

## TECHNICAL SPECIFICATIONS FOR MODEL EUH

### INDOOR COMMERCIAL/INDUSTRIAL LOW-STATIC AXIAL FAN ELECTRIC RESISTIVE UNIT HEATER



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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 equipment information shown here.**

## TECHNICAL SPECIFICATIONS—CONTINUED

### Unit Sizes

These units are available in eight unit sizes based on heating capacity of 3,000–30,000 watts.

### Features

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**NOTE: More information is available upon request.**

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- Voltage/phase options: 208/1, 208/3, 240/1, 240/3, 277/1, 480/3, and 600/3
- Corrosion-resistant 20-gauge hot rolled steel cabinet:
  - Impact-, solvent-, and scratch-resistant per relevant ASTM standards
  - Salt spray performance  $\geq$ 1,000 hours per ASTM B117
  - G30 grade steel galvanizing, adhesive primer, and topcoat
  - Two-tone black and white glossy paint scheme
- Reznor Robust™ housing with integrated horizontal louvers and removeable front face
- Clean rounded corners and edges
- Hinged access door panel with quarter-turn latch
- Standard two-point suspension and wall hanger on all unit sizes
- Vibration- and noise-isolated fan motor designed for low-noise operation— steel fan blade with aluminum hub—full fan guard
- Enclosed stainless steel, sheathed and finned heating elements
- High-temperature limit control with automatic reset and air-proving switch protection
- External terminal strip for 24V wiring
- Unit sizes 3, 5, 7, and 10 are field-adjustable to 3-phase electrical power to reduce amperage demand and operating expense
- Unit sizes 15, 20, 25, and 30 feature two-stage operation so that heating can be tailored to actual demand to reduce unit cycling and improve comfort

### Factory-Installed Options

Option	Description
AK4	277/1/60 voltage (unit sizes 3, 5, 7, and 10)
AK6E	240/3/60 voltage (unit size 20)
AK7E	480/3/60 voltage
AK8E	600/3/60 voltage (unit sizes 15, 20, 25, and 30)
AK20	208-240/3/60 voltage (unit size 15)
AK44	208-240/1/60 voltage (unit sizes 3, 5, 7, and 10, field-convertible from 1- to 3-phase)
BA6	Lockable, non-fused disconnect switch

### Field-Installed Options

Option	Description
CK8	Adapts 3/8-inch hangers for two-point suspension from 1-inch threaded pipe
CK22	Angle brackets for low ceiling mounting (does not include hanger rods)
CL1	Single-stage thermostat
CL22	Two-stage thermostat
CL31, CL32	Multiple unit control: option CL31 includes components for one control unit and one additional unit—option CL32 includes components for each additional non-control unit
CL90	BACnet-capable thermostat
CM1	Locking cover for CL1 thermostat
CM1B	Locking cover for CL22 thermostat
CM3	Bracket assembly for mounting thermostat on unit
CN3F	Remote ON/OFF switch in 2 × 4 box
IT13	Unit-mounted thermostat

## Technical Data

Parameter	Unit of Measure	Unit Size (kW)							
		3	5	7	10	15	20	25	30
Heating capacity	kW	3	5	7	10	15	20	25	30
	BTUh	10,236	17,060	23,884	34,121	51,182	68,242	85,303	102,364
Minimum air volume (limit cutout)	CFM	125	158	296	191	263	357	446	504
	meter <sup>3</sup> /minute	3.54	4.476	8.38	5.40	7.44	10.11	12.63	14.27
Maximum air volume	CFM	431	479	740	957	1215	1290	1612	1663
	meter <sup>3</sup> /minute	12.20	13.56	20.90	27.10	34.40	36.53	45.65	47.09
Fan motor size	HP	0.03		0.07			0.17		
Fan size	inch	10			12	16		18	
Control amps, 24V	amp	1.6							

Parameter	Unit of Measure	Unit Size (kW)																
		3				5				7				10				
		Voltage																
		208	240	277	480	208	240	277	480	208	240	277	480	208	240	277	480	
Nominal kW	kW	3				5				7				10				
Actual kW		2.3	3.0			4.0	5.3			5.5	7.3			7.5	9.9			
Actual (1-phase)	amp	10.8	12.5	10.8	6.3	19.1	22.1	19.1	11.0	26.3	30.4	26.4	15.2	36.1	41.3	35.7	20.6	
MCA (1-phase)		11.2	12.9	11.2	6.6	19.5	22.5	19.5	11.4	26.7	30.8	26.7	15.6	36.4	41.6	36.1	21.0	
FLA (1-phase)		11.1	12.8	11.1	6.6	19.4	22.4	19.4	11.3	26.6	30.7	26.7	15.5	36.4	41.6	36.0	20.9	
MOP (1-phase)		15.0	20.0	15.0		25.0	30.0	25.0	15.0	35.0	40.0	35.0	20.0	50.0	55.0	45.0	30.0	
Actual (3-phase)		6.2	7.2	6.3	3.6	11.0	12.7	11.0	6.4	15.2	17.6	15.2	8.8	20.8	23.8	20.6	11.9	
MCA (3-phase)		6.6	7.6	—		4.0	11.4	13.1	—		6.7	15.6	17.9	—		9.2	21.2	24.2
FLA (3-phase)		6.5	7.5	—		3.9	11.3	13.0	—		6.7	15.5	17.9	—		9.1	21.1	24.1
MOP (3-phase)		15.0		—		15.0	15.0	20.0	—		15.0	20.0	25.0	—		15.0	30.0	35.0
Temperature rise	°F	22				33				32				33				

Setting	Parameter	Unit of Measure	Unit Size (kW)															
			15				20				25				30			
			Voltage															
		208	240	480	600	240	480	600	480	600	480	600						
—	MCA (3-phase)	amp	32.2	37.1	19.0	14.8	49.1	24.4	19.6	30.4	24.4	36.5	29.2					
	FLA (3-phase)		32.0	36.9	18.3	14.7	48.9		19.5			36.4						
	MOP (3-phase)		45.0	50.0	25.0	20.0	60.0	30.0	25.0	40.0	35.0	50.0	40.0					
Low heat	Nominal kW	kW	7.4	10.0								15.0		20.0				
	Actual kW		5.6															
	Actual (3-phase)	amp	26.8	41.3	20.6	16.5	41.7	20.8	16.7	31.3	25.0	41.7	33.3					
Temperature rise	°F	19	26				24				29		28					
High heat	Nominal kW	kW	15.0	15.0				20.0				25.0		30.0				
	Actual kW		11.3															
	Actual (3-phase)	amp	31.2	36.1	18.0	14.4	48.1	24.1	19.2	30.1	24.1	36.1	28.9					
Temperature rise	°F	39				49				57								

## Certification

This unit is listed by Intertek to UL 2021 and CSA C22.2 #46 for use in the US and Canada.

## Installation Codes

- This unit must be installed in accordance with local building codes. Local authorities having jurisdiction should be consulted before installation is made to verify local codes and installation procedure requirements.
- All electrical wiring and connections, including electrical grounding MUST BE made in accordance with the *National Electric Code* ANSI/NFPA No. 70 (latest edition) or, in Canada, the *Canadian Electric Code*, Part 1 (CSA C.22.1). In addition, the installer should be aware of any local ordinances or gas company requirements that might apply.

## TECHNICAL SPECIFICATIONS—CONTINUED

### Heater Throw with Standard Horizontal Louvers

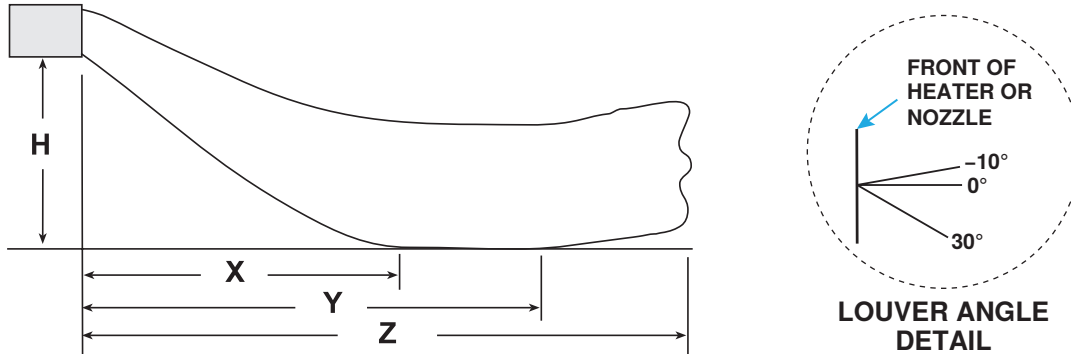
The graphic shows throw patterns and the table lists throw distances for units suspended at varying mounting heights.

**H** = the distance from the bottom of the heater to the floor

**X** = the distance from the heater to the start of floor coverage

**Y** = the distance from the heater to the end of floor coverage

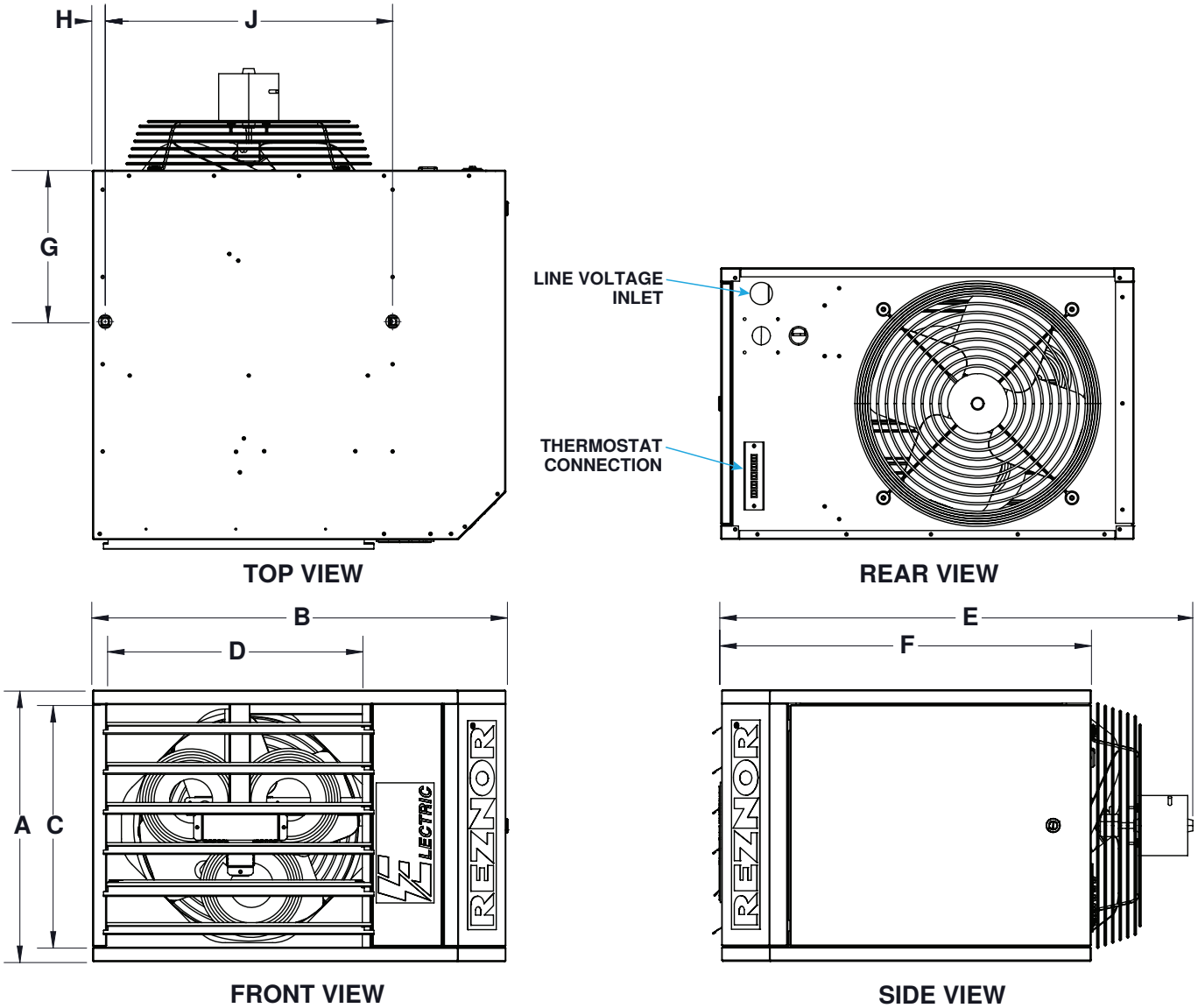
**Z** = the distance at which air velocity drops below 50 feet (15.2 meters) per minute



Dimension H* (Feet (Meters))	Louver Angle* and Dimension*	Unit Size (kW)							
		3	5	7	10	15	20	25	30
		Feet (Meters)							
6 (1.8)	Angle	36°	27°	27°	27°	22°	22°	22°	22°
	X	4 (1.2)	5 (1.5)	7 (2.1)	6 (1.8)	13 (4.0)	11 (3.4)	10 (3.0)	10 (3.0)
	Y	8 (2.4)	13 (4.0)	15 (4.6)	14 (4.3)	19 (5.8)	23 (7.0)	28 (8.5)	27 (8.2)
	Z	18 (5.5)	22 (6.7)	36 (11.0)	36 (11.0)	37 (11.3)	37 (11.3)	42 (12.8)	41 (12.5)
8 (2.4)	Angle	—	36°	34°	30°	27°	27°	27°	27°
	X	—	5 (1.5)	9 (2.7)	6 (1.8)	14 (4.3)	11 (3.4)	9 (2.7)	8 (2.4)
	Y		10 (3.0)	15 (4.6)	14 (4.3)	19 (5.8)	28 (8.5)	28 (8.5)	28 (8.5)
	Z		16 (4.9)	32 (9.8)	36 (11.0)	37 (11.3)	39 (11.9)	39 (11.9)	39 (11.9)
10 (3.0)	Angle	—	36°	36°	32°	32°	32°	32°	
	X	—	6 (1.8)	6 (1.8)	13 (4.0)	12 (3.7)	8 (2.4)	9 (2.7)	
	Y		15 (4.6)	14 (4.3)	18 (5.5)	28 (8.5)	27 (8.2)	25 (7.6)	
	Z		26 (7.9)	34 (10.4)	34 (10.4)	38 (11.6)	36 (11.0)	36 (11.0)	
12 (3.7)	Angle	—	36°	36°	45°	45°	36°	36°	
	X	—	12 (3.7)	10 (3.0)	11 (3.4)	10 (3.0)	12 (3.7)	10 (3.0)	
	Y		14 (4.3)	15 (4.6)	16 (4.9)	22 (6.7)	24 (7.3)	22 (6.7)	
	Z		20 (6.1)	33 (10.0)	27 (8.2)	31 (9.4)	34 (10.4)	34 (10.4)	
14 (4.3)	Angle	—						45°	45°
	X	—	—				12 (3.7)	12 (3.7)	
	Y		—				18 (5.5)	16 (4.9)	
	Z		—				25 (7.6)	25 (7.6)	

\*See graphic above.

# Dimensions



Cabinet Size	Unit Size (kW)	Dimension (See Graphic Above)								
		A	B	C	D	E	F	G*	H	J
Inches (mm)										
1	3, 5, 7, 10	15-1/4 (388)	23-11/32 (593)	13-5/8 (347)	14-11/32 (365)	27-31/32 (711)	20-7/8 (531)	8-9/16 (217)	25/32 (20)	16-5/32 (411)
2	15, 20, 25, 30	21-1/8 (537)	28-5/32 (716)	19-1/2 (496)	19-11/32 (492)	33-13/32 (849)	24-3/4 (629)	10-9/16 (268)		21-7/32 (539)

\*Hanger dimension for two-point suspension.

## TECHNICAL SPECIFICATIONS—CONTINUED

### Clearances

The unit must be located so that the clearances are provided for with regards to inspection and service and for proper spacing from combustible construction. Clearance to combustibles is defined as the minimum distance from the unit to a surface or object for which it is necessary to ensure that a surface temperature of 117°F (65°C) above the surrounding ambient temperature is not exceeded.

Unit Surface	Minimum Clearance (Inches (mm))
Top	1 (25)
Access panel	21 (533)
Non-access side	1 (25)
Bottom*	1 (25)
Rear from fan motor	18 (457)

\*Suspend the unit so that the bottom is a minimum of 6 feet (1.8 meters) above the floor.

### Weights

Type	Unit Size (kW)							
	3	5	7	10	15	20	25	30
	Pounds (kg)							
Unit	49 (23)	50 (23.5)	51 (24)	53 (25)	82 (38)	92 (42)	97 (44)	101 (46)
Shipping	63 (28.5)	64 (29)	65 (30)	67 (31)	100 (46)	110 (50)	115 (53)	119 (54)

### Electrical Connections

#### ⚠ CAUTION ⚠

- **Ensure that Ground Fault Overcurrent Protection (GFOC) and the Short Circuit Current Rating (SCCR) are adequate and provided for at the installation location.**
- **Ensure that all wiring is in accordance with the wiring diagram provided with the unit.**
- **All electrical wiring and connections, including electrical grounding MUST be made in accordance with the *National Electric Code* (ANSI/NFPA No. 70, latest edition) or, in Canada, the *Canadian Electric Code* (Part 1, CSA C.22.1, latest edition). In addition, the installer should be aware of any local ordinances that might apply.**
- **All external wiring must be within approved conduit and have a minimum temperature rise rating of 140°F (60°C). Conduit must be run so as not to interfere with the access panel.**

Check the rating plate on the unit for the supply voltage and current requirements. A dedicated line voltage supply with a disconnect switch should be run directly from the main electrical panel to the unit.

**NOTE: IMPORTANT (BEFORE CONNECTING THE SUPPLY WIRING): Determine if units with option AK6E or AK44 require field-modification of the transformer or contactor wiring.**

## NOTES

## ⚠ DANGER ⚠

- This unit has hot parts inside. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- This unit is hot when in use. To avoid burns, do not let bare skin touch hot surfaces.
- Do not operate any unit after it malfunctions. Disconnect power at the service panel and have the unit inspected by a reputable electrician before reusing.
- Do not use outdoors.
- Do not insert or allow foreign objects to enter any unit opening as this may cause electrical shock, fire, or damage to the unit.
- To prevent a possible fire, do not block air intakes or exhaust in any way whatsoever.
- Use this unit only as recommended by the manufacturer. Any other use may cause electrical shock, fire, or damage to the unit.

For more information on Reznor HVAC products:

- Contact your local Reznor representative at 1-800-695-1901
- Refer to the manuals and additional consumer materials found at [www.reznorhvac.com](http://www.reznorhvac.com)

