

| KW | Volts | Ph | Total Amps\* | CFM | Approx. Air Temp Rise -  °F (°C) | 2-Stage Control | Std  Control  Voltage | Installed Weight  lb (kg) | Max Air Throw -  Ft (m) | | Catalog  Number (2) |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2.5 | 208 | 1 | 12.3 | 350 | 27 (15) | 1B | 208 | 25 (11.34) | 15 (4.57) | | HX-240-U1025C |  | |
|  | 240 | 1 | 10.7 | 350 | 27 (15) | 1B | 240 | 25 (11.32) | 15 (4.57) | | HX-240-U1025J |  | |
|  | 277 | 1 | 9.4 | 350 | 27 (15) | 1B | 277 | 25 (11.32) | 15 (4.57) | | HX-240-U1025N |  | |
| 3.3 | 208 | 1 | 16.2 | 350 | 27 (15) | 1B | 208 | 25 (11.34) | 15 (4.57) | | HX-240-U1033C |  | |
|  | 240 | 1 | 14.1 | 350 | 27 (15) | 1B | 240 | 25 (11.34) | 15 (4.57) | | HX-240-U1033J |  | |
|  | 277 | 1 | 12.2 | 350 | 27 (15) | 1B | 277 | 25 (11.34) | 15 (4.57) | | HX-240-U1033N |  | |
| 3.7 | 480 | 3 | 4.7 | 350 | 27 (15) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1037U |  | |
| 3.8 | 208 | 3 | 10.9 | 350 | 27 (15) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1038D |  | |
|  | 240 | 3 | 9.4 | 350 | 27 (15) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1038K |  | |
| 5 | 208 | 1 | 24.3 | 350 | 46 (26) | 1B | 208 | 25 (11.34) | 15 (4.57) | | HX-240-U1050C |  | |
|  | 240 | 1 | 21.1 | 350 | 46 (26) | 1B | 240 | 25 (11.34) | 15 (4.57) | | HX-240-U1050J |  | |
|  | 277 | 1 | 18.4 | 350 | 46 (26) | 1B | 277 | 25 (11.34) | 15 (4.57) | | HX-240-U1050N |  | |
|  | 208 | 3 | 14.2 | 350 | 46 (26) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1050D |  | |
|  | 240 | 3 | 12.3 | 350 | 46 (26) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1050K |  | |
|  | 480 | 3 | 6.2 | 350 | 46 (26) | 1A | 24 | 25 (11.34) | 15 (4.57) | | HX-240-U1050U |  | |
| 6.7 | 208 | 1 | 32.9 | 650 | 37 (21) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2067C |  | |
|  | 240 | 1 | 28.6 | 650 | 37 (21) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2067J |  | |
|  | 277 | 1 | 24.8 | 650 | 37 (21) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2067N |  | |
| 7.5 | 208 | 1 | 36.76 | 650 | 37 (21) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2075C |  | |
|  | 240 | 1 | 31.95 | 650 | 37 (21) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2075J |  | |
|  | 208 | 3 | 21.5 | 650 | 37 (21) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2075D |  | |
|  | 240 | 3 | 18.7 | 650 | 37 (21) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2075K |  | |
|  | 480 | 3 | 9.4 | 650 | 37 (21) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2075U |  | |
| 9.9 | 208 | 1 | 48.3 | 650 | 49 (27) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2099C |  | |
| 10 | 240 | 1 | 42.4 | 650 | 49 (27) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2100J |  | |
|  | 277 | 1 | 36.7 | 650 | 49 (27) | 1B | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2100N |  | |
|  | 208 | 3 | 28.5 | 650 | 49 (27) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2100D |  | |
|  | 240 | 3 | 24.8 | 650 | 49 (27) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2100K |  | |
|  | 480 | 3 | 12.4 | 650 | 49 (27) | 1A | 24 | 40 (18.14) | 18 (5.49) | | HX-240-U2100U |  | |
| 13.2 | 277 | 1 | 48.4 | 1500 | 52 (29) | 1B | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3132N |  | |
| 13.3 | 208 | 1 | 64.8 | 1500 | 52 (29) | Standard | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3133C-X (1) |  | |
|  | 240 | 1 | 56.3 | 1500 | 52 (29) | Standard | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3133J-X |  | |
| 15 | 208 | 3 | 42.5 | 1500 | 52 (29) | 1B | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3150D |  | |
|  | 240 | 3 | 36.9 | 1500 | 52 (29) | 1B | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3150K |  | |
|  | 480 | 3 | 18.4 | 1500 | 52 (29) | 1B | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3150U |  | |
| 19.9 | 208 | 1 | 96.5 | 1500 | 60 (33) | Standard | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3199C-X (1) |  | |
|  | 240 | 3 | 48.7 | 1500 | 60 (33) | 1B | 24 | 55 (24.95) | 41 (12.5) | | HX-240-U3199K |  | |
| 20 | 240 | 1 | 84.2 | 1500 | 60 (33) | Standard | 24 | 55 (24.95) | 41 (12.5) | HX-240-U3200J-X (1) | |  |
|  | 277 | 1 | 72.9 | 1500 | 60 (33) | Standard | 24 | 55 (24.95) | 41 (12.5) | HX-240-U3200N-X (1) | |  |
|  | 208 | 3 | 56.4 | 1500 | 60 (33) | Standard | 24 | 55 (24.95) | 41 (12.5) | HX-240-U3200D-X | |  |
|  | 480 | 3 | 24.5 | 1500 | 60 (33) | 1B | 24 | 55 (24.95) | 41 (12.5) | HX-240-U3200U | |  |
| 25 | 208 | 3 | 70.9 | 3100 | 49 (27) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4250D-X | |  |
|  | 240 | 3 | 61.6 | 3100 | 49 (27) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4250K-X | |  |
|  | 480 | 3 | 30.8 | 3100 | 49 (27) | 1B | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4250U | |  |
| 33.3 | 208 | 3 | 93.9 | 3100 | 49 (27) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4333D-X | |  |
|  | 240 | 3 | 81.6 | 3100 | 49 (27) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4333K-X | |  |
|  | 480 | 3 | 40.8 | 3100 | 49 (27) | 1B | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4333U | |  |
| 37.5 | 208 | 3 | 105.6 | 3100 | 61 (34) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4375D-X | |  |
|  | 240 | 3 | 91.7 | 3100 | 61 (34) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4375K-X | |  |
|  | 480 | 3 | 45.8 | 3100 | 61 (34) | 1A | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4375U | |  |
| 49.8 | 208 | 3 | 139.7 | 3100 | 68 (38) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4498D-X | |  |
| 50 | 240 | 3 | 121.8 | 3100 | 68 (38) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4500K-X | |  |
|  | 480 | 3 | 60.8 | 3100 | 68 (38) | Standard | 24 | 155 (70.3) | 62 (18.9) | HX-240-U4500U-X | |  |

\*Total Amps = Heating element amps and motor amps.

1. Disconnect switch unavailable.

2. All standard heaters are supplied with 24V transformer and contactor except up to 5KW single phase units. Optional low voltage transformer and contactor are available for these heaters, see Factory Built-in Option ‘R1’.

2-stage heaters can be field wired as single stage.

1A = Optional 2-stage control, unbalanced (option X)

1B = Optional 2-stage control, balanced (option X)

1C = 2-stage control provided as standard (option X)

If heater part number includes ‘-X’ in table above, 2-stage control is provided standard. Do not add Option ‘X’ pricing.

**Factory Built-In Options**

|  |  |  |
| --- | --- | --- |
| **Code** | **Description** |  |
| Consult  Factory | Custom KW - CONSULT FACTORY |  |
| D | Door Interlocking Power Disconnect Switch |  |
| F | Fusing under 48 Amps, not available on heaters 3 to 10KW |  |
| M | Manual Reset Cutout (In addition to automatic cutout) on heaters up to 10K |  |
| P (1) | “Heater On” Pilot Light |  |
| R1 | Built-in 24V transformer and contactor for 3 to 5 KW, single phase heaters. |  |
| R2 (1) (2) | 120V Transformer to replace 24V Transformer |  |
| S1 | Summer Fan Switch |  |
| S2 (1) | Summer Fan Switch – Remote Pilot Duty |  |
| T | Built-On Thermostat - 1 - Stage |  |
| Built-On Thermostat - 2 - Stage (Option 'X' required) |  |
| V1\* | Anemostat (Cone) Diffuser |  |
| V2 | Radial Diffuser |  |
| X (2) | 2-Stage Control |  |

\*consult factor for lead times

1. When specifying Option ‘P’ (pilot light) or Option ‘S2’ (remote fan switch) or Option ‘R2’ (120V control for single phase heaters up to 5 kW), Option ‘R1’ must also be specified.

2. Option ‘R2’ (120V control) and Option ‘X’ (2-stage control) cannot be combined on heaters rated up to 5 KW.

**Field-Installed Mechanical Option Kits**

|  |  |  |
| --- | --- | --- |
| **Catalog**  **Number** | **Description** |  |
| 1024149 | Universal wall & ceiling mounting bracket up to 10 KW |  |
| 1024150 | Universal wall & ceiling mounting bracket over 10 KW up to 20 KW |  |
| 1024151 | Universal wall & ceiling mounting bracket over 20 KW |  |
| 1024155\* | Anemostat (Cone) Diffuser up to 5 KW |  |
| 1024156\* | Anemostat (Cone) Diffuser over 5 KW up to  20 KW |  |
| 1024157\* | Anemostat (Cone) Diffuser over 20 KW |  |
| 1024152 | Radial Diffuser up to 5 KW |  |
| 1024153 | Radial Diffuser over 5 KW up to up to 20KW |  |
| 1024154 | Radial Diffuser over 20 KW |  |
| 1023941 | Horizontal Dust Shield up to 10 KW |  |
| 1024059 | Horizontal Dust Shield over 10 KW up to 20KW |  |
| 1024060 | Horizontal Dust Shield over 20 KW |  |

\*consult factory for lead times**Field-Installed Options (shipped loose for field installation into heater)**

|  |  |  |
| --- | --- | --- |
| **Catalog**  **Number** | **Description** |  |
| 1024162 | Disconnect Switch, 600V, Three-Pole, 32 Amp |  |
| 1024163 | Disconnect Switch, 600V, Three-Pole, 64 Amp |  |
| 1024164 | Disconnect Switch, 600V, Three-Pole, 80 Amp |  |
| 1024166 | Built-in Thermostat – 1 - Stage |  |
| 1024167 | Built-in Thermostat – 2 - Stage (Option 'X' required) |  |
| 1024168 (1) | Heater On Pilot Light (24V) |  |
| 1024169 (1) | Heater On Pilot Light (120V) |  |
| 1024170 | Summer Fan Switch - Built-in up to 277V |  |
| 1024171 | Summer Fan Switch - Built On, 24V Control Motor over 277V |  |
| 1024172 (1) | Summer Fan Switch - Remote, 24V Control |  |

(1) When specifying these options for single-phase heaters rated up to 5 kW, Option ‘R1 must also be specified.

(2) When specifying this option with any heater, option ‘R2’ must also be specified.

**Finish / Color Options:**

| **Code** | **Finish** | **Color** | |  |
| --- | --- | --- | --- | --- |
| None | Polyester Powder Coat | Camel | Standard |  |
| A0 | Grey | Custom |  |
| A1 | Yellow | Custom |  |
| A2 | Red | Custom |  |
| A3 | White | Custom |  |
| A4 | Blue | Custom |  |
| A5 | Galvanized Steel  (unpainted) | — | Standard |  |
| A7 | Polyester  Powder Coat | Beige | Standard |  |

Allow 6 - 8 weeks for heaters with custom colors, additional costs will apply.

**HEATREX Supplied Remote Thermostats**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| KW | Catalog  Number | Volts | Ph | 1-Stage  Line  Voltage |  | 1-Stage  Low  Voltage (b) |  | 2-Stage  Low  Voltage (b) |  |
| 2.5 | HX-240-U1025C | 208 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1025J | 240 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1025N | 277 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
| 3.3 | HX-240-U1033C | 208 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1033J | 240 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1033N | 277 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
| 3.7 | HX-240-U1037U | 480 | 3 | NA |  | 1006998 |  | 1007030 |  |
| 3.8 | HX-240-U1038D | 208 | 3 | NA |  | 1006998 |  | 1007030 |  |
|  | HX-240-U1038K | 240 | 3 | NA |  | 1006998 |  | 1007030 |  |
| 5 | HX-240-U1050C | 208 | 1 | NA |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1050J | 240 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
|  | HX-240-U1050N | 277 | 1 | 1007014 |  | 1006998 (a) |  | 1007030 (a) |  |
| **All Other UHIR Heaters** | | | | NA |  | 1006998 |  | 1007030 |  |

(a) Add option ‘R1’ for 24V control on these units.

(b) Option ‘R2’ is unavailable with any HEATREX supplied remote low voltage thermostats.

Figure1

Fig. 1 Horizontal Wall Mounting

Figure2 Fig 2. Horizontal Ceiling Mount with Mounting Arm

Figure3Fig. 3 Using Threaded Rod

Figure4

Fig. 4 Vertical Ceiling Mount with Mounting Arm

Figure5

Fig. 5 Using Threaded Rod

Figure6

Fig. 6 3/8-16 Threaded Rod Attachment with Threaded Rod

**Heater Dimensions**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **KW** | **W**  **In. (mm)** | **H**  **In. (mm)** | **Depth**  **In. (mm)** | **A**  **In. (mm)** | **B**  **In. (mm)** | **C**  **In. (mm)** | **D**  **In. (mm)** | **E**  **In. (mm)** | **F**  **In. (mm)** | **G**  **In. (mm)** | **H**  **In. (mm)** | **I**  **In. (mm)** | **J**  **In. (mm)** |
| up to 5 | 12.875  (327) | 17.750  (450) | 7.625  (194) | 8  (203) | 11.188  (284) | 18  (457) | 10  (254) | 8  (203) | 16  (406) | 5  (127) | 6.44  (164) | 6.44  (164) | 5  (127) |
| 5.1 to 10 | 16.875  (429) | 24.250  (616) | 7.625  (194) | 6  (152) | 9.313  (237) | 18  (457) | 10  (254) | 8  (203) | 16  (406) | 5  (127) | 6.44  (164) | 6.44  (164) | 5  (127) |
| 10.1 to 20 | 16.875  (429) | 24.250  (616) | 11.375  (289) | 6  (152) | 9.313  (237) | 18  (457) | 12  (305) | 12  (305) | 32  (813) | 5  (127) | 10.13  (257) | 5  (127) | 10.13  (257) |
| 20.1 to 50 | 26.937  (684) | 35.500  (902) | 15.625  (397) | 9.281  (236) | 14.937  (380) | 13  (330) | 12  (305) | 16  (406) | 32  (813) | 7  (178) | 12.92  (238) | 7  (178) | 12.92  (328) |

**Application**

Small rooms may only require one unit heater (FIG #7) while other may require multiple unit heaters for proper perimeter circulation (FIG #8).

Fig7&8

**UHIR Vertical Mounting Air Pattern Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Description** | **Used On** | | **Max Mtg.**  **Height**  **ft (m)** | **A**  **ft (m)** | **B**  **ft (m)** | **Diffuser Pattern** |
| WITHOUT DIFFUSER  For a straight downward air pattern, directional louvers can be removed in order to maximize airflow. | up to 5 KW | | 10 (3.0) | 17 (5.2) | --- | Without Diffuser |
| over 5 KW up to 10 | | 15 (4.6) | 28 (8.5) | --- |
| over 10 KW up to 20 | | 20 (6.1) | 38 (11.6) | --- |
| over 20 KW up to 50 | | 25 (7.6) | 68 (20.7) | --- |
| DIRECTIONAL LOUVERS (standard)  Provides a directional (straight line) airflow which results in a rectangular air pattern. Louvers can be adjusted through a 35 degree range of motion. | up to 5 KW | | 10 (3.0) | 22 (6.7) | 12 (3.7) | Directional Louvers |
| over 5 KW up to 10 | | 15 (4.6) | 40 (12.2) | 20 (6.1) |
| over 10 KW up to 20 | | 20 (6.1) | 53 (16.2) | 27 (8.2) |
| over 20 KW up to 50 | | 25 (7.6) | 85 (25.9) | 45 (13.7) |
| ANEMOSTAT DIFFUSER  Ideal for low mounting heights. Fabricated using 3 diverging hollow cones which disperse heat to the floor area at a minimum velocity for comfort. | up to 5 KW | | 9 (2.7) | 17 (5.2) | --- | Anemostat Diffuser |
| over 5 KW up to10 | | 13 (4.0) | 29 (8.8) | --- |
| over 10 KW up to 20 | | 17 (5.2) | 40 (12.2) | --- |
| over 20 KW up to 50 | | 21 (6.4) | 68 (20.7) | --- |
| RADIAL DIFFUSER  Ideal for high ceiling mounting. Louvers can be adjusted to direct airflow straight down when fully open to 45 degrees in a radial pattern which increases floor coverage by approximately 20%. | OPEN | up to 5 KW | 10 (3.0) | 20 (6.1) | --- | Radial Diffuser |
| over 5 KW up to10 | 15 (4.6) | 30 (9.1) | --- |
| over 10 up to 20 | 20 (6.1) | 38 (11.6) | --- |
| over 20 KW up to 50 | 25 (7.6) | 65 (19.8) | --- |
| 45° | up to 5 KW | 9 (2.7) | 24 (7.3) |  |
| over 5 KW up to10 | 11 (3.4) | 36 (11.0) |  |
| over 10 KW up to 20 | 15 (4.5) | 46 (14.0) |  |
| over 20 KW up to 50 | 18 (5.5) | 78 (23.8) |  |

**Wall Ceiling Mounting Hole Patterns**

0-20kw

20

For Heaters 0-20 Kw For Heaters 20.1 Kw & Up

**Architect’s and Engineer’s Specifications**

Check off options which you require. Standard built-in controls have already been checked off.

🗹 1) Electric Commercial Unit Heaters shall be manufactured by HEATREX, with controls built-in and factory pre-wired as shown below. Heater is to be a forced fan type, UL Listed, of the KW rating, voltage and phase specified in the schedule.

🗹 2) Finned tubular heating elements shall have steel type fins copper brazed to a 0.475” diameter steel sheath epoxy sealed for moisture resistance.

🗹 3) Provide the following standard built-in controls:

🗹 Automatic reset thermal cutout for primary over-temperature protection and a secondary manual reset cutout shall be provided on heaters 20 KW and above.

🗹 24 VAC transformer and disconnecting magnetic contactor.\*

🗹 Fan delay to eliminate cold drafts when fan starts up, and dissipate stored element heat before fan shuts down

🗹 Fan motor is permanently lubricated and thermally protected.

🗹 Built-in power fusing for heater loads over 48 amps.

🗹 4) Cabinet shall be heavy gauge steel protected from corrosion by either a galvanized coating or a durable baked on polyester powder coat finish.

🗹 5) Outlet grille shall have individually adjustable directional louvers, an Anemostat (cone) diffuser or radial diffuser. In addition, an outlet protective grille shall prevent debris from reaching the element compartment. Inlet grille shall comply with OSHA requirements for a fan blade guard.

🗹 6) Single point, line voltage connection for incoming power enables heater, fan and controls to be connected to the same branch circuit.

\* Note: For single-phase heaters rated up to 5 KW no contactor and transformer are required when controlled by a load-carrying thermostat. Contactor and transformer are required when used with a remote fan switch, HEATREX supplied remote thermostat, 24 volt control and heater on pilot light.