

TECHNICAL SPECIFICATIONS FOR MODEL RIHP

COMMERCIAL/INDUSTRIAL GAS-FIRED INFRARED PATIO 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 patio heaters are available in two unit sizes based on 35,000 and 50,000 BTU/h input.

Features

- Voltage/phase/Hz: 115/1/60
- Natural gas or propane
- For indoor/outdoor spaces including restaurant patios, garages, decks and more
- Withstands rain and snow and winds up to 40 MPH
- Weather-resistant zinc-plated burner box with black high-temperature powder-coated paint
- Single- or two-stage operation
- Two-stage control system—single-stage available with factory-supplied jumper wire
- Potted (water-resistant) direct spark ignition control
- NO_x emission levels as low as 15 PPM (adjusted for 3% O₂)—below nationally-recognized levels as defined by California Energy Commission

Factory-Installed Options

Option	Description
AA1	Natural gas
AA2	Propane
AK1	115/1/60 voltage

Field-Installed Options

Option	Description
CK57	Ceiling mount bracket kit (for use with option DO4)
CK58	Wall/ceiling mount bracket kit, telescopic
CN19	Manual control switch (HIGH/LOW/OFF)
CN20	Controller with 60-minute timer and luminated three-position switch for recessed wall applications (controls up to eight additional heaters)
CZ7	Regulator with vent-limiting device
DO4	Heat shield kit
IRT1	Two-stage relay kit for controlling multiple heaters with 24V two-stage thermostat
UF4	Stainless steel black powder-coated gas connector, 1/2 × 1/2 × 24

Technical Data

Parameter	Unit of Measure	Unit Size (MBTU/h)	
		35	50
Input heating capacity, low fire	BTU/h	24,000	34,000
Input heating capacity, high fire		35,000	50,000
Burner pressure, natural gas	IN WC	6	
Burner pressure, propane		11	
Minimum inlet pressure, natural gas		7	
Minimum inlet pressure, propane		11.5	
Maximum inlet pressure, natural gas and propane		14	
Gas connection	inch	1/2	

Certification

These patio heaters are design certified by CSA—ANSI Z83.19 and ANSI Z83.26— for use in the United States and in Canada. They are approved for indoor (vented) or outdoor (unvented) use with either natural gas or propane. In indoor and tightly-sealed buildings, ventilation is required. Indirect vented installation requires a minimum of 4 CFM per 1,000 BTU/h of total installed heater capacity with natural gas by either gravity- or power-ventilation.

Installation Codes

- These units 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 that might apply.

Heater Location

The heater may be mounted horizontally or angled (up to 60-degrees). An optional adjustable mounting bracket is available for ceiling suspension or angled mounting from a column or wall.

NOTE: Suggested mounting heights and spacing are subject to site conditions. The heater can be operated in excessive weather conditions, however, excessive weather and high wind (>15 MPH) can reduce heater effectiveness.

Mounting Orientation	Unit Size (MBTU/h)			
	35		50	
	Mounting Height	Spacing Between Units	Mounting Height	Spacing Between Units
	Feet (Meters)			
Horizontal	8–11 (2.50–3.50)	8–16 (2.50–5.00)	9–12 (2.75–3.75)	8–16 (2.50–5.00)
Angled	7–9 (2.25–2.75)	6–18 (2.00–5.50)	8–11 (2.50–3.50)	10–20 (3.25–6.25)

Dimensions



Unit Size (MBTU/h)	Dimension (See Graphic Above)		
	A	B	C
	Inches (mm)		
35	9.5 (242)	11.81 (300)	48 (1220)
50		13.37 (340)	

Weights

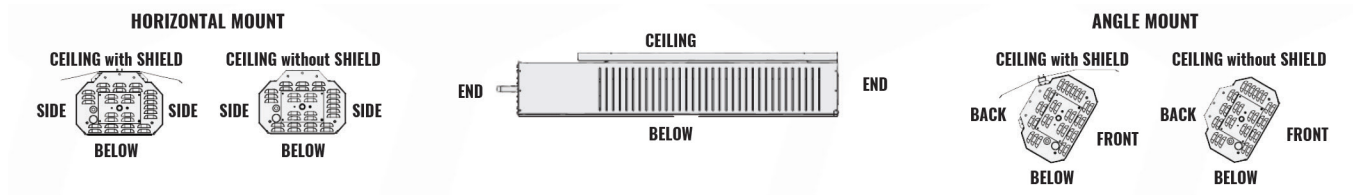
Unit Size (MBTU/h)	
35	50
Pounds (kg)	
55 (25)	62 (29)

TECHNICAL SPECIFICATIONS—CONTINUED

Clearances

NOTE: Indoor applications require increased clearances. For details, refer to the installation, operation, and maintenance manual provided with the unit.

The heater must be installed so that the following clearances are provided for with regards to operation, inspection, and service.



Unit Size (MBTUh)	Mounting Angle (Degrees)	Heater Surface (See Graphic Above)							
		Ceiling	Ceiling with Shield*	Back	Back with Shield*	Side	End	Below	Front
		Inches (mm)							
35	0	22 (559)	10 (254)	12 (305)	12 (305)	24 (610)	12 (305)	40 (1016)	48 (1220)
	15, 30	23 (585)	14 (356)						
	45, 60	24 (610)	17 (432)	8 (204)					
50	0	22 (559)	10 (254)	8 (204)	12 (305)	28 (712)	16 (407)	60 (1524)	50 (1270)
	15, 30		14 (356)	12 (305)					
	45, 60	27 (686)	17 (432)		48 (1220)				

*The heat shield (option DO4) allows for decreased ceiling and back clearances.

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NOTES

⚠ WARNING ⚠

- This appliance is not intended for use by persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not remove safety labels. If they are unreadable, contact an authorized distributor for replacement labels.

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

