Totally enclosed U.L. listed motor.
- Pilot light (power on indicator).

The Washdown Series unit heaters are electric unit heaters constructed for use in areas that require washing or hosing of equipment due to dirty or dusty industrial environments in non-hazardous locations. The totally enclosed water-tight construction made with corrosion-resistant material make this series ideal for industrial heating applications. The Washdown Series is constructed with all built-in controls and safety temperature controls wired in a non-metallic Nema 4x control panel with single-point power connections.

- Stainless steel finned tubular element. Constructed of 304 or 316 stainless rod and fins. • Control panel on bottom of unit for ease of installation and service.
- Disconnect switch with enclosure door interlock.
- Front grill rotates to direct airflow.
- Single-point power connection.
- Fan Blade Epoxy coated Aluminum.
- Epoxy painted cold roll steel model available consult factory.
- Meets all U.L., NEC, and OSHA requirements
- (when installed as directed).
- Corrosion-resistant in high humidity and water-saturated areas (for areas where corrosion resistance is needed in non-explosive areas, contact factory for heater applications and optional materials).

н

6.00

6.00

4.50

2.75

•ABS (American Bureau of Shipping) type approved.

### Mounting Bracket Kits & Product Dimensions

| SIZE<br>KW  | UPC#<br>686334 | STAINLESS STEEL<br>COMBINATION BRACKET | UPC#<br>686334 | WALL MTG.<br>BRACKET * | UPC#<br>686334 | HANGING<br>BRACKET * | UPC#<br>686334 | PIPE MTG.<br>BRACKET * |
|-------------|----------------|--|----------------|------------------------|----------------|----------------------|----------------|------------------------|
| 3.3-15      | 713672         | A5520/UHB                              | 709002         | W5520/WMK              | 713702         | H5520/HMK            | 713689         | P5520/PMK              |
| 20-48       |                |  | 713733         | W5550/WMK              | 713719         | H5550/HMK            | 713696         | P5550/PMK              |
| * Material: | Heavy Du       | ty Epoxy Powder Coat Finish.           |                |                        |                |                      |                |                        |

COLUMN STABILIZING Ideal for use in buildings Simple and economical if Particularly useful in that have substantial adequate overhead buildings with insufficient strenth to walls. Arm (only) can MOUNTING CARM ASSY. structure exists. Requires be bolted directly to 1/2" pipe, cut and threaded use other types of structural steel. (not supplied). mounts. WALL BRACKET Requires 3 1/2" pipe ROOF OR OVERHEAD (4" O.D.-not supplied). MOUNTING 1/2" PIPE (NOT SUPPLIED) 3 1/2" SCHEDULE 40 PIPE (NOT SUPPLIED) BASE ASSEMBLY 3-15 Kw ONLY VALL OR STRUCTURE A5520 W5550 H5550 P5550 FIG. 1 FIG. 2 в Heater Dimension in Inches unless otherwise stated. Heater **KW** Α В С D Е F G 3-7.5 12.00 18.00 19.75 15.25 16.25 8.00 14.00 10-15 19.00 21.75 15.25 18.00 8.00 6 ft. 28.75 20-30 16.00 27.00 19.50 17.50 15.50 40-48 18.00 31.00 21.75 30.75 19.50 19.50

### Product Specifications & Standard Washdown Models

**Enclosure and Motor:** Element housing shall be 16 Gauge 304 or 316 stainless steel shroud. The outlet grill and louver assembly shall be 304 stainless steel and rotate for direction of discharge air. The heater shall have a 304/316 stainless steel inlet grill and fan guard. The motor shall be totally enclosed, permanently lubricated and designed to resist moisture and corrosion. The fan blade shall be aluminum with a powder coated epoxy finish.

**Element:** The heating element shall be 304 or 316 stainless steel tube with 304 stainless steel fin material helically attached to the tube for even heat transfer. The element designed with the highest quality nickelchromium resistance wire embedded in compacted efficient dielectric to ensure proper heat transfer.

**Control Panel:** The control enclosure shall be nonmetallic Nema 4X control panel water-tight and dusttight. The enclosure and elements are attached to the control panel with stainless steel fasteners. Standard control components are factory mounted and wired with access through control panel door on bottom of heater assembly. A standard door interlock disconnect switch shall be factory mounted and wired for safety.

**Controls:** All controls shall be factory mounted and wired in Nema 4X panel. Terminal block, 24 Volt transformer, high temperature limits, contactor and fusing if required by NEC are mounted and wired in control panel. A three-position switch (Off-Heat-Fan) shall be mounted on side of control panel for access from outside of panel. A pilot light to indicate power is on for safety shall be located on side of control panel. A wall mounted Nema 4X thermostat is an optional accessory.

**Mounting Bracket:** A formed 304 stainless steel bracket shall be used on 3.3 thru 15 KW units. A cast iron epoxy painted bracket shall be used on 20 thru 48 KW units. Above brackets shall be combination wall/ceiling type. Optional mounting brackets are available.

| UPC#<br>686334 | MODEL    | ĸw  | BTU's           | VOLTS | РН | AMPS | CONTROL<br>VOLTAGE | TEMP<br>RISE °F    | AIR<br>THROW | CFM  | WT<br>(LBS) |
|----------------|----------|-----|-----------------|-------|----|------|--------------------|--------------------|--------------|------|-------------|
| 713047         | F1F5503T |     |                 | 208   | 1  | 16   |                    |                    |              |      |             |
| 713054         | F3F5503T | 1   | 11200           | 208   | 3  | 9    |                    | 26                 | 20'          | 400  |             |
| 713061         | H1H5503T | 3   |                 | 240   | 1  | 14   | 24                 |                    |              |      | 58          |
| 713078         | H3H5503T |     |                 | 240   | 3  | 8    |                    |                    |              |      |             |
| 713085         | G1G5503T |     |                 | 277   | 1  | 12   |                    |                    |              |      |             |
| 713092         | P3P5503T |     |                 | 480   | 3  | 4    |                    |                    |              |      |             |
| 713115         | F1F5505T | 5   | 17100           | 208   | 1  | 24   |                    | 40                 |              |      |             |
| 713122         | F3F5505T |     |                 | 208   | 3  | 14   |                    |                    |              |      |             |
| 713139         | H1H5505T |     |                 | 240   | 1  | 21   |                    |                    |              |      |             |
| 713146         | H3H5505T |     |                 | 240   | 3  | 12   |                    |                    |              |      |             |
| 713153         | G1G5505T |     |                 | 277   | 1  | 18   |                    |                    |              |      |             |
| 713160         | P3P5505T |     |                 | 480   | 3  | 6    |                    |                    |              |      |             |
| 713184         | F1F5507T |     | 25600           | 208   | 1  | 36   |                    |                    |              |      |             |
| 713191         | F3F5507T | 7.5 |                 | 208   | 3  | 21   |                    |                    |              |      |             |
| 713207         | H1H5507T |     |                 | 240   | 1  | 31   |                    |                    |              |      |             |
| 713214         | H3H5507T |     |                 | 240   | 3  | 13   |                    |                    |              |      |             |
| 713221         | G1G5507T |     |                 | 277   | 1  | 27   |                    |                    |              |      |             |
| 713238         | P3P5507T |     |                 | 480   | 3  | 9    |                    |                    |              |      |             |
| 713252         | F1F5510T | 10  | 34130           | 208   | 1  | 48   |                    | 45                 | 28'          | 700  | 64          |
| 713269         | F3F5510T |     |                 | 208   | 3  | 28   |                    |                    |              |      |             |
| 713276         | H1H5510T |     |                 | 240   | 1  | 41   |                    |                    |              |      |             |
| 713283         | H3H5510T |     |                 | 240   | 3  | 24   |                    |                    |              |      |             |
| 713290         | G1G5510T |     |                 | 277   | 1  | 36   |                    |                    |              |      |             |
| 713306         | P3P5510T |     |                 | 480   | 3  | 12   |                    |                    |              |      |             |
| 713399         | F1F5515T |     | 51200           | 208   | 1  | 72   |                    | 68                 |              |      |             |
| 713405         | F3F5515T |     |                 | 208   | 3  | 42   |                    |                    |              |      |             |
| 713412         | H1H5515T | 15  |                 | 240   | 1  | 63   |                    |                    |              |      |             |
| 713429         | H3H5515T |     |                 | 240   | 3  | 36   |                    |                    |              |      |             |
| 713443         | P3P5515T |     |                 | 480   | 3  | 18   |                    |                    |              |      |             |
| 713467         | F3F5520T |     | 68260           | 208   | 3  | 56   |                    | 45<br>56 35'<br>68 | 35'          | 1400 | 92          |
| 713474         | H3H5520T | 20  |                 | 240   | 3  | 48   |                    |                    |              |      |             |
| 713481         | P3P5520T |     |                 | 480   | 3  | 24   |                    |                    |              |      |             |
| 713504         | F3F5525T |     | 85325<br>102390 | 208   | 3  | 70   |                    |                    |              |      |             |
| 713511         | H3H5525T | 25  |                 | 240   | 3  | 60   |                    |                    |              |      |             |
| 713528         | P3P5525T |     |                 | 480   | 3  | 30   |                    |                    |              |      |             |
| 713542         | F3F5530T |     |                 | 208   | 3  | 83   |                    |                    |              |      |             |
| 713559         | H3H5530T | 30  |                 | 240   | 3  | 72   |                    |                    |              |      |             |
| 713566         | P3P5530T |     |                 | 480   | 3  | 36   |                    |                    |              |      |             |
| 713603         | P3P5540T | 40  | 136520          | 480   | 3  | 48   | ]                  | 70                 | 42'          | 1800 | 126         |
| 713641         | P3P5548T | 48  | 163824          | 480   | 3  | 58   |                    | 84                 | 74           | 1000 | 120         |

## Remote Rain-Tight Thermostat



| UPC#<br>686334 | MODEL | DESCRIPTION                 |
|----------------|-------|-----------------------------|
| 503242         | TW155 | 1 POLE, 40-110 deg F, 22Amp |
| 503259         | TW255 | 2 POLE, 40-110 deg F, 22Amp |

Note: NEMA 4X Construction Stainless Steel Hardware