

Explosion-Proof and Fan-Forced Unit Heaters

Our products do more in a wide range of applications. **Expect More.**

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Indeeco offers commercial and industrial electric heating and control systems that set the industry standard for excellence. The company's heating solutions reflect more than 85 years of innovation, product quality and efficient service.





This catalog features Indeeco's complete line of explosion-proof and fan-forced electric unit heaters. Our products

include ULTRA-SAFE™ EXP and COMPACT Explosion-proof Unit Heaters; an explosion-proof convector; the TRIAD® Washdown/Corrosion Resistant Unit Heater; and several types of standard unit heaters.




Indeeco's quality is matched only by its customer service and support. With its quick-ship delivery program, Indeeco provides the products you need.

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Explosion-proof Unit Heaters

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*Optional factory installed disconnect switches have been sized in accordance to current UL2021 standards.

*All field installed and factory installed electrical component options are listed with their maximum voltage and maximum amperage ratings. They can be used with heaters rated up to their maximum ratings.

Use of Electric Heaters IN HAZARDOUS LOCATIONS

Introduction

Hazardous locations are those areas where a potential for explosion and fire exists due to the presence of flammable gases, vapors, pulverized dusts or ignitable fibers in the atmosphere. Hazardous locations are created from the normal processing of volatile chemicals, gases, coal, grains, etc., or from the accidental failure of storage systems for these materials.

Open flames are not permitted in these locations. The use of electric heating equipment is permitted with two major restrictions: 1) The surface temperature of the equipment cannot exceed the ignition temperature of the hazardous atmosphere and 2) all arc and spark producing devices must be isolated from the atmosphere in an appropriate enclosure.

National Electrical Code Classification

Articles 500 through 516 of the National Electrical Code deal with the definition of hazardous areas and the use or design of electrical equipment used in these locations. Electric heating equipment for hazardous areas is specified based on the NEC class, division, group and ignition temperature or the alternate class and zone classification.

Class

Hazardous locations are divided into the three general classes of vapors/gases, dusts and fibers.

Class I – Locations where the potential for explosion and fire exists due to the presence of flammable gases or vapors in the air. Typical Class I locations include oil or natural gas drilling rigs, petroleum refining or pumping facilities, petrochemical plants, wastewater/sewage treatment plants, solvent extraction plants, paint spraying booths, locations

where open tanks or vats of combustible liquids are present and storage areas for flammable materials.

Class II – Locations where the potential for explosion exists because of finely pulverized flammable dusts suspended in the atmosphere. Typical locations would include coal fired power plants, coal preparation/coal handling facilities, coal mines, grain elevators, flour and feed mills, packaging and handling of pulverized sugar and processing and storage of magnesium and aluminum powder.

Class III – This third classification is primarily a fire hazard where fibers or flyings suspended in the air create a hazard. This would include small pieces of thread-like fiber, sawdust, lint, etc. Typical applications would include textile mills, woodworking plants, cotton gins, cotton seed mills and flax producing plants.

Division

Class I, Class II and Class III areas are further defined in terms of when the hazard occurs. Division 1 and Division 2 occurrences are summarized below.

Division 1 – If the hazard is expected to be present under normal conditions, such as a production or processing facility, the occurrence is designated Division 1. The hazardous atmosphere may be present continuously, intermittently, periodically, or during normal repair or maintenance operations. Division 1 occurrences also include locations where a breakdown in the operation of processing equipment results in the release of hazardous vapors.

Division 2 – If the hazardous material is normally expected to be contained within a closed area, system or container, and would enter the ambient atmosphere only under an abnormal failure, then it is referred to as a Division 2 occurrence.

Hazardous and Corrosive Area Applications

- Aircraft Hangars/Service Areas
- Battery Storage Areas
- Chemical Plants
- Chemical Storage/Handling Areas
- Coal Mines/Preparation Plants
- Control Rooms
- Dry Cleaning Plants
- Dusty Areas Subject to Washdown
- Food Processing Plants (Washdown Areas)
- Foundries
- Gasoline Fueling/Storage Areas
- Grain Elevators
- Hydrogen Atmospheres
- Marine/Shipboard and Landbase Facilities
- Natural Gas (Methane) Atmospheres
- Oil Refineries
- Offshore Drilling Rigs
- Paint Spraying/Storage Areas
- Parking Garages
- Petrochemical Plants
- Pipeline Pumping Stations
- Pulp and Paper Mills
- Sewage/Wastewater Treatment Plants
- Solvent Recovery/Storage Areas
- Utility Plants

Use of Electric Heaters

IN HAZARDOUS LOCATIONS

Group

The nature and explosive characteristics of the hazardous material are defined by the NEC group to which it is assigned.

Class I – Hazardous vapors/gas locations include chemicals and other materials that have been divided into four groups based on their ignition temperature and explosive characteristics. (Groups A, B, C and D)

Class II – Hazardous dust locations are divided into three groups based on their ignition temperature and electrical conductivity of the suspended particles.

Group E – Atmospheres containing metal dust, such as aluminum or magnesium.

Group F – Atmospheres containing coal, charcoal or coke dust.

Group G – Atmospheres with grain, flour, starch, combustible plastics or chemical dust.

Class III – Locations have no group definitions.

Ignition Temperature

All electrical equipment is designed not to exceed the ignition temperature of the hazardous atmosphere. The maximum surface temperature for electric heaters is defined by the NEC.

Class and Zone Classifications

Class I, Zone 0 – Locations in which ignitable concentrations of flammable gases or vapors are present continuously or for long periods.

Class I, Zone 1 – Locations in which ignitable concentrations of flammable gases or vapors are likely to exist, may exist frequently or exist as a result of equipment breakdown or faulty operation. Applies to locations adjacent to a Class I, Zone 0 location.

Class I, Zone 2 – Locations in which ignitable concentrations of flammable gases or vapors are not likely to occur under normal operation, exist only for a short period or exist only as a result of accidental failure, such as rupture or breakdown of the container or system, abnormal operation of equipment, failure or abnormal operation of the ventilation equipment. Applies to locations adjacent to a Class I, Zone 1 location.

Material Groups

Group IIC – Atmospheres containing acetylene or hydrogen. Equivalent to a combination of Class I, Group A and Class I, Group B as described in NEC Article 500.

Group IIB – Atmospheres containing acetaldehyde. Equivalent to Class I, Group C as described in NEC Article 500.

Group IIA – Atmospheres containing acetone, ammonia, ethyl alcohol, gasoline, methane or propane. Equivalent to Class I, Group D as described in NEC Article 500.

Product use depends on temperature class. The temperature code indicates the maximum temperature of the exposed surface of the product. For Zone classified dusts the explosion-proof temperature is the maximum surface temperature is shown as e.g. T80°C

| Class, Division Classification | | Zone Classification | |
|--------------------------------|-------------------------------------|----------------------------|--------------------------------|
| Temperature Class (T Code) | Maximum Surface Temperature °F (°C) | Temperature Class (T Code) | Maximum Surface Temperature °C |
| T1 | ≤ 842 (≤ 450) | T1 | ≤ 450 |
| T2 | ≤ 572 (≤ 300) | T2 | ≤ 300 |
| T2A | ≤ 536 (≤ 280) | T3 | ≤ 200 |
| T2B | ≤ 500 (≤ 260) | T4 | ≤ 135 |
| T2C | ≤ 446 (≤ 230) | T5 | ≤ 100 |
| T2D | ≤ 419 (≤ 215) | T6 | ≤ 85 |
| T3 | ≤ 392 (≤ 200) | | |
| T3A | ≤ 356 (≤ 180) | | |
| T3B | ≤ 329 (≤ 165) | | |
| T3C | ≤ 320 (≤ 160) | | |
| T4 | ≤ 275 (≤ 135) | | |
| T4A | ≤ 248 (≤ 120) | | |
| T5 | ≤ 212 (≤ 100) | | |
| T6 | ≤ 185 (≤ 85) | | |

Use of Electric Heaters IN HAZARDOUS LOCATIONS

Special Requirements for Electric Heating Equipment used in Hazardous Areas

Electric heating equipment can be economically designed and safely used in hazardous areas if the following special requirements are observed.

1. The surface temperature of the electric heating equipment cannot exceed the ignition temperature of the hazardous atmosphere. To insure that the proper heater has been selected, it is essential that the correct NEC Ignition Temperature Code be specified.

If the temperature code selected is too high, the electric heating system may operate above the ignition point of the application, creating a potentially hazardous condition.

2. All arc and spark-producing control devices must be isolated from the hazardous atmosphere. If it is not economically feasible to locate the control devices in the non-hazardous area, they must be housed in an enclosure that will withstand the pressure of a potential explosion from within the enclosure.
3. All electrical supply connections must be made according to the latest NEC and local code requirements for hazardous locations. This includes the requirement that conduit entering the enclosures must be provided with seals at the enclosure.

| CLASS I - HAZARDOUS GAS ATMOSPHERES | | | | | CLASS I - HAZARDOUS GAS ATMOSPHERES | | | | | |
|--------------------------------------|----------------------|----------------------|---------|----------|-------------------------------------|--|-----------------------------------|-----------|-----------------|-----|
| Group | Material | Ignition Temp. | | NEC Code | Group | Material | Ignition Temp. | | NEC Code | |
| | | °F | °C | | | | °F | °C | | |
| A | Acetylene | 581 | 305 | T2 | D | Methyl Isobutyl Ketone | 840 | 448 | T2 | |
| B | Acrolein (Inhibited) | 428 | 220 | T2D | | 2-Methyl-1-Propanol (Isobutyl Alcohol) | 780 | 415 | T2 | |
| | Butadiene | 788 | 420 | T2 | | Petroleum Naptha | 550 | 288 | T2A | |
| | Ethylene Oxide | 804 | 429 | T2 | | Pyridine | 900 | 482 | T1 | |
| | Hydrogen | 932 | 500 | T1 | | Octanes | 403 | 206 | T3 | |
| | Propylene Oxide | 840 | 449 | T2 | | Pentanes | 500 | 260 | T2B | |
| | Propyl Nitrate | 347 | 175 | T3B | | 1-Pentanol (Amyl Alcohol) | 650 | 343 | T2 | |
| C | Acetaldehyde | 347 | 175 | T3B | | Propane | 842 | 450 | T1 | |
| | Allyl Alcohol | 713 | 378 | T2 | | 1-Propanol (Propyl Alcohol) | 775 | 412 | T2 | |
| | Carbon Monoxide | 1128 | 609 | T1 | | 2-Propanol (Isopropyl Alcohol) | 750 | 399 | T2 | |
| | Cyclopropane | 928 | 498 | T1 | | Propylene | 851 | 455 | T1 | |
| | Ethylene | 842 | 450 | T1 | | Styrene | 914 | 490 | T1 | |
| | Hydrogen Cyanide | 1000 | 538 | T1 | | Toluene | 896 | 480 | T1 | |
| | Hydrogen Sulfide | 500 | 260 | T2B | | Vinyl Acetate | 756 | 402 | T2 | |
| | 2-Nitropropane | 802 | 428 | T2 | | Vinyl Chloride | 882 | 472 | T1 | |
| | Tetrahydrofuran | 610 | 321 | T2 | | Xylenes | 867-984 | 463-528 | T1 | |
| | D | Acetic Acid (Glacia) | 867 | 463 | T1 | CLASS II - HAZARDOUS DUST ATMOSPHERES | | | | |
| Acetone | | 869 | 465 | T1 | Group | Material | Ignition Temp. °F | °C | NEC Code | |
| Ammonia, Anhydrous | | 1204 | 651 | T1 | E | Aluminum, A422 Flake | 608 | 320 | T2 | |
| Benzene | | 928 | 498 | T1 | | Calcium Silicide | 1004 | 540 | T1 | |
| Butane | | 550 | 287 | T2A | | Manganese | 464 | 240 | T2C | |
| 1-Butanol (Butyl Alcohol) | | 650 | 343 | T2 | | Magnesium, Grade B, Milled | 806 | 430 | T2 | |
| 2-Butanol (Secondary Butyl Alcohol) | | 761 | 405 | T2 | F | Charcoal | 356 | 180 | T3A | |
| Ethane | | 882 | 472 | T1 | | Coal, Kentucky Bituminous | 356 | 180 | T3A | |
| Ethanol (Ethyl Alcohol) | | 685 | 363 | T2 | | Coal, Pittsburgh Experimental | 338 | 170 | T3B | |
| Ethyl Acetate | | 800 | 427 | T2 | | Pitch, Petroleum | 1166 | 630 | T1 | |
| Ethylene Dichloride | | 775 | 413 | T2 | G | Alkyl Ketone Dimer Sizing Compound | 320 | 160 | T3C | |
| Gasoline (56-60 Octane) | | 536 | 280 | T2A | | | Corn | 482 | 250 | T2C |
| Gasoline (100 Octane) | | 853 | 456 | T1 | | | Corn Starch, Modified | 392 | 200 | T3 |
| Heptanes | | 399 | 204 | T3 | | | Polyurethane Foam, Fire Retardant | 734 | 390 | T2 |
| Hexanes | | 437 | 235 | T2D | | | Shellac | 752 | 400 | T2 |
| Isoprene | | 428 | 220 | T2D | | | Soy Flour | 374 | 190 | T3A |
| Isopropyl Ether | | 830 | 443 | T2 | | | Sugar, Powdered | 698 | 370 | T2 |
| Methane (Natural Gas) | | 900-1170 | 482-632 | T1 | | | Sulfur | 428 | 220 | T2D |
| Methanol (Methyl Alcohol) | | 867 | 454 | T1 | | | Wheat | 428 | 220 | T2D |
| 3-Methyl-1-Butanol (Isoamyl Alcohol) | | 662 | 350 | T2 | | | Wood Flour | 500 | 260 | T2B |
| Methyl Ethyl Ketone | 759 | 404 | T2 | | | | | | | |

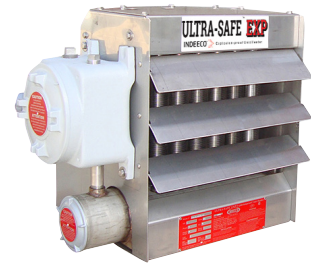
The materials given are found in NFPA 497, 1991 and NFPA 325, 2001.

Comparison Chart

Only Indeeco offers a selection of explosion-proof heater constructions to meet your specific application.

ULTRA-SAFE™ EXP

Our most popular and versatile construction has a broad range of stock designs, special options and the industry's lowest Ignition Temperature Code rating, 320°F (160°C).



| Features | ULTRA-SAFE™ EXP |
|---|---|
| Hazardous Location NEC Classifications | Class I, Divisions 1 and 2, Groups C and D Class II, Divisions 1 and 2, Groups E, F, and G Class 1, Zones 1 and 2, Groups IIB |
| Ignition Temperature Code | T3C 320°F (160°C) |
| KW Range | Up to 30 KW |
| Standard Built-in Overtemperature Protection | Dual overtemperature protection with automatic and manual reset thermal cutouts |
| Other Standard Built-in Controls | Controlling contactor, control circuit transformer |
| Standard Control Voltage | 24V |
| Single Point Line Voltage Connection for Incoming Power | Yes |
| Optional Built-in Controls | |
| Thermostat | Yes |
| Disconnect Switch | Yes |
| Selector Switch | Yes |
| Manual Reset Cutout | Standard |
| “Heater On” Pilot Light | Yes |
| “Warning” Pilot Light | Yes |
| Control Circuit Transformer | Standard |
| Standard Construction | |
| Heater Assembly | Liquid-to-air heat exchanger, steel tube with aluminum fins, propylene glycol, immersion heater |
| Cabinet/Housing | Powder coated galvanized steel |
| NEMA 7, 9 Control Enclosure | Cast aluminum |
| Mounting Brackets | Wall, ceiling or pole mounting kits (optional) |
| Optional Constructions | |
| Dirty Duty Corrosion Resistant | Choice of 316SS Construction or Heresite® coating |
| Wet Location | Suitable for IP55 wet locations |
| 50 Hertz Motor | Yes |
| Agency Approvals | |
| | CSA _{US} |

Comparison Chart

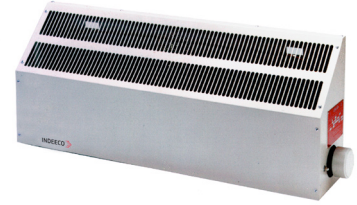
COMPACT

The industry's smallest and most economical design for Class I, Group D applications up to 12 KW.



CONVECTOR

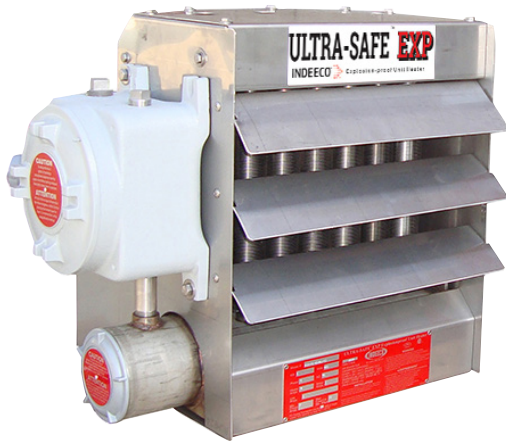
Small, compact design with a wide range of optional built-in controls.



| COMPACT | CONVECTOR |
|--|--|
| Class I, Divisions 1 and 2, Group D Class 1, Zones 1 and 2, Group IIA | Class I, Divisions 1 and 2, Groups B, C and D Class II, Divisions 1 and 2, Groups E, F, and G Class 1, Zones 1 and 2, Groups IIC |
| T3 392°F (200°C) (Varies with KW) | T3C 320°F (160°C) (Varies with classification) |
| Up to 12 KW | Up to 9.5 KW |
| Primary and secondary automatic reset cutouts with fan relay | Primary automatic reset cutout |
| Controlling contactor | None |
| 120V | Maximum 277V |
| Separate 120V motor line required | Yes |
| Yes | Yes |
| No | No |
| No | No |
| Yes | No |
| No | No |
| No | No |
| No | Yes |
| Stainless steel finned tubular elements | Heater core enclosed in copper tube with large aluminum fins |
| Stainless steel | Powder coated galvanized steel |
| Cast aluminum | Cast aluminum |
| Swivel mounting bracket (standard) | Wall mounting bracket (standard) |
| Yes | Wet locations (Type 3) iridite coated elements |
| No | Wet locations (Type 3) iridite coated elements |
| No | N/A |
| CSA _{us} & ABS | CSA _{us} & ABS |

Ultra-Safe™ EXP

UNIT HEATER



Indeeco's ULTRA-SAFE™ EXP explosion-proof unit heater is designed with both safety and versatility in mind. Unique ULTRA-SAFE™ EXP features include:

- Industry's Lowest Ignition Temperature Code Rating: T3C, 320°F (160°C)
- Dual Overtemperature Protection: With both automatic and manual reset overtemperature cutouts for additional safety.
- Optional wet location construction, which includes IP55 motor, type 4 outdoor rated enclosure and meets rain-tight requirements of UL 1004-1.
- Nontoxic Propylene Glycol Heat Transfer Fluid
- Low 70 PSIG Relief Valve Setting: This assures that in an emergency, the initial escaping vapor temperature remains below the 320°F (160°C) ignition temperature.
- Corrosion Resistant Options: Indeeco offers three constructions suitable for most applications.

Standard construction for use in dry non-corrosive areas includes: welded steel heat exchanger; powder-coated cabinet.

A 316 stainless steel construction suitable for Waste Water Treatment Plants includes: 316 stainless steel heat exchanger, headers and tubes with aluminum fins; stainless steel cabinet; corrosion resistant hardware.

Third construction is suitable for use in Chemical Plants where chlorides are present and includes: Heresite® coated heat exchanger, cabinet, fan blade; corrosion resistant hardware.

Applications

- Aircraft Hangars/Service Areas
- Chemical Storage/Handling Areas
- Coal Preparation Plants
- Compressor Stations
- Grain Elevators
- Oil Refineries and Rigs
- Paint Storage Areas
- Petrochemical Plants
- Sewage Pump Stations/ Treatment Plants (Option C1 recommended)
- Spray Booths

Class I, Divisions 1 and 2, Groups C and D
Class II, Divisions 1 and 2, Groups E, F and G
Class I, Zones 1 and 2, Group IIB
Temperature Code T3C, 320°F (160°C)

Standard Construction Features

Heat Exchanger – Efficient liquid-to-air design utilizes an all welded steel headers and finned tube construction with spiral wound aluminum fins. Industrial grade Indeeco heating elements are immersed in a nontoxic, inhibited, propylene glycol heat transfer fluid that provides freeze protection down to -49°F (-45°C). The heat exchanger is hydrostatically tested at 350 psig. A pressure relief valve provides excess pressure protection and is set at 70 psig.

Fan Motor Assembly – Consists of an explosion-proof motor fitted with an aluminum fan blade. The motor has double-shielded, permanently lubricated ball bearings and automatic reset line breaking thermal overload protection. Motors furnished on standard units operate at line voltage and are prewired to the control enclosure so separate field wiring to the motor is not required. The standard motor is rated for

Class I, Groups C and D, Class II, Groups F and G. The minimum operating temperature is -14°F (-25°C) and the minimum storage temperature is -49°F (-45°C). Optional motor ratings are described on page 9.

Cabinet/Louvers – Industrial grade, corrosion resistant construction fabricated from beige powder coated 14-gauge galvanized steel. The adjustable louvers have minimum opening safety stops.

Controls – Factory mounted on the unit heater. Standard built-in controls include automatic and manual reset overtemperature cutouts, controlling magnetic contactor, and 24-volt control circuit transformer housed in a NEMA 7, 9 cast aluminum enclosure.

Factory Built-in Options

| Code | Option | Description | Availability Code (2) |
|------|---|---|-----------------------|
| C1 | 316 Stainless Steel Corrosion-Resistant Construction (Waste Water Treatment Plants) | 316 Stainless steel heat exchanger with aluminum fins, 316 stainless steel cabinet; aluminum fan blade; cast aluminum NEMA 7, 9 control enclosure; corrosion-resistant hardware; corrosion-resistant protective coated motor, which has passed the ASTM B117 salt-spray test. | C |
| C2 | Dirty Duty Corrosion-Resistant Construction (Chemical Plants) | Heresite® coated heat exchanger, cabinet and fan blade; cast aluminum NEMA 7, 9 control enclosure; corrosion-resistant hardware; corrosion-resistant protective coated motor which has passed the ASTM B117 salt-spray test. | C |
| D | Disconnect Switch | Factory installed on the unit heater above the control enclosure. This is an inexpensive and positive way to meet NEC/CEC requirements for a disconnecting means within sight of the heater. | AS |
| E* | Group E (Metal Dust) Construction | Class II, Group E (Metal Dust) Construction Temperature Code T3C, 320°F (160°C) | C |
| K | “Warning” Pilot Light | Indicates when the thermal cutouts have tripped and the unit heater needs servicing. | AS |
| L | “Heater On” Pilot Light | Indicates when the electric heating elements are energized. | AS |
| M | Manual Reset Thermal Cutout with Backup Contactor | A pilot duty manual reset thermal cutout with a backup contactor is provided for independent secondary over-temperature protection. This option cannot be provided if option Code S or V are also specified. | AS |
| S | Auto/Fan Selector Switch | A two-position switch wired to the control circuit for auto (automatic heat) and fan only control. This selector switch cannot be provided if option Code M or V are also specified. | AS |
| S1 | Built-In Controls for Remote Auto/Fan Selector Switch | Unit is prewired for field addition of remote auto/fan selector switch. This option cannot be provided if Code M or V are also specified. | AS |
| T | Adjustable Thermostat | Factory installed and prewired to the control enclosure. Thermostat is adjustable from 50° to 90°F (10° to 32°C) range. | AS |
| T1 | Adjustable Thermostat for Wet Locations | Factory installed and prewired to the control enclosure. Thermostat is adjustable from 40° to 80° F (5° to 25° C) range. Can be specified for all constructions. | AS |
| V | 120 Volt Control Circuit | Can be provided when required for special external thermostat circuit. This option cannot be provided if option Code S or M are also specified. Nor can both K and L be specified. | AS |
| W | Wet Location Construction Features – IP55 | Unit provided with components suitable for IP55 wet locations. Requires dirty duty corrosion-resistant or 316 stainless steel corrosion-resistance construction option. | AS |

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

* Code E cannot be selected when selecting Code W.

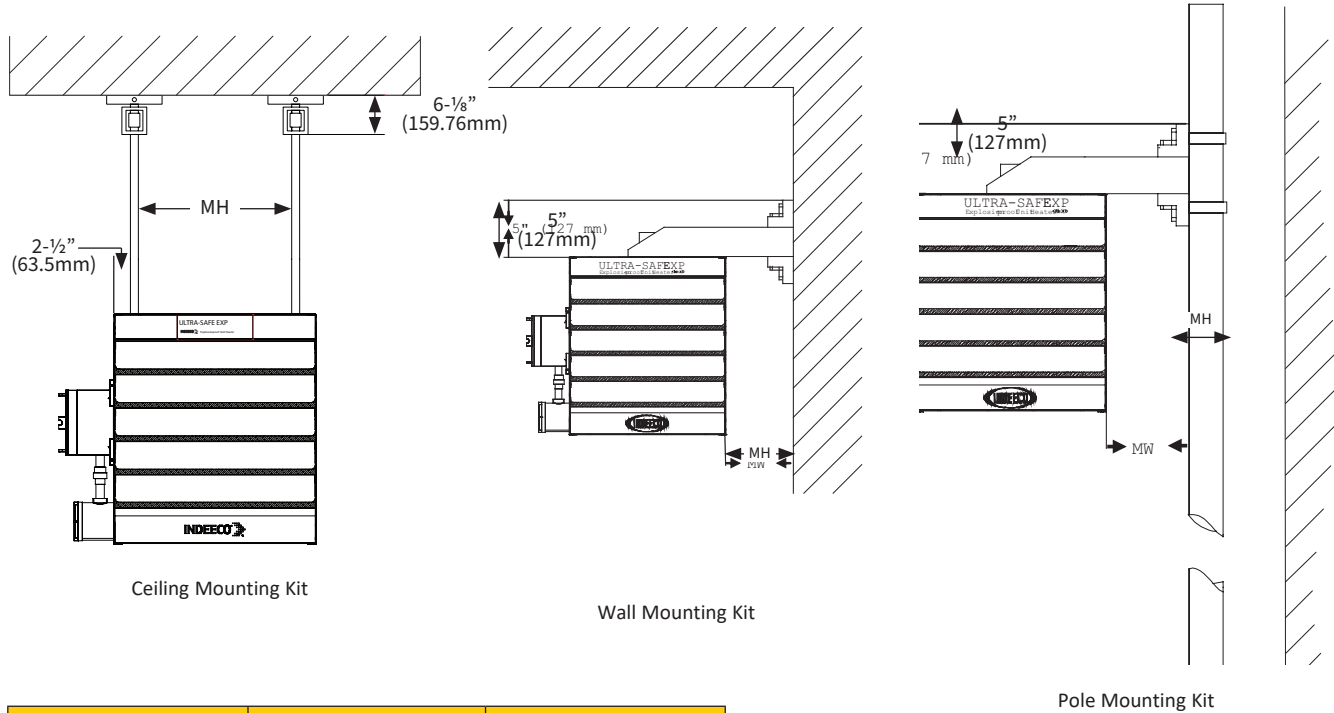
Ultra-Safe™ EXP

UNIT HEATER

Accessory Items

ULTRA-SAFE™ EXP Heater Mounting Kits

These are available for ceiling, wall and pole mounting configurations as described below. Specify type required and catalog number at time of order entry.



| Size | MH In. (mm) | MW In. (mm) |
|------|----------------|-------------|
| 1 | 11.063 (281) | 9 (228.6) |
| 2 | 15.063 (382.6) | 7 (177.8) |
| 3 | 19.063 (484.2) | 5 (127) |

Unit Heater Mounting Kits (One kit required per heater) Standard Mounting Kits for use in most applications

| Catalog Number | Description | Availability Code (2) |
|----------------|--|-----------------------|
| 1022451 | Ceiling Mounting Kit, for Frame Size 1, 2, 3 | AS |
| 1022454 | Wall Mounting Kit, for Frame Size 1, 2, 3 | |
| 1022457 | Pole Mounting Kit, for Frame Size 1, 2, 3 | |

Optional Mounting Kits for Option C1 or C2 heaters

| Catalog Number | Description | Availability Code (2) |
|----------------|--|-----------------------|
| 1022451-S | Corrosion Resistant Ceiling Mounting Kit, for Frame Size 1, 2, 3 | AS |
| 1022454-S | Corrosion Resistant Wall Mounting Kit, for Frame Size 1, 2, 3 | |
| 1022457-S | Corrosion Resistant Pole Mounting Kit, for Frame Size 1, 2, 3 | |

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

Accessory Remote Thermostat

| Catalog Number | Switch Type | Description | Type | Ratings | Temp. Range °F (°C) | Availability Code |
|----------------|---|--|------|-------------------------------|---------------------|-------------------|
| 1007002 | Bimetal | Class 1, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G | SPDT | 125-277V, 22A | 50-90 (10-32) | AS |
| 1024754 | Bulb and Capillary with Internal Set Point Adjustment | Class 1, Div. 1, Groups B, C & D Class II, Div. 1, Groups E, F, & G | SPDT | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |
| 1025396 | Bulb and Capillary with Internal Set Point Adjustment | Corrosion-Resistant Class 1, Div. 1, Groups B, C, & D Class II, Div. 1, Groups E, F & G | SPST | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |
| 1036506 | Bimetal | Class I, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G Class III IP66, Type 4 | SPDT | 480V, 15A | 40-80 (5-25) | AS |

Remote Fan Switch

| Catalog Number | Switch Type | Description | Hubs | Ratings | Availability Code |
|----------------|-------------|---|----------------------|-----------------|-------------------|
| 1001744 | 2-Position | Class I, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G Class III | (2) 3/4" NPT Hubs | 120/277V 30A | AS |
| 1031042 | 2-Position | Class I, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G Class III NEMA 4X | (2) 3/4" NPT Hubs | 110V 6A | |

Ultra-Safe™ EXP

UNIT HEATER

Dimensions, Airflows and Weights

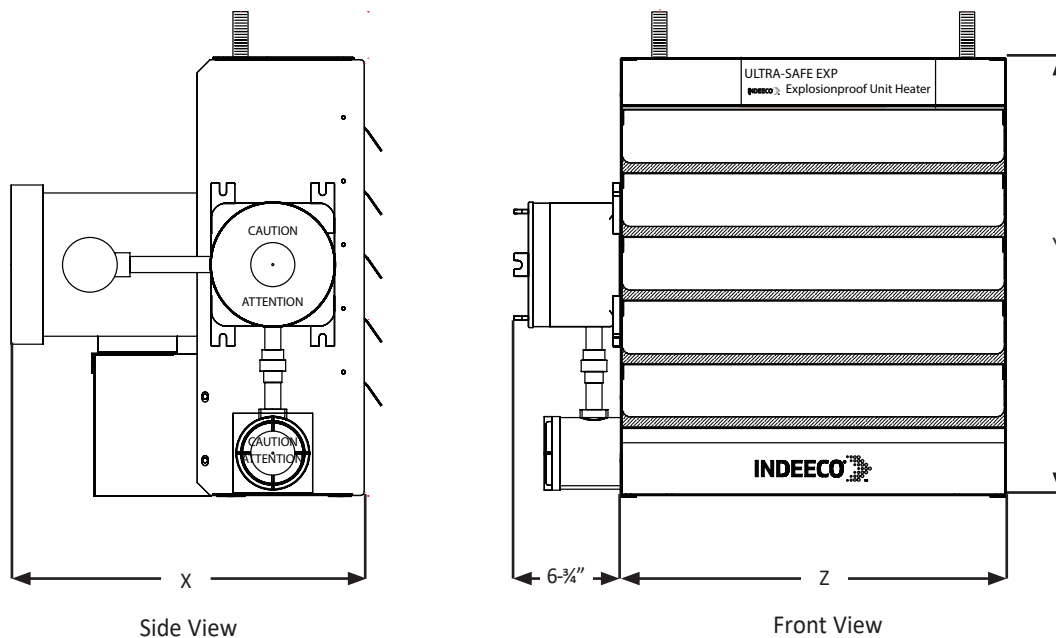
| Frame Size | | Size 1 | Size 2 | Size 3 |
|---------------------------|--------------------|------------------|------------------|------------------|
| Overall Heater Dimensions | 'X' In. (mm) | 21.75 (552.45) | 21.75 (552.45) | 22.75 (577.85) |
| | 'Y' In. (mm) | 19.375 (492.125) | 23.375 (593.725) | 27.375 (695.325) |
| | 'Z' In. (mm) | 16.063 (408) | 20.188 (512.775) | 24.188 (614.375) |
| Weight | Net Lbs. (kgs) | 110 (49.89) | 150 (68.03) | 190 (86.18) |
| | Shipping Lbs (kgs) | 130 (58.96) | 169 (76.65) | 216 (97.97) |

60 Hertz Heaters

| KW Range | | 3 - 5 | 7.5 - 10 | 15 | 20 | 25 | 30 |
|-------------------------|----------------------------------|------------|------------|-------------|-------------|-------------|----|
| Airflow Characteristics | Air Volume CFM (cubic meter/hr.) | 650 (1104) | 850 (1444) | 1800 (3058) | 3110 (5283) | 3850 (6541) | |
| | Air Throw Feet (m) | 15 (4.5) | 25 (7.6) | 45 (13.7) | 65 (19.8) | 75 (22.8) | |
| Motor/Fan | RPM | 1725 | | | | | |
| | HP | 1/4 | | | | 1/2 | |
| | Fan Blade Dia. In. (mm) | 12 (304.8) | | 16 (406.4) | | 20 (508) | |

50 Hertz Heaters

| KW Range | | 2.5 - 4.2 | 6.3 - 8.4 | 12.5 | 16.7 | 21 - 25 |
|-------------------------|----------------------------------|------------|------------|-------------|-------------|----------|
| Airflow Characteristics | Air Volume CFM (cubic meter/hr.) | 550 (934) | 700 (1189) | 1500 (2549) | 2600 (4417) | |
| | Air Throw Feet (m) | 13 (4) | 22 (7) | 39 (12) | 57 (17) | |
| Motor/Fan | RPM | 1438 | | | | |
| | HP | 1/4 | | | | 1/2 |
| | Fan Blade Dia. In. (mm) | 12 (304.8) | | 16 (406.4) | | 20 (508) |



Ultra-Safe™ EXP

UNIT HEATER

ULTRA-SAFE™ EXP Unit Heater Listing 60 Hz

Class I, Divisions 1 and 2, Groups C and D
 Class II, Divisions 1 and 2, Groups F and G
 Class I, Zones 1 and 2, Group IIB
 Temperature Code T3C, 320°F (160°C)



| KW | Volts | Phase | Total Amps (1) | Frame Size | Approximate Air Temperature Rise °F (°C) | Catalog Number | Availability (2) |
|-----|-------|-------|----------------|------------|--|----------------|------------------|
| 3 | 208 | 1 | 17 | 1 | 15 (8) | 233-FA-0036C | AS |
| | 240 | 1 | 15 | 1 | 15 (8) | 233-FA-0036J | |
| | 208 | 3 | 10 | 1 | 15 (8) | 233-FA-0036D | |
| | 240 | 3 | 9 | 1 | 15 (8) | 233-FA-0036K | |
| | 480 | 3 | 5 | 1 | 15 (8) | 233-FA-0036U | |
| | 600 | 3 | 4 | 1 | 15 (8) | 233-FA-0036Z | |
| 5 | 208 | 1 | 26 | 1 | 25 (13) | 233-FA-0056C | |
| | 240 | 1 | 23 | 1 | 25 (13) | 233-FA-0056J | |
| | 208 | 3 | 16 | 1 | 25 (13) | 233-FA-0056D | |
| | 240 | 3 | 14 | 1 | 25 (13) | 233-FA-0056K | |
| | 480 | 3 | 7 | 1 | 25 (13) | 233-FA-0056U | |
| | 600 | 3 | 6 | 1 | 25 (13) | 233-FA-0056Z | |
| 7.5 | 208 | 1 | 38 | 1 | 28 (16) | 233-FA-0086C | |
| | 240 | 1 | 34 | 1 | 28 (16) | 233-FA-0086J | |
| | 208 | 3 | 23 | 1 | 28 (16) | 233-FA-0086D | |
| | 240 | 3 | 20 | 1 | 28 (16) | 233-FA-0086K | |
| | 480 | 3 | 10 | 1 | 28 (16) | 233-FA-0086U | |
| | 600 | 3 | 9 | 1 | 28 (16) | 233-FA-0086Z | |
| 10 | 240 | 1 | 44 | 1 | 38 (21) | 233-FA-0106J | |
| | 208 | 3 | 30 | 1 | 38 (21) | 233-FA-0106D | |
| | 240 | 3 | 26 | 1 | 38 (21) | 233-FA-0106K | |
| | 480 | 3 | 13 | 1 | 38 (21) | 233-FA-0106U | |
| | 600 | 3 | 11 | 1 | 38 (21) | 233-FA-0106Z | |
| 15 | 208 | 3 | 44 | 2 | 27 (15) | 233-FB-0156D | |
| | 240 | 3 | 38 | 2 | 27 (15) | 233-FB-0156K | |
| | 480 | 3 | 19 | 2 | 27 (15) | 233-FB-0156U | |
| | 600 | 3 | 16 | 2 | 27 (15) | 233-FB-0156Z | |
| 20 | 480 | 3 | 25 | 2 | 35 (19) | 233-FB-0206U | |
| | 600 | 3 | 21 | 2 | 35 (19) | 233-FB-0206Z | |
| 25 | 480 | 3 | 31 | 3 | 26 (14) | 233-FC-0256U | |
| | 600 | 3 | 25 | 3 | 26 (14) | 233-FC-0256Z | |
| 30 | 480 | 3 | 37 | 3 | 25 (13) | 233-FC-0306U | |
| | 600 | 3 | 30 | 3 | 25 (13) | 233-FC-0306Z | |

(1) Total Amps = Heating element amps and motor amps.

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

Ultra-Safe™ EXP

UNIT HEATER

ULTRA-SAFE™ EXP Unit Heater Listing 50 Hz

Class I, Divisions 1 and 2, Groups C and D
Class II, Divisions 1 and 2, Groups F and G
Class I, Zones 1 and 2, Group IIB
Temperature Code T3C, 320°F (160°C)



| KW | Volts | Phase | Total Amps (1) | Frame Size | Approximate Air Temperature Rise °F (°C) | Catalog Number | Availability (2) |
|------|-------|-------|----------------|------------|--|----------------|------------------|
| 2.5 | 220 | 1 | 14 | 1 | 14 (8) | 233-FA-0036E | C |
| | 220 | 3 | 9 | 1 | 14 (8) | 233-FA-0036F | |
| | 380 | 3 | 6 | 1 | 14 (8) | 233-FA-0036G | |
| | 400 | 3 | 6 | 1 | 14 (8) | 233-FA-0036H | |
| | 415 | 3 | 5 | 1 | 14 (8) | 233-FA-0036I | |
| 4.2 | 220 | 1 | 21 | 1 | 24 (13) | 233-FA-0056E | |
| | 220 | 3 | 13 | 1 | 24 (13) | 233-FA-0056F | |
| | 380 | 3 | 9 | 1 | 24 (13) | 233-FA-0056G | |
| | 400 | 3 | 8 | 1 | 24 (13) | 233-FA-0056H | |
| | 415 | 3 | 7 | 1 | 24 (13) | 233-FA-0056I | |
| 6.3 | 220 | 1 | 31 | 1 | 28 (16) | 233-FA-0076E | |
| | 220 | 3 | 19 | 1 | 28 (16) | 233-FA-0076F | |
| | 380 | 3 | 12 | 1 | 28 (16) | 233-FA-0076G | |
| | 400 | 3 | 11 | 1 | 28 (16) | 233-FA-0076H | |
| | 415 | 3 | 10 | 1 | 28 (16) | 233-FA-0076I | |
| 8.4 | 220 | 1 | 40 | 1 | 38 (21) | 233-FA-0096E | |
| | 220 | 3 | 24 | 1 | 38 (21) | 233-FA-0096F | |
| | 380 | 3 | 15 | 1 | 38 (21) | 233-FA-0096G | |
| | 400 | 3 | 13 | 1 | 38 (21) | 233-FA-0096H | |
| | 415 | 3 | 13 | 1 | 38 (21) | 233-FA-0096I | |
| 12.5 | 220 | 3 | 35 | 2 | 26 (14) | 233-FB-0136F | |
| | 380 | 3 | 21 | 2 | 26 (14) | 233-FB-0136G | |
| | 400 | 3 | 19 | 2 | 26 (14) | 233-FB-0136H | |
| | 415 | 3 | 18 | 2 | 26 (14) | 233-FB-0136I | |
| 16.7 | 220 | 3 | 46 | 2 | 35 (19) | 233-FB-0176F | |
| | 380 | 3 | 28 | 2 | 35 (19) | 233-FB-0176G | |
| | 400 | 3 | 25 | 2 | 35 (19) | 233-FB-0176H | |
| | 415 | 3 | 24 | 2 | 35 (19) | 233-FB-0176I | |
| 21 | 380 | 3 | 33 | 3 | 26 (14) | 233-FC-0216G | |
| | 400 | 3 | 32 | 3 | 26 (14) | 233-FC-0216H | |
| | 415 | 3 | 31 | 3 | 26 (14) | 233-FC-0216I | |
| 25 | 380 | 3 | 39 | 3 | 30 (17) | 233-FC-0256G | |
| | 400 | 3 | 37 | 3 | 30 (17) | 233-FC-0256H | |
| | 415 | 3 | 36 | 3 | 30 (17) | 233-FC-0256I | |

(1) Total Amps = Heating element amps and motor amps.

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

Compact UNIT HEATER



Class I, Divisions 1 and 2, Group D
Class I, Zones 1 and 2, Group IIA

Indeeco's COMPACT explosion-proof unit heater is designed with both size and economy in mind. COMPACT advantages and unique features include:

- **Compact Size:** This small design is only 13 inches wide, which makes it ideal for applications where limited space is available.
- **Low Cost:** The COMPACT design offers the most economical solution for heating small Class I, Group D hazardous areas. It is a cost effective alternative to the use of explosion-proof convection heaters.
- **Redundant Overtemperature Protection:** Primary and secondary automatic reset thermal cutouts for additional safety.
- **Stainless Steel Construction:** Provides superior corrosion resistant protection. Optional Dirty Duty construction adds polyester powder coating to all aluminum parts for use in corrosive applications.
- **Optional Marine Duty Construction:** The COMPACT design is ideal for shipboard use where size, weight and corrosion resistant construction are critical.

Applications

- Chemical Storage/ Handling Areas
- Compressor Stations
- Marine and Offshore
- Oil Platforms and Refineries
- Sewage/Wastewater Treatment Plants
- Spray Booths

Standard Construction Features

Heating Elements – Industrial grade, Type 304 stainless steel finned tubular heating elements are manufactured by Indeeco.

Terminal Enclosure – A NEMA 7, 9 cast aluminum enclosure with a threaded bottom cover permits easy access to the built-in controls from underneath the heater.

Housing – Round, 16-gauge stainless steel shroud.

Grilles – An adjustable stainless steel louvered outlet grille directs airflow 45° up or down and a heavy gauge stainless steel rear grille protects against accidental contact with the fan blade.

Stainless Steel Swivel Mounting Bracket – Supplied as standard with all COMPACT explosion-proof unit heaters. This multi-purpose bracket can be used for either wall or ceiling mounting.

Built-In Controls – Include primary and secondary automatic reset overtemperature cutouts, controlling contactor, and a time delay relay which keeps the fan running to cool the heating elements after they have been de-energized.

Fan Motor Assembly – Consists of a 120-volt, 1-phase 60 hertz motor fitted with an aluminum fan blade. The totally enclosed motor is UL Listed for Class I, Group D applications and includes permanently lubricated ball bearings and built-in thermal overload protection. The motor is factory wired into the enclosure to reduce field wiring, but requires a separate 120-volt power supply.

Compact UNIT HEATER

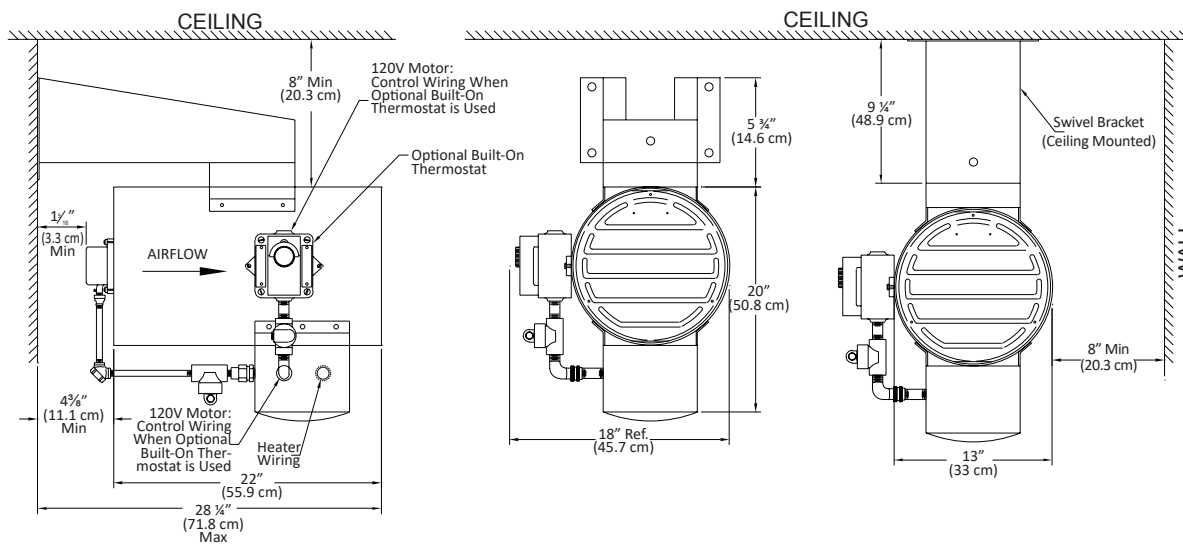
Custom Options

| Code | Option | Description | Availability Code (2) |
|------|---|--|-----------------------|
| C | Dirty Duty Corrosion Resistant Construction | Includes polyester powder coated fan blade, wiring conduit and fittings, NEMA 4X, 7, 9 enclosure. | C |
| CM | Marine Duty Construction | Dirty Duty Construction with manual reset thermal cutout. Meets U.S. Coast Guard requirements per 46CFR-111.87 and is ABS Approved | C |
| M | Manual Reset Cutout | Can be specified to replace secondary automatic cutout. | C |
| T | Adjustable Thermostat | Factory installed and prewired to the control enclosure. Thermostat is adjustable from 50° to 90°F (10° to 32°C) range. | C |

(2) AS = Assembly Stock, C = Custom Assembly Stock heaters ordered with custom options are subject to longer delivery.

Dimensions, Airflows and Weights

| KW | | 3 | 5 | 7 | 10 | 12 |
|--|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Ignition Temperature Code | | T3 | T2C | T2 | T1 | T1 |
| Approximate Air Temperature Rise °F (°C) | | 9 (5) | 15 (8) | 22 (12) | 31 (17) | 37 (21) |
| Airflow Characteristics | Air Volume CFM (cubic meters/hr) | 1050 (1784) | 1050 (1784) | 1050 (1784) | 1050 (1784) | 1050 (1784) |
| | Air Throw Feet (m) | 25 (8) | 25 (8) | 25 (8) | 25 (8) | 25 (8) |
| | Outlet Velocity FPM (meters/min) | 1140 (348) | 1140 (348) | 1140 (348) | 1140 (348) | 1140 (348) |
| Motor/Fan | RPM | 1725 | 1725 | 1725 | 1725 | 1725 |
| | HP | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
| | Fan Blade Dia. Inch (cm) | 12 (31) | | | | |
| Weight | Net Lbs (kgs) | 96 (44) | | | | |
| | Shipping Lbs (kgs) | 110 (50) | | | | |



Standard Wall and Ceiling Installation with Swivel Mounting Bracket

Class I, Divisions 1 and 2, Group D
Class I, Zones 1 and 2, Group IIA

COMPACT Unit Heater Listing

| Ignition Temperature Code °F (°C) | KW | Volts | Phase | Heater Amps (1) | Catalog Number | Availability Code (2) |
|--------------------------------------|----|-------|-------|-----------------|---------------------|-----------------------|
| T3 392 (200) | 3 | 208 | 1 | 14.5 | 236-F01T-0037C-7300 | C |
| | | 240 | 1 | 12.5 | 236-F01T-0037J-7301 | C |
| | | 480 | 1 | 6.3 | 236-F01T-0037T-7302 | C |
| | | 208 | 3 | 8.4 | 236-F01T-0037D-7303 | C |
| | | 240 | 3 | 7.3 | 236-F01T-0037K-7304 | C |
| | | 480 | 3 | 3.7 | 236-F01T-0037U-7305 | C |
| | | 600 | 3 | 2.9 | 236-F01T-0037Z-7306 | C |
| T2C 446 (230) | 5 | 208 | 1 | 24.1 | 236-F01T-0055C-7307 | C |
| | | 240 | 1 | 20.9 | 236-F01T-0055J-7308 | C |
| | | 480 | 1 | 10.5 | 236-F01T-0055T-7309 | C |
| | | 208 | 3 | 13.9 | 236-F01T-0055D-7310 | C |
| | | 240 | 3 | 12.1 | 236-F01T-0055K-7311 | C |
| | | 480 | 3 | 8.1 | 236-F01T-0055U-7312 | C |
| | | 600 | 3 | 4.9 | 236-F01T-0055Z-7313 | C |
| T2 572 (300) | 7 | 208 | 1 | 33.7 | 236-F01T-0072C-7314 | C |
| | | 240 | 1 | 29.2 | 236-F01T-0072J-7315 | C |
| | | 480 | 1 | 14.6 | 236-F01T-0072T-7316 | C |
| | | 208 | 3 | 19.5 | 236-F01T-0072D-7317 | C |
| | | 240 | 3 | 16.9 | 236-F01T-0072K-7318 | C |
| | | 480 | 3 | 8.5 | 236-F01T-0072U-7319 | C |
| | | 600 | 3 | 6.8 | 236-F01T-0072Z-7320 | C |
| T1 842 (450) | 10 | 240 | 1 | 41.7 | 236-F01T-0101J-7321 | C |
| | | 480 | 1 | 20.9 | 236-F01T-0101T-7322 | C |
| | | 208 | 3 | 27.8 | 236-F01T-0101D-7323 | C |
| | | 240 | 3 | 24.1 | 236-F01T-0101K-7324 | C |
| | | 480 | 3 | 12.1 | 236-F01T-0101U-7325 | C |
| | | 600 | 3 | 9.7 | 236-F01T-0101Z-7326 | C |
| T1 842 (450) | 12 | 480 | 1 | 25.0 | 236-F01T-0121T-7327 | C |
| | | 240 | 3 | 29.0 | 236-F01T-0121K-7328 | C |
| | | 480 | 3 | 14.5 | 236-F01T-0121U-7329 | C |
| | | 600 | 3 | 11.6 | 236-F01T-0121Z-7330 | C |

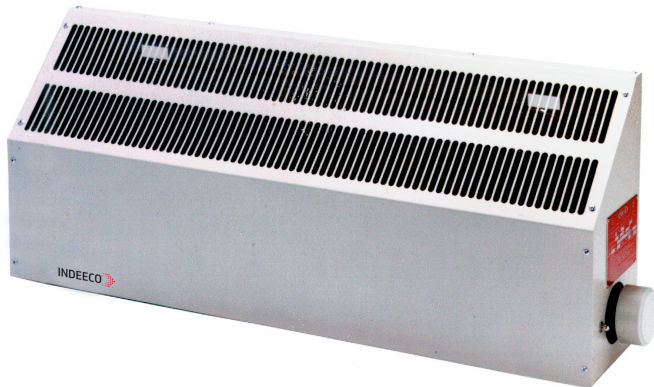


(1) The amps shown are for the heating elements only. The 120V, 1 Ph 60 Hz motor draws 3.8 amps and requires a separate 120V power supply.
(2) Availability Code: C = Custom

Accessory Remote Thermostat

| Catalog Number | Switch Type | Description | Type | Ratings | Temp. Range °F (°C) | Availability Code |
|----------------|---|---|------|-------------------------------|---------------------|-------------------|
| 1007002 | Bimetal | Class 1, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G | SPDT | 125-277V, 22A | 50-90 (10-32) | AS |
| 1024754 | Bulb and Capillary with Internal Set Point Adjustment | Class 1, Div. 1, Groups B, C & D Class II, Div. 1, Groups E, F, & G | SPDT | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |
| 1025396 | Bulb and Capillary with Internal Set Point Adjustment | Corrosion-Resistant Class 1, Div. 1, Groups B, C, & D Class II, Div. 1, Groups E, F & G | SPST | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |

Convector



Class I, Divisions 1 and 2, Groups B, C and D
Class II, Divisions 1 and 2, Groups E, F and G
Class I, Zones 1 and 2, Groups IIB and H2

Applications

- Battery Storage Areas
- Chemical Plants
- Coal Handling Facilities
- Dry Cleaning Plants
- Gasoline Fueling/Storage Areas
- Grain Elevators
- Oil Refineries
- Paint Spraying/Storage Areas
- Petrochemical Plants

Indeeco's explosion-proof convector is designed to provide a heavy duty and corrosion resistant heat source. Features include:

- Wide Selection of Sizes: Four compact sizes to fit any space with ratings from 500 to 9,500 watts.
- Sloped Top Cabinet: Prevents objects from being set on top of the convector, which can restrict airflow and cause overheating.
- Single and Three-Phase: Unique design provides single and balanced three-phase loads in a single element.
- Gas and Dust Atmospheres: Three listings cover the entire field, two for hazardous gases and vapors and one for dust particles.
- Wet Locations: All unit sizes available with iridite-coated elements and powder-coated frames for NEMA 3 wet locations.

Standard Construction Features

Element – Grade A Nickel-Chromium heating coils are insulated with ceramics and magnesium oxide from the copper heater tube and fitted with large aluminum fins locked in place.

Cabinet – Heavy gauge galvanized steel cabinet is painted with a beige powder coat for durability. Cabinet should be mounted at least 6 inches (152 mm) above the floor. Factory-furnished wall brackets make installation easy.

Thermal Protection – A linear limit, automatic reset thermal cutout is built into every unit.

Complete Electrical Package – For larger single-phase and all three-phase units, a built-on contactor and transformer option package are available.

Electrical Package Options

All single-phase heaters rated over 22 amps or 277 volts and all three-phase heaters require a magnetic contactor. Some electrical combinations will also require a control transformer.

To simplify field installation, these accessories are factory-mounted on the heater cabinet and factory pre-wired (not available on Size 1 convectors).

| Code | Option | Description | Availability Code (2) |
|------|--|---|-----------------------|
| B2 | Electric Control Option (1) (without thermostat) | Classes I and II, Groups B, C, E, D, F and G includes contactor and transformer (as required). Required for all three-phase and single-phase heaters over 22 amps or 277 volts | AS |
| B2S1 | Thermostat & Controls (1) | Classes I and II, Groups C, D, E, F and G includes thermostat, contactor and transformer (as required). | AS |
| B3 | Thermostat & Controls (Group B) (1) | Classes I and II, Groups B, C, D, E, F and G includes thermostat, contactor and transformer (as required). Thermostat has internal set point. | AS |
| S1 | Thermostat Only (1) | Classes I and II, Groups C, D, E, F and G single-phase heaters rated up to 22 amps at 120-277 volts. Use remote room thermostat Catalog Number 1007002 for Size 1 convectors. | AS |
| S2 | Thermostat Only (Group B) (1) | Classes I and II, Groups B, C, D, E, F and G single-phase heaters rated up to 22 amps at 120-277 volts. Thermostat has internal set point. Use remote room thermostat Catalog Number 1024754 for Size 1 convectors. | AS |

(1) These options are not available on Size 1 Convectors.

Custom Option

| Code | Option | Description | Availability Code (2) |
|------|--|---|-----------------------|
| C1 | Wet Locations | Type 3 rated construction. Includes Iridite coated element assembly and gasketed terminal box. Not available with options B2/S1, S1, or S2. | C |
| C2 | Corrosive-Resistant Stainless Steel Construction | Type 3 rated construction with addition of stainless steel cabinet. Includes Iridite coated element assembly and gasketed terminal box. Not available with options B2/S1, S1, or S2. ONLY the cabinet is upgraded to stainless steel. | C |

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

Accessory Remote Thermostat

| Catalog Number | Switch Type | Description | Type | Ratings | Temp. Range °F (°C) | Availability Code |
|----------------|---|---|------|-------------------------------|---------------------|-------------------|
| 1007002 | Bimetal | Class 1, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G | SPDT | 125-277V, 22A | 50-90 (10-32) | AS |
| 1024754 | Bulb and Capillary with Internal Set Point Adjustment | Class 1, Div. 1, Groups B, C & D Class II, Div. 1, Groups E, F, & G | SPDT | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |
| 1025396 | Bulb and Capillary with Internal Set Point Adjustment | Corrosion-Resistant Class 1, Div. 1, Groups B, C, & D Class II, Div. 1, Groups E, F & G | SPST | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |

Convector

Class I, Divisions 1 & 2, Groups B, C & D
Ignition Temperature Code T2A, 536°F (280°C)
Class I, Zones 1 and 2 Groups IIB + H2

Use these heaters when ordering heaters without optional built-on controls

| KW | Volts (1) | Phase | Total Amps | Unit Size | Catalog Number | Availability Code (3) | Optional Built-on Controls | |
|-----|-----------|-------|---------------|-----------|----------------|-----------------------|----------------------------|---|
| | | | | | | | Controls Only | Thermostat Only (3) or Thermostat with Controls |
| 0.5 | 120 | 1 | 4.2 | 1 | 254-F0310052B | AS | N/A | 1024754 |
| | 208 | 1 | 2.4 | | 254-F0310052C | | N/A | 1024754 |
| | 240 | 1 | 2.1 | | 254-F0310052J | | N/A | 1024754 |
| | 277 | 1 | 1.8 | | 254-F0310052N | | N/A | 1024754 |
| 1 | 120 | 1 | 8.3 | 1 | 254-F0310102B | | N/A | 1024754 |
| | 208 | 1 | 4.8 | | 254-F0310102C | | N/A | 1024754 |
| | 240 | 1 | 4.2 | | 254-F0310102J | | N/A | 1024754 |
| | 277 | 1 | 3.6 | | 254-F0310102N | | N/A | 1024754 |
| 1.8 | 120 | 1 | 15.0 | 2 | 254-F0320182B | | N/R | S2 |
| | 208 | 1 | 8.7 | | 254-F0320182C | | N/R | S2 |
| | 240 | 1 | 7.5 | | 254-F0320182J | | N/R | S2 |
| | 277 | 1 | 6.5 | | 254-F0320182N | | N/R | S2 |
| | 347 | 1 | 5.2 | | 254-F0320182I | | B2 | B3 |
| | 480 | 3 | 2.2 | | 254-F0320182U | | B2 | B3 |
| 2.5 | 600 | 3 | 1.8 | 2 | 254-F0320182Z | | B2 | B3 |
| | 208 | 1 | 12.0 | | 254-F0320252C | | N/R | S2 |
| | 208 | 3 | 6.9 | | 254-F0320252D | B2 | B3 | |
| | 240 | 1 | 10.4 | | 254-F0320252J | N/R | S2 | |
| | 277 | 1 | 9.0 | | 254-F0320252N | N/R | S2 | |
| | 347 | 1 | 7.2 | | 254-F0320252I | B2 | B3 | |
| 3.6 | 480 | 3 | 3.0 | 2 | 254-F0320252U | B2 | B3 | |
| | 600 | 3 | 2.4 | | 254-F0320252Z | B2 | B3 | |
| | 208 | 1 | 17.3 | | 3 | 254-F0330362C | N/R | S2 |
| | 208 | 3 | 10.0 | | | 254-F0330362D | B2 | B3 |
| | 240 | 1 | 15.0 | | | 254-F0330362J | N/R | S2 |
| | 277 | 1 | 13.0 | | | 254-F0330362N | N/R | S2 |
| 347 | 1 | 10.4 | 254-F0330362I | B2 | | B3 | | |
| 480 | 3 | 4.3 | 254-F0330362U | B2 | | B3 | | |
| 4.4 | 600 | 3 | 3.5 | 3 | 254-F0330362Z | B2 | B3 | |
| | 208 | 3 | 12.2 | | 254-F0330442D | B2 | B3 | |
| | 240 | 1 | 18.3 | | 254-F0330442J | N/R | S2 | |
| | 277 | 1 | 15.9 | | 254-F0330442N | N/R | S2 | |
| | 347 | 1 | 12.7 | | 254-F0330442I | B2 | B3 | |
| | 480 | 3 | 5.3 | | 254-F0330442U | B2 | B3 | |
| 6.5 | 600 | 3 | 4.3 | 3 | 254-F0330442Z | B2 | B3 | |
| | 208 | 3 | 18.0 | | 4 | 254-F0340652D | B2 | B3 |
| | 240 | 3 | 27.1 | | | 254-F0340652J | B2 | B3 |
| | 277 | 1 | 23.5 | | | 254-F0340652N | B2 | B3 |
| | 347 | 1 | 18.7 | | | 254-F0340652I | B2 | B3 |
| | 480 | 3 | 7.8 | | | 254-F0340652U | B2 | B3 |
| 7.5 | 600 | 3 | 6.3 | 4 | | 254-F0340652Z | B2 | B3 |
| | 208 | 3 | 20.8 | | 254-F0340752D | B2 | B3 | |
| | 240 | 1 | 31.3 | | 254-F0340752J | B2 | B3 | |
| | 277 | 1 | 27.1 | | 254-F0340752N | B2 | B3 | |
| | 347 | 1 | 21.6 | | 254-F0340752I | B2 | B3 | |
| | 480 | 3 | 9.0 | | 254-F0340752U | B2 | B3 | |
| 9.5 | 600 | 3 | 7.2 | 4 | 254-F0340752Z | B2 | B3 | |
| | 208 | 3 | 26.4 | | 254-F0340952D | B2 | B3 | |
| | 240 | 1 | 39.6 | | 254-F0340952J | B2 | B3 | |
| | 277 | 1 | 34.3 | | 254-F0340952N | B2 | B3 | |
| | 347 | 1 | 27.4 | | 254-F0340952I | B2 | B3 | |
| | 480 | 3 | 11.4 | | 254-F0340952U | B2 | B3 | |
| | 600 | 3 | 9.1 | | 254-F0340952Z | B2 | B3 | |

- (1) Convectors are 60/50 Hz rated
- (2) AS = Assembly Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.
- (3) Thermostat only is load carrying or remote.

Convector

Class I, Divisions 1 & 2, Groups C & D
Class I, Zones 1 and 2 Groups IIB
Ignition Temperature Code T2A, 536°F (280°C)

| KW | Volts (1) | 3Phase | Total Amps | Unit Size | Catalog Number | Availability Code (3) | Optional Built-on Controls | |
|-----|-----------|--------|---------------|-----------|----------------|-----------------------|----------------------------|---|
| | | | | | | | Controls Only | Thermostat Only (3) or Thermostat with Controls |
| 0.5 | 120 | 1 | 4.2 | 1 | 254-F0310053B | AS | N/A | 1007002 |
| | 208 | 1 | 2.4 | | 254-F0310053C | | N/A | 1007002 |
| | 240 | 1 | 2.1 | | 254-F0310053J | | N/A | 1007002 |
| | 277 | 1 | 1.8 | | 254-F0310053N | | N/A | 1007002 |
| 1 | 120 | 1 | 8.3 | 1 | 254-F0310103B | | N/A | 1007002 |
| | 208 | 1 | 4.8 | | 254-F0310103C | | N/A | 1007002 |
| | 240 | 1 | 4.2 | | 254-F0310103J | | N/A | 1007002 |
| | 277 | 1 | 3.6 | | 254-F0310103N | | N/A | 1007002 |
| 1.8 | 120 | 1 | 15.0 | 2 | 254-F0320183B | | N/R | S1 |
| | 208 | 1 | 8.7 | | 254-F0320183C | | N/R | S1 |
| | 240 | 1 | 7.5 | | 254-F0320183J | | N/R | S1 |
| | 277 | 1 | 6.5 | | 254-F0320183N | | N/R | S1 |
| | 347 | 1 | 5.2 | | 254-F0320183I | | B2 | B2S1 |
| | 480 | 3 | 2.2 | | 254-F0320183U | | B2 | B2S1 |
| 2.5 | 600 | 3 | 1.8 | 2 | 254-F0320183Z | | B2 | B2S1 |
| | 208 | 1 | 12.0 | | 254-F0320253C | | N/R | S1 |
| | 208 | 3 | 6.9 | | 254-F0320253D | B2 | B2S1 | |
| | 240 | 1 | 10.4 | | 254-F0320253J | N/R | S1 | |
| | 277 | 1 | 9.0 | | 254-F0320253N | N/R | S1 | |
| | 347 | 1 | 7.2 | | 254-F0320253I | B2 | B2S1 | |
| 3.6 | 480 | 3 | 3.0 | 2 | 254-F0320253U | B2 | B2S1 | |
| | 600 | 3 | 2.4 | | 254-F0320253Z | B2 | B2S1 | |
| | 208 | 1 | 17.3 | | 3 | 254-F0330363C | N/R | S1 |
| | 208 | 3 | 10.0 | | | 254-F0330363D | B2 | B2S1 |
| | 240 | 1 | 15.0 | | | 254-F0330363J | N/R | S1 |
| | 277 | 1 | 13.0 | | | 254-F0330363N | N/R | S1 |
| 347 | 1 | 10.4 | 254-F0330363I | B3 | | B3S1 | | |
| 480 | 3 | 4.3 | 254-F0330363U | B2 | | B2S1 | | |
| 4.4 | 600 | 3 | 3.5 | 3 | 254-F0330363Z | B2 | B2S1 | |
| | 208 | 3 | 12.2 | | 254-F0330443D | B2 | B2S1 | |
| | 240 | 1 | 18.3 | | 254-F0330443J | N/R | S1 | |
| | 277 | 1 | 15.9 | | 254-F0330443N | N/R | S1 | |
| | 347 | 1 | 12.7 | | 254-F0330443I | B2 | B3S1 | |
| | 480 | 3 | 5.3 | | 254-F0330443U | B2 | B2S1 | |
| 6.5 | 600 | 3 | 4.3 | 4 | 254-F0330443Z | B2 | B2S1 | |
| | 208 | 3 | 18.0 | | 254-F0340653D | B2 | B2S1 | |
| | 240 | 1 | 27.1 | | 254-F0340653J | B2 | B2S1 | |
| | 277 | 1 | 23.5 | | 254-F0340653N | B2 | B2S1 | |
| | 347 | 1 | 18.7 | | 254-F0340653I | B2 | B2S1 | |
| | 480 | 3 | 7.8 | | 254-F0340653U | B2 | B2S1 | |
| 7.5 | 600 | 3 | 6.3 | 4 | 254-F0340653Z | B2 | B2S1 | |
| | 208 | 3 | 20.8 | | 254-F0340753D | B2 | B2S1 | |
| | 240 | 1 | 31.3 | | 254-F0340753J | B2 | B2S1 | |
| | 277 | 1 | 27.1 | | 254-F0340753N | B2 | B2S1 | |
| | 347 | 1 | 21.6 | | 254-F0340753I | B2 | B2S1 | |
| | 480 | 3 | 9.0 | | 254-F0340753U | B2 | B2S1 | |
| 9.5 | 600 | 3 | 7.2 | 4 | 254-F0340753Z | B2 | B2S1 | |
| | 208 | 3 | 26.4 | | 254-F0340953D | B2 | B2S1 | |
| | 240 | 1 | 39.6 | | 254-F0340953J | B2 | B2S1 | |
| | 277 | 1 | 34.3 | | 254-F0340953N | B2 | B2S1 | |
| | 347 | 1 | 27.4 | | 254-F0340953I | B2 | B2S1 | |
| | 480 | 3 | 11.4 | | 254-F0340953U | B2 | B2S1 | |
| | 600 | 3 | 9.1 | | 254-F0340953Z | B2 | B2S1 | |

(1) Convectors are 60/50 Hz rated
(2) AS = Assembly Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.
(3) Thermostat only is load carrying or remote.

Convector

Class I, Divisions 1 & 2, Groups B, C & D
Ignition Temperature Code T3A, 356°F (180°C)
Class I, Zones 1 and 2 Groups IIB + H2

Use these heaters when ordering heaters without optional built-on controls

| KW | Volts (1) | Phase | Total Amps | Unit Size | Catalog Number | Availability Code (3) | Optional Built-on Controls | |
|-----|-----------|-------|------------|-----------|----------------|-----------------------|----------------------------|---|
| | | | | | | | Controls Only | Thermostat Only (3) or Thermostat with Controls |
| 0.5 | 120 | 1 | 4.2 | 1 | 254-F0610052B | AS | N/A | 1024754 |
| | 208 | 1 | 2.4 | | 254-F0610052C | | N/A | 1024754 |
| | 240 | 1 | 2.1 | | 254-F0610052J | | N/A | 1024754 |
| | 277 | 1 | 1.8 | | 254-F0610052N | | N/A | 1024754 |
| 1.4 | 120 | 1 | 11.7 | 2 | 254-F0620142B | | N/R | S2 |
| | 208 | 1 | 6.7 | | 254-F0620142C | | N/R | S2 |
| | 240 | 1 | 5.8 | | 254-F0620142J | | N/R | S2 |
| | 277 | 1 | 5.1 | | 254-F0620142N | | N/R | S2 |
| | 347 | 1 | 4.0 | | 254-F0620142I | | B2 | B3 |
| 2.3 | 120 | 1 | 19.2 | 3 | 254-F0630232B | | N/R | S2 |
| | 208 | 1 | 11.1 | | 254-F0630232C | | N/R | S2 |
| | 208 | 3 | 6.4 | | 254-F0630232D | | B2 | B3 |
| | 240 | 1 | 9.6 | | 254-F0630232J | | N/R | S2 |
| | 277 | 1 | 8.3 | | 254-F0630232N | | N/R | S2 |
| | 347 | 1 | 6.6 | | 254-F0630232I | | B2 | B3 |
| | 480 | 3 | 2.8 | | 254-F0630232U | | B2 | B3 |
| | 600 | 3 | 2.2 | | 254-F0630232Z | | B2 | B3 |
| 3.2 | 208 | 1 | 15.4 | 4 | 254-F0640322C | | N/R | S2 |
| | 208 | 3 | 8.9 | | 254-F0640322D | | B2 | B3 |
| | 240 | 1 | 13.3 | | 254-F0640322J | | N/R | S2 |
| | 277 | 1 | 11.6 | | 254-F0640322N | | N/R | S2 |
| | 347 | 1 | 9.2 | | 254-F0640322I | | B2 | B3 |
| | 480 | 3 | 3.8 | | 254-F0640322U | | B2 | B3 |
| | 600 | 3 | 3.1 | | 254-F0640322Z | | B2 | B3 |
| 5.0 | 208 | 3 | 13.9 | 4 | 254-F0640502D | | B2 | B3 |
| | 240 | 1 | 20.8 | | 254-F0640502J | | N/R | S2 |
| | 277 | 1 | 18.1 | | 254-F0640502N | | N/R | S2 |
| | 347 | 1 | 14.4 | | 254-F0640502I | | B2 | B3 |
| | 480 | 3 | 6.0 | | 254-F0640502U | | B2 | B3 |
| | 600 | 3 | 4.8 | | 254-F0640502Z | | B2 | B3 |

(1) Convectors are 60/50 Hz rated

(2) AS = Assembly Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.

(3) Thermostat only is load carrying or remote.

Convector

Class I, Divisions 1 & 2, Groups C & D
Class I, Zones 1 and 2 Groups IIB
Ignition Temperature Code T3A, 356°F (180°C)

| KW | Volts (1) | Phase | Total Amps | Unit Size | Catalog Number | Availability Code (3) | Optional Built-on Controls | |
|-----|-----------|-------|------------|-----------|----------------|-----------------------|----------------------------|---|
| | | | | | | | Controls Only | Thermostat Only (3) or Thermostat with Controls |
| 0.5 | 120 | 1 | 4.2 | 1 | 254-F0610053B | AS | N/A | 1007002 |
| | 208 | 1 | 2.4 | | 254-F0610053C | | N/A | 1007002 |
| | 240 | 1 | 2.1 | | 254-F0610053J | | N/A | 1007002 |
| | 277 | 1 | 1.8 | | 254-F0610053N | | N/A | 1007002 |
| 1.4 | 120 | 1 | 11.7 | 2 | 254-F0620143B | | N/R | S1 |
| | 208 | 1 | 6.7 | | 254-F0620143C | | N/R | S1 |
| | 240 | 1 | 5.8 | | 254-F0620143J | | N/R | S1 |
| | 277 | 1 | 5.1 | | 254-F0620143N | | N/R | S1 |
| | 347 | 1 | 4.0 | | 254-F0620143I | | B2 | B2S1 |
| 2.3 | 120 | 1 | 19.2 | 3 | 254-F0630233B | | N/R | S1 |
| | 208 | 1 | 11.1 | | 254-F0630233C | | N/R | S1 |
| | 208 | 3 | 6.4 | | 254-F0630233D | | B2 | B2S1 |
| | 240 | 1 | 9.6 | | 254-F0630233J | | N/R | S1 |
| | 277 | 1 | 8.3 | | 254-F0630233N | | N/R | S1 |
| | 347 | 1 | 6.6 | | 254-F0630233I | | B2 | B2S1 |
| | 480 | 3 | 2.8 | | 254-F0630233U | | B2 | B2S1 |
| | 600 | 3 | 2.2 | | 254-F0630233Z | | B2 | B2S1 |
| 3.2 | 208 | 1 | 15.4 | 4 | 254-F0640323C | | N/R | S1 |
| | 208 | 3 | 8.9 | | 254-F0640323D | | B2 | B2S1 |
| | 240 | 1 | 13.3 | | 254-F0640323J | | N/R | S1 |
| | 277 | 1 | 11.6 | | 254-F0640323N | | N/R | S1 |
| | 347 | 1 | 9.2 | | 254-F0640323I | | B2 | B2S1 |
| | 480 | 3 | 3.8 | | 254-F0640323U | | B2 | B2S1 |
| | 600 | 3 | 3.1 | | 254-F0640323Z | | B2 | B2S1 |
| 5.0 | 208 | 3 | 13.9 | 4 | 254-F0640503D | | B2 | B2S1 |
| | 240 | 1 | 20.8 | | 254-F0640503J | | N/R | S1 |
| | 277 | 1 | 18.1 | | 254-F0640503N | | N/R | S1 |
| | 347 | 1 | 14.4 | | 254-F0640503I | | B2 | B2S1 |
| | 480 | 3 | 6.0 | | 254-F0640503U | | B2 | B2S1 |
| | 600 | 3 | 4.8 | | 254-F0640503Z | | B2 | B2S1 |

(1) Convectors are 60/50 Hz rated
(2) AS = Assembly Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.
(3) Thermostat only is load carrying or remote.

Convector

Class I, Divisions 1 & 2, Groups B, C & D
Class II, Divisions 1 & 2, Groups E, F & G
Ignition Temperature Code T3C, 320°F (160°C)

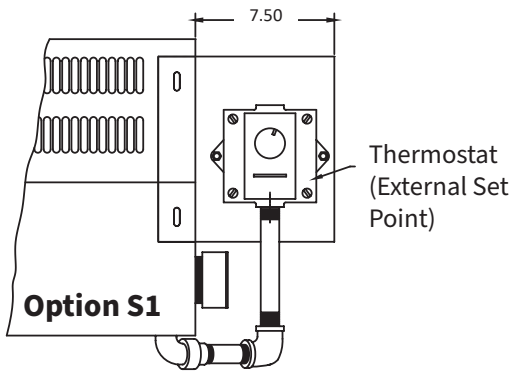
| KW | Volts (1) | Phase | Total Amps | Unit Size | Catalog Number | Availability Code (3) | Optional Built-on Controls | |
|-----|-----------|-------|------------|-----------|----------------|-----------------------|----------------------------|---|
| | | | | | | | Controls Only | Thermostat Only (3) or Thermostat with Controls |
| 0.5 | 120 | 1 | 4.2 | 1 | 254-F0810054B | AS | N/A | 1007002 |
| | 208 | 1 | 2.4 | | 254-F0810054C | | N/A | 1007002 |
| | 240 | 1 | 2.1 | | 254-F0810054J | | N/A | 1007002 |
| | 277 | 1 | 1.8 | | 254-F0810054N | | N/A | 1007002 |
| 1.0 | 120 | 1 | 8.3 | 2 | 254-F0820104B | | N/R | S1 |
| | 208 | 1 | 4.8 | | 254-F0820104C | | N/R | S1 |
| | 240 | 1 | 4.2 | | 254-F0820104J | | N/R | S1 |
| | 277 | 1 | 3.6 | | 254-F0820104N | | N/R | S1 |
| | 347 | 1 | 2.9 | | 254-F0820104I | | B2 | B2S1 |
| 1.7 | 120 | 1 | 14.2 | 3 | 254-F0830174B | | N/R | S1 |
| | 208 | 1 | 8.2 | | 254-F0830174C | | N/R | S1 |
| | 208 | 3 | 4.7 | | 254-F0830174D | | B2 | B2S1 |
| | 240 | 1 | 7.1 | | 254-F0830174J | | N/R | S1 |
| | 277 | 1 | 6.1 | | 254-F0830174N | | N/R | S1 |
| | 347 | 1 | 4.9 | | 254-F0830174I | | B2 | B2S1 |
| | 480 | 3 | 2 | | 254-F0830174U | | B2 | B2S1 |
| | 600 | 3 | 1.6 | | 254-F0830174Z | B2 | B2S1 | |
| 3.2 | 208 | 1 | 15.4 | 4 | 254-F0840324C | N/R | S1 | |
| | 208 | 3 | 8.9 | | 254-F0840324D | B2 | B2S1 | |
| | 240 | 1 | 13.3 | | 254-F0840324J | N/R | S1 | |
| | 277 | 1 | 11.6 | | 254-F0840324N | N/R | S1 | |
| | 347 | 1 | 9.2 | | 254-F0840324I | B2 | B2S1 | |
| | 480 | 3 | 3.8 | | 254-F0840324U | B2 | B2S1 | |
| | 600 | 3 | 3.1 | | 254-F0840324Z | B2 | B2S1 | |

- (1) Convectors are 60/50 Hz rated
 (2) AS = Assembly Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.
 (3) Thermostat only is load carrying or remote.

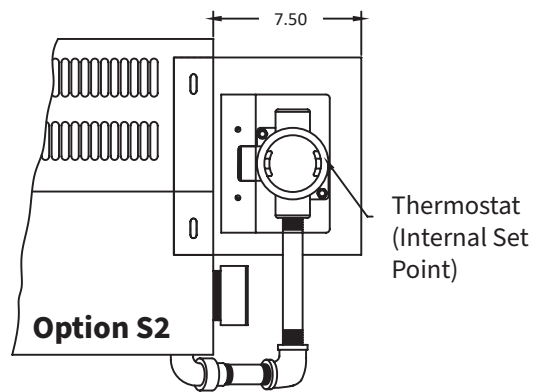
Accessory Remote Thermostat

| Catalog Number | Switch Type | Description | Type | Ratings | Temp. Range °F (°C) | Availability Code |
|----------------|---|---|------|-------------------------------|---------------------|-------------------|
| 1007002 | Bimetal | Class 1, Div. 1, Groups C & D Class II, Div. 1, Groups E, F, & G | SPDT | 125-277V, 22A | 50-90 (10-32) | AS |
| 1024754 | Bulb and Capillary with Internal Set Point Adjustment | Class 1, Div. 1, Groups B, C & D Class II, Div. 1, Groups E, F, & G | SPDT | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |
| 1025396 | Bulb and Capillary with Internal Set Point Adjustment | Corrosion-Resistant Class 1, Div. 1, Groups B, C, & D Class II, Div. 1, Groups E, F & G | SPST | 120-240V, 25A 277V, 22A | 40-120 (5-49) | |

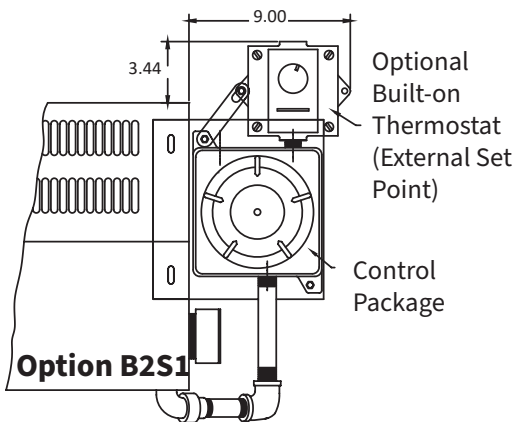
Convector



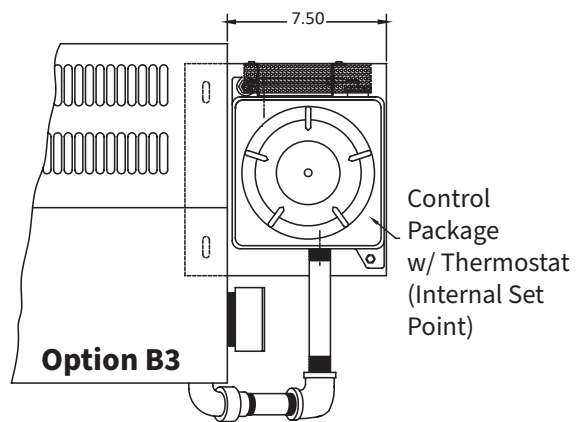
Thermostat is rated for Class I, Groups C and D
Class II Groups E, F and G



Thermostat is rated for Class I, Groups B, C and D
Class II Groups E, F and G



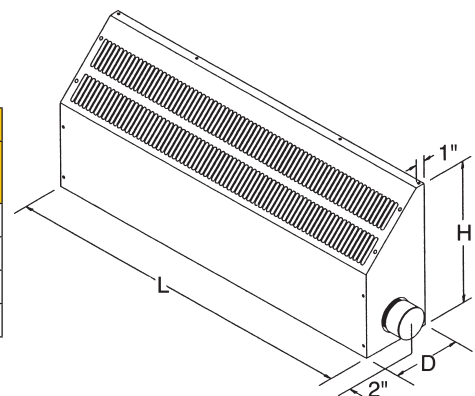
Thermostat is rated for Class I, Groups C and D
Class II Groups E, F and G



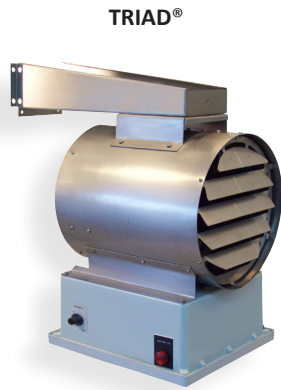
Thermostat is rated for Class I, Groups B, C and D
Class II Groups E, F and G

Dimensions and Weights

| Unit Size | Dimensions - In. (cm) | | | Weight - Lb (kg) |
|-----------|-----------------------|------------|------------|------------------|
| | Length (L) | Height (H) | Depth (D) | Without Controls |
| 1 | 26 (66) | 6 (15) | 4-1/2 (11) | 13 (5.9) |
| 2 | 26 (66) | 16 (41) | 8 (20) | 27 (12.2) |
| 3 | 39 (99) | 16 (41) | 8 (20) | 36 (16.3) |
| 4 | 67-1/2 (171) | 16 (41) | 8 (20) | 60 (27.2) |



Comparison Chart



| Features | Washdown TRIAD® | IUH | UHIR |
|------------------------------|--|--|--|
| Typical Applications | Food processing plants Marine duty Wastewater treatment plants | Factories Warehouses | Factories Mechanical rooms Workshops |
| KW Range | 2 to 47 | 3 to 38.4 | 3.3 to 50 |
| Voltages | up to 600/3 | Up to 480/3 | Up to 600/3 |
| Airflow CFM | Up to 2400 | Up to 1774 | Up to 3100 |
| Discharge | Horizontal | Horizontal | Horizontal or Vertical |
| Element Type | Stainless steel finned tubular | Stainless steel finned tubular | Stainless steel finned tubular |
| Standard Construction | 16 gauge stainless steel shroud and non-metallic NEMA 4X control enclosure | 16 gauge galvanized steel shroud and control enclosure | 20-14 gauge (depending on size) galvanized steel cabinet |
| Finish | Stainless steel | Beige polyester powder paint | Camel polyester powder paint |
| Mounting | Ceiling or wall | Ceiling or wall | Ceiling or wall |
| Agency Approvals | cUL _{us} & ABS | cUL _{us} | cUL _{us} |

WASHDOWN/CORROSION RESISTANT UNIT HEATER



The Indeeco TRIAD® unit heater is the perfect solution to the problem of heating people or equipment in non-hazardous environments where moisture and corrosion exist. Advantages of the TRIAD® include:

- **Built-in Controls:** All necessary safety and temperature controls are included in a single package. Components and motor are factory-wired to a single terminal block for field wiring, eliminating the chance for field error and reducing installation costs.
- **Single Point Electrical Hook-up:** Heater, fan motor and controls are all connected to the same branch circuit.
- **Corrosion Resistant:** Stainless steel construction, powder-coated aluminum fan blade and nonmetallic NEMA 4X terminal enclosure resist corrosion found in sewage treatment plants, swimming pool areas, car washes, paper mills and marine installations.
- **Washable:** This watertight construction can be hosed down without disconnecting the heater, which makes it ideal for coal handling areas, steel mills, foundries, ships, wood finishing plants, cement, sand, grain and food processing facilities.

Applications

- Car Washes
- Cement Plants
- Coal Handling Areas
- Dairies
- Food Processing Plants
- Marine and Offshore
- Power Generating Stations
- Steel Mills and Foundries
- Swimming Pool Areas
- Wastewater Treatment Plants

Standard Construction Features

Heating Elements – Industrial grade, Type 316 stainless steel tubular elements with stainless steel fins, manufactured by Indeeco.

Fan Motor Assembly – Totally enclosed, epoxy coated, UL Recognized motor with permanently lubricated ball bearings for longer life. Designed to resist moisture and corrosion. Factory-wired to NEMA 4X enclosure. Fitted with a powder-coated, aluminum fan blade suitable for corrosive salt spray environments.

Housing – Heating elements and motor are enclosed in a round, heavy 16-gauge 304 stainless steel shroud.

Inlet/Outlet Grilles – Adjustable, stainless steel, louvered outlet grille can be rotated 90° to direct airflow up, down, left or right. Heavy gauge, 304 stainless steel rear grille protects against accidental contact with the fan blade.

Control Enclosure – The non-metallic enclosure, which houses the element terminals and built-in controls, will not rust and meets NEMA 4X hose-down requirements.

Built-in Controls – Include automatic reset overtemperature cutout, fan delay relay, controlling contactor, transformer for 24-volt control circuit, terminal block for field wiring and a separate motor contactor (when required).

Mounting Bracket – The heater comes complete with a 304 stainless steel swivel mounting bracket which can be used either for wall or ceiling mounting. Four field-supplied 3/8-16 threaded rods can also be used for ceiling installation.

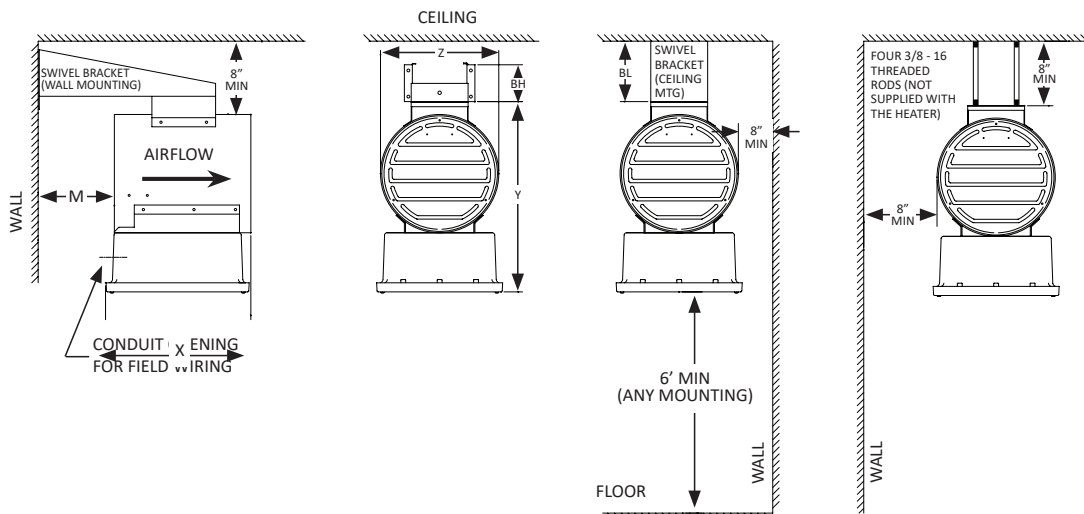
Factory Built-in Options

| Code | Description | Availability Code (2) |
|------|--|-----------------------|
| B | Delete swivel mounting bracket. Heater installs from the ceiling with field furnished threaded rods. | AS |
| C | Epoxy painted stainless steel parts: housing and grilles. | C |
| D | Power disconnect switch | AS |
| E | Monel finned tubular elements | C |
| F8 | Fan motor fusing with disconnecting contactor | C |
| L | "Heater on" pilot light | AS |
| M | Secondary manual reset overtemperature cutout. Required for U.S. Coast Guard and ABS Approved designs. | AS |
| S | Three-position selector switch (heater-standby-fan) | AS |
| T | 1- Stage Built-in thermostat 40 to 100° F (5 to 38° C) range | AS |
| | 2- Stage Built-in thermostat 40 to 120° F (5 to 49° C) range (Option "X" required) | C |
| V | 120 volt control circuit | AS |
| X | 2-Stage Control | C |

(2) AS = Assembly Stock, C = Custom. Assembly Stock heaters ordered with custom options are subject to longer delivery.

Dimensions, Airflow and Weights

| Dimensions, Airflows and Weights | | KW | | |
|----------------------------------|----------------------------------|-------------|-------------|-------------|
| | | 2 - 7.5 | 9 - 12 | 12.5 - 47 |
| Overall Heater Dimensions | "X" Inch (cm) | 15-1/2 (39) | 15-1/2 (39) | 24-1/2 (66) |
| | "Y" Inch (cm) | 21-1/2 (55) | 21-1/2 (55) | 26 (71) |
| | "Z" Inch (cm) | 13 (33) | 13 (33) | 20 (51) |
| Mounting Hole Dimensions | "BH" Inch (cm) | 4-1/4 (11) | 4-1/4 (11) | 7-1/8 (18) |
| | "BL" Inch (cm) | 19-1/2 (50) | 19-1/2 (50) | 22-1/4 (57) |
| | "M" Inch (cm) | 8-1/2 (22) | 8-1/2 (22) | 5 (8) |
| Airflow Characteristics | Air Volume CFM (cubic meters/hr) | 700 (1189) | 1450 (2463) | 2400 (4077) |
| | Air Throw Feet (m) | 26 (8) | 43 (13) | 50 (15) |
| | Outlet Velocity FPM (meters/min) | 760 (232) | 1575 (481) | 1200 (366) |
| Weight | Net Lbs (kgs) | 56 (25) | 56 (25) | 115 (52) |
| | Shipping Lbs (kgs) | 70 (32) | 70 (32) | 130 (60) |



WASHDOWN/CORROSION RESISTANT UNIT HEATER

Remote Room Thermostat

| Catalog Number | Switch Type | Ratings | Type | Tamper-proof | Thermo-meter | Amps | Pilot Duty | Temperature Range °F (°C) |
|----------------|--------------|---------|--------|--------------|--------------|------------------------------|------------|---------------------------|
| 1004328 | Bulb | NEMA 4X | SPDT | No | No | 25A @ 120-240V 22A @ 277V | 125VA | 40-110 (5-43) |
| 1026347 | 2-Stage Bulb | NEMA 4X | 2 SPDT | No | No | 25A @ 120-240V 22A @ 277V | 125VA | 40-100 (5-38) |



1004328



1026347

TRIAD® Unit Heater Listing

For Non-Hazardous Areas

| KW | Volts | Ph | Total Amps (1) | Approximate Air Temperature Rise °F (°C) | Motor | | | Catalog Number | 2-Stage Control | Availability Code (2)(3) |
|-----|-------|----|----------------|--|-------|-------|----------------|----------------|-----------------|--------------------------|
| | | | | | HP | Volts | Ph | | | |
| 2 | 120 | 1 | 21 | 9 (5) | 1/4 | 120 | 1 | 234-U11R-0020B | 1B | AS |
| | 208 | 1 | 12 | 9 (5) | 1/4 | 208 | 1 | 234-U11R-0020C | 1B | |
| | 240 | 1 | 11 | 9 (5) | 1/4 | 240 | 1 | 234-U11R-0020J | 1B | |
| | 277 | 1 | 10 | 9 (5) | 1/4 | 277 | 1 | 234-U11R-0020N | 1B | |
| | 347 | 1 | 7 | 9 (5) | 1/4 | 347 | 1 | 234-U11R-0020I | 1B | |
| 3 | 120 | 1 | 29 | 14 (8) | 1/4 | 120 | 1 | 234-U11N-0030B | 1A | |
| | 208 | 1 | 17 | 14 (8) | 1/4 | 208 | 1 | 234-U11N-0030C | 1A | |
| | 240 | 1 | 15 | 14 (8) | 1/4 | 240 | 1 | 234-U11N-0030J | 1A | |
| | 277 | 1 | 13 | 14 (8) | 1/4 | 277 | 1 | 234-U11N-0030N | 1A | |
| | 347 | 1 | 11 | 14 (8) | 1/4 | 347 | 1 | 234-U11N-0030I | 1A | |
| | 480 | 1 | 8 | 14 (8) | 1/4 | 480 | 1 | 234-U11N-0030T | 1A | |
| | 208 | 3 | 11 | 14 (8) | 1/4 | 208 | 1 | 234-U11N-0030D | 1A | |
| | 240 | 3 | 10 | 14 (8) | 1/4 | 240 | 1 | 234-U11N-0030K | 1A | |
| | 480 | 3 | 5 | 14 (8) | 1/4 | 480 | 1 | 234-U11N-0030U | 1A | |
| 600 | 3 | 4 | 14 (8) | 1/4 | 600 | 1 | 234-U11N-0030Z | 1A | | |
| 5 | 208 | 1 | 27 | 24 (13) | 1/4 | 208 | 1 | 234-U11R-0050C | 1B | |
| | 240 | 1 | 23 | 24 (13) | 1/4 | 240 | 1 | 234-U11R-0050J | 1B | |
| | 277 | 1 | 20 | 24 (13) | 1/4 | 277 | 1 | 234-U11R-0050N | 1B | |
| | 347 | 1 | 17 | 24 (13) | 1/4 | 347 | 1 | 234-U11R-0050I | 1B | |
| | 480 | 1 | 12 | 24 (13) | 1/4 | 480 | 1 | 234-U11R-0050T | 1B | |
| | 208 | 3 | 16 | 24 (13) | 1/4 | 208 | 1 | 234-U11N-0050D | 1A | |
| | 240 | 3 | 15 | 24 (13) | 1/4 | 240 | 1 | 234-U11N-0050K | 1A | |
| | 480 | 3 | 8 | 24 (13) | 1/4 | 480 | 1 | 234-U11N-0050U | 1A | |
| 600 | 3 | 6 | 24 (13) | 1/4 | 600 | 1 | 234-U11N-0050Z | 1A | | |
| 7.5 | 208 | 1 | 39 | 35 (19) | 1/4 | 208 | 1 | 234-U11N-0080C | 1A | |
| | 240 | 1 | 34 | 35 (19) | 1/4 | 240 | 1 | 234-U11N-0080J | 1A | |
| | 277 | 1 | 29 | 35 (19) | 1/4 | 277 | 1 | 234-U11N-0080N | 1A | |
| | 347 | 1 | 24 | 35 (19) | 1/4 | 347 | 1 | 234-U11N-0080I | 1A | |
| | 480 | 1 | 17 | 35 (19) | 1/4 | 480 | 1 | 234-U11N-0080T | 1A | |
| | 208 | 3 | 23 | 35 (19) | 1/4 | 208 | 1 | 234-U11N-0080D | 1A | |
| | 240 | 3 | 21 | 35 (19) | 1/4 | 240 | 1 | 234-U11N-0080K | 1A | |
| | 480 | 3 | 11 | 35 (19) | 1/4 | 480 | 1 | 234-U11N-0080U | 1A | |
| | 600 | 3 | 9 | 35 (19) | 1/4 | 600 | 1 | 234-U11N-0080Z | 1A | |

(1) Total Amps = Heating element amps and motor amps.
 (2) Availability Code: AS = Assembly Stock,
 (3) Stock heaters ordered with custom options subject to longer delivery.

NOTE: 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')

TRIAD® Unit Heater Listing (continued)

For Non-Hazardous Areas

| KW | Volts | Ph | Total Amps (1) | Approximate Air Temperature Rise °F (°C) | Motor | | | Catalog Number | 2-Stage Control | Availability Code (2)(3) |
|------|-------|----|----------------|--|-------|-------|----------------|----------------|-----------------|--------------------------|
| | | | | | HP | Volts | Ph | | | |
| 9 | 208 | 1 | 46 | 20 (11) | 1/4 | 208 | 1 | 234-U11N-0090C | 1A | AS |
| | 240 | 1 | 40 | 20 (11) | 1/4 | 240 | 1 | 234-U11N-0090J | 1A | |
| | 277 | 1 | 35 | 20 (11) | 1/4 | 277 | 1 | 234-U11N-0090N | 1A | |
| | 347 | 1 | 29 | 20 (11) | 1/4 | 347 | 1 | 234-U11N-0090I | 1A | |
| | 480 | 1 | 20 | 20 (11) | 1/4 | 480 | 1 | 234-U11N-0090T | 1A | |
| | 208 | 3 | 28 | 20 (11) | 1/4 | 208 | 1 | 234-U11N-0090D | 1A | |
| | 240 | 3 | 24 | 20 (11) | 1/4 | 240 | 1 | 234-U11N-0090K | 1A | |
| | 480 | 3 | 12 | 20 (11) | 1/4 | 480 | 1 | 234-U11N-0090U | 1A | |
| 600 | 3 | 10 | 20 (11) | 1/4 | 600 | 1 | 234-U11N-0090Z | 1A | | |
| 10 | 240 | 1 | 44 | 22 (12) | 1/4 | 240 | 1 | 234-U11N-0100J | 1A | |
| | 277 | 1 | 39 | 22 (12) | 1/4 | 277 | 1 | 234-U11N-0100N | 1A | |
| | 347 | 1 | 32 | 22 (12) | 1/4 | 347 | 1 | 234-U11N-0100I | 1A | |
| | 480 | 1 | 22 | 22 (12) | 1/4 | 480 | 1 | 234-U11N-0100T | 1A | |
| | 208 | 3 | 30 | 22 (12) | 1/4 | 208 | 1 | 234-U11N-0100D | 1A | |
| | 240 | 3 | 27 | 22 (12) | 1/4 | 240 | 1 | 234-U11N-0100K | 1A | |
| | 480 | 3 | 14 | 22 (12) | 1/4 | 480 | 1 | 234-U11N-0100U | 1A | |
| | 600 | 3 | 11 | 22 (12) | 1/4 | 600 | 1 | 234-U11N-0100Z | 1A | |
| 12 | 277 | 1 | 46 | 26 (14) | 1/4 | 277 | 1 | 234-U11N-0120N | 1A | |
| | 347 | 1 | 38 | 26 (14) | 1/4 | 347 | 1 | 234-U11N-0120I | 1A | |
| | 480 | 1 | 27 | 26 (14) | 1/4 | 480 | 1 | 234-U11N-0120T | 1A | |
| | 208 | 3 | 36 | 26 (14) | 1/4 | 208 | 1 | 234-U11N-0120D | 1A | |
| | 240 | 3 | 32 | 26 (14) | 1/4 | 240 | 1 | 234-U11N-0120K | 1A | |
| | 480 | 3 | 16 | 26 (14) | 1/4 | 480 | 1 | 234-U11N-0120U | 1A | |
| | 600 | 3 | 13 | 26 (14) | 1/4 | 600 | 1 | 234-U11N-0120Z | 1A | |
| 12.5 | 347 | 1 | 39 | 17 (9) | 1/4 | 347 | 1 | 234-U11L-0130I | 1A | |
| | 208 | 3 | 37 | 17 (9) | 1/4 | 208 | 1 | 234-U11L-0130D | 1A | |
| | 240 | 3 | 33 | 17 (9) | 1/4 | 240 | 1 | 234-U11L-0130K | 1A | |
| | 480 | 3 | 17 | 17 (9) | 1/4 | 480 | 1 | 234-U11L-0130U | 1A | |
| | 600 | 3 | 14 | 17 (9) | 1/4 | 600 | 1 | 234-U11L-0130Z | 1A | |
| 15 | 347 | 1 | 47 | 21 (12) | 1/4 | 347 | 1 | 234-U11L-0150I | 1A | |
| | 208 | 3 | 44 | 21 (12) | 1/4 | 208 | 1 | 234-U11L-0150D | 1A | |
| | 240 | 3 | 39 | 21 (12) | 1/4 | 240 | 1 | 234-U11L-0150K | 1A | |
| | 480 | 3 | 20 | 21 (12) | 1/4 | 480 | 1 | 234-U11L-0150U | 1A | |
| | 600 | 3 | 16 | 21 (12) | 1/4 | 600 | 1 | 234-U11L-0150Z | 1A | |
| 20 | 480 | 3 | 26 | 28 (16) | 1/4 | 480 | 1 | 234-U11L-0200U | 1A | |
| | 600 | 3 | 21 | 28 (16) | 1/4 | 600 | 1 | 234-U11L-0200Z | 1A | |
| 25 | 480 | 3 | 32 | 35 (19) | 1/4 | 480 | 1 | 234-U11A-0250U | 1B | |
| | 600 | 3 | 26 | 35 (19) | 1/4 | 600 | 1 | 234-U11A-0250Z | 1B | |
| 30 | 480 | 3 | 38 | 42 (23) | 1/4 | 480 | 1 | 234-U11A-0300U | 1B | |
| | 600 | 3 | 31 | 42 (23) | 1/4 | 600 | 1 | 234-U11A-0300Z | 1B | |
| 35 | 480 | 3 | 44 | 48 (27) | 1/4 | 480 | 1 | 234-U11A-0350U | 1B | |
| | 600 | 3 | 35 | 48 (27) | 1/4 | 600 | 1 | 234-U11A-0350Z | 1B | |
| 38.4 | 480 | 3 | 48 | 54 (30) | 1/4 | 480 | 1 | 234-U11A-0390U | 1B | |
| | 600 | 3 | 38 | 54 (30) | 1/4 | 600 | 1 | 234-U11A-0390Z | 1B | |
| 47 | 600 | 3 | 47 | 64 (36) | 1/4 | 600 | 1 | 234-U11A-0470Z | 1B | |

- (1) Total Amps = Heating element amps and motor amps.
- (2) Availability Code: AS = Assembly Stock,
- (3) Stock heaters ordered with custom options subject to longer delivery.

NOTE: 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')

IUH Series

INDUSTRIAL UNIT HEATER



Indeeco's industrial unit heater is designed for maximum heating performance in non-hazardous and non-corrosive environments. Features include:

- **Unique Design:** Round design of the industrial unit heater provides uniform airflow over the elements to prevent hot spots and ensure even discharge temperatures. Circular stainless steel finned tubular elements have a longer life due to lower operating temperatures.
- **Built-in Controls:** Heaters are completely assembled with all electrical components built-in at the factory to reduce installation costs.
- **Improved Performance:** High CFM's and air throw up to 50 feet promote air circulation within the space. More uniform temperature increases comfort levels and helps to eliminate cold spots.
- **Single Point Electrical Hook-up:** Heater, fan motor and controls are all connected to the same branch circuit.

Applications

- Aircraft Hangars
- Entryways
- Factories
- Garages
- Power Generating Stations
- Pump Houses
- Service Stations

Standard Construction Features

Heating Elements – Industrial grade, Type 304 stainless steel finned tubular elements, manufactured by Indeeco.

Housing – Heating elements and motor are enclosed in a round, 16-gauge galvanized steel enclosure which has a beige powder coat finish for durability.

Inlet/Outlet Grilles – Inlet grille complies with OSHA requirements for fan blade guard. Outlet grille has 45° beige powder coat finish angled louvers to direct airflow.

Fan Motor – Motor is UL Recognized with built-in thermal protection.

Built-in Controls – Include main control magnetic contactor, 24V control voltage transformer, automatic reset thermal cutout and fan thermostat.

Mounting Bracket – Wall mounting bracket with single point suspension allows the heater to rotate a full 360°.

Thermostats

| Catalog Number | Switch Type | Color | Type | Tamper-proof | Thermo-meter | Amps @ 120-240V | Amps @ 277V | Pilot Duty | Positive Off | Temperature Range °F |
|----------------|-------------|-------|------|--------------|--------------|-----------------|-------------|-----------------|--------------|----------------------|
| 1006998 | Bimetal | White | SPDT | No | No | — | — | 30VA at 30V max | Yes | 50-90 |

IUH Series

INDUSTRIAL UNIT HEATER

Factory Built-in Options

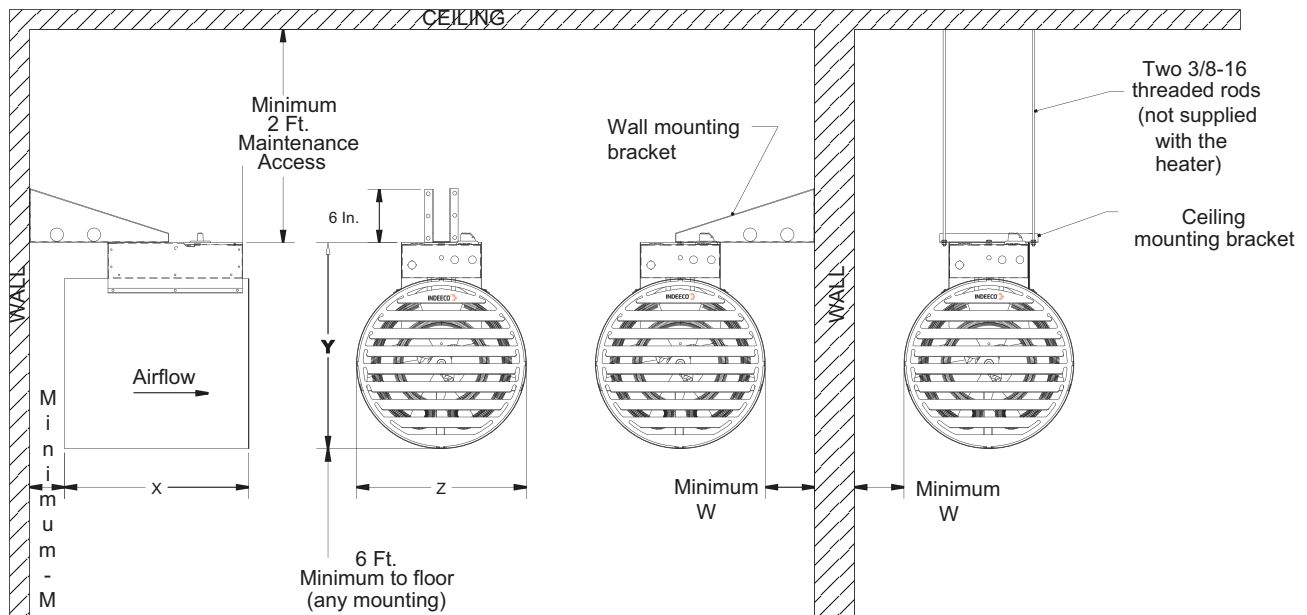
| Code | Description | Availability Code (2) |
|------|---|-----------------------|
| B | No mounting bracket | AS |
| C | Substitute wall mounting bracket with ceiling bracket (beige powder coat finish for durability) | AS |
| D | Power Disconnect Switch | AS |
| G | Adjustable Outlet Louvers (beige powder coat finish for durability) | AS |
| H | Premium Fan Motor | AS |
| L | "Heater On" Pilot Light | AS |
| M | Secondary Manual Reset Thermal Cutout | AS |
| R | Built-in Fan Relay - Required for Remote Fan Switch | AS |
| S | Three-position Selector Switch (Heater-Standby-Fan) | AS |
| T | Built-in Thermostat 40° to 120° F (4° to 49° C) Range | AS |
| X | No Transformer - Customer supplied control voltage | AS |

(2) AS = Assembly Stock, C = Custom. Assembly stock heaters ordered with custom options subject to longer delivery.

Dimensions, Weights and Air Throws

| KW | Dimensions - In. (cm) | | | | | Weight Lb (kgs) | Maximum Air Throw-Ft. (m) |
|-----------|-----------------------|------------|-------------|-------------|-------------|-----------------|---------------------------|
| | M | W | X | Y | Z | | |
| 1 - 12 | 8-1/4 (21) | 8-3/4 (22) | 15 (38) | 17 (43) | 13 (41) | 45 (20) | 15 (5) |
| 12.5 - 20 | 7 (18) | 5-1/2 (14) | 16-1/4 (41) | 23-1/2 (60) | 19-1/4 (49) | 60 (27) | 50 (15) |
| 25 - 38.4 | 4 (10) | 5-1/2 (14) | 20-3/4 (53) | 23-1/2 (60) | 19-1/4 (49) | 80 (36) | 50 (15) |

*Maximum air throws are based on ideal conditions at time of test at a defined height. Actual performances may vary by installation. Please consult factory for more details



Motor Data

| Description | RPM | Airflow - CFM (cubic meters/hr) | | | Noise Level (dB) | | |
|-------------|------|---------------------------------|-------------|-------------|------------------|------------|------------|
| | | 3-12 KW | 12.5-20 KW | 25-38.4 KW | 3-12 KW | 12.5-20 KW | 25-38.4 KW |
| Standard | 1200 | 362 (615) | 1342 (2280) | 1237 (2102) | 64 | 68 | 68 |
| Premium | 1800 | 618 (1050) | 1774 (3014) | 1635 (2778) | 75 | 84 | 84 |

IUH Series

INDUSTRIAL UNIT HEATER



For Non-Hazardous Areas
For Non-Corrosive Areas

Heater Listing

| KW | Volts | Phase | Total Amps (1) | Approximate Air Temperature Rise °F (°C) | Motor | | | Catalog Number | Availability Code (2) |
|------|-------|-------|----------------|--|-------|-------|-------|----------------|-----------------------|
| | | | | | HP | Volts | Phase | | |
| 3 | 120 | 1 | 29 | 15 (8) | 1/4 | 120 | 1 | *238-UR03B | AS |
| | 208 | 1 | 17 | 21 (12) | 1/4 | 208 | 1 | 238-UT03C | |
| | 240 | 1 | 15 | 21 (12) | 1/4 | 240 | 1 | 238-UT03J | |
| | 277 | 1 | 13 | 15 (8) | 1/4 | 277 | 1 | *238-UR03N | |
| | 347 | 1 | 11 | 15 (8) | 1/4 | 347 | 1 | *238-UR03I | |
| | 480 | 1 | 8 | 21 (12) | 1/4 | 480 | 1 | 238-UT03T | |
| | 600 | 1 | 6 | 15 (8) | 1/4 | 600 | 1 | *238-UR03Y | |
| | 208 | 3 | 11 | 21 (12) | 1/4 | 208 | 1 | 238-UT03D | |
| | 240 | 3 | 10 | 21 (12) | 1/4 | 240 | 1 | 238-UT03K | |
| 5 | 480 | 3 | 5 | 21 (12) | 1/4 | 480 | 1 | 238-UT03U | |
| | 208 | 1 | 27 | 35 (19) | 1/4 | 208 | 1 | 238-UT05C | |
| | 240 | 1 | 23 | 35 (19) | 1/4 | 240 | 1 | 238-UT05J | |
| | 277 | 1 | 20 | 26 (14) | 1/4 | 277 | 1 | *238-UT05N | |
| | 347 | 1 | 17 | 26 (14) | 1/4 | 347 | 1 | *238-UT05I | |
| | 480 | 1 | 12 | 35 (19) | 1/4 | 480 | 1 | 238-UT05T | |
| | 600 | 1 | 10 | 26 (14) | 1/4 | 600 | 1 | *238-UT05Y | |
| | 208 | 3 | 16 | 35 (19) | 1/4 | 208 | 1 | 238-UT05D | |
| | 240 | 3 | 15 | 35 (19) | 1/4 | 240 | 1 | 238-UT05K | |
| 7.5 | 480 | 3 | 8 | 35 (19) | 1/4 | 480 | 1 | 238-UT05U | |
| | 600 | 3 | 6 | 26 (14) | 1/4 | 600 | 1 | *238-UT05Z | |
| | 208 | 1 | 39 | 53 (29) | 1/4 | 208 | 1 | 238-UT08C | |
| | 240 | 1 | 34 | 53 (29) | 1/4 | 240 | 1 | 238-UT08J | |
| | 277 | 1 | 29 | 39 (22) | 1/4 | 277 | 1 | *238-UT08N | |
| | 347 | 1 | 24 | 39 (22) | 1/4 | 347 | 1 | *238-UT08I | |
| | 480 | 1 | 17 | 53 (29) | 1/4 | 480 | 1 | 238-UT08T | |
| | 600 | 1 | 14 | 39 (22) | 1/4 | 600 | 1 | *238-UT08Y | |
| | 208 | 3 | 23 | 53 (29) | 1/4 | 208 | 1 | 238-UT08D | |
| 9 | 240 | 3 | 21 | 53 (29) | 1/4 | 240 | 1 | 238-UT08K | |
| | 480 | 3 | 11 | 53 (29) | 1/4 | 480 | 1 | 238-UT08U | |
| | 600 | 3 | 9 | 39 (22) | 1/4 | 600 | 1 | *238-UT08Z | |
| | 208 | 1 | 46 | 64 (36) | 1/4 | 208 | 1 | 238-UT09C | |
| | 240 | 1 | 40 | 64 (36) | 1/4 | 240 | 1 | 238-UT09J | |
| | 277 | 1 | 35 | 47 (26) | 1/4 | 277 | 1 | *238-UT09N | |
| | 347 | 1 | 29 | 47 (26) | 1/4 | 347 | 1 | *238-UT09I | |
| | 480 | 1 | 20 | 64 (36) | 1/4 | 480 | 1 | 238-UT09T | |
| | 600 | 1 | 17 | 47 (26) | 1/4 | 600 | 1 | *238-UT09Y | |
| 10 | 208 | 3 | 28 | 64 (36) | 1/4 | 208 | 1 | 238-UT09D | |
| | 240 | 3 | 24 | 64 (36) | 1/4 | 240 | 1 | 238-UT09K | |
| | 480 | 3 | 12 | 64 (36) | 1/4 | 480 | 1 | 238-UT09U | |
| | 600 | 3 | 10 | 47 (26) | 1/4 | 600 | 1 | *238-UT09Z | |
| | 240 | 1 | 44 | 52 (29) | 1/4 | 240 | 1 | *238-UT10J | |
| | 277 | 1 | 39 | 52 (29) | 1/4 | 277 | 1 | *238-UT10N | |
| | 347 | 1 | 32 | 52 (29) | 1/4 | 347 | 1 | *238-UT10I | |
| | 480 | 1 | 22 | 52 (29) | 1/4 | 480 | 1 | *238-UT10T | |
| | 600 | 1 | 19 | 52 (29) | 1/4 | 600 | 1 | *238-UT10Y | |
| 12 | 208 | 3 | 30 | 52 (29) | 1/4 | 208 | 1 | *238-UT10D | |
| | 240 | 3 | 27 | 52 (29) | 1/4 | 240 | 1 | *238-UT10K | |
| | 480 | 3 | 14 | 52 (29) | 1/4 | 480 | 1 | *238-UT10U | |
| | 600 | 3 | 11 | 52 (29) | 1/4 | 600 | 1 | *238-UT10Z | |
| | 277 | 1 | 46 | 62 (34) | 1/4 | 277 | 1 | *238-UT12N | |
| | 347 | 1 | 38 | 62 (34) | 1/4 | 347 | 1 | *238-UT12I | |
| | 480 | 1 | 27 | 62 (34) | 1/4 | 480 | 1 | *238-UT12T | |
| | 208 | 3 | 36 | 62 (34) | 1/4 | 208 | 1 | *238-UT12D | |
| | 240 | 3 | 32 | 62 (34) | 1/4 | 240 | 1 | *238-UT12K | |
| 12.5 | 480 | 3 | 16 | 62 (34) | 1/4 | 480 | 1 | *238-UT12U | |
| | 600 | 3 | 13 | 62 (34) | 1/4 | 600 | 1 | *238-UT12Z | |
| | 347 | 1 | 39 | 22 (12) | 1/4 | 347 | 1 | *238-UL13I | |
| | 208 | 3 | 37 | 31 (17) | 1/4 | 208 | 1 | 238-UL13D | |
| | 240 | 3 | 33 | 31 (17) | 1/4 | 240 | 1 | 238-UL13K | |
| | 480 | 3 | 17 | 31 (17) | 1/4 | 480 | 1 | 238-UL13U | |
| | 600 | 3 | 14 | 22 (12) | 1/4 | 600 | 1 | *238-UL13Z | |
| | 347 | 1 | 47 | 27 (15) | 1/4 | 347 | 1 | *238-UL15I | |
| | 208 | 3 | 44 | 38 (21) | 1/4 | 208 | 1 | 238-UL15D | |
| 15 | 240 | 3 | 39 | 38 (21) | 1/4 | 240 | 1 | 238-UL15K | |
| | 480 | 3 | 20 | 38 (21) | 1/4 | 480 | 1 | 238-UL15U | |
| | 600 | 3 | 16 | 27 (15) | 1/4 | 600 | 1 | *238-UL15Z | |
| 20 | 480 | 3 | 26 | 35 (19) | 1/4 | 480 | 1 | *238-UL20U | |
| | 600 | 3 | 21 | 35 (19) | 1/4 | 600 | 1 | *238-UL20Z | |
| 25 | 480 | 3 | 32 | 66 (37) | 1/4 | 480 | 1 | 238-UA25U | |
| | 600 | 3 | 26 | 44 (24) | 1/4 | 600 | 1 | *238-UA25Z | |
| 30 | 480 | 3 | 38 | 79 (44) | 1/4 | 480 | 1 | 238-UA30U | |
| | 600 | 3 | 31 | 53 (29) | 1/4 | 600 | 1 | *238-UA30Z | |
| 35 | 480 | 3 | 44 | 61 (34) | 1/4 | 480 | 1 | *238-UA35U | |
| | 600 | 3 | 35 | 61 (34) | 1/4 | 600 | 1 | *238-UA35Z | |
| 38.4 | 480 | 3 | 48 | 70 (39) | 1/4 | 480 | 1 | *238-UA39U | |
| | 600 | 3 | 38 | 70 (39) | 1/4 | 600 | 1 | *238-UA39Z | |

* Premium motor comes standard with heater.

(1) Total Amps = Heating element amps and motor amps.

(2) AS = Assembly Stock, C = Custom. Assembly stock heaters ordered with custom options subject to longer delivery.

UHIR Series

UNIT HEATER

**SameDay
Shipping**
Now Available on Select Units



Shown with optional diffuser

The UHIR unit heater is available in four unit sizes with 59 standard models with ratings up to 50 KW at voltages of 208, 240, 277, 480 and 600 single or three-phase. They are available with a wide variety of factory built-in or field-installed options.

Temperature Control: Single-stage or two-stage control with built-in or remote-mounted thermostats are available on all heaters.

Control Options: Available as factory built-in or field-installed to meet job specifications.

Custom KW's: Custom KW's are available up to 50 KW.

Discharge Direction: The UHIR heater can be mounted for horizontal or vertical discharge using an optional universal wall/ceiling mounting bracket or with field-furnished threaded rods for ceiling mounting.

Applications

- Factories
- Garages
- Mechanical Rooms
- Pump Houses
- Service Areas in Air Handling Units
- Shipping and Receiving Areas
- Storage Areas
- Warehouses
- Workshops

Standard Construction Features

Heating Elements - Industrial grade, 0.475" diameter steel sheath with brazed copper plated steel fins and epoxy sealed ends. Draw-thru airflow design pulls air across the heating elements to ensure cool element operation and even air distribution resulting in long element life.

Housing - Heating elements and motor are enclosed in a heavy gauge galvanized steel cabinet with a durable camel polyester powder coat finish.

Outlet Grille - Individually adjustable louvers are provided to direct airflow. A protective outlet fan guard is provided to prevent insertion of foreign objects.

Fan Motor - Permanently lubricated and thermally protected motor.

Built-in Controls - All units include an automatic reset thermal cutout that will de-energize the heater if an overtem-

perature condition occurs. A manual reset thermal cutout, in addition to an automatic reset thermal cutout, is standard on heaters 10 KW and above. A fan delay is provided to allow the elements to heat up before fan startup and purges the heater of residual heat after shutdown. A 24-volt transformer and disconnecting contactor are provided on most heaters. Single-phase heaters rated at 5 KW or less have line voltage controls; 24-volt control and contactor are available. Power fusing is standard on all heaters rated over 48 amps.

Mounting - Universal horizontal or vertical discharge. Optional diffusers are available for vertical discharge. An Anemostat diffuser can be used to provide draft-free air movement at lower mounting heights. For higher mounting heights, radial diffuser with adjustable fins can be used to increase floor coverage or adjusted for a vertical down blast of air.

Factory Built-in Options

| Code | Description |
|-----------------|--|
| Consult Factory | Custom KW - CONSULT FACTORY |
| D | Power disconnect switch |
| F | Fusing under 48 Amps, not available on heaters size 1 and size 2 or size 3 at 600V |
| M | Manual Reset Cutout (In addition to automatic cutout) on heaters up to 10KW |
| P (1) | "Heater On" Pilot Light |
| R1 | Built-in 24V transformer and contactor for 2.5 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-in Thermostat - 1 - Stage |
| | Built-in Thermostat - 2 - Stage (Option 'X' required) |
| V1* | Anemostat (Cone) Diffuser |
| V2 | Radial Diffuser |
| X (2) | 2-Stage Control |

* consult factory for lead times

(1) When specifying Option 'P', 'R2', or 'S2' for single-phase heaters rated up to 5KW; Option 'R1' must also be specified.

(2) Option 'R2' and 'X' cannot be combined on heaters rates up to 5KW.

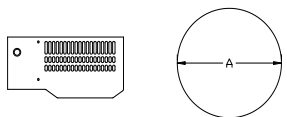
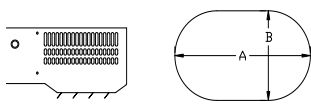
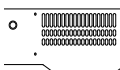
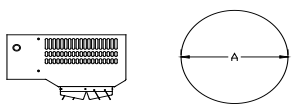
Field-Installed Options (shipped loose for field installation into heater)

| Catalog Number | Description |
|----------------|---|
| 1024155 | Anemostat (Cone) Diffuser size 1 |
| 1024156 | Anemostat (Cone) Diffuser size 2 and 3 |
| 1024157 | Anemostat (Cone) Diffuser size 4 |
| 1024152 | Radial Diffuser size 1 |
| 1024153 | Radial Diffuser size 2 and 3 |
| 1024154 | Radial Diffuser size 4 |
| 1023941 | Horizontal Dust Shield size 1 and 2 |
| 1024059 | Horizontal Dust Shield size 3 |
| 1024060 | Horizontal Dust Shield size 4 |
| 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)(2) | Heater On Pilot Light (120V) |
| 1024170 | Summer Fan Switch - Built-in up to 277V |
| 1024171 | Summer Fan Switch- Built-in, over 277V, 24V Control |
| 1024172 (1) | Summer Fan Switch - Remote, 24V Control |
| 1031847 | Summer Fan Switch - Built-in, over 277V, 120V Control |
| 1031848 | Summer Fan Switch - Remote, 120V Control |

(1) When specifying Option 'P', 'R2', or 'S2' for single-phase heaters rated up to 5KW; Option 'R1' must also be specified.

(2) Option 'R2' and 'X' cannot be combined on heaters rates up to 5KW.

Vertical Mounting Air Pattern Table

| Description | Used on | Max Mtg. Height ft. (m) | A ft (m) | B ft (m) |
|---|---|--|---|---|
| WITHOUT DIFFUSER For a straight downward air pattern, directional louvers can be removed in order to maximize airflow.  | Size 1 up to 5 kW Size 2 over 5 up to 10 kW Size 3 over 10 up to 20 kW Size 4 over 20 up to 50 kW | 10 (3.0) 15 (4.6) 20 (6.1) 25 (7.6) | 17 (5.2) 28 (8.5) 38 (11.6) 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  | Size 1 up to 5 kW Size 2 over 5 up to 10 kW Size 3 over 10 up to 20 kW Size 4 over 20 up to 50 kW | 10 (3.0) 15 (4.6) 20 (6.1) 25 (7.6) | 22 (6.7) 40 (12.2) 53 (16.2) 85 (25.9) | 12 (3.7) 20 (6.1) 27 (8.2) 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.  | Size 1 up to 5 kW Size 2 over 5 up to 10 kW Size 3 over 10 up to 20 kW Size 4 over 20 up to 50 kW | 9 (2.7) 13 (4.0) 17 (5.2) 21 (6.4) | 17 (5.2) 29 (8.8) 40 (12.2) 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 Size 1 up to 5 kW Size 2 over 5 up to 10 kW Size 3 over 10 up to 20 kW Size 4 over 20 up to 50 kW | 10 (3.0) 15 (4.6) 20 (6.1) 25 (7.6) | 20 (6.1) 30 (9.1) 38 (11.6) 65 (19.8) | — — — — |
| | 45° Size 1 up to 5 kW Size 2 over 5 up to 10 kW Size 3 over 10 up to 20 kW Size 4 over 20 up to 50 kW | 9 (2.7) 11 (3.4) 15 (4.5) 18 (5.5) | 24 (7.3) 36 (11.0) 46 (14.0) 78 (23.8) | — — — — |

UHIR Series

UNIT HEATER

Heater Listing

| KW | Volts | Ph | Total Amps* | Approx. Air Temperature Rise °F (°C) | 2-Stage Control | Std. Control Voltage | Unit Size | Catalog Number (2) |
|------|-------|----|-------------|--------------------------------------|-----------------|----------------------|-----------|--------------------|
| 2.5 | 208 | 1 | 12.30 | 23 (13) | 1B | 208 | 1 | 240-U1025C |
| | 240 | 1 | 10.7 | | 1B | 240 | 1 | 240-U1025J |
| | 277 | 1 | 9.40 | | 1B | 277 | 1 | 240-U1025N |
| 3.3 | 208 | 1 | 16.17 | 31 (18) | 1B | 208 | 1 | 240-U1033C |
| | 240 | 1 | 14.05 | | 1B | 240 | 1 | 240-U1033J |
| | 277 | 1 | 12.21 | | 1B | 277 | 1 | 240-U1033N |
| 3.7 | 480 | 3 | 4.66 | 34 (19) | 1A | 24 | 1 | 240-U1037U |
| 3.8 | 208 | 3 | 10.85 | 35 (20) | 1A | 24 | 1 | 240-U1038D |
| | 240 | 3 | 9.44 | | 1A | 24 | 1 | 240-U1038K |
| 5 | 208 | 1 | 24.34 | 46 (26) | 1B | 208 | 1 | 240-U1050C |
| | 240 | 1 | 21.13 | | 1B | 240 | 1 | 240-U1050J |
| | 277 | 1 | 18.35 | | 1B | 277 | 1 | 240-U1050N |
| | 208 | 3 | 14.18 | | 1A | 24 | 1 | 240-U1050D |
| | 240 | 3 | 12.33 | | 1A | 24 | 1 | 240-U1050K |
| | 480 | 3 | 6.22 | | 1A | 24 | 1 | 240-U1050U |
| 6.7 | 208 | 1 | 32.91 | 33 (19) | 1B | 24 | 2 | 240-U2067C |
| | 240 | 1 | 28.62 | | 1B | 24 | 2 | 240-U2067J |
| | 277 | 1 | 24.79 | | 1B | 24 | 2 | 240-U2067N |
| 7.5 | 208 | 1 | 36.80 | 37 (21) | 1B | 24 | 2 | 240-U2075C |
| | 240 | 1 | 32.00 | | 1B | 24 | 2 | 240-U2075J |
| | 208 | 3 | 21.52 | | 1A | 24 | 2 | 240-U2075D |
| | 240 | 3 | 18.74 | | 1A | 24 | 2 | 240-U2075K |
| | 480 | 3 | 9.39 | | 1A | 24 | 2 | 240-U2075U |
| 9.9 | 208 | 1 | 48.30 | 49 (28) | 1B | 24 | 2 | 240-U2099C |
| 10 | 240 | 1 | 42.37 | 50 (28) | 1B | 24 | 2 | 240-U2100J |
| | 277 | 1 | 36.70 | | 1B | 24 | 2 | 240-U2100N |
| | 208 | 3 | 28.46 | | 1A | 24 | 2 | 240-U2100D |
| | 240 | 3 | 24.76 | | 1A | 24 | 2 | 240-U2100K |
| | 480 | 3 | 12.40 | | 1A | 24 | 2 | 240-U2100U |
| 13.2 | 277 | 1 | 48.35 | 39 (22) | 1B | 24 | 3 | 240-U3132N |
| 13.3 | 208 | 1 | 64.79 | 39 (22) | Standard | 24 | 3 | 240-U3133C-X (1) |
| | 240 | 1 | 56.27 | | Standard | 24 | 3 | 240-U3133J-X |
| 15 | 208 | 3 | 42.48 | 44 (25) | 1B | 24 | 3 | 240-U3150D |
| | 240 | 3 | 36.93 | | 1B | 24 | 3 | 240-U3150K |
| | 480 | 3 | 18.44 | | 1B | 24 | 3 | 240-U3150U |
| | 600 | 3 | 14.43 | | 1B | 120 | 3 | 240-U3150Z (3) |
| 19.9 | 208 | 1 | 96.52 | 59 (33) | Standard | 24 | 3 | 240-U3199C-X (1) |
| | 240 | 3 | 48.72 | | 1B | 24 | 3 | 240-U3199K |
| 20 | 240 | 1 | 84.18 | 59 (33) | Standard | 24 | 3 | 240-U3200J-X (1) |
| | 277 | 1 | 72.90 | | Standard | 24 | 3 | 240-U3200N-X (1) |
| | 208 | 3 | 56.36 | | Standard | 24 | 3 | 240-U3200D-X |
| | 480 | 3 | 24.46 | | 1B | 24 | 3 | 240-U3200U |
| | 600 | 3 | 19.25 | | 1B | 120 | 3 | 240-U3200Z (3) |
| 25 | 208 | 3 | 70.90 | 27 (15) | Standard | 24 | 4 | 240-U4250D-X |
| | 240 | 3 | 61.64 | | Standard | 24 | 4 | 240-U4250K-X |
| | 480 | 3 | 30.77 | | 1B | 24 | 4 | 240-U4250U |
| | 600 | 3 | 24.06 | | 1B | 24 | 4 | 240-U4250Z |
| 33.3 | 208 | 3 | 93.93 | 36 (20) | Standard | 24 | 4 | 240-U4333D-X |
| | 240 | 3 | 81.61 | | Standard | 24 | 4 | 240-U4333K-X |
| | 480 | 3 | 40.75 | | 1B | 24 | 4 | 240-U4333U |
| | 600 | 3 | 32.04 | | 1B | 24 | 4 | 240-U4333Z |
| 37.5 | 208 | 3 | 105.59 | 40 (23) | Standard | 24 | 4 | 240-U4375D-X |
| | 240 | 3 | 91.71 | | Standard | 24 | 4 | 240-U4375K-X |
| | 480 | 3 | 45.80 | | 1A | 24 | 4 | 240-U4375U |
| | 600 | 3 | 36.08 | | 1A | 24 | 4 | 240-U4375Z |
| 49.8 | 208 | 3 | 139.73 | 54 (30) | Standard | 24 | 4 | 240-U4498D-X |
| 50 | 240 | 3 | 121.8 | 54 (30) | Standard | 24 | 4 | 240-U4500K-X |
| | 480 | 3 | 60.84 | | Standard | 24 | 4 | 240-U4500U-X |
| | 600 | 3 | 48.11 | | Standard | 24 | 4 | 240-U4500Z-X |

*Total Amps = Heating element amps and motor amps.

(1) Disconnect switch unavailable.

(2) All Standard heaters are supplied with transformer and contactor except up to 5 KW single-phase units.

Optional low voltage transformer and contactor are available for these heaters, see Factory Built-in Option 'R1'.

(3) Fusing, Option "F" not available. Option 'R2' (120V Control) is standard, 24V available

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).

UHIR Series UNIT HEATER

Heater Dimensions

| Unit Size | 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) |
|-----------|------------|--------------|--------------|----------------|-------------|--------------|------------|------------|------------|------------|------------|-------------|------------|-------------|
| Size 1 | up to 5 | 12.875 (327) | 17.750 (450) | 7.625 (194) | 8 (203) | 10.188 (284) | 18 (457) | 10 (254) | 8 (203) | 16 (406) | 5 (127) | 6.44 (164) | 6.44 (164) | 5 (127) |
| Size 2 | 5.1 to 10 | 16.875 (429) | 24.250 (616) | 7.625 (194) | 6 (152) | 10.188 (237) | 18 (457) | 10 (254) | 8 (203) | 16 (406) | 5 (127) | 6.44 (164) | 6.44 (164) | 5 (127) |
| Size 3 | 10.1 to 20 | 16.875 (429) | 24.250 (616) | 11.375 (289) | 6 (152) | 8.313 (237) | 18 (457) | 12 (305) | 12 (305) | 32 (813) | 5 (127) | 10.13 (257) | 5 (127) | 10.13 (257) |
| Size 4 | 20.1 to 50 | 26.937 (684) | 35.500 (902) | 15.625 (397) | 6.281 (236) | 11.937 (380) | 13 (330) | 12 (305) | 16 (406) | 32 (813) | 7 (178) | 12.92 (328) | 7 (178) | 12.92 (328) |

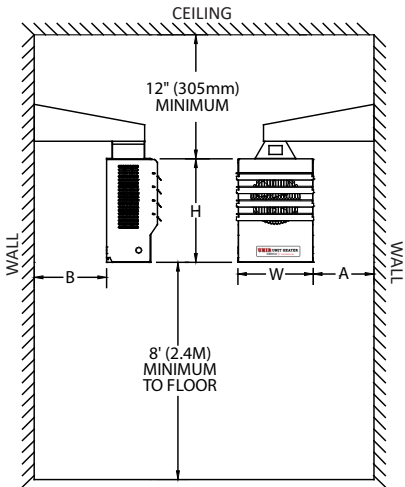


FIG. 1
HORIZONTAL WALL MOUNTING WITH MOUNTING ARM

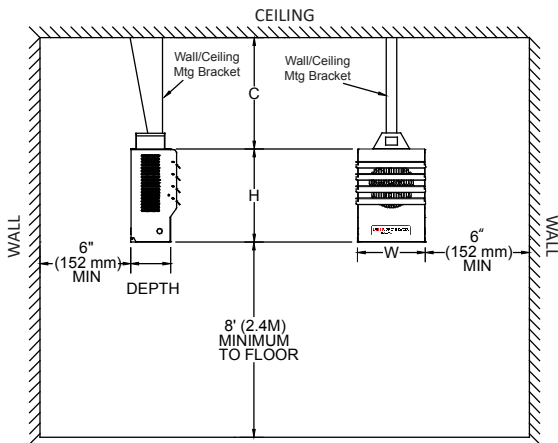


FIG. 2
HORIZONTAL CEILING MOUNT WITH MTG ARM

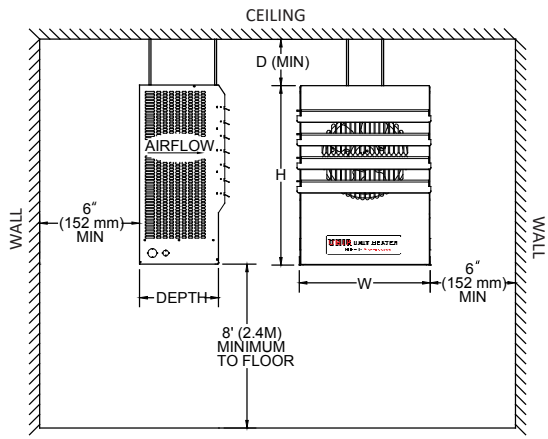


FIG. 3
HORIZONTAL CEILING MOUNT WITH THREADED ROD

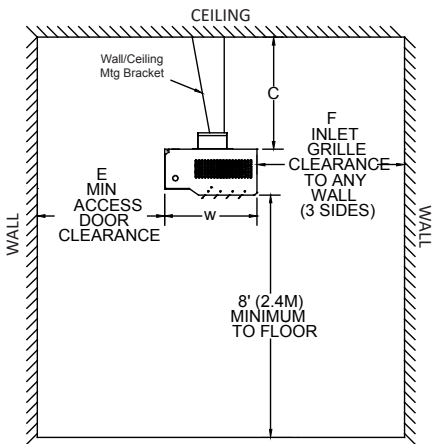


FIG. 4
VERTICAL CEILING MOUNT WITH MTG ARM

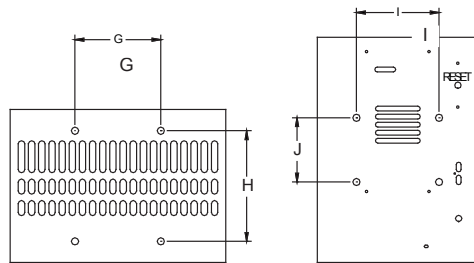


FIG. 5
THREADED ROD (3/8 - 16) ATTACHMENT POINT DIMENSIONS

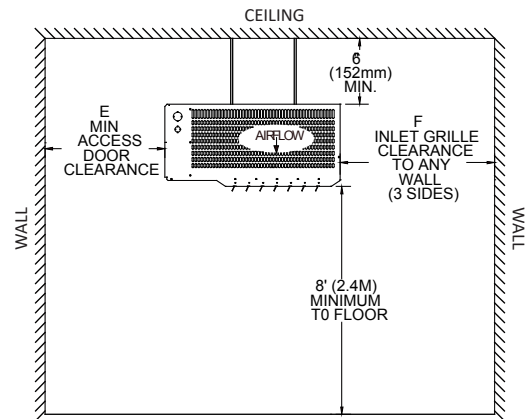


FIG. 6
VERTICAL CEILING MOUNT WITH THREADED ROD

UHIR Series

UNIT HEATER

Mounting Brackets

| Catalog Number | Description |
|----------------|---|
| 1024149 | Universal wall & ceiling mounting bracket up to 10 KW (size 1 and 2) |
| 1024150 | Universal wall & ceiling mounting bracket over 10 KW up to 20 KW (size 3) |
| 1024151 | Universal wall & ceiling mounting bracket over 20 KW (size 4) |

Airflows, Weights and Air Throw

| Unit Size | CFM | Installed Weight lb (kg) | Max. Air Throw ft. (m) |
|-----------|------|--------------------------|------------------------|
| 1 | 350 | 25 (11.3) | 15 (4.6) |
| 2 | 650 | 40 (18.1) | 18 (5.5) |
| 3 | 1100 | 55 (25) | 41 (12.5) |
| 4 | 3000 | 155 (70.3) | 62 (18.9) |

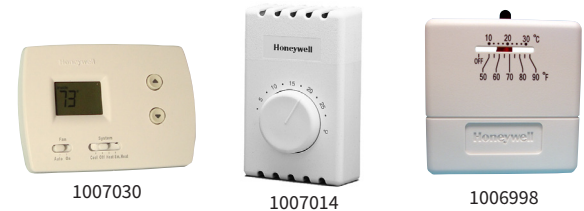
Remote Thermostat Selection Chart

| KW | Catalog Number | Volts | Ph | 1-Stage Line Voltage | 1-Stage Low Voltage (b) | 2-Stage Low Voltage (b) |
|-------------------------------|----------------|-------|----|----------------------|-------------------------|-------------------------|
| 2.5 | 240-U1025C | 208 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| | 240-U1025J | 240 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| | 240-U1025U | 277 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| 3.3 | 240-U1033C | 208 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| | 240-U1033J | 240 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| | 240-U1033N | 277 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| 3.7 | 240-U1037U | 480 | 3 | NA | 1006998 | 1007030 |
| 3.8 | 240-U1038D | 208 | 3 | NA | 1006998 | 1007030 |
| | 240-U1038K | 240 | 3 | NA | 1006998 | 1007030 |
| 5 | 240-U1050C | 208 | 1 | NA | 1006998 (a) | 1007030 (a) |
| | 240-U1050J | 240 | 1 | 1007014 | 1006998 (a) | 1007030 (a) |
| | 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 Indeeco supplied remote low voltage thermostats.

*Add option code to catalog number, mounting brackets or field installed options where applicable



Color Selection Chart

Standard Colors 900 Series



Beige = N

White = W

Special Colors 900 Series



Black = B

Aluminum = A

Bronze = S

Charcoal Gray = G

Refer to catalog listings for standard and special color availability. Use color codes in parentheses when specifying and ordering. Custom colors are also available on 900 Series. Special and Optional Colors subject to setup charges. Colors represented are approximate.

ULIR Series

GENERAL INDUSTRIAL/COMMERCIAL UNIT HEATER

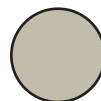


Technical Specifications:

- Temp Range: 45°–90°F
- CFM: 270–1800

Applications:

- Factories
- Warehouses
- Garages
- Service Stations
- Stockrooms
- Workshops
- Stores
- Stairwells
- Maintenance Rooms



Beige

Standard Construction Features

- Heater comes equipped with ceiling-mount bracket for horizontal or vertical flow mounting or any position in between
- Built-in single-pole thermostat
- Copper-brazed steel fins with steel sheathed tubular elements for uniform heating and longevity
- Adjustable louvers control air throw direction
- Automatic fan delay eliminates cold drafts on start-up and discharges residual heat from the heater body during shut down
- High limit cut-off with visual alarm automatically shuts off current in event of overheating and reactivates unit when temperature returns to normal
- Disconnect switch (DS30) option available for heaters 24 amps or lower.

ULIR Series

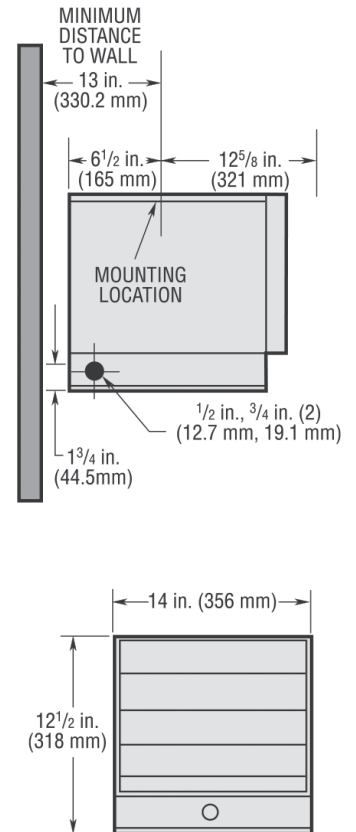
GENERAL INDUSTRIAL/COMMERCIAL UNIT HEATER

Models & Specifications:

| ITEM INFORMATION | | ELECTRICAL DATA | | | |
|------------------|-------|-----------------|---------|-------------|----------|
| CATALOG NO. | VOLTS | WATTS | BTU/HR. | HEATER AMPS | SHIP WT. |
| 925IU-UH5004-N | 208 | 1874 | 6396 | 9 | 24 lbs |
| | | 2500 | 8553 | 12 | |
| | | 3123 | 10659 | 15 | |
| | | 3750 | 12799 | 18 | |
| | 240 | 2500 | 8533 | 10.4 | |
| | | 3332 | 11365 | 13.9 | |
| | | 4165 | 14215 | 17.4 | |
| 925IU-UH7504-N | 208 | 2812 | 9598 | 13.5 | 27 lbs |
| | | 3750 | 12799 | 18 | |
| | | 4685 | 15990 | 22.5 | |
| | | 5625 | 19198 | 27.1 | |
| | 240 | 3750 | 12799 | 15.6 | |
| | | 5000 | 17065 | 20.8 | |
| | | 6250 | 21331 | 26 | |
| | | 7500 | 25598 | 31.3 | |
| 925IU-UH5008-N | 208 | 2500 | 8533 | 12 | 26 lbs |
| | | 3332 | 11365 | 16 | |
| | | 4165 | 14215 | 20 | |
| | | 5000 | 17065 | 24 | |

NOTE: Disconnect switch (UIS-DS30-X) option available for heaters 24 amps or lower. Optional UIB-CWB1-N combination wall/ceiling bracket available.

Dimensions and Clearances:



Controls and Accessories:

| | CATALOG NO. | DESCRIPTION |
|--|-------------|--|
| | UIS-DS30-X | 3-pole power disconnect switch for field installation on all heaters. Complies with "positive off" requirements. |
| | UIB-CWB1-N | Wall mounting brackets for all units. (Ceiling mounting bracket is included with all heaters.) |

UHP Series

CONFINED SPACE UNIT HEATER



Applications

- Parking Garages
- Crawl Spaces
- Inside Plenums
- Above Drop Ceilings

Indeco's confined space plenum rated unit heater is the perfect heating solution for parking garages and other confined spaces.

- Easily fits between joist for typical installation.
- Zero Clearance for wall and ceiling mounting as well as floor mounting with appropriate inlet and outlet clearances.
- Bracket standard or can be mounted by 3/8" threaded rod (field supplied).
- Automatic reset thermal limit for safety.
- 1-phase model wattage field changeable from 1874 to 5000 watts.
- 24V control circuit on three phase models with hydraulic thermostat.
- Made in the USA.

Standard Construction Features

Heating Elements – Heavy-duty block fin element design. The heating element is located directly in front of the fan discharge air for uniform heating. The multiple tap electric design is factory wired for 5 kW and allows for field conversion to eight wattages at 208/240 volts single phase or at 208, 240 and 480 volts three phase.

Cabinet – The cabinet is made of heavy gauge steel casing and finished with two tone, brown and beige, durable powder coating. The bottom panel allows for access to the controls without dismounting the heater.

Control Box – Gasket control box cover to prevent dust and dirt from entering the control box. All heater wiring and controls are located at the bottom of the heater and equipped with a removable cover held in place by four screws to permit full access for installation and servicing without dismounting the heater. 24-Volt control circuit is standard on three phase heaters. Inlet and outlet protective screens are provided to prevent contact with the fan and elements.

Disconnect Switch– Optional field installed disconnect switch for full electrical disconnection at site of the heater as required by NEC.

Safety Thermal Cutouts – Automatic reset thermal safety cutout is built-in to shut off heater in the event of overheating due to any cause.

Fan Delay Control – Fan control to delay fan startup of the fan motor until the heating elements have warmed up and continue fan operation after heating elements have been de-energized to dissipate residual heat.

Temperature Control – The heater includes a built-in adjustable hydraulic thermostat.

Zero Clearance – The heater is rated for zero clearance to any surface mounted next to the sides, top, and bottom of the metal cabinet.

Fan Motor – Fan motor is totally enclosed permanently lubricated with thermal overload protection. Fan motor and controls operate directly from the line voltage.

UHP Series

CONFINED SPACE UNIT HEATER

Field-Installed Options

| Catalog Number | Description | Availability Code (2) |
|----------------|---------------------------------------|-----------------------|
| 1031082 | Disconnect switch, 30 Amp @ 600 Volts | AS |

Heater Listing

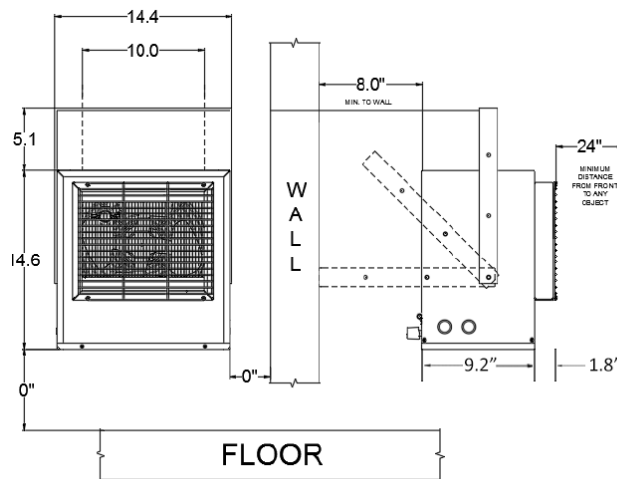
| Catalog Number | Watts (3) | BTUs | Volts (1) | Phase | Total Amps | Temp Rise °F (°C) | Temp Range °F (°C) | Air Throw (Ft.) | CFM | Wt. (Lbs) | Availability Code (2) |
|----------------|-----------|-------|-----------|-------|------------|-------------------|--------------------|-----------------|-----|-----------|-----------------------|
| P-961U5000V-T | 5000 | 17065 | 240 | 1 | 21 | 57 | 40-120 (5-49) | 16 | 275 | 32 | AS |
| | 4165 | 14215 | | | 17 | 48 | | | | | |
| | 3332 | 11365 | | | 14 | 38 | | | | | |
| | 2500 | 8533 | | | 10 | 29 | | | | | |
| | 3750 | 12798 | 208 | 1 | 18 | 43 | 40-120 (5-49) | 16 | 275 | 32 | |
| | 3123 | 10659 | | | 15 | 36 | | | | | |
| | 2500 | 8553 | | | 12 | 29 | | | | | |
| | 1874 | 6396 | | | 9 | 21 | | | | | |
| P-961U5000K-T | 3750 | 12799 | 208 | 3 | 10.4 | 43 | 40-110 (5-43) | 16 | 275 | 32 | |
| | 5000 | 17065 | 240 | | 12 | 57 | | | 275 | | |
| P-961U5000U-T | 5000 | 17065 | 480 | 3 | 6 | 57 | 40-110 (5-43) | 16 | 275 | 32 | |

(1) 60 Hz only

(2) AS = Assemble Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.

(3) 240/208 single phase unit is factory wired for 5kW. The heater may be field changed to listed wattages, see IOM for instructions.

(4) Mounting bracket and built-in thermostat included.



UHHP Series

PLENUM RATED UNITS FOR ENCLOSED SPACES



Applications

- Concealed Areas
- Concession Stands
- Plenum Areas
- Large Entry Ways

Indeeco's UHHP plenum heater is versatile by design and is easily serviceable, if ever needed.

- 20 gauge galvanized cabinet.
- Variable speed motor, factory set at maximum. Motor speed can be field adjusted to increase heat rise.
- Acoustically insulated with 1" fiberglass.
- Access panels on both sides of cabinet.
- 24 Volt controls./ Disconnect Switch.
- Airflow switch.
- Terminal blocks.
- Single point connection
- Dust tight control enclosure.
- Filter rack on inlet with throw-away filter.
- Inlet and outlet screens and duct connection.
- Automatic primary limit control and secondary fuse link.
- Optional wall thermostat, unit thermostat or SSR control which proportionally regulates heat output.
- Made in the USA.

Standard Construction Features

Heating Elements - The heating elements are 80% nickel and 20% chromium resistance wire. The heating elements are located directly in front of the blower discharge for uniform heating.

Cabinet - The cabinet is constructed of 20 gauge galvanized steel with 1" of acoustic fiberglass insulation. Inlet and outlet are fitted with protective screens and suitable for duct connection. Access panels to fan(s) are on both sides of the cabinet. Heater control enclosure is dust tight.

Operation - The heater and fan(s) operation is controlled by either built-in or remote thermostat. Fan motor speed is field adjusted to provide desired temperature rise.

Safety Thermal Cutouts - An automatic resetting thermal cutout for primary and fuse link cutout(s) for secondary over-temperature protection is built into the unit to provide zero clearance to combustible materials.

Motor and Blower Assembly - The PSC motor(s) and blower(s) are direct drive and resiliently mounted on a rigid heavy gauge frame for quiet operation and long life. The motor(s) is rated for continuous operation and is provided with automatic reset overload. The blower(s) is forward curved, double inlet, centrifugal type with discharge directly on the full length of the elements to provide uniform discharge air temperatures.

Air Filters - Inlet filter(s) is provided to assure clean air circulation. The throw away filter(s) is easily removed for changing from outside of the unit.

Disconnect Switch - The unit includes a door interlocking disconnect rated at a minimum of 125% of the total electrical load and has a single point electrical connection for the unit.

Built-In Controls - Clearly labeled power and control terminal blocks are provide for all field electrical connections. Pressure differential airflow switch(s) is provide to interlock airflow with the operation of the unit. Power fusing is provided for units over 48 amps as required by NEC. Magnetic disconnecting contactor(s) for stage and safety control circuit interlock, fan relay and adjustable motor speed controller are provided. Control terminal block allows for remote disabling of the fan, remote switch to be provided by the installer.

Temperature Control - The unit is designed to be controlled by a remote thermostat. Thermostat field connections are made at a clear/y marked control terminal block located inside the heater enclosure.

Fan Speed - The variable fan motor speed control is field adjustable to increase temperature rise, factory set at maximum. Controller is located inside the control enclosure for ease of adjustment.

UHHP Series

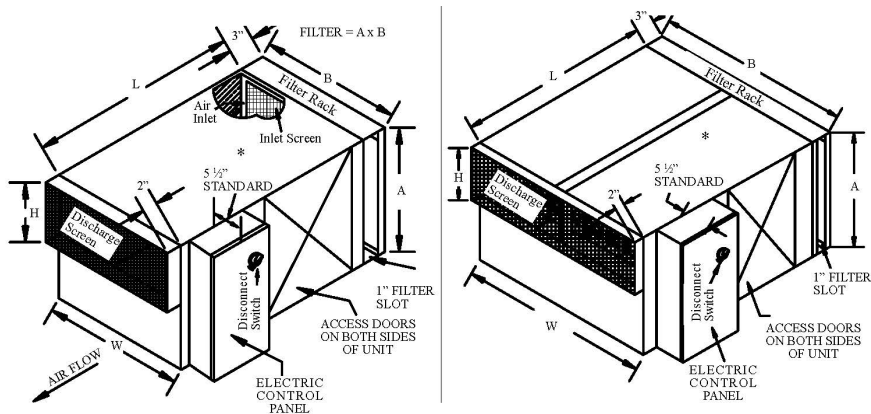
PLENUM RATED UNITS FOR ENCLOSED SPACES

Factory Built-in Options

| Code | Description | Availability Code (2) |
|------|---|-----------------------|
| T | 1-Stage built-in adjustable thermostat | AS |
| | 2-Stage built-in adjustable thermostat | |
| U4L6 | Optional left and connection in place of standard right hand. | |

Accessory Remote Room Thermostat

| Catalog Number | Description | Availability Code (2) |
|----------------|--|-----------------------|
| 1006998 | Single-Stage Low Voltage Remote Thermostat - White - Bimetal | AS |
| 1007030 | Two-Stage Low Voltage Remote Thermostat - White - Bimetal | |
| 1032432 | Low Voltage Electronic Duct Discharge Sensor - SSR Controlled heater | |



Control panel access right hand (U6L4) is standard as shown. For panel on opposite side access specify left hand (U4L6).

| 962 Series | Dimensions | | | Discharge | | Weight |
|------------|------------|---------|---------|-----------|----|------------|
| | A (In.) | B (In.) | L (In.) | W | H | |
| | 3 KW | 12 | 14 | 32 | 14 | |
| 5 KW | 14 | 18 | 36 | 18 | 8 | 118 |
| 10 & 15 KW | 18 | 18 | 36 | 18 | 10 | 141 |
| 20 KW | 18 | 22 | 36 | 22 | 10 | 163 |
| 23 & 25 KW | 18 | 26 | 36 | 26 | 10 | 201 |

| 962 Series | Dimensions | | | Discharge | | Weight |
|-------------|-------------|---------|---------|-----------|----|--------|
| | A (In.) | B (In.) | C (In.) | W | H | |
| | 25-30-25 KW | 18 | 44 | 36 | 44 | |
| 40-45-50 KW | 18 | 52 | 36 | 52 | 10 | 319 |

* Note: Control box depth depends on actual components. Consult factory for exact dimensions.

UHHP Series

PLENUM RATED UNITS FOR ENCLOSED SPACES

Heater Listing - Stage Controlled Heaters

| Catalog Number | KW | CFM Range | Volts/Phase (1) | Total Amps for Motor & Heater | Stage | Motor Voltage | Full Load Amps for Motor | Motor HP | Wt. (Lbs.) | Availability Code (2) | |
|-------------------|----|-----------|-----------------|-------------------------------|-------|---------------|--------------------------|------------------------|------------|-----------------------|-----|
| P-962U1N03C-DU6L4 | 3 | 70-270 | 208/1 | 15.4 | 1 | 277 | 1 | 1/15 | 98 | AS | |
| P-962U1N03J-DU6L4 | | | 240/1 | 13.5 | | | | | | | |
| P-962U1N03N-DU6L4 | | | 277/1 | 11.83 | | | | | | | |
| P-962U1N03D-DU6L4 | | | 208/3 | 9.32 | | | | | | | |
| P-962U1N03K-DU6L4 | | | 240/3 | 8.21 | | | | | | | |
| P-962U1N05C-DU6L4 | 5 | 200-650 | 208/1 | 25.13 | 1 | 277 | 1.1 | 1/6 | 118 | | |
| P-962U1N05J-DU6L4 | | | 240/1 | 21.93 | | | | | | | |
| P-962U1N05N-DU6L4 | | | 277/1 | 19.15 | | | | | | | |
| P-962U1N05D-DU6L4 | | | 208/3 | 14.97 | | | | | | | |
| P-962U1N05K-DU6L4 | | | 240/3 | 13.12 | | | | | | | |
| P-962U1T05U-DU6L4 | | | 480/3 | 7.11 | | | | | | | 480 |
| P-962U1N10D-DU6L4 | 10 | 500-1200 | 208/3 | 29.45 | 1 | 277 | 1.7 | 1/4 | 141 | | |
| P-962U1N10K-DU6L4 | | | 240/3 | 25.75 | | | | | | | |
| P-962U1N10U-DU6L4 | | | 480/3 | 13.72 | | | | | | | |
| P-962U2N10D-DU6L4 | | | 208/3 | 29.45 | 2 | | | | | | 480 |
| P-962U2N10K-DU6L4 | | | 240/3 | 25.75 | | | | | | | |
| P-962U2T10U-DU6L4 | | | 480/3 | 13.75 | | | | | | | |
| P-962U1N15D-DU6L4 | 15 | 500-1200 | 208/3 | 43.33 | 1 | 277 | 1.7 | 1/4 | 141 | | |
| P-962U1T15U-DU6L4 | | | 240/3 | 37.78 | | | | | | | |
| P-962U1T15U-DU6L4 | | | 480/3 | 19.74 | | | | | | | |
| P-962U2N15D-DU6L4 | | | 208/3 | 43.3 | | | | | | | |
| P-962U2N15K-DU6L4 | | | 240/3 | 37.78 | | | | | | | |
| P-962U2T15U-DU6L4 | | | 480/3 | 19.74 | | | | | | | |
| P-962U2N20D-DU6L4 | 20 | 750-1600 | 208/3 | 58.01 | 2 | 277 | 2.5 | 1/2 | 163 | | |
| P-962U2N20K-DU6L4 | | | 240/3 | 50.61 | | | | | | | |
| P-962U2T20U-DU6L4 | | | 480/3 | 26.55 | | | | | | | |
| P-962U2N23D-DU6L4 | 23 | 1300-2000 | 208/3 | 68.14 | 2 | 277 | 4.3 | 3/4 | 210 | | |
| P-962U2N23K-DU6L4 | | | 240/3 | 59.63 | | | | | | | |
| P-962U2T25U-DU6L4 | 25 | | 480/3 | 34.37 | | | | | | 480 | |
| P-962U2N30K-DU6L4 | 30 | 1800-2800 | 240/3 | 78.47 | 2 | 277 | 6.3 | 2 Motors @ 1/2 HP each | 278 | | |
| P-962U2T30U-DU6L4 | | | 480/3 | 42.38 | | | | | | | |
| P-962U2T35U-DU6L4 | 35 | | 480/3 | 48.39 | | | | | | 480 | |
| P-962U2T40U-DU6L4 | 40 | 2000-3600 | 480/3 | 56.71 | 2 | 480 | 8.6 | 2 Motors @ 3/4 HP each | 319 | | |
| P-962U2T45U-DU6L4 | 45 | | | 62.72 | | | | | | | |
| P-962U2T50U-DU6L4 | 50 | | | 68.74 | | | | | | | |

UHHP Series

PLENUM RATED UNITS FOR ENCLOSED SPACES

Heater Listing - SSR Controlled Heaters

| Catalog Number | KW | CFM Range | Volts/Phase (1) | Total Amps for Motor & Heater | Stage | Motor Voltage | Full Load Amps for Motor | Motor HP | Wt. (Lbs.) | Availability Code (2) |
|--------------------|----|-----------|-----------------|-------------------------------|-------|---------------|--------------------------|----------|------------|-----------------------|
| P-962U1N03C-DEU6L4 | 3 | 70-270 | 208/1 | 15.4 | SSR | 277 | 1 | 1/15 | 98 | C |
| P-962U1N03J-DEU6L4 | | | 240/1 | 13.5 | | | | | | |
| P-962U1N03N-DEU6L4 | | | 277/1 | 11.83 | | | | | | |
| P-962U1N03D-DEU6L4 | | | 208/3 | 9.32 | | | | | | |
| P-962U1N03K-DEU6L4 | | | 240/3 | 8.21 | | | | | | |
| P-962U1N05C-DEU6L4 | 5 | 200-650 | 208/1 | 25.13 | | 277 | 1.1 | 1/6 | 118 | |
| P-962U1N05J-DEU6L4 | | | 240/1 | 21.93 | | | | | | |
| P-962U1N05N-DEU6L4 | | | 277/1 | 19.5 | | | | | | |
| P-962U1N05D-DEU6L4 | | | 208/3 | 14.97 | | | | | | |
| P-962U1N05K-DEU6L4 | | | 240/3 | 13.12 | | | | | | |
| P-962U1T05U-DEU6L4 | | | 480/3 | 7.11 | | 480 | | | | |
| P-962U1N10D-DEU6L4 | 10 | 500-1200 | 208/3 | 29.45 | | 277 | 1.7 | 1/4 | 141 | |
| P-962U1N10K-DEU6L4 | | | 240/3 | 25.75 | | | | | | |
| P-962U1N10U-DEU6L4 | | | 480/3 | 13.72 | | | | | | |
| P-962U1N15D-DEU6L4 | 15 | 500-1200 | 208/3 | 43.33 | | 277 | 1.7 | 1/4 | 141 | |
| P-962U1N15K-DEU6L4 | | | 240/3 | 37.78 | | | | | | |
| P-962U1T15U-DEU6L4 | | | 480/3 | 19.74 | | | | | | |
| P-962U2T20U-DEU6L4 | 20 | 750-1600 | 480/3 | 26.55 | 480 | 2.5 | 1/2 | 163 | | |
| P-962U2T25U-DEU6L4 | 25 | 1300-2000 | 480/3 | 34.37 | | 4.3 | 3/4 | 201 | | |
| P-962U2T30U-DEU6L4 | 30 | 1800-2800 | 480/3 | 42.38 | | 6.3 | 2 Motors @ 1/2 HP each | 278 | | |
| P-962U2T35U-DEU6L4 | 35 | | 480/3 | 48.39 | | | | | | |

(1) 60 Hz only

(2) AS = Assemble Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.

(3) Default/standard hand-of-connection is right hand (U6L4) optional left hand (U4L6) is available, see optional features.

(4) Built-in door interlocking disconnect switch is included.

(5) Includes Viconics VT7225 Remote Thermostat.

UHLP Series

LOW PROFILE PLENUM HEATER



Applications

- Low Clearance Ceilings
- Low Clearance Floors
- Concealed Areas
- Concession Stands
- Plenum Areas
- Large Entry Ways

Indeeco's low profile plenum heater is designed to fit jobs where the clear space between the ceiling and the floor above is as small as 11-3/4 inches.

- 20 gauge galvanized cabinet.
- Variable speed motor, factory set at maximum. Motor speed can be field adjusted to increase heat rise.
- Acoustically insulated with 1" fiberglass.
- Access panels on bottom of unit.
- 24 Volt controls / Disconnect Switch.
- Airflow switch.
- Terminal blocks.
- Single point connection
- Dust tight control enclosure.
- Filter rack on inlet with throw-away filter.
- Inlet and outlet screens and duct connection.
- Automatic primary limit control and secondary fuse link.
- Optional wall thermostat, unit thermostat or SSR control which proportionally regulates heat output.
- Made in the USA.

Standard Construction Features

Heating Elements - The heating elements are 80% nickel and 20% chromium resistance wire. The heating elements are located directly in front of the blower discharge for uniform heating.

Cabinet - The cabinet is constructed of 20 gauge galvanized steel with 1" of acoustic fiberglass insulation. Inlet and outlet are fitted with protective screens and suitable for duct connection. Access panels to fan(s) are on both sides of the cabinet. Heater control enclosure is dust tight.

Operation - The heater and fan(s) operation is controlled by either built-in or remote thermostat. Fan motor speed is field adjusted to provide desired temperature rise.

Safety Thermal Cutouts - An automatic resetting thermal cutout for primary and fuse link cutout(s) for secondary over-temperature protection is built into the unit to provide zero clearance to combustible materials.

Motor and Blower Assembly - The PSC motor(s) and blower(s) is direct drive and resiliently mounted on a rigid heavy gauge frame for quiet operation and long life. The motor(s) is rated for continuous operation and is provided with automatic reset overload. The blower(s) is forward curved, double inlet, centrifugal type with discharge directly on the full length of the elements to provide uniform discharge air temperatures.

Air Filters - Inlet filter(s) is provided to assure clean air circulation. The throw away filter(s) is easily removed for changing from outside of the unit.

Disconnect Switch - The unit includes a door interlocking disconnect rated at a minimum of 125% of the total electrical load and has a single point electrical connection for the unit.

Built-In Controls - Clearly labeled power and control terminal blocks are provided for all field electrical connections. Pressure differential airflow switch(s) is provided to interlock airflow with the operation of the unit. Power fusing is provided for units

UHLP Series

LOW PROFILE PLENUM HEATER

Standard Construction Features (continued)

over 48 amps as required by NEC. Magnetic disconnecting contactor(s) for stage and safety control circuit interlock, fan relay and adjustable motor speed controller is provided. Control terminal block allows for remote disabling of the fan, remote switch to be provided by the installer.

Temperature Control - The unit is designed to be controlled by a remote thermostat. Thermostat field connections are made at a clearly marked control terminal block located inside the heater enclosure.

Fan Speed – The variable fan motor speed control is field adjustable to increase temperature rise, factory set at maximum. Controller is located inside the control enclosure for ease of adjustment.

Heater Listing - Stage Controlled Heaters

| Catalog Number | KW | CFM Range | Volts/Phase (1) | Total Amps for Motor & Heater | Stage | Motor Voltage | Full Load Amps for Motor | Motor HP | Wt. (Lbs.) | Availability Code (2) |
|-------------------|----|-----------|-----------------|-------------------------------|-------|---------------|--------------------------|------------------------|------------|-----------------------|
| P-963U1N05C-DU6L4 | 5 | 170-950 | 208/1 | 26 | 1 | 277 | 2 | 1/4 | 163 | C |
| P-963U1N05J-DU6L4 | | | 240/1 | 22 | | | | | | |
| P-963U1N05N-DU6L4 | | | 277/1 | 20 | | | | | | |
| P-963U1N05D-DU6L4 | | | 208/3 | 15 | | | | | | |
| P-963U1N05K-DU6L4 | | | 240/3 | 14 | | | | | | |
| P-963U1T05U-DU6L4 | | | 480/3 | 8 | | | | | | |
| P-963U1N10D-DU6L4 | 10 | 170-950 | 208/3 | 30 | 2 | 277 | 2 | 1/4 | 163 | |
| P-963U1N10K-DU6L4 | | | 240/3 | 26 | | | | | | |
| P-963U1T10U-DU6L4 | | | 480/3 | 14 | | | | | | |
| P-963U2N10D-DU6L4 | | | 208/3 | 30 | | | | | | |
| P-963U2N10K-DU6L4 | | | 240/3 | 26 | | | | | | |
| P-963U2T10U-DU6L4 | | | 480/3 | 14 | | | | | | |
| P-963U1N12K-DU6L4 | 12 | 170-950 | 240/3 | 32 | 1 | 277 | 3 | 1/4 | 219 | |
| P-963U1T12U-DU6L4 | | | 480/3 | 17 | | | | | | |
| P-963U2N12D-DU6L4 | | | 208/3 | 37 | | | | | | |
| P-963U2N12K-DU6L4 | | | 240/3 | 32 | | | | | | |
| P-963U2T12U-DU6L4 | | | 480/3 | 17 | | | | | | |
| P-963U2T12U-DU6L4 | | | 277 | 2 | | | | | | |
| P-963U2T12U-DU6L4 | 15 | 270-1500 | 240/3 | 39 | 1 | 277 | 3 | 2 Motors @ 1/4 HP Each | 219 | |
| P-963U1T15U-DU6L4 | | | 480/3 | 21 | | | | | | |
| P-963U2N15D-DU6L4 | | | 208/3 | 45 | | | | | | |
| P-963U2N15K-DU6L4 | | | 240/3 | 39 | | | | | | |
| P-963U2T15U-DU6L4 | | | 480/3 | 21 | | | | | | |
| P-963U2T15U-DU6L4 | | | 277 | 4 | | | | | | |
| P-963U1T18U-DU6L4 | 18 | 270-1500 | 480/3 | 25 | 1 | 480 | 3 | 2 Motors @ 1/4 HP Each | 219 | |
| P-963U2T18U-DU6L4 | | | 480/3 | 25 | | | | | | 2 |

(1) 60 Hz only

(2) AS = Assemble Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times.

(3) Default/standard hand-of-connection is right hand (U6L4) optional left hand (U4L6) is available, see optional features.

(4) Built-in door interlocking disconnect switch is included.

UHLP Series

LOW PROFILE PLENUM HEATER

Heater Listing - SSR Controlled Heaters

| Catalog Number | KW | CFM Range | Volts/Phase (1) | Total Amps for Motor & Heater | Stage | Motor Voltage | Full Load Amps for Motor | Motor HP | Wt. (Lbs.) | Availability Code (2) |
|--------------------|----|-----------|-----------------|-------------------------------|-------|---------------|--------------------------|------------------------|------------|-----------------------|
| P-963U1N05C-DEU6L4 | 5 | 170-950 | 208/1 | 26 | SSR | 277 | 2 | 1/4 | 163 | C |
| P-963U1N05J-DEU6L4 | | | 240/1 | 22 | | | | | | |
| P-963U1N05N-DEU6L4 | | | 277/1 | 20 | | | | | | |
| P-963U1N05D-DEU6L4 | | | 208/3 | 15 | | | | | | |
| P-963U1N05K-DEU6L4 | | | 240/3 | 14 | | | | | | |
| P-963U1T05U-DEU6L4 | | | 480/3 | 8 | | | | | | |
| P-963U1N10D-DEU6L4 | 10 | 170-950 | 208/3 | 30 | | 277 | | | | |
| P-963U1N10K-DEU6L4 | | | 240/3 | 26 | | 480 | | | | |
| P-963U1T10U-DEU6L4 | | | 480/3 | 14 | | 277 | | | | |
| P-963U1N12K-DEU6L4 | 12 | 270-1500 | 240/3 | 32 | | 480 | 3 | 2 Motors @ 1/4 HP Each | 219 | |
| P-963U1T12U-DEU6L4 | | | 480/3 | 17 | | 277 | | | | |
| P-963U1N15K-DEU6L4 | 15 | | 240/3 | 39 | | 480 | | | | |
| P-963U1T15U-DEU6L4 | | | 480/3 | 21 | 480 | | | | | |
| P-963U1T18U-DEU6L4 | | | 18 | 480/3 | 25 | 480 | | | | |

(1) Includes Viconics VT7225 Remote Thermostat.

Factory Built-in Options

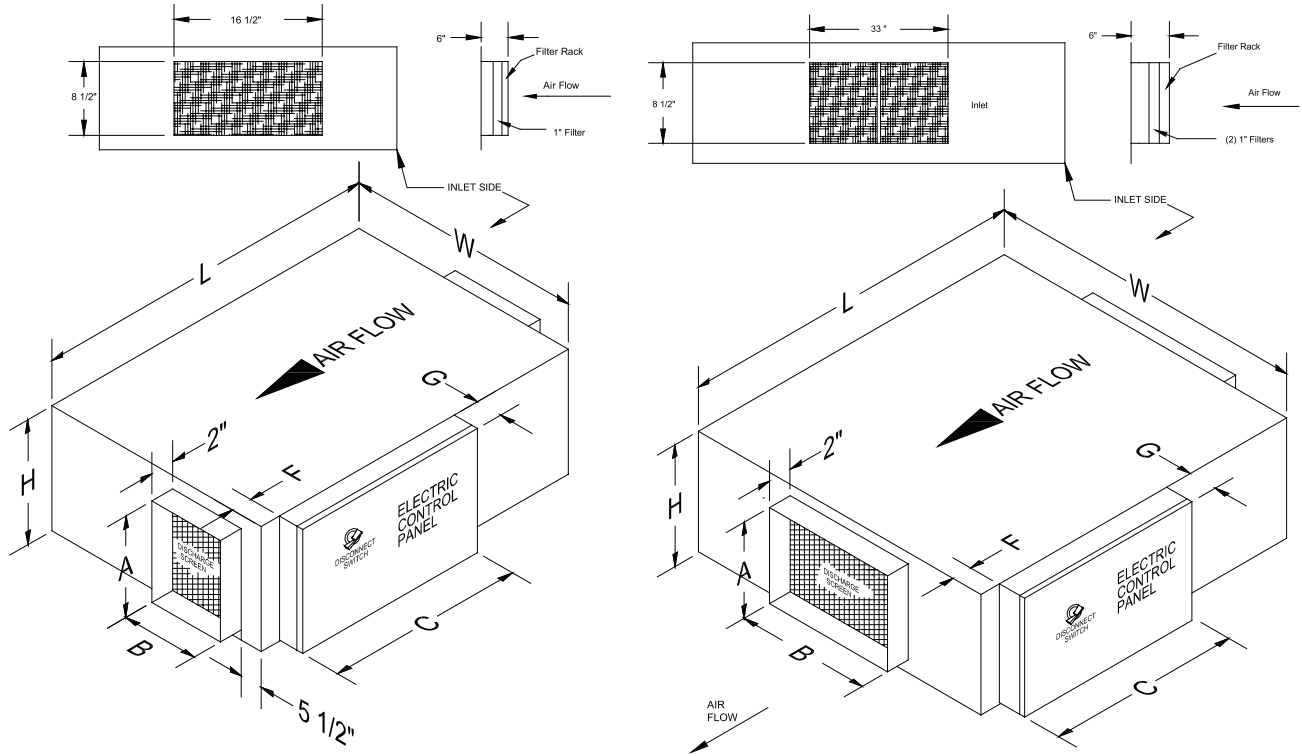
| Code | Description | Availability Code (2) |
|------|---|-----------------------|
| T | 1-Stage built-in adjustable thermostat | AS |
| | 2-Stage built-in adjustable thermostat | |
| U4L6 | Optional left and connection in place of standard right hand. | |

Accessory Remote Room Thermostat

| Catalog Number | Description | Availability Code (2) |
|----------------|--|-----------------------|
| 1006998 | Single-Stage Low Voltage Remote Thermostat - White - Bimetal | AS |
| 1007030 | Two-Stage Low Voltage Remote Thermostat - White - Bimetal | |
| 1032432 | Low Voltage Electronic Duct Discharge Sensor - SSR Controlled heater | |

UHLP Series

LOW PROFILE PLENUM HEATER



Control panel access right hand (U6L4) is standard as shown. For panel on opposite side access specify left hand (U4L6).

| Dimensions | | | | | | | | |
|------------|-------|-----|-----|-------|-----|-----|-----------|----|
| P-963 | C | F | G | H | L | W | Discharge | |
| | In. | In. | In. | In. | In. | In. | A | B |
| 5 & 10 KW | 28.75 | 1 | 6 | 11.75 | 45 | 26 | 8 | 10 |

| Dimensions | | | | | | | | |
|---------------|-------|-----|-----|-------|-----|-----|-----------|----|
| P-963 | C | F | G | H | L | W | Discharge | |
| | In. | In. | In. | In. | In. | In. | A | B |
| 12, 15 & 18KW | 28.75 | 2 | 6 | 11.75 | 45 | 43 | 8 | 20 |

Note: Dimensions C and G will vary with accessories.

Limited Warranty

Indeeco new products are warranted against defects in workmanship, material, design, labeling and packaging. No other warranty, expressed or implied, written or oral, applies. No person other than an officer or the general manager of Indeeco is authorized to give any other warranty or assume any liability.

Warranty Period

18 months from the date of shipment from Indeeco's factory, or 12 months from the date the product is first placed into service, whichever period lapses first.

Conditions of Warranty

Indeeco products must be installed, operated, and maintained in accordance with Indeeco's instructions. Indeeco is not liable for damage or unsatisfactory performance of the product resulting from accident, negligence, alteration, unauthorized repair, improper application or installation of the product, improper specifications, or corrosion. Indeeco IS NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Claims against carriers for damage in transit must be filed by the purchaser with the carrier.

Remedy

Contact Indeeco sales department at (314) 644-4300 or sales@Indeeco.com, for a Return Material Authorization Number (RMA#) and return instructions.

If after receipt of the product and the claim, Indeeco finds to its reasonable satisfaction that the product is defective in workmanship, material, design, labeling or packaging, the product will be repaired or replaced, or the purchase price refunded at Indeeco's option. There will be no charge to the purchaser for parts or labor. Removal and reinstallation of the product, and shipment of the product to Indeeco for repair or inspection, shall be at the purchaser's risk and expense.


THE REPAIR, REPLACEMENT, OR REFUND PROVIDED FOR IN THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO

Warranty Period

| Indeeco Product Line | Warranty Period |
|-------------------------|---|
| BBI (903) | 1 year* and 10 years on heating element |
| BISI/BII (905/907) | 1 year* and 5 years on heating element |
| BCI (906) | 1 year* and 5 years on heating element |
| BASI (908) | 1 year* and 5 years on heating element |
| BAI/BAPI (909/911) | 1 year* and 5 years on heating element |
| LBAI/LBAPI (912/913) | 1 year* and 5 years on heating element |
| BMI (914) | 1 year* and 5 years on heating element |
| BHI (916) | 1 year* and 5 years on heating element |
| RCI (918) | 1 year* and 5 years on heating element |
| CUI (922) | 1 year* and 5 years on heating element |
| ULIR (925) | 1 year* and 5 years on heating element |
| WRI (930) | 1 year* and 5 years on heating element |
| CCI (931) | 1 year* and 5 years on heating element |
| WCI (932) | 1 year* and 5 years on heating element |
| WAI (933) | 1 year* and 5 years on heating element |
| WLI (934) | 1 year* and 1 year on heating element |
| CDI (937) | 1 year* and 5 years on heating element |
| TSI (938) | 1 year* and 5 years on heating element |
| FFI (939) | 1 year* and 5 years on heating element |
| CLI (941) | 1 year* and 5 years on heating element |
| WCZ (950) | 1 year* and 1 year on heating element |
| All Other Product Lines | 18 months from the date of shipment from Indeeco's factory, or 12 months from the date the product is first placed into service, whichever period lapses first. |

We have the experience and expertise to provide you with the personalized support to arrive at customized solutions.

Email sales@indeeco.com
or call 800.243.8162
to find your nearest
Indeeco representative.



When you need more than an off-the-shelf, standardized product.
Ask **More.**