

D3 SERIES, DERATED TRIPLE METAL HEATERS									
WATTS	VOLTS	HOT OVERALL		STEEL	304 SS	316 SS	TITANIUM	SHIP WGT.	Lbs./kg)
		ZONE	LENGTH						
		In./mm)	In./mm)						
1500	120	6	11	D3P1.5111-*.**	D3F1.5111-*.**	D3S1.5111-*.**	D3T1.5111-*.**	21	
	240	(152)	(279)	D3P1.5211-*.**	D3F1.5211-*.**	D3S1.5211-*.**	D3T1.5211-*.**	(9.5)	
3000	240	10	17	D3P3217-*.**	D3F3217-*.**	D3S3217-*.**	D3T3217-*.**	30	
	480	(254)	(432)	D3P3417-*.**	D3F3417-*.**	D3S3417-*.**	D3T3417-*.**	(13.6)	
4500	240	16	23	D3P4.5223-*.**	D3F4.5223-*.**	D3S4.5223-*.**	D3T4.5223-*.**	33	
	480	(406)	(584)	D3P4.5423-*.**	D3F4.5423-*.**	D3S4.5423-*.**	D3T4.5423-*.**	(15)	
6000	240	20	29	D3P6229-*.**	D3F6229-*.**	D3S6229-*.**	D3T6229-*.**	39	
	480	(508)	(737)	D3P6429-*.**	D3F6429-*.**	D3S6429-*.**	D3T6429-*.**	(17.7)	
7500	240	25	35	D3P7.5235-*.**	D3F7.5235-*.**	D3S7.5235-*.**	D3T7.5235-*.**	45	
	480	(635)	(889)	D3P7.5435-*.**	D3F7.5435-*.**	D3S7.5435-*.**	D3T7.5435-*.**	(20.4)	
9000	240	30	40	D3P9240-*.**	D3F9240-*.**	D3S9240-*.**	D3T9240-*.**	51	
	480	(762)	(1016)	D3P9440-*.**	D3F9440-*.**	D3S9440-*.**	D3T9440-*.**	(23.1)	
12000	240	37	47	D3P12247-*.**	D3F12247-*.**	D3S12247-*.**	D3T12247-*.**	63	
	480	(940)	(1194)	D3P12447-*.**	D3F12447-*.**	D3S12447-*.**	D3T12447-*.**	(28.6)	
13500	240	44	54	D3P13.5254-*.**	D3F13.5254-*.**	D3S13.5254-*.**	D3T13.5254-*.**	69	
	480	(1118)	(1372)	D3P13.5454-*.**	D3F13.5454-*.**	D3S13.5454-*.**	D3T13.5454-*.**	(31.3)	
15000	240	49	59	D3P15259-*.**	D3F15259-*.**	D3S15259-*.**	D3T15259-*.**	75	
	480	(1245)	(1499)	D3P15459-*.**	D3F15459-*.**	D3S15459-*.**	D3T15459-*.**	(34)	
18000	240	58	68	D3P18268-*.**	D3F18268-*.**	D3S18268-*.**	D3T18268-*.**	84	
	480	(1473)	(1727)	D3P18468-*.**	D3F18468-*.**	D3S18468-*.**	D3T18468-*.**	(38.1)	

Standard units consist of single head with single conduit. Add "-1" for single phase or "-3" for three phase.

## D3 Series Heater Features and Benefits

### SUPERIOR CHEMICAL RESISTANCE:

- ◆ For use in most aqueous alkaline solutions, and plating and phosphate tanks. Check solution recommendation chart 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

### OUTSTANDING PERFORMANCE:

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

### CORROSION RESISTANT HEAD:

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

### SAFETY FEATURES:

- ◆ Grounded construction.
- ◆ Thermal protectors built in. Replaceable PI protector standard for solutions up to 180°F (82°C).
- ◆ Non-floating construction.

**CERTIFICATIONS:** cULus listed (except steel) and CE compliant (except 600 volts).

**SIZES:** 1,500 watts to 18,000 watts.

### VOLTAGES:

- ◆ 120 to 600 volts.

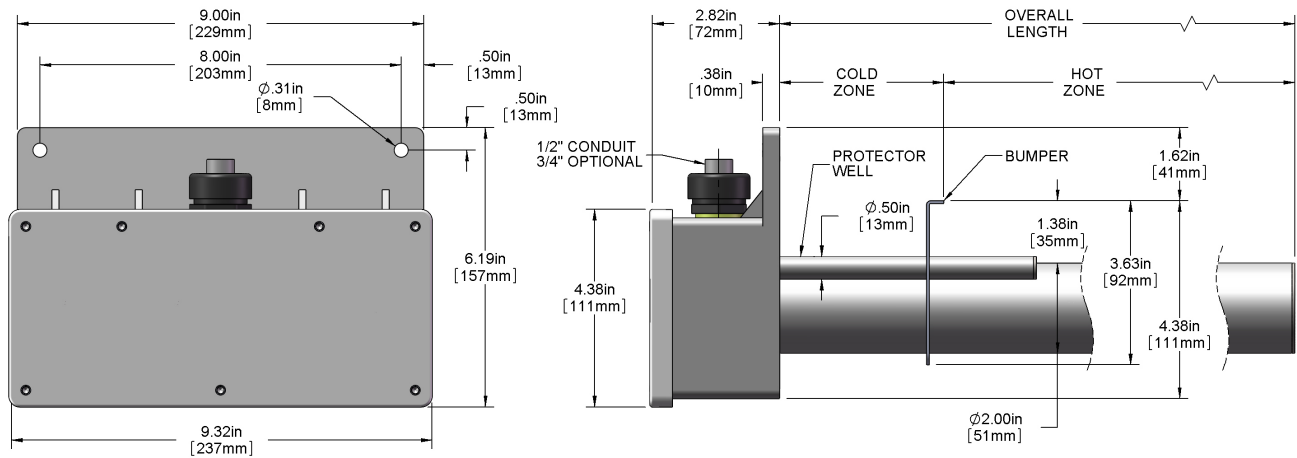
### OPTIONS AVAILABLE (consult factory):

- ◆ Replaceable thermal protectors:  
P4: for solutions up to 230°F(110°C)  
P5: for solutions up to 300°F(149°C)

Resettable thermal protectors:

- P2: for solutions up to 180°F(82°C)
- P6: for solutions up to 230°F(110°C)
- P7: for solutions up to 300°F(149°C)
- ◆ Special configurations and lengths.
- ◆ Longer wire and conduit lengths.
- ◆ Lower watt densities for highly viscous solutions.
- ◆ Temperature and level controls sized to match the heater (sold separately).
- ◆ All metal welded junction box.

## DIMENSIONS



## DERATED TRIPLE TUBE METAL OVER THE SIDE HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Length (in.)	Options	Type of Protector	Wire and Conduit Length																		
	1.5 = 1500 3 = 3000 4.5 = 4500 6 = 6000 7.5 = 7500 9 = 9000 12 = 12000 13.5 = 13500 15 = 15000 18 = 18000	1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200	11 = 1.5kW 17 = 3kW 23 = 4.5kW 29 = 6kW 35 = 7.5kW 40 = 9kW 47 = 12kW 54 = 13.5kW 59 = 15kW 68 = 18kW specify custom lengths, not to exceed tank depth			no designator = 36" length standard specify variations from standard Ex: -X84 = 84"																		
	D3P = steel D3F = 304 stainless steel D3S = 316 stainless steel D3T = titanium				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Replaceable Protector</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">P1 (std)</td> <td>for solutions up to 180°F</td> </tr> <tr> <td style="text-align: center;">P4</td> <td>for solutions up to 230°F</td> </tr> <tr> <td style="text-align: center;">P5</td> <td>for solutions up to 300°F</td> </tr> <tr> <th colspan="2" style="text-align: center;">Resettable Protector</th> </tr> <tr> <td colspan="2" style="text-align: center;">(additional control components required)</td> </tr> <tr> <td style="text-align: center;">P2</td> <td>for solutions up to 180°F</td> </tr> <tr> <td style="text-align: center;">P6</td> <td>for solutions up to 230°F</td> </tr> <tr> <td style="text-align: center;">P7</td> <td>for solutions up to 300°F</td> </tr> </tbody> </table>	Replaceable Protector		P1 (std)	for solutions up to 180°F	P4	for solutions up to 230°F	P5	for solutions up to 300°F	Resettable Protector		(additional control components required)		P2	for solutions up to 180°F	P6	for solutions up to 230°F	P7	for solutions up to 300°F	
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	-X = any special configuration not called out in the part number (specify in clear text) no designator = three phase power (standard) -1 = single phase power																							

### ORDERING EXAMPLE:

D3F12447-3-P4-X72

Derated, triple tube, 304 stainless steel, 12,000 watts, 480 volt, 47" long, 3 phase, P4 protector, 72" wire and conduit.

