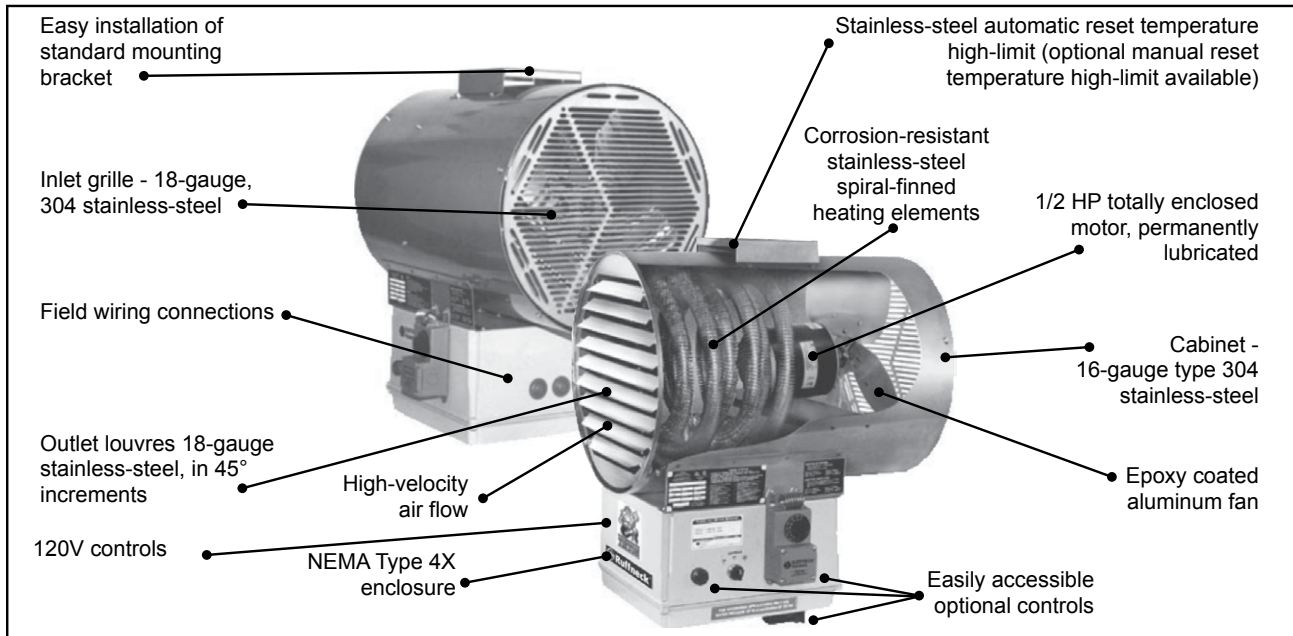


# CR1 Triton™ Corrosion-Resistant Washdown Heaters

Ruffneck™ CR1 Triton™ Series is a new generation of NEMA 4X corrosion-resistant washdown heaters. The first UL listed Type 4X heater with models ranging from 3 kW to 39 kW.

**IMPORTANT:** Ruffneck™ CR1 heaters are suitable for non-hazardous locations only. For washdown applications use water pressure less than 70 psi.



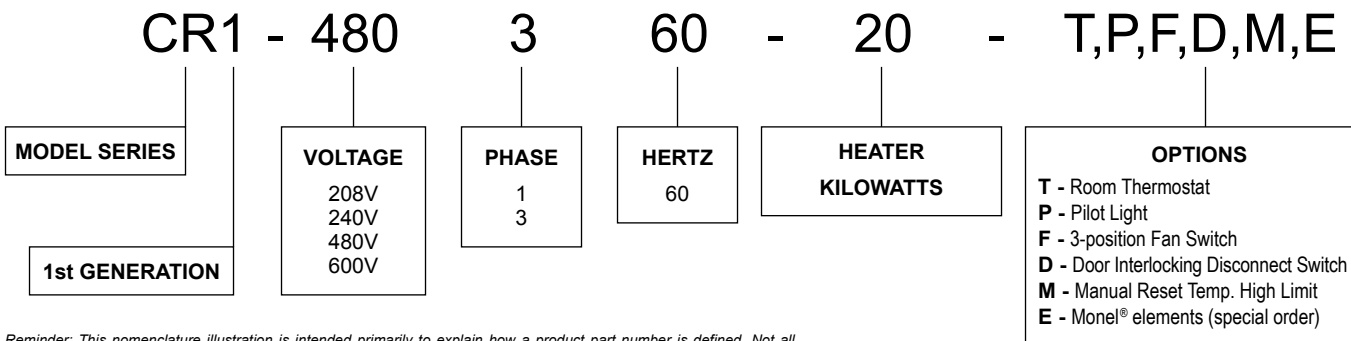
## Feature

- entire heater is NEMA Type 4X
- epoxy coated fan blade
- 16-gauge stainless-steel cabinet
- custom configured stainless-steel elements
- optional built-in accessories
- stainless-steel wall/ceiling mounting kit
- 120V controls
- stainless-steel temperature high-limit

## Benefit

- 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

## Model Coding



*Reminder: This nomenclature illustration is intended primarily to explain how a product part number is defined. Not all voltage and/or wattage combinations are available - please consult the Performance Data chart(s) for product availability.*

CR1 Triton™

## CR1 Triton™ 60 Hertz Technical Data

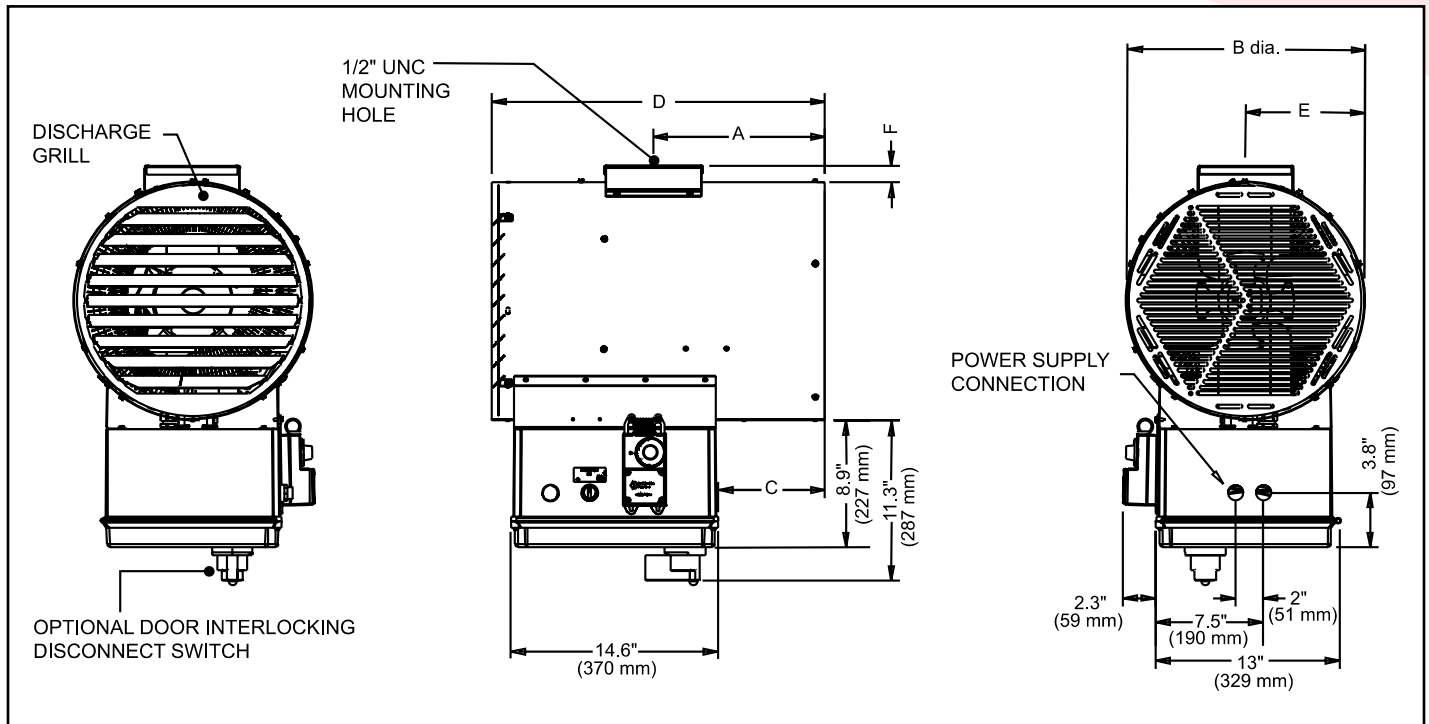
MODEL	NOMINAL POWER (kW)	UNIT VOLTAGE (V)	PHASE	UNIT CURRENT (A)	AIR TEMPERATURE RISE		Btu/hr
					°F	°C	
CR1-208160-030	3	208	1	17.4	13.5	7.5	10250
CR1-240160-030	3	240	1	15.5	13.5	7.5	10250
CR1-208360-030	3	208	3	11.3	13.5	7.5	10250
CR1-240360-030	3	240	3	10.2	13.5	7.5	10250
CR1-480360-030	3	480	3	5.1	13.5	7.5	10250
CR1-600360-030	3	600	3	3.9	13.5	7.5	10250
CR1-208160-050	5	208	1	27.0	22.5	12.5	17050
CR1-240160-050	5	240	1	23.8	22.5	12.5	17050
CR1-208360-050	5	208	3	16.9	22.5	12.5	17050
CR1-240360-050	5	240	3	15.0	22.5	12.5	17050
CR1-480360-050	5	480	3	7.5	22.5	12.5	17050
CR1-600360-050	5	600	3	5.8	22.5	12.5	17050
CR1-208160-075	7.5	208	1	39.1	33.8	18.8	25600
CR1-240160-075	7.5	240	1	34.3	33.8	18.8	25600
CR1-208360-075	7.5	208	3	23.8	33.8	18.8	25600
CR1-240360-075	7.5	240	3	21.0	33.8	18.8	25600
CR1-480360-075	7.5	480	3	10.5	33.8	18.8	25600
CR1-600360-075	7.5	600	3	8.2	33.8	18.8	25600
CR1-240160-100	10	240	1	44.7	45.0	25.0	34100
CR1-208360-100	10	208	3	30.8	45.0	25.0	34100
CR1-240360-100	10	240	3	27.1	45.0	25.0	34100
CR1-480360-100	10	480	3	13.5	45.0	25.0	34100
CR1-600360-100	10	600	3	10.8	45.0	25.0	34100
CR1-208360-150	15	208	3	44.6	32.6	18.1	51200
CR1-240360-150	15	240	3	39.1	32.6	18.1	51200
CR1-480360-150	15	480	3	19.5	32.6	18.1	51200
CR1-600360-150	15	600	3	15.4	32.6	18.1	51200
CR1-480360-200	20	480	3	25.6	43.6	24.2	68250
CR1-600360-200	20	600	3	20.3	43.6	24.2	68250
CR1-480360-250	25	480	3	31.6	37.5	20.9	85300
CR1-600360-250	25	600	3	25.1	37.5	20.9	85300
CR1-480360-300	30	480	3	37.6	45.1	25.0	102350
CR1-600360-300	30	600	3	29.9	45.1	25.0	102350
CR1-480360-350	35	480	3	43.6	52.6	29.2	119400
CR1-600360-350	35	600	3	34.7	52.6	29.2	119400
CR1-480360-390	39	480	3	48.0	58.6	32.5	133100
CR1-600360-390	39	600	3	38.5	58.6	32.5	133100

**Notes:**

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 UL requirements.  
This option replaces the automatic reset temperature high-limit.

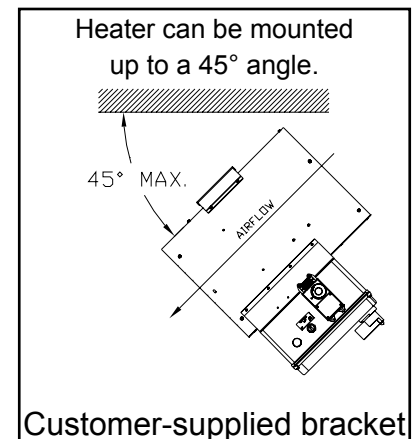
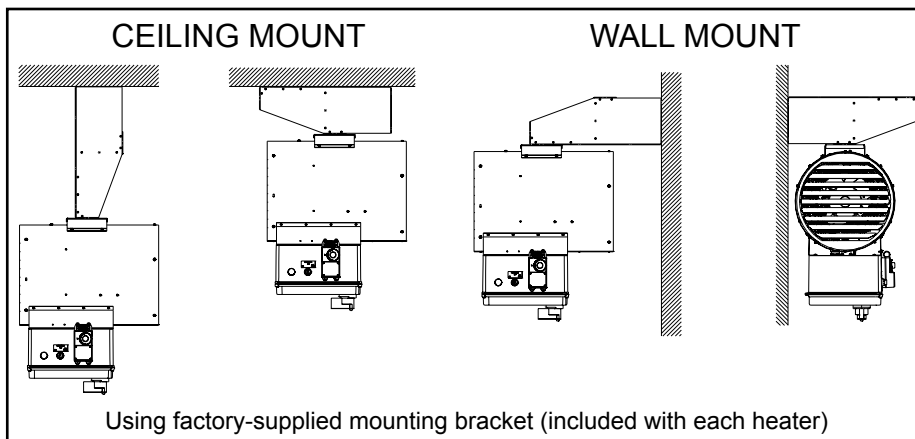
**Note:** To order a heater that meets U.S. Coast Guard regulations, order built-in control option #5 above.

## CR1 Triton™ Physical Dimensions



DIMENSIONS	A	B	C	D	E	F
<b>3 to 10 kW</b>	12.5" (318 mm)	12.8" (325 mm)	8.5" (216 mm)	24.4" (620 mm)	6.4" (162.5 mm)	0.9" (23 mm)
<b>15 and 20 kW</b>	12.1" (307 mm)	16.7" (425 mm)	7.5" (190 mm)	23.4" (595 mm)	8.4" (212.5 mm)	1.2" (30 mm)
<b>25 to 39 kW</b>	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)

## CR1 Triton™ Mounting Options



<b>Approvals</b>	UL listed to U.S. & Canadian safety standards. Type 4X
	Complies with U.S. Coast Guard electrical engineering regulations subchapter J (46 CFR Parts 110-113) when manual reset temperature high-limit is ordered
<b>Enclosure</b>	NEMA Type 4X non-metallic enclosure
<b>Motor Type</b>	Thermally protected, ½ HP, 1725 RPM, permanently lubricated ball bearings
<b>Fan</b>	Epoxy coated, aluminum blade, steel spider
<b>Mounting Bracket</b>	Type 304 stainless-steel universal mounting bracket Minimum 16-gauge (0.06" / 1.52 mm)
<b>Heating Elements</b>	Type 321 stainless-steel sheath with Type 304 stainless-steel spiral fins
<b>Temperature High-Limit</b>	Automatic reset, stainless-steel bulb and capillary
	Optional manual reset, stainless-steel bulb and capillary. Replaces automatic reset.
<b>Temperature Limitations</b>	Storage: -4°F to 140°F (-20°C to 60°C)
	Operating: -4°F to 104°F (-20°C to 40°C)
<b>Control Circuit</b>	120V AC
<b>Optional Built-in Thermostat</b>	NEMA Type 4X thermostat
<b>Control Transformer</b>	Multi-tap primary, 120V secondary, 50VA
<b>Contactors</b>	40 or 75 amp. Rated for 500,000 mechanical operations. 120V, 15VA coil
<b>Cabinet Material</b>	Type 304 stainless-steel, 16-gauge (0.06" / 1.52 mm) All external fasteners are stainless-steel
<b>Inlet Grille</b>	Type 304 stainless-steel, ¼" (6.3 mm) maximum openings Minimum 18-gauge (0.05" / 1.21 mm)
<b>Discharge Grille</b>	Type 304 stainless-steel. Rotatable in 45° increments Minimum 18-gauge (0.05" / 1.21 mm)

<b>Nominal kW</b>		<b>3, 5, 7.5, 10</b>	<b>15, 20</b>	<b>25, 30, 35, 39</b>
Net Weight	lbs (kg)	75.0 (34.1)	90.0 (40.9)	130 (59.1)
Shipping Weight	lbs (kg)	125.0 (56.8)	140.0 (63.6)	180 (81.8)
Fan Diameter	in (mm)	12 (305)	16 (406)	20 (508)
Air Delivery	CFM (m³/hr)	700 (1190)	1450 (2465)	2100 (3570)
Approx. Air Velocity	ft/min (m/s)	785 (4.0)	950 (4.8)	900 (4.6)
Horizontal Throw	ft (m)	22 (6.7)	35 (10.7)	44 (13.4)
Max. Mounting Height*	ft	8.5	11.5	12.3
	Horizontal (to underside) m	2.6	3.5	3.7
Max. Mounting Height*	ft	12.8	18.0	18.8
	45° decline (to underside) m	3.9	5.5	5.7
Min. Mounting Height	ft	6.0	6.0	6.0
	m	1.8	1.8	1.8

\* Maximum mounting height to ensure warm air reaches the floor.

**Note:**

Contact factory for suitable applications.

CR1 Triton™



Corrosion-Resistant Washdown Unit Heaters