

CRE1 Triton™ Series Corrosion-Resistant Washdown Heaters

Ruffneck™ CRE1 Triton Series is a new generation of IP55 corrosion-resistant washdown heaters. The first UL listed and European compliant heater with models ranging from 2.5 kW to 40 kW.

IMPORTANT: Ruffneck™ CRE1 heaters are suitable for non-hazardous locations only. For washdown applications use water pressure less than 482 kPa only.

CE
IP66

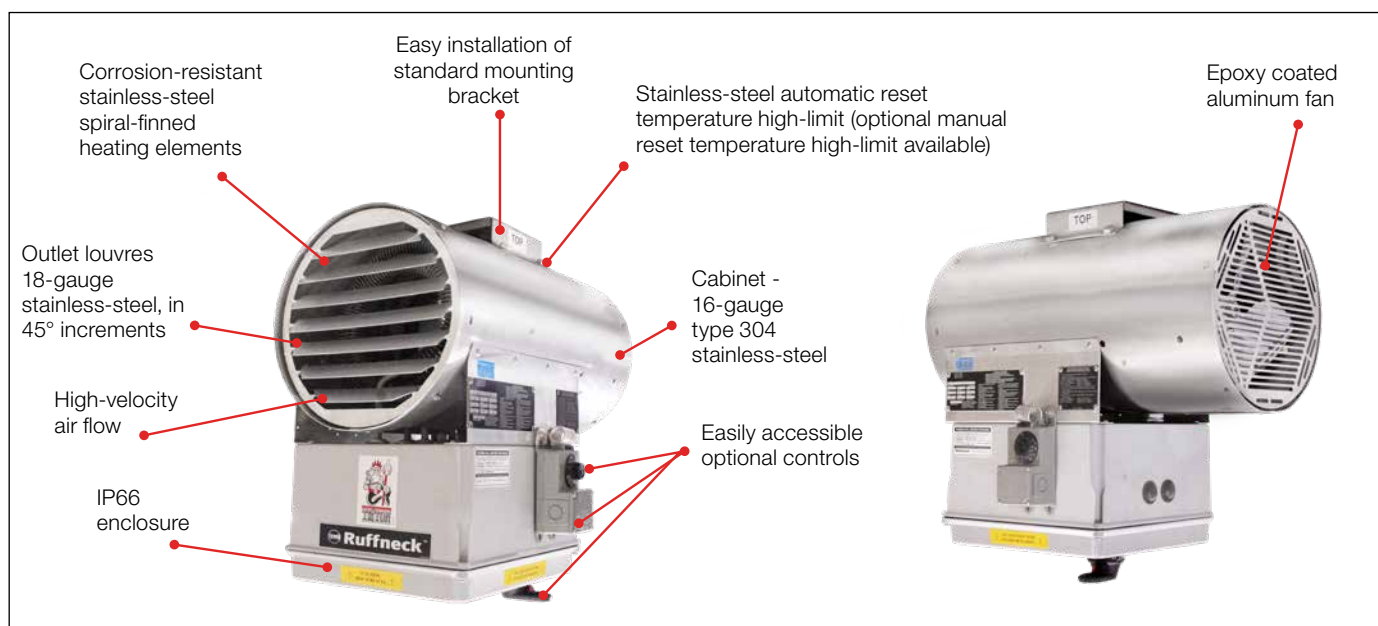


Figure 8

Features

- Entire heater is IP66
- Epoxy coated fan blade
- 16-gauge stainless-steel cabinet
- Custom configured stainless-steel elements
- Optional built-in accessories
- Stainless-steel wall/ceiling mounting kit
- 120 V controls
- Stainless-steel temperature high-limit

Benefits

- Increased safety and protection against water penetration
- Added corrosion protection
- Better resistance to corrosion for longer life
- Improved heat distribution and corrosion protection
- Flexibility and reduced field installation costs
- Flexible options for mounting heater
- Better contactor pull-in reliability
- Increased safety and reliability

Physical Dimensions

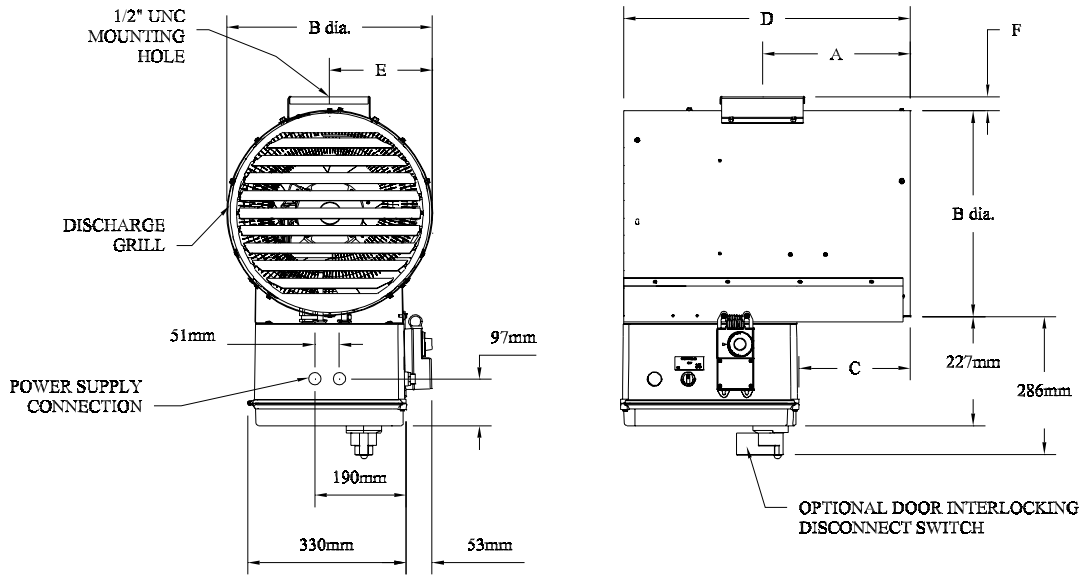


Table 21 – Heating Capacities and Physical Dimensions

Heating Capacity	Dimensions					
	A	B	C	D	E	F
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
up to 10 kW	12.5" (318 mm)	12.8" (325 mm)	8.5" (216 mm)	24.4" (620 mm)	6.4" (162.5 mm)	1" (23 mm)
15 and 20 kW	12.1" (307 mm)	16.7" (425 mm)	7.5" (190 mm)	23.4" (595 mm)	8.4" (212.5 mm)	1.1" (30 mm)
25 to 40 kW	12.1" (307 mm)	20.7" (526 mm)	7.5" (190 mm)	23.4" (595 mm)	10.3" (262.5 mm)	1.3" (33 mm)

Table 22 – Specifications

Heating Capacity	Air Delivery	Air Velocity	Horizontal Throw	Net Weight
	m ³ /hr	m/s	m	kg
up to 10 kW	1190	4.0	6.7	34
15 and 20 kW	2465	4.8	10.7	41
25 to 40 kW	3570	4.6	13.4	59

CRE1 Triton™ Mounting Options

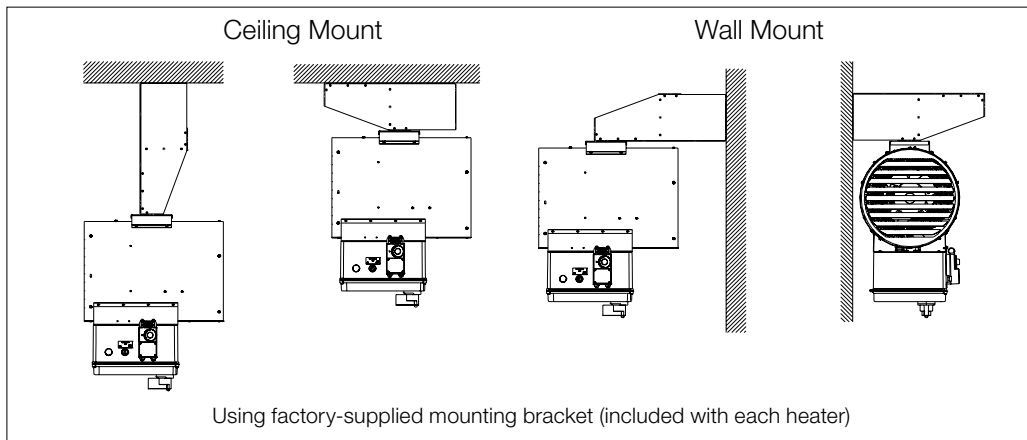


Figure 9

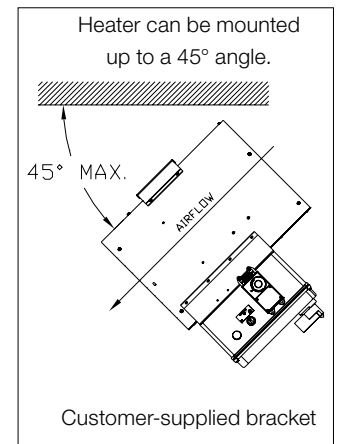


Figure 10

Table 23 – Performance Data for CR1 Triton™

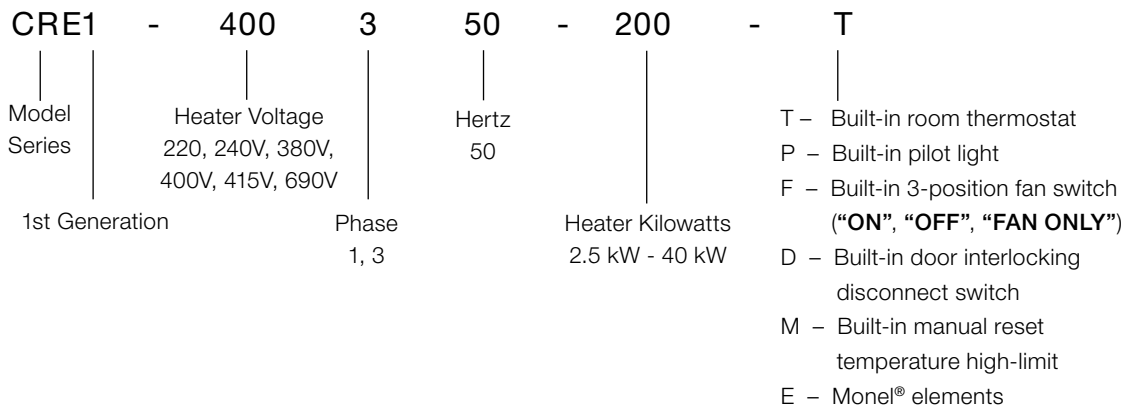
Model	Nominal Power	Unit Voltage	Phase	Unit Current	Cabinet Size
	kW	V		A	
CRE1-220150-025	2.52	220	1	13.6	12
CRE1-220150-042	4.20	220	1	21.2	12
CRE1-220150-063	6.30	220	1	30.7	12
CRE1-240150-030	3.00	240	1	14.6	12
CRE1-240150-050	5.00	240	1	22.9	12
CRE1-240150-075	7.50	240	1	33.4	12
CRE1-240150-100	10.00	240	1	43.8	12
CRE1-380350-025	2.52	380	3	5.0	12
CRE1-380350-042	4.21	380	3	7.6	12
CRE1-380350-063	6.31	380	3	10.8	12
CRE1-380350-094	8.41	380	3	14.0	12
CRE1-380350-126	12.62	380	3	20.4	16
CRE1-380350-168	16.82	380	3	26.8	16
CRE1-380350-210	21.03	380	3	33.2	20
CRE1-380350-252	25.23	380	3	39.5	20
CRE1-400350-028	2.79	400	3	5.2	12
CRE1-400350-047	4.65	400	3	7.9	12
CRE1-400350-070	6.97	400	3	11.3	12
CRE1-400350-093	9.29	400	3	14.6	12
CRE1-400350-139	13.94	400	3	21.3	16
CRE1-400350-186	18.58	400	3	28.0	16

Model	Nominal Power	Unit Voltage	Phase	Unit Current	Cabinet Size
	kW	V		A	
CRE1-400350-232	23.23	400	3	34.7	20
CRE1-400350-279	27.87	400	3	41.4	20
CRE1-415350-030	3.00	415	3	5.4	12
CRE1-415350-050	5.00	415	3	8.2	12
CRE1-415350-075	7.50	415	3	11.6	12
CRE1-415350-100	10.00	415	3	15.1	12
CRE1-415350-150	15.00	415	3	22.1	16
CRE1-415350-200	20.00	415	3	29.0	16
CRE1-415350-250	25.00	415	3	36.0	20
CRE1-415350-300	30.00	415	3	42.9	20
CRE1-690350-030	3.00	690	3	3.1	12
CRE1-690350-050	5.00	690	3	4.8	12
CRE1-690350-075	7.50	690	3	6.9	12
CRE1-690350100	10.00	690	3	9.0	12
CRE1-690350-150	15.0	690	3	13.2	16
CRE1-690350-200	20.00	690	3	17.3	16
CRE1-690350-250	25.00	690	3	21.5	20
CRE1-690350-300	30.00	690	3	25.7	20
CRE1-690350-350	35.00	690	3	29.9	20
CRE1-690350-400	40.00	690	3	34.1	20

Note:

1. To order a heater with a built-in room thermostat add a "T" suffix to model number.
2. To order a heater with a built-in pilot light add a "P" suffix to model number.
3. To order a heater with a built-in 3-position fan switch ("ON", "OFF", "FAN ONLY") add an "F" to model number.
4. To order a heater with a built-in door interlocking disconnect switch add a "D" suffix to model number.
5. To order a heater with a built-in manual reset temperature high-limit add an "M" suffix to model number. Also included is a built-in door interlocking disconnect switch to meet CE requirements. This option replaces the automatic reset temperature high-limit.

Model Coding



General Specifications

1. Approvals CE Mark complies with European standards EN60335-1 & EN60335-2-30.
2. Enclosures IP66 non-metallic enclosure.
3. Motor Type Thermally protected, ½ HP, 1725 RPM, permanently lubricated ball bearings.
4. Fan Epoxy coated, aluminum blade, steel spider.
5. Mounting Bracket Type 304 stainless-steel, minimum 0.05" (1.21 mm) thick. Universal mounting bracket.
6. Heating Elements Type 321 stainless-steel sheath with Type 304 stainless-steel spiral fins.
7. Temperature High-Limit Automatic reset, stainless-steel bulb and capillary. Optional manual reset, stainless-steel bulb and capillary. Replaces automatic reset.
8. Temperature Limitations Storage: -4°F to 140°F (-20°C to 60°C).
Operating: -4°F to 104°F (-20°C to 40°C)
9. Control Circuit 120 Vac
10. Optional Built-in Thermostat IP66 thermostat
11. Control Transformer Multi-tap primary, 120 V secondary, 50 VA
12. Contactor 40 or 75 amp. Rated for 500,000 mechanical operations. 120 V, 15 VA coil
13. Cabinet Material Type 304 stainless-steel, 16-gauge (0.06" / 1.52 mm). All external fasteners are stainless-steel
14. Inlet Grille Type 304 stainless-steel, 1/4" (6 mm) maximum openings. Minimum 18-gauge (0.05" / 1.21 mm)
15. Discharge Grille Type 304 stainless-steel. Rotatable in 45° increments. Minimum 18-gauge (0.05" / 1.21 mm)

Table 24 – Specifications

		Nominal kW		
		2.5 to 10	12.62 to 20	23.23 to 40
Air Delivery	m ³ /hr	1190	2465	3570
Approx. Air Velocity	m/s	4.0	4.8	4.6
Horizontal Throw	m	6.7	10.7	13.4
Max. Mounting Height	Horizontal (to underside)	2.6	3.5	3.7
	45° Decline (to underside)	3.9	5.5	5.7
Min. Mounting Height	m	1.8		
Fan Diameter	in	12	16	20
	mm	305	406	508
Net Weight	kg	34.1	40.9	59.1
Shipping Weight	kg	56.8	63.6	81.8