

# 3P, 3F, 3S and 3T Metal Heater

Durable, efficient metal heater. Available in Steel, 304 Stainless Steel, 316 Stainless Steel, and Titanium.



### FEATURES

For use in most aqueous alkaline solutions, plating and phosphate tanks. Check solution recommendation chart with your chemical supplier for proper sheath material selection.

Heavy wall metal sheaths available in: steel, 304 stainless steel, 316 stainless steel, titanium.

Watt densities up to 35 watts per square inch (5.4 w/cm<sup>2</sup>) ensure long service life.

Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

Temperature and level controls sized to match the heater.

Lower watt densities for highly viscous solutions.

NOTE: Intended for vertical installation only.

3P, 3F, 3S, and 3T SERIES, TRIPLE METAL HEATERS								
WATTS	VOLTS	HOT ZONE In./(mm)	OVERALL LENGTH In./(mm)	STEEL	304 SS	316 SS	TITANIUM	SHIP WGT. Lbs./(kg)
3000	240	6	11	3P3211-***	3F3211-***	3S3211-***	3T3211-***	21
	480	(152)	(279)	3P3411-***	3F3411-***	3S3411-***	3T3411-***	(9.5)
6000	240	10	17	3P6217-***	3F6217-***	3S6217-***	3T6217-***	30
	480	(254)	(432)	3P6417-***	3F6417-***	3S6417-***	3T6417-***	(13.6)
9000	240	16	23	3P9223-***	3F9223-***	3S9223-***	3T9223-***	33
	480	(406)	(584)	3P9423-***	3F9423-***	3S9423-***	3T9423-***	(15)
12000	240	20	29	3P12229-***	3F12229-***	3S12229-***	3T12229-***	39
	480	(508)	(737)	3P12429-***	3F12429-***	3S12429-***	3T12429-***	(17.7)
15000	240	25	35	3P15235-***	3F15235-***	3S15235-***	3T15235-***	45
	480	(635)	(889)	3P15435-***	3F15435-***	3S15435-***	3T15435-***	(20.4)
18000	240	30	40	3P18240-***	3F18240-***	3S18240-***	3T18240-***	51
	480	(762)	(1016)	3P18440-***	3F18440-***	3S18440-***	3T18440-***	(23.1)
24000	240	37	47	3P24247-***	3F24247-***	3S24247-***	3T24247-***	63
	480	(940)	(1194)	3P24447-***	3F24447-***	3S24447-***	3T24447-***	(28.6)
27000	240	44	54	3P27254-***	3F27254-***	3S27254-***	3T27254-***	69
	480	(1118)	(1372)	3P27454-***	3F27454-***	3S27454-***	3T27454-***	(31.3)
30000	240	49	59	3P30259-***	3F30259-***	3S30259-***	3T30259-***	75
	480	(1245)	(1499)	3P30459-***	3F30459-***	3S30459-***	3T30459-***	(34)
36000	240	58	68	3P36268-***	3F36268-***	3S36268-***	3T36268-***	84
	480	(1473)	(1727)	3P36468-***	3F36468-***	3S36468-***	3T36468-***	(38.1)

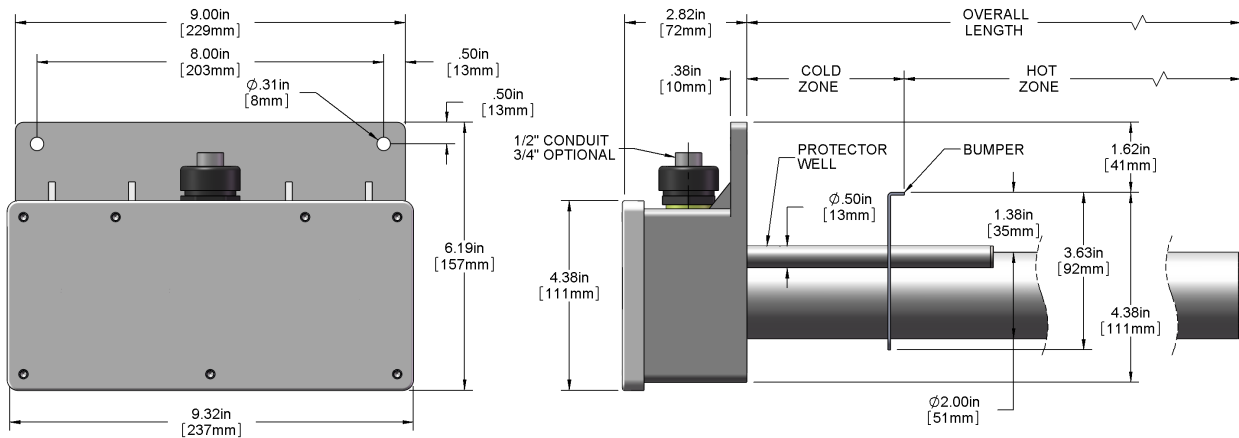
Three Phase Standard

# 3P, 3F, 3S and 3T Metal Heater

## SPECIFICATIONS

Wattages	3000 Watts to 36,000 Watts
Voltages	200 volts to 600 volts, (600V on 4,500W or lower only)
Temperature Range	Up to 180°C (82°F)
Options	Special configurations & lengths Longer wire and conduit lengths All metal welded junction box
Safety Features	Grounded construction Thermal protector built in. Replaceable PI protector standard for solutions up to 180°C (82°F). See chart below for options

## DIMENSIONS



## MODEL NUMBER BREAKDOWN

Series	Wattage	Voltage	Overall Length	Phase	Type of Protector	Wire & Conduit Length
3P = Steel	3 = 3000	1 = 120	11 = 3kW	-3 = 3 phase (std)	<b>Replaceable Fuse</b> P1 (std) = solutions up to 180°F P4 = solutions up to 230°F P5 = solutions up to 300°F	36" length standard (no designator) Specify variations from standard Ex: -X84 = 84"
3F = 304 stainless steel	6 = 6000	2 = 240	17 = 6kW	-1 = single phase	<b>Resettable Fuse</b> P2 = solutions up to 180°F P6 = solutions up to 230°F P7 = solutions up to 300°F	
3S = 316 stainless steel	9 = 9000	3 = 380	23 = 9kW			
3T = Titanium	12 = 12000	4 = 480	29 = 12kW			
	15 = 15000	5 = 415	35 = 15kW			
	18 = 18000	6 = 600	40 = 18kW			
	24 = 24000	7 = 400	47 = 24kW			
	27 = 27000	8 = 208	54 = 27kW			
	30 = 30000	9 = 220	59 = 30kW			
	36 = 36000	0 = 200	60 = 68kW			