



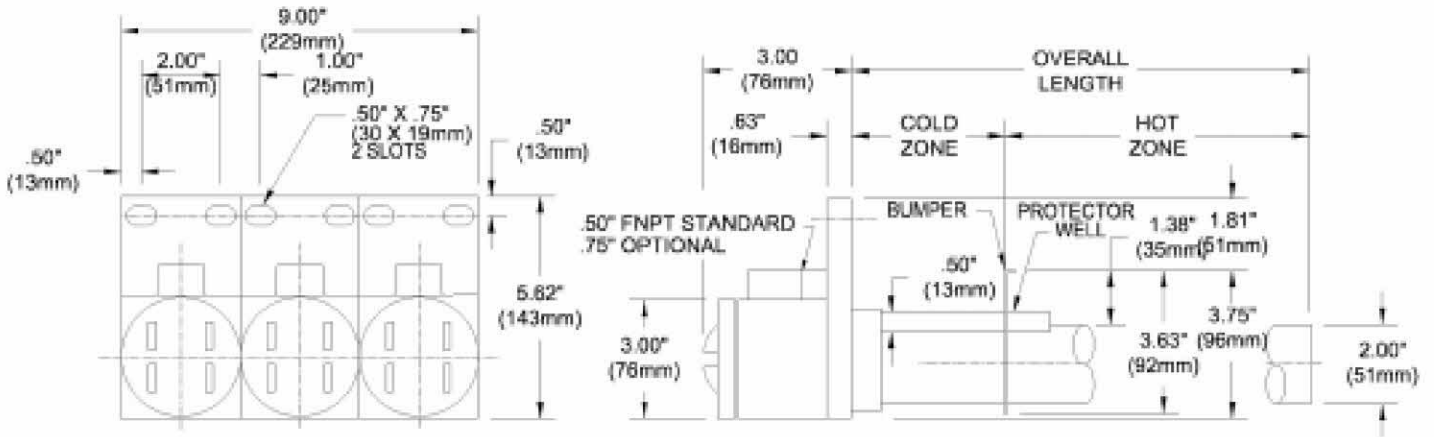
3P, 3F, 3S, and 3T SERIES, TRIPLE METAL HEATERS									
WATTS	VOLTS	HOT ZONE		OVERALL LENGTH	STEEL	304 SS	316 SS	TITANIUM	SHIP WGT. Lbs./ (kg)
		In./ (mm)	In./ (mm)						
3000	240	6	11	3P3211-**	3F3211-**	3S3211-**	3T3211-**	21	
	480	(155)	(280)						3P3411-**
6000	240	10	17	3P6217-**	3F6217-**	3S6217-**	3T6217-**	30	
	480	(255)	(430)						3P6417-**
9000	240	16	23	3P9223-**	3F9223-**	3S9223-**	3T9223-**	33	
	480	(405)	(585)						3P9423-**
12000	240	20	29	3P12229-**	3F12229-**	3S12229-**	3T12229-**	39	
	480	(510)	(735)						3P12429-**
15000	240	25	35	3P15235-**	3F15235-**	3S15235-**	3T15235-**	45	
	480	(635)	(890)						3P15435-**
18000	240	30	40	3P18240-**	3F18240-**	3S18240-**	3T18240-**	51	
	480	(760)	(1015)						3P18440-**
24000	240	37	47	3P24247-**	3F24247-**	3S24247-**	3T24247-**	63	
	480	(940)	(1195)						3P24447-**
27000	240	44	54	3P27254-**	3F27254-**	3S27254-**	3T27254-**	69	
	480	(1120)	(1370)						3P27454-**
30000	240	49	59	3P30259-**	3F30259-**	3S30259-**	3T30259-**	75	
	480	(1245)	(1500)						3P30459-**
36000	240	58	68	3P36268-**	3F36268-**	3S36268-**	3T36268-**	84	
	480	(1475)	(1730)						3P36468-**

Standard units consist of three individual elements, each with its own conduit. Single head with single conduit (3 phase wiring standard) available at same price. Add "-3" before thermal protector designator.

Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** Materials available for use in most aqueous alkaline solutions, plating solutions, and rinse tanks. Check solution recommendation chart or with your chemical supplier for proper sheath material selection.
- ◆ **RUGGED CONSTRUCTION:** Heavy wall metal sheaths available in:
 - Steel.
 - 304 stainless steel.
 - 316 stainless steel.
 - Titanium.
- ◆ **LONG LASTING PERFORMANCE:** Watt densities of 35 watts per square inch (5.4 w/cm²) ensure long service life.
- ◆ **CORROSION RESISTANT HEAD:** Vapor tight, flame retardant polypropylene terminal enclosure with 3-foot (.9m) flexible PVC liquid tight conduit.
- ◆ **SAFETY FEATURES:**
 - Grounded construction.
 - Thermal protector built in. Replaceable PI fuse standard for solutions up to 180°F (82°C).
 - Non-floating construction.
- ◆ **CERTIFICATIONS:** UL (Except steel sheath), CSA, and CE.
- ◆ **SIZES:** 3,000 watts to 36,000 watts.
- ◆ **VOLTAGES:** 120, 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Each head is single phase standard. May be wired together as single or three phase.
- ◆ **OPTIONS AVAILABLE (consult factory):**
 - Replaceable thermal protectors:
 - PIM: for solutions from 180°F (82°C) to 230°F (110°C).
 - PIH: for solutions from 230°F (110°C) to 300°F (150°C).
 - Resettable thermal protectors:
 - PII: for solutions up to 180°F (82°C).
 - PIIM: for solutions from 180°F (82°C) to 230°F (110°C).
 - PIIH: for solutions from 230°F (110°C) to 300°F (150°C).
 - Special configurations and lengths.
 - One common head (terminal enclosure) with single conduit for single or three phase.
 - Longer wire and conduit lengths.
 - Lower watt densities for highly viscous solutions.
 - Temperature and level controls sized to match the heater.

DIMENSIONS



TRIPLE TUBE METAL OVER THE SIDE HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Length	Options	Type of Fuse	Wire and Conduit Length																		
	3 = 3000 6 = 6000 9 = 9000 12 = 12000 15 = 15000 18 = 18000 24 = 24000 27 = 27000 30 = 30000 36 = 36000	2 = 240 4 = 480 -208- = 208 -380- = 380 -415- = 415 -600- = 600	11 = 3kW 17 = 6kW 23 = 9kW 29 = 12kW 35 = 15kW 40 = 18kW 47 = 24kW 54 = 27kW 59 = 30kW 68 = 36kW specify custom lengths, not to exceed tank depth			no designator = 36" length standard specify variations from standard Ex: -X84 = 84"																		
	3P = steel 3F = 304 stainless steel 3S = 316 Stainless Steel 3T = titanium				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Replaceable Fuse</th> </tr> </thead> <tbody> <tr> <td style="width: 50%;">-PI (std)</td> <td>for solutions up to 180°F</td> </tr> <tr> <td>-PIM</td> <td>for 180° - 230°F solutions</td> </tr> <tr> <td>-PIH</td> <td>for 230° - 300°F solutions</td> </tr> <tr> <th colspan="2" style="text-align: center;">Resettable Fuse</th> </tr> <tr> <td colspan="2" style="text-align: center;">(additional control components required)</td> </tr> <tr> <td>-PII</td> <td>for solutions up to 180°F</td> </tr> <tr> <td>-PIIM</td> <td>for 180° - 230°F solutions</td> </tr> <tr> <td>-PIIH</td> <td>for 230° - 300°F solutions</td> </tr> </tbody> </table>		Replaceable Fuse		-PI (std)	for solutions up to 180°F	-PIM	for 180° - 230°F solutions	-PIH	for 230° - 300°F solutions	Resettable Fuse		(additional control components required)		-PII	for solutions up to 180°F	-PIIM	for 180° - 230°F solutions	-PIIH	for 230° - 300°F solutions
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-X = any special configuration not called out in the part number (specify in clear text) no designator = 3 individual heater tubes, each with its own wire and conduit (can be wired single or three phase). -3 = three phase power with single head and conduit -1 = single phase power with single head and conduit																								

ORDERING EXAMPLE:

3S12429-PIIM-X72

Triple tube, 316 SS, 12,000 watts, 480 volt, 29" overall length, PIIM fuse, 72" wire and conduit.

**PROCESS
TECHNOLOGY**