

REZNOR[®]

**ELECTRIC
HEATING
CATALOG**

Form RZ-NA-C-EH (Version B)

BACKGROUND

Reznor was founded in 1888 to manufacture the “Reznor” reflector heater, which used a luminous flame gas burner developed by George Reznor. This technological breakthrough was an immediate success and hastened the expansion of gas heating in residential and commercial applications. Technological development and innovation have been the hallmark of Reznor products through the years. The development of the forced air gas unit heater, the modular Thermocore® heat exchanger, and the high-efficiency, V3® Series Unit Heater with the TCore²® single-burner and innovative heat exchanger system, have kept Reznor products at the forefront of technological advances in commercial and industrial gas heating. As a result of this pioneering role in the heating, makeup air, and ventilating equipment field, the products offered today are the most advanced in engineering design to satisfy a wide variety of applications.

FACILITIES

Reznor heaters were first manufactured and sold in Mercer, Pennsylvania (70 miles north of Pittsburgh) in 1888. Over the years, the company has grown and expanded. Today, with sales worldwide, Reznor products are being manufactured at facilities throughout North America and Europe.

PRODUCT SCOPE

Well-equipped engineering laboratories for both product development and testing can be found at many of the manufacturing sites. All domestic lab sites are agency approved.

Reznor Products include a complete line of heating, makeup air, air conditioning and ventilating systems, using gas, oil, hot water/steam, or electric heating or cooling sources. Reznor catalogs are designed to aid the engineer, architect or contractor in specifying the correct equipment for all standard and special applications. Complete data is presented on unit heaters, duct furnaces, infrared heaters, makeup air systems, pre-engineered custom-designed systems, packaged cooling equipment, energy recovery and evaporative cooling modules. Consult your local Reznor Sales Representative for further assistance in specifying Reznor Equipment for your specific application.

SERVICES

Product service requirements are handled through contractors and/or distributors, with backup from local representatives and factory-based service team. Replacement parts inventories for both warranty and non-warranty requirements are maintained at service centers throughout the country and at the manufacturing facilities.

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Reznor offers models for the following applications:

- Shipping and Receiving Areas
- Aircraft Hangars
- Factories
- Warehouses
- Garages
- Waste Water Treatment Plants,
- Steel Mills
- Construction Sites
- Car Washes
- Swimming Pool Areas
- Sewage Treatment Plants
- Petrochemical Facilities, Oil Rigs
- Unattended Pumping Stations
- Chemical Storage and Handling Facilities
- Paint Storage Areas
- Grain Elevators
- Comfort Heating in Industrial Buildings
- Schools
- Hospitals
- Department Stores
- Office Complexes
- Heat hoppers
- Heating Trailers
- Curing Plaster and Concrete
- Thawing Frozen Pipes
- Thawing Railroad Cars
- Heating Large Tents

ELECTRIC HEATERS

Reznor Electric Comfort Heaters are designed to provide efficient, economical, clean, fast heat for commercial and industrial applications. Heavy-duty construction results in a long, dependable life.



Electric Unit Heaters

Standard Unit Heater Model EGEA	2
Hose Down Heater Model EWH	7
Explosion Resistant Heater Model EXUA	10

Electric Duct Furnaces

Models EDI & EDF	15
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Infrared Heater

Fixed Overhead Heater Model ERSF	17
Portable Heater Model ERSP	17

Electric Portable Blower Heater

Model EPB	22
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Warranty	25
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In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc. of the equipment information shown here.

Model EGEA

Horizontal or Vertical Discharge Fan Forced Unit Heater



Model EGEA Sizes 2 - 15
Horizontal or Vertical



Model EGEA Sizes 20 - 45
Horizontal only



- 2.6 - 45 kW
- 8,900 - 153,000 Btuh
- 208, 240, 277, 480 and 600 Volt
- 1 or 3 Phase
- Wall or Ceiling Mounted Configurations
- CSA Certified (North America)
- CE Certified (Europe) - Sizes 20 - 45 Only

Description

Model EGEA self-contained heater provides quiet, reliable fan-forced heating in all types of commercial and industrial applications.

Applications

- Shipping and Receiving Areas
- Pump Houses
- Power Generating Stations
- Aircraft Hangars
- Factories
- Warehouses
- Garages

Construction

Die Formed Cabinet - Heavy gauge steel (18 or 20 gauge depending on unit size), phosphate undercoated for corrosion resistance and finished in gray polyester powder coat.

Louvers - Individually adjustable louvers direct air flow up or down as needed.

Finned Tubular Heating Elements have corrosion resistant steel fins that are furnace brazed to the tubular heating element to assure long life and superior heat transfer.

Fan Motor - Totally enclosed fan motor is rated for continuous duty with built-in thermal cutout and operates on same voltage as the heating circuit.

Dynamically Balanced Fan ensures smooth, quiet operation. Blade pitch is carefully selected so that the volume of air moved results in the optimum discharge air temperature. Fan is attached with rubber vibration insulators on Sizes 20 - 45.

Features

Integral 24V Control Transformer - Standard on 480V and 600V models, eliminates the need for an external control source.

Heavy Duty Magnetic Contactors are standard on all models except 2.6 thru 5 kW single phase models.

Fail-Safe Linear Thermal Cutouts open the control circuit and disconnect power to the heating elements if overheating occurs. Automatic Reset allows the control circuit to reclose and restore power when temperature returns to normal.

Field Convertible - Single or three phase operation on selected sizes.

Mounting Configurations

- **Horizontal** - Recessed welded fasteners on top of the heater cabinet are internally threaded for suspension of unit with threaded rods. Ceiling and Universal Wall Swivel brackets are optional. The ceiling bracket lets you mount heater directly to ceiling or overhead member, simply and easily. The swivel mounting allows you to readily adjust the direction of warm air flow for maximum comfort up to 180 degrees.
- **Vertical (Sizes 2 - 15 Only)** - Vertical Discharge Recessed fasteners on the rear of the heater cabinet are internally threaded for suspension of unit in the vertical discharge mode with threaded rods.

Subdivided Circuits with Individual Fuse Protection - Standard on all heaters with a total current draw of 48 Amps or greater. The fuse compartment is conveniently located for easy access.

Factory Installed Options

- **Heat ON Indicator Light**
- **Time Delay** (heat on and off): Provides delay of fan operation until elements have warmed up. The fan stays on until cool.

Optional Features (Factory Installed or Field Installation Kits)

24V or 120V control voltage for 208/240/277 Volt units.

Summer Fan Switch Kit - Field installable for circulating warm stratified air. Available for all models.

Thermostat Kit - Unit-mounted, field-installable on all models. Range 40°F - 90°F.

Power Disconnect Switch - Field installable switch enables power to be disconnected while servicing heater.

- Sizes 2 - 15: 50 Amp rating mounts on the front of the heater
- Sizes 20 - 45: 40, 80 and 100 Amp models available. Mounts in the back of the heater.

Mounting Brackets

- Ceiling Bracket
- Wall Mounting Bracket

Advantages

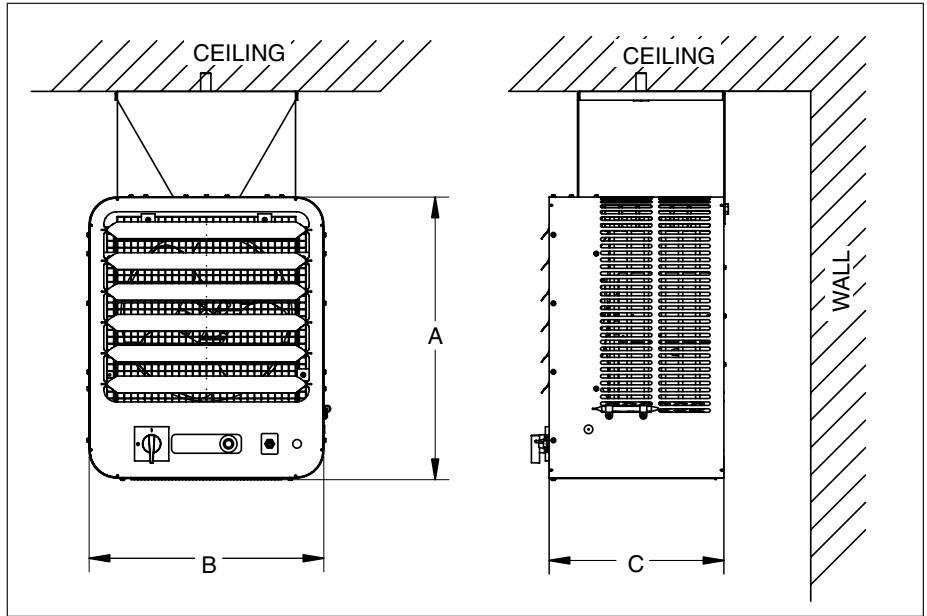
- Self Contained
- Versatile, Flexible and High Performance
- Easy Installation
- Minimum Maintenance
- Long Life
- Attractive Appearance

Because it has individually adjustable discharge louvers to direct air flow, and can be wall or ceiling (plus swivel) mounted, Model EGEA may be used in a variety of heating applications including:

- Primary Heating
- Supplementary Heating
- Dual System Heating
- Spot Heating
- Entryway Air-Curtain Heating

Model EGEA Sizes 2 - 15 Dimensions and options

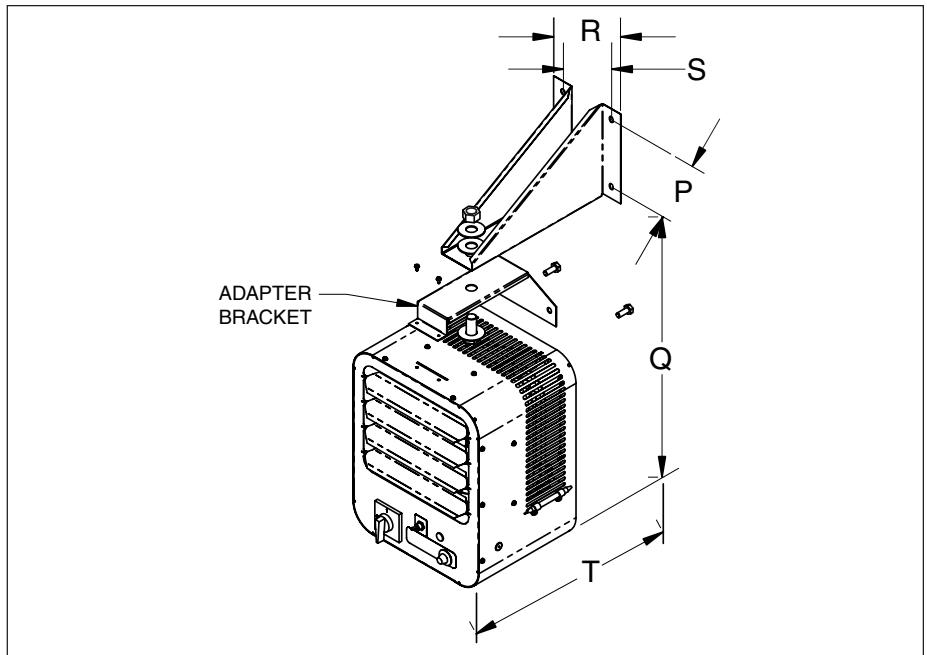
Mounting for Horizontal Air Discharge



Dimensions - In. (mm)

Size	A	B	C
2 - 5	16 1/8	13	10
	(410)	(330)	(254)
7 - 15	20 5/8	17 1/8	12 3/4
	(524)	(435)	(324)

Optional Wall Swivel Mounting Bracket - Option CK4



Mounting Limitations

Hazardous Atmosphere - Unit heaters should not be used in potentially explosive atmospheres.

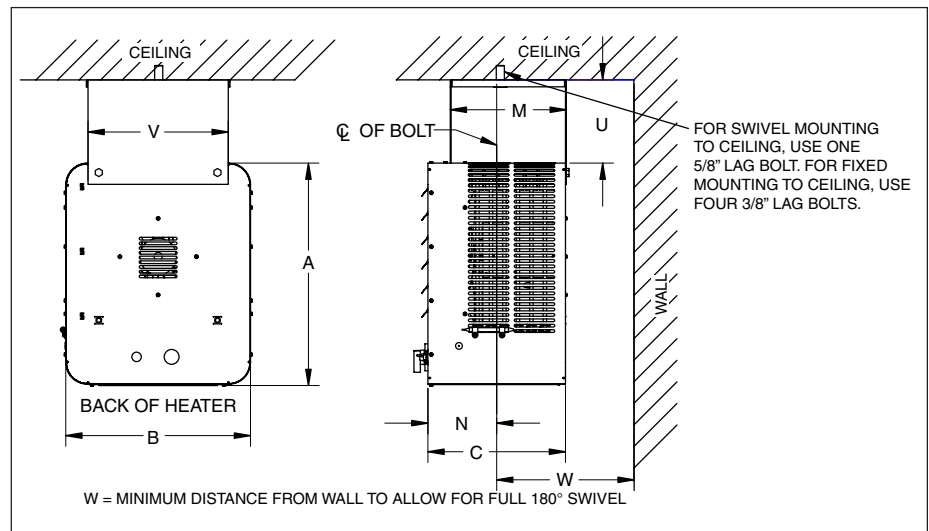
Corrosive Atmosphere - The finish is not intended for direct salt spray exposure in marine applications or the highly corrosive atmospheres of greenhouses, swimming pools, chemical storage bins, etc.

Mounting Height - Do not install unit heaters above recommended maximum mounting height. **Obstructions** must not block unit heater air inlet or discharge.

For use with		P	Q	R	S	T	Weight
EGEA02-05	in.	6 1/6	18 7/8	7	5	17 5/8	lbs 3 3/4
	mm	(157)	(479)	(178)	(127)	(448)	g (1,701)
EGEA07-15	in.	6 1/6	23 1/4	7	5	18 5/8	lbs 6 1/2
	mm	(157)	(591)	(178)	(127)	(473)	g (2,948)

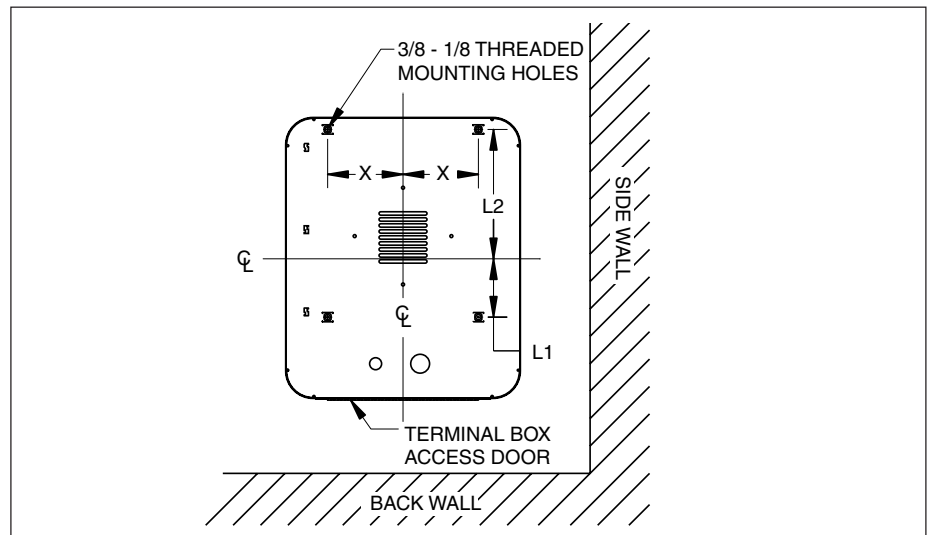
Model EGEA Sizes 2 - 15 Dimensions and Options

Optional Ceiling Swivel Mounting Bracket



For use with		A	B	C	M	N	U	V	W	Weight
EGEA02-05	in.	16 1/8	13	10	8 3/8	5 3/4	7 3/4	9 3/4	12	lbs 4
	mm	(410)	(330)	(254)	(213)	(146)	(197)	(248)	(305)	g (1,814)
EGEA07-15	in.	20 5/8	17 1/8	12 3/4	10 3/4	6 3/4	7 3/4	12	12	lbs 8
	mm	(524)	(435)	(324)	(273)	(171)	(197)	(305)	(305)	g (3,629)

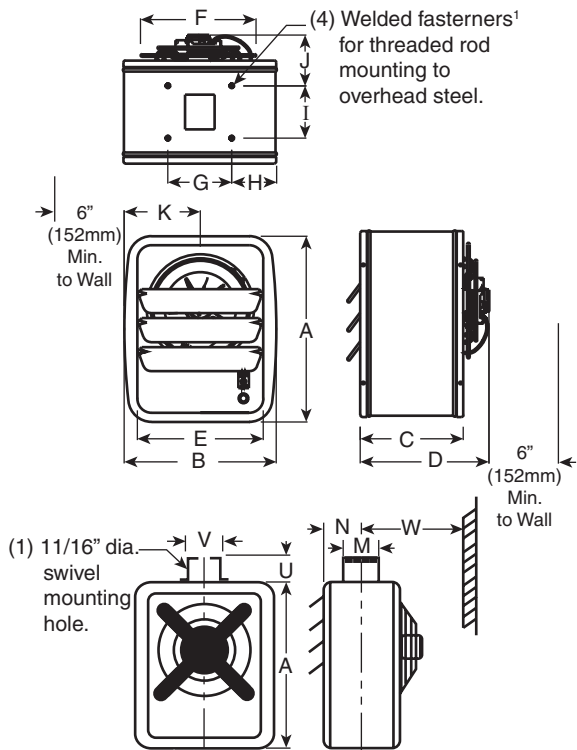
Hanging 3/8 - 16 Threaded Rod Spacing for Vertical Air Discharge



		L1	L2	X
EGEA02-05	in.	2 7/8	7 1/8	3 3/4
	mm	(73)	(181)	(95)
EGEA07-15	in.	4 5/16	9 3/8	5 1/2
	mm	(110)	(238)	(140)

Model EGEA Sizes 20 -45 Dimensions and Options

Ceiling Mounted Heaters

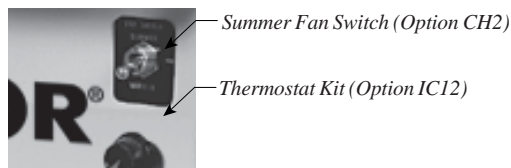


Ceiling Mounted Heaters

Ceiling Mounting Kit Option CK4

EGEA		A	B	C	D	E	F	G	H	I	J	K	M	N	U	V	W	Weight	
20 - 25	in.	24	20 1/8	11 1/2	20 1/2	16 3/4	16	8 1/4	6	6 1/4	12	10 1/16	8	6 1/4	6	7 1/4	16	lbs.	3
	(mm)	(610)	(511)	(292)	(521)	(425)	(406)	(210)	(152)	(159)	(305)	(256)	(203)	(159)	(152)	(184)	(406)	kg	(1.4)
30 - 45	in.	24	20 1/8	17	26	16 3/4	16	8 1/4	6	11 3/4	12	10 1/16	13 3/4	9 5/16	6	7 1/4	21	lbs.	3
	(mm)	(610)	(511)	(432)	(660)	(425)	(406)	(210)	(152)	(298)	(305)	(256)	(349)	(237)	(152)	(184)	(533)	kg	(1.4)

Optional Control Accessories & Remote Thermostats Fan Only Operation Kits

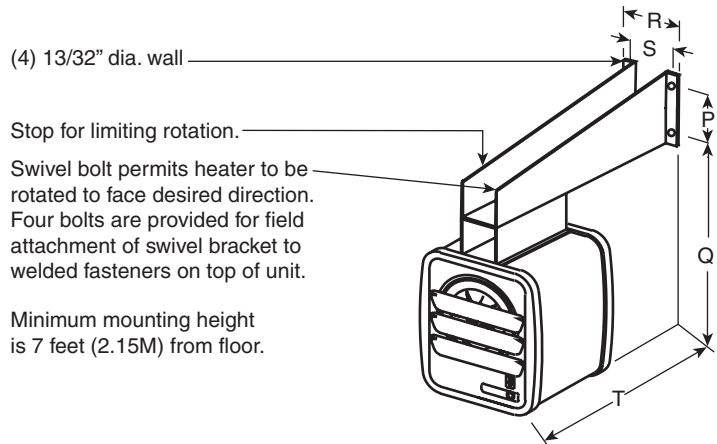


Optional Fan Switch Kits

CH2: Unit Mounted Toggle Switch Kit for 208/240/277V units only

CH3: Remote Switch with Wall Plate and 24V Fan Relay. For 480 or 600V units on 208/240/277V units with BT1 Control Transformer.

Wall Mounted Universal Bracket



Wall Mounted Heaters

Wall Mounting Kit Option CK5

EGEA		P	Q	R	S	T	Weight
20 - 25	in.	2	32	9 1/2	8 3/8	22 1/4	lbs. 7
	(mm)	(51)	(813)	(241)	(213)	(565)	kg (3.2)
30 - 45	in.	5 1/2	28 11/16	5	3 1/2	33 1/4	lbs. 10
	(mm)	(140)	(729)	(127)	(89)	(845)	kg (4.5)

Notes —

1. Threaded rod to be supplied by customer.
2. Wall mounting fasteners to be supplied by customer.

Power Disconnect Kits



3 Pole, 600V Rating (pictured)

Option Code	Rating	Weight	
		lbs.	kg
CP66	40 Amp*	0.5	0.2
CP67	50 Amp**		
CP68	80 Amp	0.5	0.2
CP69	10 Amp	1	0.5

* Rating for 480V or less is 50 Amp. Sizes 20-45 only - mounts on rear of the heater.
** Sizes 2-15 only - mounts on front of the heater.

Mounting Limitations

Hazardous Atmosphere — Unit heaters should not be used in potentially explosive atmospheres. **Corrosive Atmosphere** — The finish is not intended for direct salt spray exposure in marine applications or the highly corrosive atmospheres of greenhouses, swimming pools, chemical storage bins, etc. **Mounting Height** — Do not install unit heaters above recommended maximum mounting height. **Obstructions** must not block unit heater air inlet or discharge.

Model EGEA

Specifications and Technical Data

Size	Electrical (60 Hz)				Motor				CFM	Air Delivery			Mtg. ^E Height (Ft.)	Weight	
	kW	Volts	Ckt & Phase	Amps ^D	Volts	Phase	HP	RPM		FPM	Temp. Rise (°F)	Horiz. Throw (Ft.)		(Lbs.)	(kg)
2	2.6	208	1 - 1	13.1	208	1	1/40	1,650	410	880	21	12	8	32	15
	2.6	240	1 - 1	11.4	240	1	1/40	1,650	410	880	21	12	8	32	15
	2.6	277	1 - 1	9.6	277	1	1/30	1,550	360	770	24	12	8	32	15
4	4	208	1 - 1	19.8	208	1	1/40	1,650	410	880	31	12	8	32	15
	4	208	1 - 3 ^C	11.7	208	1	1/40	1,650	410	880	31	12	8	32	15
	4	240	1 - 1	17.2	240	1	1/40	1,650	410	880	31	12	8	32	15
	4	240	1 - 3 ^C	10.2	240	1	1/40	1,650	410	880	31	12	8	32	15
	4	277	1 - 1	14.6	277	1	1/30	1,550	360	770	35	12	8	32	15
	4	480	1 - 3	5.1	480	1	1/35	1,550	380	815	33	12	8	32	15
5	5	208	1 - 1	24.6	208	1	1/40	1,650	410	880	39	12	8	32	15
	5	208	1 - 3 ^C	14.5	208	1	1/40	1,650	410	880	39	12	8	32	15
	5	240	1 - 1	21.4	240	1	1/40	1,650	410	880	39	12	8	32	15
	5	240	1 - 3 ^C	12.6	240	1	1/40	1,650	410	880	39	12	8	32	15
	5	277	1 - 1	18.3	277	1	1/30	1,550	360	770	44	12	8	32	15
	5	480	1 - 3	6.3	480	1	1/35	1,550	380	815	42	12	8	32	15
7	7.5	208	1 - 1 ^C	36.5	208	1	1/15	1,725	850	1040	28	27	8	50	23
	7.5	208	1 - 3	21.3	208	1	1/15	1,725	850	1040	28	27	8	50	23
	7.5	240	1 - 1 ^C	31.7	240	1	1/15	1,725	850	1040	28	27	8	50	23
	7.5	240	1 - 3	18.5	240	1	1/15	1,725	850	1040	28	27	8	50	23
	7.5	277	1 - 1	27.7	277	1	1/15	1,550	750	920	32	27	8	50	23
	7.5	480	1 - 3	9.9	480	3	1/15	1,725	850	1040	28	27	8	50	23
	7.5	600	1 - 3	7.6	575	3	1/3	1,725	850	1040	28	27	8	50	23
	7.5	600	1 - 3	7.6	575	3	1/3	1,725	850	1040	28	27	8	50	23
10	9.7	208	1 - 1 ^C	47.1	208	1	1/15	1,725	850	1040	37	27	9	50	23
	9.7	208	1 - 3	27.4	208	1	1/15	1,725	850	1040	37	27	9	50	23
	10	240	1 - 1 ^C	42.1	240	1	1/15	1,725	850	1040	37	27	9	50	23
	10	240	1 - 3	24.5	240	1	1/15	1,725	850	1040	37	27	9	50	23
	10	480	1 - 3	12.9	480	3	1/15	1,725	850	1040	37	27	9	50	23
	10	600	1 - 3	10.6	575	3	1/3	1,725	850	1040	37	27	9	50	23
15	15	208	1 - 3	42.1	208	1	1/15	1,725	850	1040	56	27	10	50	23
	15	240	1 - 3	36.6	240	1	1/15	1,725	850	1040	56	27	10	50	23
	15	480	1 - 3	19.0	480	3	1/15	1,725	850	1040	56	27	10	50	23
	15	600	1 - 3	15.6	575	3	1/3	1,725	850	1040	56	27	10	50	23
20	19.4	240	1 - 3	48.02	240	3	1/3	1,725	1,240	1,160	53	31	11	73	33.1
	20	480	1 - 3	25	480	3	1/3	1,725	1,240	1,160	53	31	11	73	33.1
	20	600	1 - 3	19.6	575	3	1/3	1,725	1,240	1,160	53	31	11	73	33.1
25	25	480	1 - 3	31	480	3	1/3	1,725	1,350	1,260	60	31	12	73	33.1
	25	600	1 - 3	24.6	575	3	1/3	1,725	1,350	1,260	60	31	12	73	33.1
30	30	208	1 - 3	85.2	240	3	1/3	1,725	1,555	1,450	64	46	13	106	48.1
	30	240	1 - 3	74.02	240	3	1/3	1,725	1,555	1,450	64	46	13	106	48.1
	30	480	1 - 3	37.1	480	3	1/3	1,725	1,555	1,450	64	46	13	106	48.1
	30	600	1 - 3	29.6	575	3	1/3	1,725	1,555	1,450	64	46	13	106	48.1
35	35	240	1 - 3	86.02	240	3	1/3	1,725	1,555	1,450	71	45	14	106	48.1
	35	480	1 - 3	43.1	480	3	1/3	1,725	1,555	1,450	71	45	14	106	48.1
	35	600	1 - 3	34.7	575	3	1/3	1,725	1,555	1,450	71	45	14	106	48.1
40	38	240	1 - 3	93.3	240	3	1/3	1,725	1,555	1,450	84	44	15	106	48.1
	39	480	1 - 3	47.9	480	3	1/3	1,725	1,555	1,450	84	44	15	106	48.1
	40	600	1 - 3	39.7	575	3	1/3	1,725	1,555	1,450	84	44	15	106	48.1
45	45	480	1 - 3	55.1	480	3	1/3	1,725	1,555	1,450	94	42	17	106	48.1
	45	600	1 - 3	43.7	575	3	1/3	1,725	1,555	1,450	94	42	17	106	48.1

^A For motor data, see table.

^C Models can be field wired for 1 or 3 phase.

^D Includes motor Amps.

^E Maximum mounting height for effective heat distribution. Minimum height is 7 feet.

Other Notes —

- All heaters have built-in contactors except 2.6 thru 5 kW single phase models, and 480V and 600V models have built-in control transformers and contactors with 24V holding coils. All 208 and 240V 3 phase models, 4kW and above, have 208/240V holding coils. All stock 277V models have 277V holding coils.
- Optional contactors holding coil voltages of 24V (BT1) or 120V (BT2) and control voltage transformers, are available as made-to-order models for all heater ratings.
- When total heater capacity exceeds 48 Amps, built-in fusing is provided behind a hinged and latched door in the side which allows easy access.

EWH

Hose Down Corrosion Resistant Blower Heater

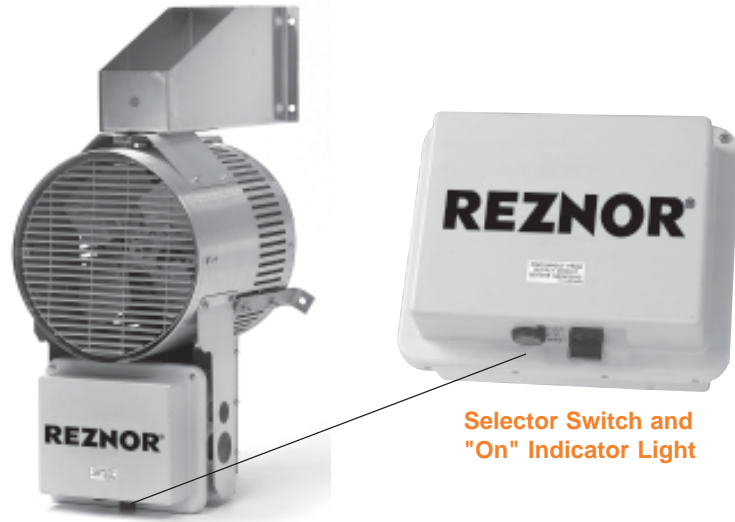
- 2 - 39 kW
- 6,800 - 133,110 Btuh
- 120, 208, 240, 277, 480 and 575 Volt
- 1 & 3 Phase
- Built-in Controls
- Vertical or Horizontal Airflow
- Wall or Ceiling Mounted Configurations

Description

This reliable, rugged, self-contained Model EWH heater is an ideal heat source for freeze protection or comfort heat in dusty/dirty/corrosive nonhazardous environments. Model EWH heaters include low profile stainless steel wall/ceiling mounting brackets that can be used to mount directly to a wall for horizontal airflow perpendicular to the wall. These brackets can also be used to mount the heater directly to the ceiling for vertical airflow.

Applications

Waste Water Treatment Plants, Coal Handling Areas, Food Processing Plants, Foundries, Steel Mills, Cement Plants, Ships, Construction Sites, Car Washes, Swimming Pool Areas, Canneries, Hose Down (for cleaning). Corrosion Resistant for Harsh Environments and Dairies.



Construction

Roll Formed Case is constructed of 20 gauge corrosion resistant type 304 stainless steel.

Adjustable Discharge Grille directs air flow up or down as needed.

NEMA 4X Control Enclosure houses the heater controls, contactors and control voltage transformer, easily accessible from front of heater.

Heating Elements — High quality, long-life, Stainless Steel finned tubular elements (type 316) offers maximum resistance to corrosion.

Totally Enclosed Motor — The motor is permanently lubricated, ball bearing type and is epoxy painted for moisture and corrosion resistance.

Dynamically Balanced Fan — Aluminum fan is epoxy coated and provides optimum air flow across the heating elements.

Features

Transformer provides a 120V control circuit (24V optional). Standard on all units except 2 kW and 3 kW, 120V.

Heavy Duty Contactors for heating circuit and motor are included. (Not furnished on 120V, 2 and 3 kW units)

Automatic Reset Thermal Cutout is provided for fast heat response and overheat protection.

Fan Time Delay Relay dissipates residual heat buildup after shutdown.

Low Profile Fixed Wall & Ceiling Mounting Bracket (Non Swiveling)

Optional Features

- Integral Thermostat
 - 40°F to 90°F (Option IC12)
 - 55°F to 105°F (Option IC13)
- Indicator Light
 - Green Indicates Power On
- Selector Switch (3 position) — Heater On, Off or Fan Only Operation for Heater
- Manual Reset Cutout
- Epoxy Painted Stainless Steel Case
- 24V Control Circuit
- Field Installed Disconnect Switch
- External Drip Shields
- Universal Swivel Wall & Ceiling Bracket

Field Installable Disconnect Kit

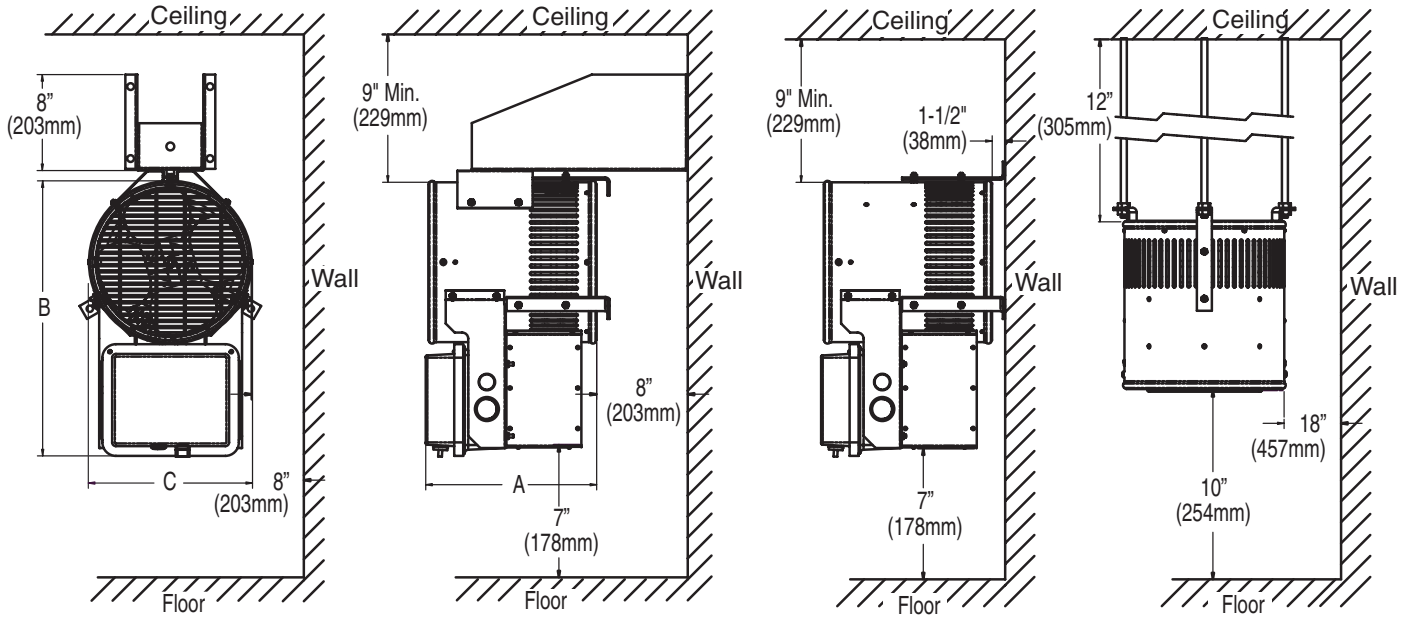
The disconnect kit consists of a complete liquid tight assembly, including a 3-pole 48 Amp Switch, power terminal block and all the hardware to mount to the main heater enclosure. Positive action to remove all power from enclosure.

Advantages

Because it has an adjustable discharge grille to direct air flow, and can be wall or ceiling (plus swivel) mounted, Model EWH may be used in a variety of heating applications:

- Primary Heating
- Supplementary Heating
- Dual System Heating
- Spot Heating
- Entryway Air-Curtain Heating
- Freeze Protection

EWH Hose Down Corrosion Resistant Blower Heater (cont'd.)



Overall Dimensions and Mounting Location

Sizes	Volts	Phase				
			A	B	C	
2 - 7	All	1, 3	in.	13 1/2	24 1/2	15
			mm	(343)	(622)	(381)
10 - 20	All	1, 3	in.	17 1/4	28	15 1/8
			mm	(438)	(711)	(384)
25 - 39	480, 575	3	in.	21 1/4	32 1/4	19 1/2
			mm	(540)	(819)	(495)

EWH Hose Down Corrosion Resistant Blower Heater (cont'd.)

Specifications and Ordering Information

Size	Electrical (60 Hz)				Motor				CFM	Air Delivery			Mtg. ^A Height (Ft.)	Weight	
	kW	Volts	Phase	Amps	Volts	Phase	HP	RPM		FPM	Temp. Rise (°F)	Horiz. Throw (Ft.)		(Lbs.)	(kg)
2	2	120	1	16.7	115	1	1/15	1,050	405	430	21	12	7	45	20
	2	208	1	9.6	208	1	1/15	1,050	405	430	21	12	7	45	20
	2	240	1	8.3	240	1	1/15	1,050	405	430	21	12	7	45	20
	2	277	1	7.2	277	1	1/15	1,050	405	430	21	12	7	45	20
3	3	120	1	25	115	1	1/15	1,050	405	430	31	12	7	45	20
	3	208	1	14.4	208	1	1/15	1,050	405	430	31	12	7	45	20
	3	240	1	12.5	240	1	1/15	1,050	405	430	31	12	7	45	20
	3	277	1	10.8	277	1	1/15	1,050	405	430	31	12	7	45	20
5	5	208	1	24	208	1	1/15	1,050	405	430	40	12	7	50	23
	5	240	1	20.8	240	1	1/15	1,050	405	430	40	12	7	50	23
	5	277	1	18.1	277	1	1/15	1,050	405	430	40	12	7	50	23
	5	480	1	10.4	480	1	1/15	1,050	405	430	40	12	7	50	23
	5	208	3	13.9	208	1	1/15	1,050	405	430	40	12	7	50	23
	5	240	3	12	240	1	1/15	1,050	405	430	40	12	7	50	23
	5 ^B	480	3	6	480	1	1/15	1,050	405	430	40	12	7	50	23
5	575	3	5	575	1	1/15	1,050	405	430	40	12	7	50	23	
7	7.5	208	1	36.1	208	1	1/15	1,050	590	640	37	13	7	50	23
	7.5	240	1	31.3	240	1	1/15	1,050	590	640	37	13	7	50	23
	7.5	277	1	27.1	277	1	1/15	1,050	590	640	37	13	7	50	23
	7.5	480	1	15.6	480	1	1/15	1,050	590	640	37	13	7	50	23
	7.5	208	3	20.8	208	1	1/15	1,050	590	640	37	13	7	50	23
	7.5	240	3	18.1	240	1	1/15	1,050	590	640	37	13	7	50	23
	7.5 ^B	480	3	9	480	1	1/15	1,050	590	640	37	13	7	50	23
7.5	575	3	7.5	575	1	1/15	1,050	590	640	37	13	7	50	23	
10	10	240	1	41.7	240	1	1/15	1,050	1,180	800	28	40	7	60	27
	10	277	1	36.1	277	1	1/15	1,050	1,180	800	28	40	7	60	27
	10	480	1	20.8	480	1	1/15	1,050	1,180	800	28	40	7	60	27
	10	208	3	27.8	208	1	1/15	1,050	1,180	800	28	40	7	60	27
	10	240	3	24.1	240	1	1/15	1,050	1,180	800	28	40	7	60	27
	10 ^B	480	3	12	480	1	1/15	1,050	1,180	800	28	40	7	60	27
10	575	3	10.1	575	1	1/15	1,050	1,180	800	28	40	7	60	27	
12	12.5	277	1	45.1	277	1	1/15	1,050	1,180	800	36	40	7	60	27
	12.5	480	1	26	480	1	1/15	1,050	1,180	800	36	40	7	60	27
	12.5	208	3	34.7	208	1	1/15	1,050	1,180	800	36	40	7	60	27
	12.5	240	3	30.1	240	1	1/15	1,050	1,180	800	36	40	7	60	27
	12.5	480	3	15.1	480	1	1/15	1,050	1,180	800	36	40	7	60	27
	12.5	575	3	12.6	575	1	1/15	1,050	1,180	800	36	40	7	60	27
15	15	480	1	31.3	480	1	1/15	1,050	1,330	900	32	45	7	60	27
	15	208	3	41.7	208	1	1/15	1,050	1,330	900	32	45	7	60	27
	15	240	3	36.1	240	1	1/15	1,050	1,330	900	32	45	7	60	27
	15 ^B	480	3	18.1	480	1	1/15	1,050	1,330	900	32	45	7	60	27
	15	575	3	15.1	575	1	1/15	1,050	1,330	900	32	45	7	60	27
20	19.5	240	3	47	240	1	1/15	1,050	1,330	900	42	45	7	60	27
	20	480	1	41.7	480	1	1/15	1,050	1,330	900	42	45	7	60	27
	20 ^B	480	3	24.1	480	1	1/15	1,050	1,330	900	42	45	7	60	27
	20	575	3	20.1	575	1	1/15	1,050	1,330	900	42	45	7	60	27
25	25	480	3	30.1	480	3	1/3	1,725	2,700	1110	31	48	7	80	36
	25	575	3	25.1	575	3	1/3	1,550	1,800	740	42	48	7	80	36
30	30	480	3	36.1	480	3	1/3	1,725	2,700	1110	37	48	7	80	36
	30	575	3	30.2	575	3	1/3	1,550	1,800	740	50	48	7	80	36
35	35	480	3	42.1	480	3	1/3	1,725	2,700	1110	43	48	7	80	36
	35	575	3	35.2	575	3	1/3	1,550	1,800	740	57	48	7	80	36
39	39	480	3	47	480	3	1/3	1,725	2,700	1110	50	48	7	80	36
	39	575	3	39.2	575	3	1/3	1,550	1,800	740	65	48	7	80	36

^A Mounting height if mounted for horizontal airflow. For vertical mounting, minimum height is 10'.

^B Models can be field re-wired for use on single phase

EXUA

Explosion Proof Blower Heater for Hazardous Locations



- 3 - 35 kW
- 10,200 - 119,420 Btuh
- 208 to 575 Volts
- 1 or 3 Phase
- Meets CSA Requirements
- CE Approved Models Available

Description

Model EXUA is designed to heat areas classified as hazardous locations to provide primary or supplementary heating for comfort or freeze protection.

Applications

- Sewage Treatment Plants
- Petrochemical Facilities, Oil Rigs
- Unattended Pumping Stations
- Chemical Storage and Handling Facilities
- Paint Storage Areas
- Grain Elevators
- Coal Preparation Plants
- Aircraft Servicing Areas
- Oil Refineries
- Areas Containing Metal Dusts

Construction

Cabinet - 14 gauge steel construction with polyester powder coat paint finish.

Adjustable Louvers - Control the direction of airflow as needed.

Rugged, Seamless, Copper Heating Elements - are immersed in the sealed liquid-to-air heat exchanger.

Factory Sealed Heat Exchanger - Features steel tubes with integral aluminum fins and filled with glycol-water heat transfer fluid.

Safety Pressure Relief Device on the heat exchanger is factory helium leak tested to assure a leakproof design.

Explosion Proof Ball Bearing Motor - Permanently lubricated and equipped with built-in thermal overload protection.

Epoxy Coated Aluminum Fan - Prevents sparking.

Features

Pre-Wired Explosion Proof Control Center with magnetic contactor and control circuit transformer.

Quick-acting Manual Reset Cutout

Pole, Wall and Ceiling Mounting Kits - Optional. Recessed threaded fasteners on top of heater for mounting with threaded rods.

Optional Features

- Built-in Thermostat 50°F to 90°F
- Built-in Manual Disconnect Switch
- Heat "On" Indicator Light
- Summer Fan Switch

Designed for Areas Classified

Low operating temperature for atmospheres having an ignition temperature higher than 165°C (329°F) code T3B.

- Class I, Group C, D - Divisions 1 & 2
- Class II, Groups E, F, G - Divisions 1 & 2

Optional Classifications

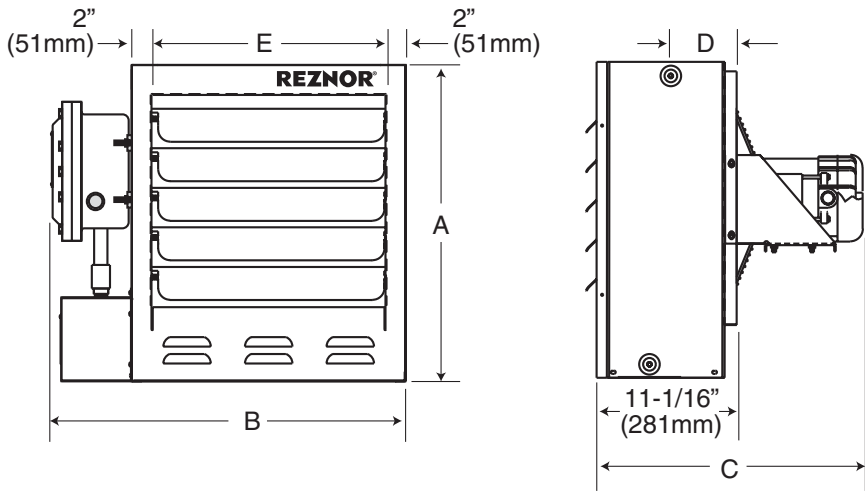
- Temperature Code T3C 160°C (320°F)
 - Class I, Groups C, D - Divisions 1 & 2
 - Class II, Groups F, G - Divisions 1 & 2
- Arctic Duty Construction

Advantages

- Easy Installation
- Safe, Propylene Glycol Heat Transfer Fluid
- Low Surface Temperature
- Wall, Pole or Ceiling Mounting
- Built-in Controls
- Virtually Maintenance Free
- Corrosion Resistant
- 120V Control (24V optional)
- Rugged and Versatile

EXUA Explosion Proof Blower Heater for Hazardous Locations (cont'd.)

Dimensions



Size		A	B ^A	C	D	E (Mtg. Holes) ^B
3 - 10	in.	19 1/8	23 7/8	21	3 1/2	13 5/8
	mm	(486)	(606)	(533)	(89)	(346)
15 - 20	in.	25	27 7/8	21	4 13/32	17 5/8
	mm	(635)	(708)	(533)	(112)	(448)
25 - 35	in.	32 1/8	31 7/8	21 3/4	5 1/2	21 5/8
	mm	(816)	(810)	(552)	(140)	(549)

Notes —

^A Disconnect switch option increases B dimension by 7 inches.

^B E dimension mounting hole center to center.

Mounting Kits (for units without Disconnect Switch)

Post Mounting Kit (CK20)

Particularly useful in buildings with insufficient strength to use other types of mounts. Requires 3-1/2" schedule 40 pipe (4" O.D.) - not supplied.

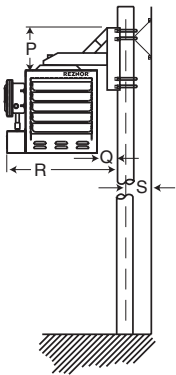
Wall Mounting Kit (CK5)

Ideal for use in buildings that have substantial walls. Arm only can also be bolted directly to structural steel. See next page for mounting unit with Disconnect Switch.

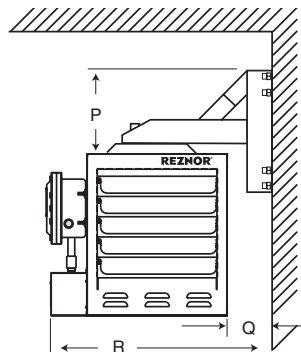
Ceiling Mounting Kit (CK4)

Simple and economical if adequate overhead structure exists. Requires 5/8" rod, cut and threaded (not supplied).

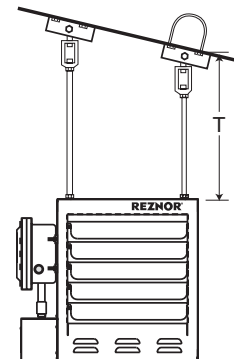
Post Mounting Bracket



Wall Mounting Bracket



Ceiling Mounting Kit



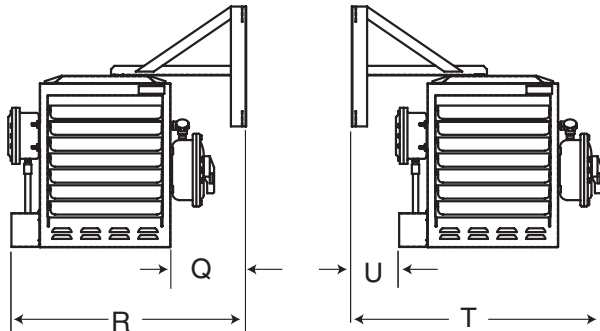
Mounting Kits

Size		P	Q	R	S	T (Min.)
3 - 10	in.	10	5 1/2	29 1/2	6	7
	mm	(254)	(140)	(749)	(152)	(178)
15 - 20	in.	11 1/2	5 1/8	33	6	7
	mm	(292)	(130)	(838)	(152)	(178)
25 - 35	in.	14 1/2	6 3/8	38 1/4	6	7
	mm	(368)	(162)	(972)	(152)	(178)

EXUA

Explosion Proof Blower Heater for Hazardous Locations (*cont'd.*)

Wall Mounting Kits (for models supplied with Disconnect Switch) (Option CK24)



Size		Q	R	T	U	Weight	
3 - 10	in.	7 7/8	31 1/16	30 1/8	6 15/16	Lbs	26
	mm	(200)	(789)	(765)	(176)	kg	(11.8)
15 - 20	in.	13 3/4	40 15/16	35 3/8	8 3/16	Lbs	28
	mm	(349)	(1040)	(899)	(208)	kg	(12.7)
25 - 35	in.	14 7/8	46 1/16	40 1/2	9 5/16	Lbs	30
	mm	(378)	(1170)	(1029)	(237)	kg	(13.6)

Optional Controls & Disconnects

Built-in Adjustable Thermostat

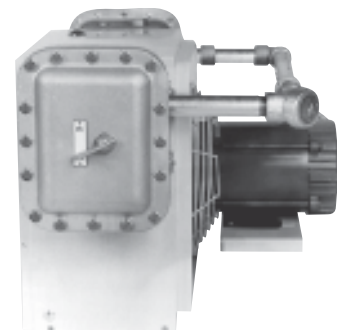
- Temperature range 50°F to 90°F
- Adjustable control knob on exterior of explosion-proof enclosure
- Mounted and wired to heater control center
- Eliminates installation of wall thermostats and associated explosion-proof conduit.
- Factory Installed

Built-in Disconnect Switch

- 15, 30 or 60 Amp as required by application
- Factory installed, eliminating field labor
- Meets National Electric Code (NEC)

Built-in Fan Switch

- Allows fan only operation for cooling



EXUA

Explosion Proof Blower Heater for Hazardous Loca- tions (cont'd.)

Specifications and Ordering Information

Size	Electrical (60 Hz)				Motor				CFM	Air Delivery			Mtg. Height Ft.	Weight	
					Control	Phase	HP	RPM		FPM	Temp. Rise °F	Horiz. Throw Ft.			
	kW	Volts	Phase	Amps	Volts	Phase	HP	RPM		FPM	Temp. Rise °F	Horiz. Throw Ft.		Lbs.	(kg)
3	3	208	1	16.7	120 or 24	1	1/4	1,725	700	900	13	28	8	135	(61.2)
	3	208	3	9.7	120 or 24	3	1/4	1,725	700	900	13	28	8	135	(61.2)
	3	240	1	14.8	120 or 24	1	1/4	1,725	700	900	13	28	8	135	(61.2)
	3	240	3	8.6	120 or 24	3	1/4	1,725	700	900	13	28	8	135	(61.2)
	3	480	3	4.3	120 or 24	3	1/4	1,725	700	900	13	28	8	135	(61.2)
5	5	208	1	26.3	120 or 24	1	1/4	1,725	700	900	22	28	8	135	(61.2)
	5	208	3	15.3	120 or 24	3	1/4	1,725	700	900	22	28	8	135	(61.2)
	5	240	1	23.1	120 or 24	1	1/4	1,725	700	900	22	28	8	135	(61.2)
	5	240	3	13.4	120 or 24	3	1/4	1,725	700	900	22	28	8	135	(61.2)
	5	480	3	6.7	120 or 24	3	1/4	1,725	700	900	22	28	8	135	(61.2)
7	7.5	208	1	38.4	120 or 24	1	1/4	1,725	840	1,070	27	32	10	135	(61.2)
	7.5	208	3	22.2	120 or 24	3	1/4	1,725	840	1,070	27	32	10	135	(61.2)
	7.5	240	1	33.6	120 or 24	1	1/4	1,725	840	1,070	27	32	10	135	(61.2)
	7.5	240	3	19.4	120 or 24	3	1/4	1,725	840	1,070	27	32	10	135	(61.2)
	7.5	480	3	9.7	120 or 24	3	1/4	1,725	840	1,070	27	32	10	135	(61.2)
10	10	208	3	29.2	120 or 24	3	1/4	1,725	840	1,070	36	32	10	140	(63.5)
	10	240	1	44	120 or 24	1	1/4	1,725	840	1,070	36	32	10	140	(63.5)
	10	240	3	25.5	120 or 24	3	1/4	1,725	840	1,070	36	32	10	140	(63.5)
	10	480	3	12.7	120 or 24	3	1/4	1,725	840	1,070	36	32	10	140	(63.5)
	10	575	3	10.6	120 or 24	3	1/4	1,725	840	1,070	36	32	10	140	(63.5)
15	15	208	3	43	120 or 24	3	1/4	1,725	1,450	1,040	31	47	10	160	(72.6)
	15	240	3	37.5	120 or 24	3	1/4	1,725	1,450	1,040	31	47	10	160	(72.6)
	15	480	3	18.7	120 or 24	3	1/4	1,725	1,450	1,040	31	47	10	160	(72.6)
	15	575	3	15.7	120 or 24	3	1/4	1,725	1,450	1,040	31	47	10	160	(72.6)
18	18	240	3	44.7	120 or 24	3	1/4	1,725	1,400	1,000	39	43	10	171	(77.6)
20	20	480	3	24.8	120 or 24	3	1/4	1,725	1,400	1,000	43	43	10	171	(77.6)
	20	575	3	20.7	120 or 24	3	1/4	1,725	1,400	1,000	43	43	10	171	(77.6)
25	25	480	3	31.1	120 or 24	3	1/2	1,725	2,330	1,070	32	54	10	216	(98.0)
	25	575	3	25.8	120 or 24	3	1/2	1,725	2,330	1,070	32	54	10	216	(98.0)
30	30	480	3	37.1	120 or 24	3	1/2	1,725	2,330	1,070	39	54	10	216	(98.0)
	30	575	3	30.2	120 or 24	3	1/2	1,725	2,330	1,070	39	54	10	216	(98.0)
35	35	480	3	43.1	120 or 24	3	1/2	1,725	2,330	1,070	45	54	10	216	(98.0)
	35	575	3	36	120 or 24	3	1/2	1,725	2,330	1,070	45	54	10	216	(98.0)

EXUA

Explosion Proof Blower Heater for Hazardous Loca- tions (*cont'd.*)

Heater Rating and Operating Data

Hazardous Location Classifications: 3 to 35 kW Models - Class I, Group C & D; Class II, Groups E, F & G, Divisions 1 & 2

Temperature Codes: This temperature shall not exceed the ignition temperature of the gas or vapor to be encountered. All standard models 165°C (329°F) T3B

INSTALLATION

Maximum Mounting Height From Floor to Bottom of Heater: 8' to 10' (2.4 to 3 meters) normal, when heat is required at floor level.

Ambient Temperature: -49°F/-45°C (Min.) 104°F/40°C (Max.)

Operating Limits Maximum Operational Altitude Above Sea Level: 7,500 feet (2,286 meters). Check with Reznor Representative for recommendations for higher elevations.

PROTECTION

High-Limit: Manual reset quick acting linear type thermal cutout.

Pressure Relief: Pressure relief device.

HEAT EXCHANGER

General Description: Steel tubes, with integral rolled-aluminum fins

Core Material: Steel.

Heat Transfer Fluid: Propylene Glycol (Ethylene Glycol available for arctic duty - check with your Reznor Representative.)

Heating Element Assembly: Immersion heater assembly with seamless copper sheathed heating elements.

CABINET

Cabinet: 14 gauge steel, polyester powder-coated. Individually adjustable louvers with minimum position stops.

Fan Guard: Heavy duty polyester powder-coated steel.

Fasteners: Nickel plated steel for corrosion resistance.

Conduit Material: Plated steel for corrosion resistance.

Control Enclosure: Cast aluminum (non-copper Alloy) NEMA 7 and 9 enclosure.

Hanger Connections: 2 (two) 5/8" UNC tapped holes.

CONTROLS

Control Circuit: Built in 120V control. Optional 24V control available.

Power Contactor: 50 Amp/600V.

Transformer: Primary voltage same as heater voltage - secondary voltage, 24V or 120V.

EDF & EDI

Finned Tubular Air Duct Heater



- Up to 533 kW
- Up to 35 kW/Ft² Power Densities
- Up to 600 Volt
- 6" x 8" to 40" x 120" Duct Sizes

Models EDI and EDF duct heaters are pre-engineered, factory assembled units consisting of a standard frame section, metal sheath heating elements and a prewired terminal box. They are available in a wide range of standard frame sizes, with various heating capacities and heating stages operating on AC voltage ratings of 120 to 600V.

The standard duct heater is designed to be inserted in a rectangular opening cut in the side of a horizontal or vertical duct. For larger ducts or where it may be more desirable to attach the duct directly to the heater, a frame may be added to the heater.

Applications

- Primary or Secondary Heating
- Reheating or Preheating
- Comfort Heating in Industrial Buildings, Schools, Hospitals, Department Stores, Warehouses and Office Complexes
- Comfort Heating on Shipboard

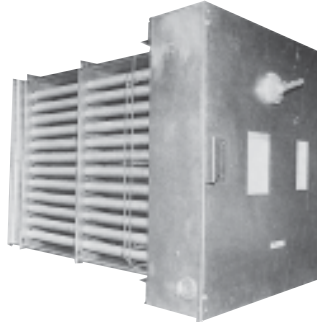
Construction

Heavy Gauge Frame of aluminized, painted or stainless steel.

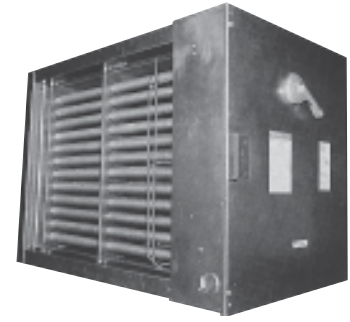
Terminal Box E1 General Purpose or Drip Proof.

Finned Tubular Elements - Fast heat responding, individually replaceable finned tubular elements provide a long life dependable heat source. Heavy mass of elements reduces cycle time and thermal stress. Aluminum painted or Stainless Steel sheath and fin materials are available.

Integral or Remote Control Panel of identical height as duct to ease field installation.



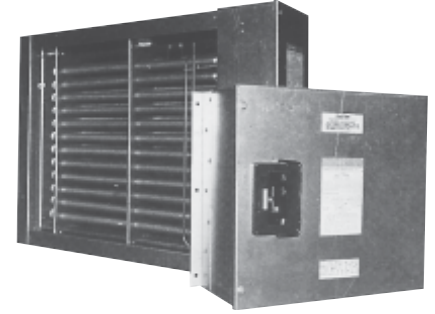
Model EDI — Insert Type with Integral Controls



Model EDF — Flange Type with Integral Controls

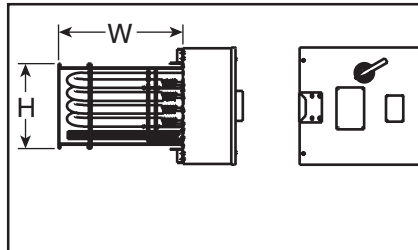


Model EDI — Insert Type with Remote Controls

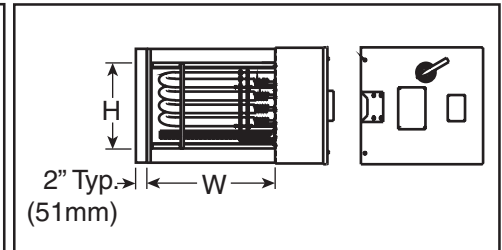


Model EDF — Flange Type with Remote Controls

Insert Type — Dimensions



Flange Type — Dimensions



W = Width of Duct Heater (8 through 120 inches)

H = Height of Duct Heater (6 through 40 inches)

Depth of Duct Heater (6-1/2 through 36 inches)

Features

Insert Heaters - Model EDI has frame dimensions sized so that the entire frame slides through a rectangular opening in the side of the duct.

Flange Heaters - Model EDF has face dimensions that exactly match inside duct dimensions. Heater flanges attach to matching external duct flanges in the field.

Pressure Drop - Lower than tubular duct heaters since fewer, higher watt density elements are required.

For Horizontal or Vertical upflow applications.

Uniform Heat Transfer to airstream since sheath and fins eliminate localized overheating on elements.

Clearance to Combustibles - Listed for zero clearance to combustible materials.

Over-temperature Protection provided with both manual and automatic resets.

Factory Prewired 48 Amp maximum circuits to meet NEC requirements.

Control Options - The fan circuit must be interlocked with the control circuit of the heater. The options are air flow switch, fan interlock relay or fan interlock relay with fan delay. Optional disconnecting means include the choice of non-fused disconnect, fused disconnect or terminal block for remote disconnect by others.

Easy Wiring access through conduit opening in terminal box.

Models EDF & EDI Finned Tubular Air Duct Heater (cont'd.)

Standard Finned Tubular Elements Supplied

Duct Height (In.)	Duct Depth (In.)		
	6.5"	12"	17-1/2"
6	2	3-4	5-6
8	3	4-6	7-9
10	3-4	5-8	9-12
12	6	7-12	13 - 18
14	6-7	8-14	15 - 21
16	6-8	9-16	17 - 24
18	9	10-18	19 - 27
20	9-10	1-20	21 - 30
22	9-11	12-22	23 - 33
24	12	13 - 24	25 - 36
26	12-14	15 - 28	29 - 42
28	15	16 - 30	31 - 45
30	15 - 16	17 - 32	33 - 48
32	15 - 17	18 - 34	35 - 51
34	15 - 17	18 - 34	35 - 51
36	18	19 - 36	37 - 54
38	18 - 19	20 - 38	39 - 57
40	18 - 20	21 - 40	41 - 60

Fan Interlock Selection - UL Standard 1096 requires an acceptable means of interlocking the heater with the fan as an integral part of the heater, factory installed. One of the following must be used.

Differential Switch - The pressure switch method of proving air flow is the most reliable. Minimum requirements are met when the pressure in the sensing tube, combined velocity and static, is greater than the switch setting.

Fan Interlock Relay - A normally open relay (contactor) is wired in series with the duct heater control circuit. The coil of this relay is wired to a terminal block for field connection to the fan motor starter circuit.

Fan Interlock Relay with Fan Delay Control - Delays the fan or blower motor until after the heating elements have reached a selected temperature, eliminating the initial delivery of unwarmed air.

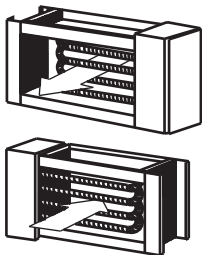
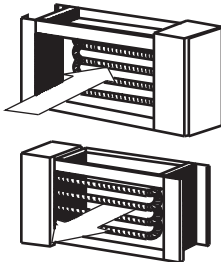
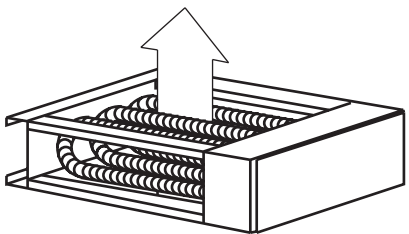
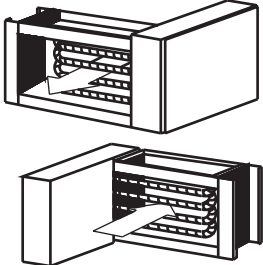
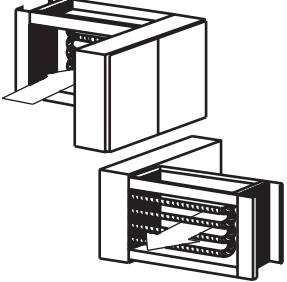
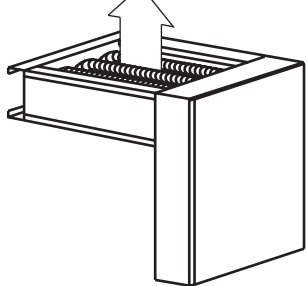
Heating Control Stages - In order to achieve modulating control of the heater, it is possible to specify multiple heating steps or stages.

Normally, the number of stages available depends upon the number of finned tubes per heater. The number of finned tubes per heater is determined by the H dimension of the heater.

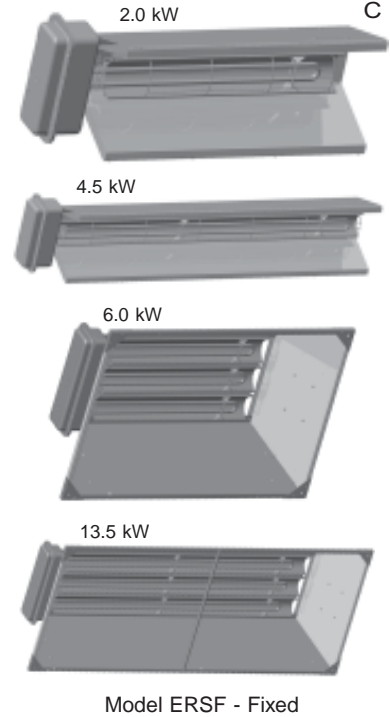
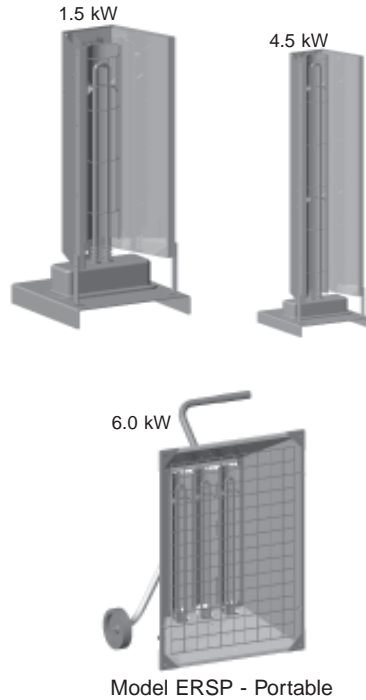
Control Circuit Supply - Optional. Built-in factory wired control transformers are frequently required if a field source of control voltage is unavailable for meeting control circuit requirements.

A complete selection of transformers with primary voltages of 120, 208, 240, 277, 380, 480 and 600V are available. Secondary voltages of 24 and 120 Vac are available. Unless specified, the transformer primary voltage will be the same as the heater line voltage.

Power Disconnect Switch - Optional. To meet the requirement for a disconnect switch at or in sight of the heater, its controls and fuses; a built-in disconnect is available for power loads greater than 200 Amps. When this option is not selected, power terminal blocks will be provided (200 Amps max per block).

 <p>Horizontal Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC1, AJ2</p>	 <p>Horizontal Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC1, AJ1</p>	 <p>Vertical Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC1, AJ3</p>
 <p>Horizontal Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC2, AJ2</p>	 <p>Horizontal Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC2, AJ1</p>	 <p>Vertical Duct — Side terminal box entry for type EDI & EDF heaters. Air flow as shown. Install with this arrow up.</p> <p>Configuration ERC2, AJ3</p>

Models ERSF and ERSP Infra-Red Radiant Heaters



- 1.5 to 13.5 kW
- 5,118 to 46,062 BTU/Hr
- 120, 208, 240, 277, 480, and 600 V
- Single or 3 Phase - Some Models Field Convertible
- Fixed Overhead - Convertible to Portable
- Portable/Factory Assembled
- Optional Accessories
 - Ground Fault
 - Disconnect
 - Tip Over Shut Down

Applications

- Localized heating in large plants
- Loading Docks
- Narrow warehouse aisle heating
- Garages
- Dry paint
- Prevent freezing of pipes, valves
- Heat hoppers

Description

The Reznor Model ERS infrared comfort heater is designed to provide a rugged source of heat for use in areas where dependence on air movement is impractical. The heaters are versatile, designed to provide warmth directly where it is needed for primary or spot heating applications. Each unit is constructed for long life and requires minimal maintenance. There are no moving parts or motors to wear out, no air filters or lubrication required.

Model ERS radiant heaters feature unique heating element terminal construction. This feature lowers the terminal box temperatures resulting in extended element and wiring life.

Extruded aluminum housings are rigid to provide added protection to the heating elements located at the focal point of a built-in mirrored aluminum reflector(s).

The heater consists of hairpin bent .430" diameter alloy sheath tubular element(s) constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element feature unique terminal construction for longer life and cooler terminal enclosure temperatures. The element(s) also feature terminal construction using a waded-in silicone bushings that produce unequalled resistance to moisture absorption. The heating element(s) connect to a gasketed, moisture resistance terminal enclosure with liquid-tight bulkhead threaded fittings. An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern.

Portable

Model ERSP portable heaters sizes 1.5 through 4.5 are mounted on a fixed pedestal. Sizes 6 and 14 are fully assembled and mounted to a rugged, chrome-nickel plated tubular steel cart and handle. The cart features large wheels for easy portability. All portable heaters include safety grills to protect personnel from contacting hot elements.

Field wiring is accomplished through a 3/4" conduit opening in terminal enclosure. The 1.5 kW unit comes complete with a factory installed 6 foot cord and 2 prong grounding type plug. Other sizes require field supplied cable w/plug of gauge suitable to amperage, voltage and cable length.

Fixed Overhead

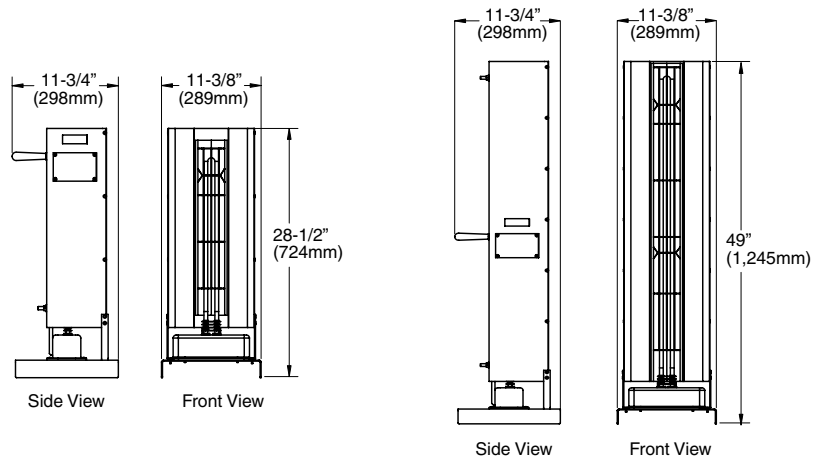
Model ERSF fixed radiant heater is shipped fully assembled and can be hung from the ceiling with 2 chains or rigid angle brackets attached to the heater brackets located on the back of the heater.

Field wiring is accomplished through the liquid tight terminal enclosure. No secondary splice box required.

Protective screens, disconnect switches and portable carts are available for these heaters.

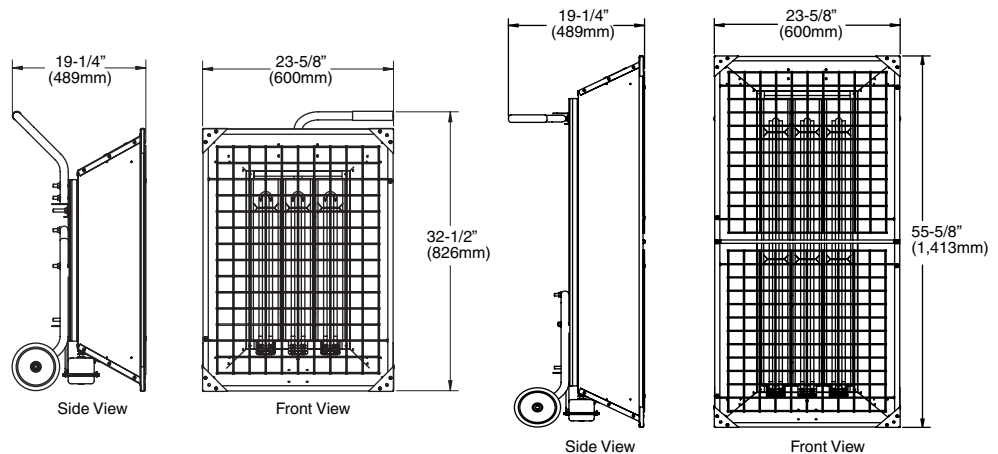
Model ERSP Infra-Red Radiant Heaters (cont'd.)

Portable Radiant Heaters 1.5 to 4.5 kW Dimensions



Size	Electrical						Dimensions (in.)						Weight		
	kW	Volts	Phase	No. Elem.	Amps	Btuh	Height		Base Width		Base Depth				
							in.	mm	in.	mm	in.	mm	Lbs.	kg	
1.5	1.5	120	1	1	12.5	5,118	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)	
	2	2.0	208	1	1	9.6	6,824	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)
		2.0	240	1	1	8.3	6,824	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)
		2.0	277	1	1	7.2	6,824	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)
		2.0	480	1	1	4.2	6,824	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)
4.5	4.5	600	1	1	3.3	6,824	28 1/2	(724)	11 3/8	(289)	11 3/4	(298)	15	(6.8)	
	4.5	208	1	1	21.6	15,354	49	(1,245)	11 3/8	(289)	11 3/4	(298)	25	(11.3)	
	4.5	240	1	1	18.8	15,354	49	(1,245)	11 3/8	(289)	11 3/4	(298)	25	(11.3)	
	4.5	277	1	1	16.2	15,354	49	(1,245)	11 3/8	(289)	11 3/4	(298)	25	(11.3)	
	4.5	480	1	1	9.4	15,354	49	(1,245)	11 3/8	(289)	11 3/4	(298)	25	(11.3)	
4.5	600	1	1	7.5	15,354	49	(1,245)	11 3/8	(289)	11 3/4	(298)	25	(11.3)		

Portable Radiant Heaters 6 to 13.5 kW Dimensions

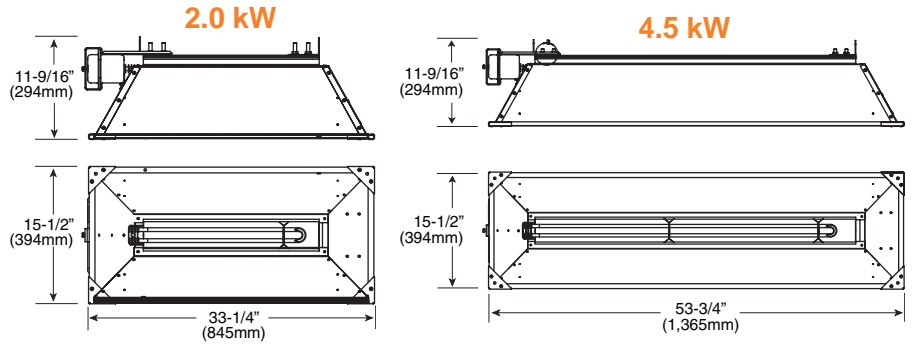


Size	Electrical					Dimensions (in.)						Weight	
	kW	Volts	Phase	Amps	Btuh	Height		Base Width		Base Depth			
						in.	mm	in.	mm	in.	mm	Lbs.	kg
6	6.0	208	3	16.7	20,472	32 1/2	(826)	23 5/8	(600)	1 1/2	(38)	26	(11.8)
	6.0	240	3	14.4	20,472	32 1/2	(826)	23 5/8	(600)	1 1/2	(38)	26	(11.8)
	6.0	277	1	21.7	20,472	32 1/2	(826)	23 5/8	(600)	1 1/2	(38)	26	(11.8)
	6.0	480	3	7.2	20,472	32 1/2	(826)	23 5/8	(600)	1 1/2	(38)	26	(11.8)
	6.0	600	3	5.8	20,472	32 1/2	(826)	23 5/8	(600)	1 1/2	(38)	26	(11.8)
14	13.5	208	3	37.5	46,062	55 5/8	(1,413)	23 5/8	(600)	1 1/2	(38)	44	(20.0)
	13.5	240	3	32.5	46,062	55 5/8	(1,413)	23 5/8	(600)	1 1/2	(38)	44	(20.0)
	13.2	277	1	47.7	46,062	55 5/8	(1,413)	23 5/8	(600)	1 1/2	(38)	44	(20.0)
	13.5	480	3	16.3	46,062	55 5/8	(1,413)	23 5/8	(600)	1 1/2	(38)	44	(20.0)
	13.5	600	3	3	46,062	55 5/8	(1,413)	23 5/8	(600)	1 1/2	(38)	44	(20.0)

Model ERSF Infra-Red Radiant Heaters (cont'd.)

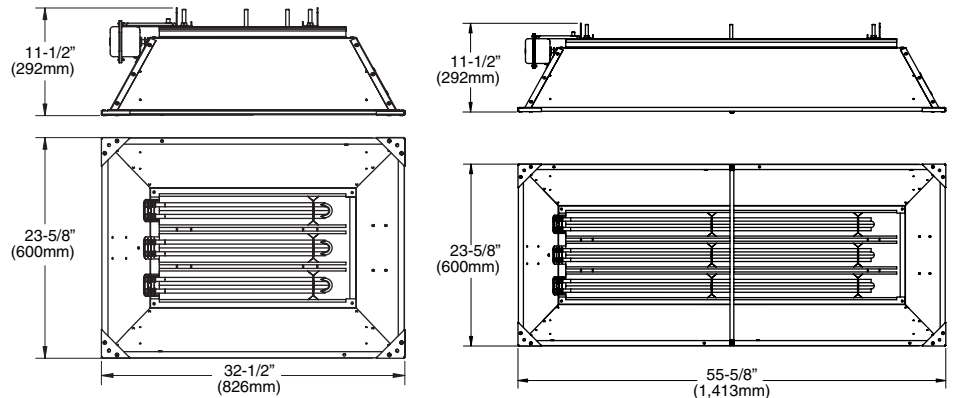
Fixed Overhead Radiant Heaters 2.0 to 4.5 kW Dimensions

U.L Listed Fixed Installations



Size	Electrical					Dimensions (in.)						Weight	
	kW	Volts	Phase	Amps	Btuh	Height		Base Width		Base Depth		Lbs.	kg
						in.	mm	in.	mm	in.	mm		
2	2.0	208	1	9.6	6,824	27 11/16	(703)	9 7/8	(251)	16 13/16	(427)	14	(6.4)
	2.0	240	1	8.3	6,824	27 11/16	(703)	9 7/8	(251)	16 13/16	(427)	14	(6.4)
	2.0	277	1	7.2	6,824	27 11/16	(703)	9 7/8	(251)	16 13/16	(427)	14	(6.4)
	2.0	480	1	4.2	6,824	27 11/16	(703)	9 7/8	(251)	16 13/16	(427)	14	(6.4)
	2.0	600	1	3.3	6,824	27 11/16	(703)	9 7/8	(251)	16 13/16	(427)	14	(6.4)
4.5	4.5	208	1	21.6	15,354	48 3/16	(1,224)	9 7/8	(251)	16 13/16	(427)	23	(10.4)
	4.5	240	1	18.8	15,354	48 3/16	(1,224)	9 7/8	(251)	16 13/16	(427)	23	(10.4)
	4.2	277	1	16.2	15,354	48 3/16	(1,224)	9 7/8	(251)	16 13/16	(427)	23	(10.4)
	4.5	480	1	9.4	15,354	48 3/16	(1,224)	9 7/8	(251)	16 13/16	(427)	23	(10.4)
	4.5	600	1	7.5	15,354	48 3/16	(1,224)	9 7/8	(251)	16 13/16	(427)	23	(10.4)

Fixed Overhead Radiant Heaters 6.0 to 13.5 kW Dimensions



Size	Electrical					Dimensions (in.)						Weight	
	kW	Volts	Phase	Amps	Btuh	Height		Base Width		Base Depth		Lbs.	kg
						in.	mm	in.	mm	in.	mm		
6	6.0	208	3	16.7	20,472	32 1/2	(826)	23 5/8	(600)	11 1/2	(292)	26	(11.8)
	6.0	240	3	14.4	20,472	32 1/2	(826)	23 5/8	(600)	11 1/2	(292)	26	(11.8)
	6.0	277	1	21.7	20,472	32 1/2	(826)	23 5/8	(600)	11 1/2	(292)	26	(11.8)
	6.0	480	3	7.2	20,472	32 1/2	(826)	23 5/8	(600)	11 1/2	(292)	26	(11.8)
	6.0	600	3	5.8	20,472	32 1/2	(826)	23 5/8	(600)	11 1/2	(292)	26	(11.8)
14	13.5	208	3	37.5	46,062	55 5/8	(1,413)	23 5/8	(600)	11 1/2	(292)	44	(20.0)
	13.5	240	3	32.5	46,062	55 5/8	(1,413)	23 5/8	(600)	11 1/2	(292)	44	(20.0)
	13.5	277	1	48.7	46,062	55 5/8	(1,413)	23 5/8	(600)	11 1/2	(292)	44	(20.0)
	13.5	480	3	16.3	46,062	55 5/8	(1,413)	23 5/8	(600)	11 1/2	(292)	44	(20.0)
	13.5	600	3	13	46,062	55 5/8	(1,413)	23 5/8	(600)	11 1/2	(292)	44	(20.0)

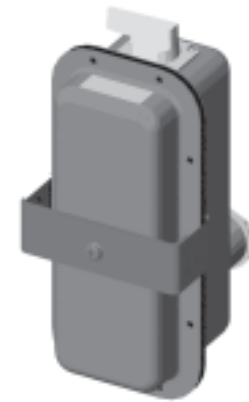
Models ERSF and ERSP Infra-Red Radiant Heaters (cont'd.)

Accessories

For use with both Fixed Overhead and Portable Heaters

Disconnect Kits - Option CP70

The disconnect kit consists of a complete liquid tight assembly including a 3 pole 48 Amp switch, power terminal block and all hardware to mount either the fixed overhead or portable radiant heater.



Portable Kits

Tip Over Switch Kits - Option BX5

Tip-over switch kits can be easily added to all Model ERSP factory assembled portable heaters or Model ERSF fixed overhead heaters which have been modified by use of a portable cart kit. This kit is designed to de-energize the heating elements of unattended units in event the heater is accidentally knocked over. The kit includes a control circuit transformer, magnetic contactor, tip-over switch assembly and on-off toggle switch with rubber boot, completely prewired in a NEMA 4 enclosure. The kit also includes a 1" coupling, wiring between the contactor and heater, mounting bracket, hardware and instructions to complete the installation to the heater.



Part No.	Heater Volts	Weight	
		Lbs	kg
215936	208	14	(6.4)
215937	240	14	(6.4)
215938	277	14	(6.4)
215939	480	14	(6.4)
215940	600	14	(6.4)

Tip-Over Switch and Ground Fault Detector Kits - Option BF18

(for portable Model ERSP6 and 14 Heaters)

The ground fault detector kit includes the components and features of the tip-over kit with the additional protection provided by a ground fault detector. The ground fault detector will monitor for any gradual changes in the insulation level due to humidity or mechanical damage as they develop and will de-energize the contactor to prevent arcing type faults, preventing premature element failure and potential fire damage.

Part No.	Heater Volts	Weight	
		Lbs.	kg
215941	208	16	(7.3)
215942	240	16	(7.3)
215943	277	16	(7.3)
215944	480	16	(7.3)
215945	600	16	(7.3)

Model ERS Infra-Red Radiant Heaters (cont'd.)

Accessories for Fixed Overhead Heaters

Hanger Kit - Option UE4

Hanger kits include 24 feet of chain, 4 “S” hooks to mount units in a fixed overhead position using the universal mounting brackets included on the back of fixed overhead radiant models. The chain is long enough to allow all heaters to be mounted up to 6 feet from the ceiling.

Portable Cart Kits - Option UK2

Model ERSF fixed overhead radiant heaters in sizes 6 and 14 can be field converted to portable spot heaters with the use of the cart kits. Each kit includes wheels, legs, handle, grill(s), baffle (if required) and all of the necessary hardware to complete the modification. These kits are easy to install with standard tools.

Part No.	kW	Weight	
		Lbs.	kg
215946	6	8	(3.6)
215947	13.5	8	(3.6)

Safety Grill Kits - Option DN3

The safety grill kits contain one (2kW, 4.5kW and 6kW) or two grills (13.5kW) to protect personnel from coming in contact with hot heating elements. The grills are constructed of heavy gauge plated steel and are simple to install.

Part No.	Size	Weight	
		Lbs.	kg
215948	2	5	(2.3)
215949	4.5	5	(2.3)
215950	6	6	(2.7)
215951	14	12	(5.4)

Ground Fault Detection - Option BF17

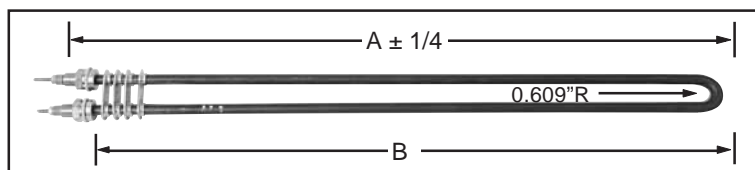
Wall mounted ground fault detectors are designed to monitor for any gradual changes in the insulation level due to humidity or mechanical damage as they develop and will de-energize the load to prevent arcing type faults, preventing premature element failure and potential fire damage. The detector consists of a ground fault sensor, control circuit transformer, magnetic contactor and an on/off toggle switch with rubber boot, completely pre-wired in a NEMA 4 enclosure.

Part No.	Heater Volts	Weight	
		Lbs.	kg
21952	208	16	(7.3)
21953	240	16	(7.3)
21954	277	16	(7.3)
21955	480	16	(7.3)
21956	600	16	(7.3)



Replacement Elements

Part Number	kW	Volts	Win2	Dimensions - inches				Weight	
				A		B		Lbs.	kg
				in.	mm	in.	mm		
215957	1.5	120	32	21 1/2	(546)	20 1/2	(521)	2	(0.9)
215958	2	208	42	21 1/2	(546)	20 1/2	(521)	3	(1.4)
215959	2	240	42	21 1/2	(546)	20 1/2	(521)	3	(1.4)
215960	2	277	42	21 1/2	(546)	20 1/2	(521)	3	(1.4)
215961	2	480	42	21 1/2	(546)	20 1/2	(521)	3	(1.4)
215962	2	600	42	21 1/2	(546)	20 1/2	(521)	3	(1.4)
215963	4.5	208	42	43 3/8	(1,102)	42 3/8	(1,076)	4	(1.8)
215964	4.5	240	42	43 3/8	(1,102)	42 3/8	(1,076)	4	(1.8)
215965	4.5	277	42	43 3/8	(1,102)	42 3/8	(1,076)	4	(1.8)
215966	4.5	480	42	43 3/8	(1,102)	42 3/8	(1,076)	4	(1.8)
215967	4.5	600	42	43 3/8	(1,102)	42 3/8	(1,076)	4	(1.8)



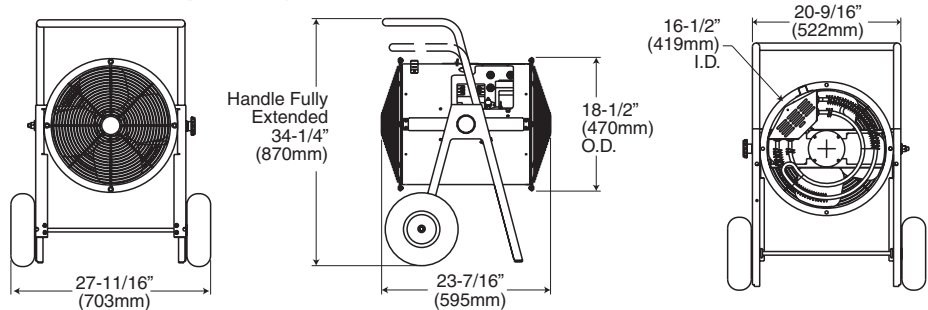
EPB

Portable Spot Industrial Blower Heater



- 7.5 to 30 kW
- 25,590 to 102,360 BTUH
- 208, 240, 480 and 600 Volts
- Single and Three Phase
- No Assembly Required
- Built-in Controls

Dimensions (Inches)



Description

Model EPB is a rugged industrial grade, self contained, highly mobile, electric blower heater. Model EPB can be left unattended without the threat of poisoning from combustion by-products associated with fuel fired heaters. The built in safety features include an adjustable thermostat to control the outlet air temperature, auto-reset cutouts for the fan motor and heating elements. The thermostat provides settings for full off, fan only and temperature control in the heating setting. Model EPB heaters feature a large, easily accessible control and wiring compartment containing a magnetic contactor; additional safety is provided by a 120 volt control voltage transformer and motor starter on 480 and 600 volt units. The bright red polyester powder coated heating cylinder is highly visible and can be rotated to direct heat or fan driven air movement where it is needed. For assured safety, all standard units meet the requirements of CSA (File No. LR40859).

Construction

Heating Cylinder - A structural frame consisting of 2 spun steel rings and 2 formed steel channels support a 20 gauge steel cylinder phosphate coated for corrosion resistance, and finished in red polyester powder coat paint. The heating cylinder pivots vertically to direct air flow.

Leg Assembly - Each side consists of a one piece, 12 gauge, formed steel member, which accepts a steel tubular handle, held in place with a 1 1/2" long x 1/4" bolt on each side. The handle can be raised from the shipping position if desired. The rubber, pneumatic wheels are 10" diameter and 3 1/2" wide to provide ease of transporting the heater on irregular and gravel surfaces. The large wheels make it easy to roll up stairways without damage to decorative step surfaces.

Fan Assembly - The self-centering fan assembly consists of a totally enclosed, permanently lubricated motor and a dynamically balanced aluminum fan blade for smooth, quiet operation.

Controls - A thermostat, with a temperature range of 40°F to 100°F is included, with a full off position, a fan only position and an adjustable range of temperature settings in the heating mode position. Each unit includes a 3 pole magnetic contactor and auto-reset thermal cutout. 480 volt and 600 volt units also include a motor relay and 120 volt control voltage transformer for personnel safety.

Safety Guards - Front and rear grills are 10 gauge, finished in black polyester powder coat and are designed to meet OSHA safety requirements.

Heating Assembly - The patented metal sheath finned tubular heating elements consist of steel fins furnace brazed on industrial grade .475 diameter steel sheath tubular heaters for maximum heat transfer. The elements are held in place with steel bulkhead fittings for durability. The elements feature a high temperature finish for corrosive protection.

Applications

- For Best Results Use in Enclosed Area with Ceiling Heights Below 15 feet
- Any Commercial or Industrial Application Needing Instant Fan Forced Heat
- Heating Trailers
- Building Construction
- Curing Plaster and Concrete
- Warming Workers
- Thawing Frozen Pipes
- Thawing Railroad Cars
- Heating Large Tents
- Non-Hazardous Areas

EPB

Portable Spot Industrial Blower Heater (cont'd.)

Specifications And Ordering Information

Size	kW	Volts	Phase	Amps ^A	BTU/H	HP	CFM	Temp. Rise °F ^B	Weight	
									Lbs.	kg
7	7.5	208	1 and 3	36.3/21.0	25,590	0.06	1070	23	65	(29.5)
	7.5/5.6	240/208	1 and 3	31.5/18.3 ^C	25,590	0.06	1070	23	65	(29.5)
10	9.75	208	1 and 3	47.1/27.3	33,267	0.06	1070	31	65	(29.5)
	10/7.5	240/208	1 and 3	40.8/23.7 ^C	33,267	0.06	1070	31	65	(29.5)
15	15	208	3	41.8	51,180	0.06	1070	46	65	(29.5)
	15/11.2	240/208	3	36.3 ^C	51,180	0.06	1070	46	65	(29.5)
	15	480	1 and 3	31.4/18.2	51,180	0.06	1070	46	65	(29.5)
	15	600	1 and 3	25.2/14.6	51,180	0.06	1070	46	65	(29.5)
20	19.5/15	240/208	3	47.1 ^C	66,534	0.06	1070	61	75	(34.0)
	20	480	1 and 3	42.0/24.4	68,240	0.06	1070	62	75	(34.0)
	20	600	1 and 3	33.5/19.4	68,240	0.06	1070	62	75	(34.0)
30	30	480	3	36.3	102,360	0.06	1070	92	75	(34.0)
	30	600	3	29.1	102,360	0.06	1070	92	75	(34.0)

^A Includes motor amps

^B Temperature rise at 240V operation

^C 208V amperage is 86% of 240V value

LIMITED PRODUCT WARRANTY

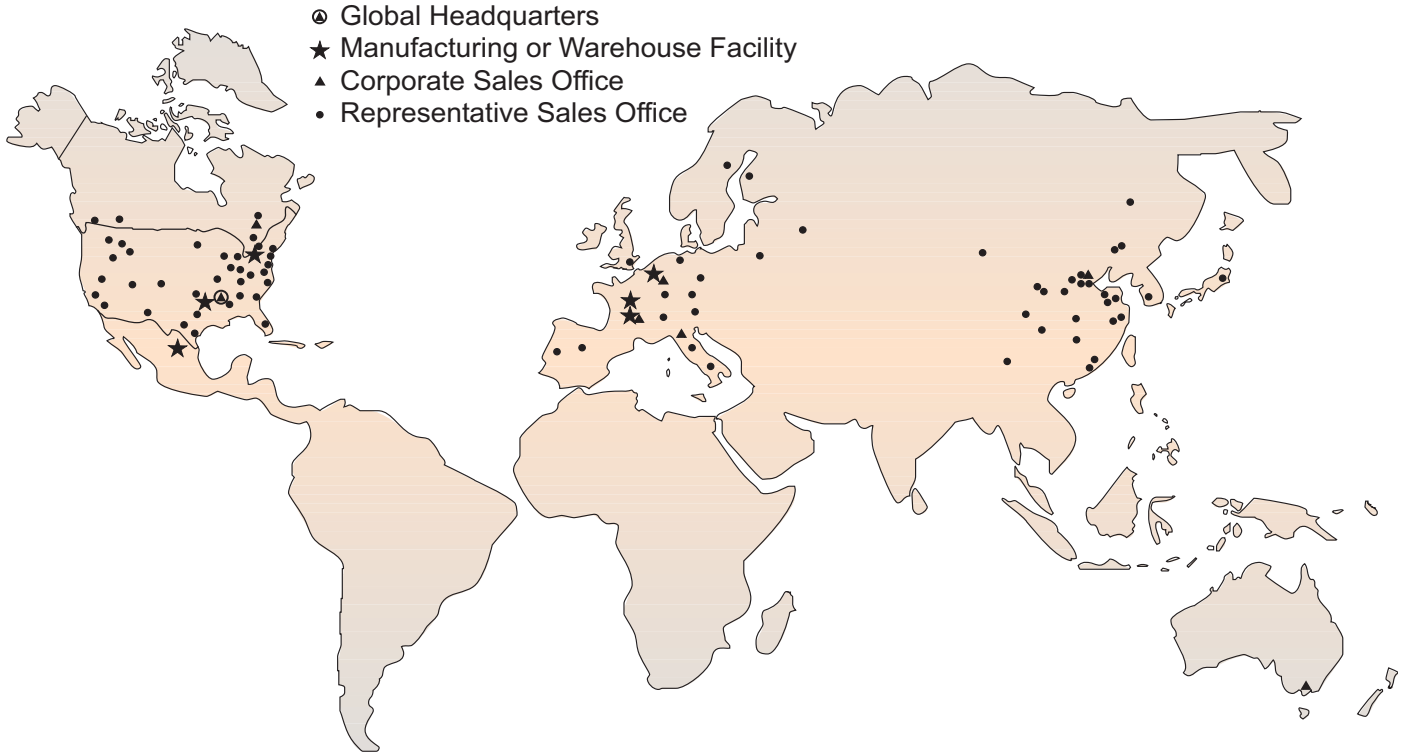
Thomas & Betts Corporation warrants to the original owner-user that this Reznor product will be free from defects in material or workmanship. This warranty is limited to twelve (12) months from the date of original installation, whether or not actual use begins on that date, or eighteen (18) months from date of shipment by Thomas & Betts Corporation, whichever occurs first.

LIMITATIONS AND EXCLUSIONS

Thomas & Betts Corporation's obligations under this warranty and the sole remedy for its breach are limited to repair, at its manufacturing facility, of any part or parts of its Reznor products which prove to be defective; or, in its sole discretion, replacement of such products. All returns of defective parts or products must include the product model number and serial number, and must be made through an authorized Reznor distributor or arranged through Reznor Customer Service. Authorized returns must be shipped prepaid. Repaired or replacement parts will be shipped by Thomas & Betts F.O.B. shipping point.

1. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, installation, service or handling of parts or complete products.
2. All claims under the warranty provided herein must be made within ninety (90) days from the date of discovery of the defect. Failure to notify Thomas & Betts of a warranted defect within ninety (90) days of its discovery voids Thomas & Betts's obligations hereunder.
3. The warranty provided herein shall be void and of no effect in the event that (a) the product has been operated outside its designed output capacity (heating, cooling, airflow); (b) the product has been subjected to misuse, neglect, accident, improper or inadequate maintenance, corrosive environments, environments containing airborne contaminants (silicone, aluminum oxide, etc.), or excessive thermal shock; (c) unauthorized modifications are made to the product; (d) the product is not installed or operated in compliance with the manufacturer's printed instructions; (e) the product is not installed and operated in compliance with applicable building, mechanical, plumbing and electrical codes; or (f) the serial number of the product has been altered, defaced or removed.
4. The warranty provided herein is for repair or replacement only. Thomas & Betts Corporation shall not be liable for any loss, cost, damage, or expense of any kind arising out of a breach of the warranty. Further, Thomas & Betts Corporation shall not be liable for any incidental, consequential, exemplary, special, or punitive damages, nor for any loss of revenue, profit or use, arising out of a breach of this warranty or in connection with the sale, maintenance, use, operation or repair of any Reznor product. In no event will Thomas & Betts be liable for any amount greater than the purchase price of a defective product. The disclaimers of liability included in this paragraph 4 shall remain in effect and shall continue to be enforceable in the event that any remedy herein shall fail of its essential purpose.
5. THIS WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY FOR REZNOR PRODUCTS, AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES. THOMAS & BETTS CORPORATION SPECIFICALLY DISCLAIMS ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. No person or entity is authorized to bind Thomas & Betts Corporation to any other warranty, obligation or liability for any Reznor product. Installation, operation or use of the Reznor product for which this warranty is issued shall constitute acceptance of the terms hereof.

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MANUFACTURER OF GAS, OIL, ELECTRIC HEATING, COOLING AND VENTILATING EQUIPMENT

1105 OG POD

Form RZ-NA-C-EH

(Version B)

Thomas&Betts