

# 3HS Series

## PRODUCT DATA SHEET

### Metal Heater

#### Durable, efficient chemical heater

For use in most aqueous alkaline solutions and rinse tanks

Low watt density design saves space & ensures long life

Vapor resistant, flame retardant polypropylene terminal enclosure

Grounded construction and built in thermal protector



Up to 82°C (180°F)



3,000 watts to 10,500 watts.



200 to 600 Volts  
600V on 4,500W or lower only



Steel, 304 stainless steel, 316 stainless steel, and titanium



cULus listed (except steel).  
CE compliant (except 600 volts)

#### 3HS SERIES, THREE ELEMENT STAINLESS STEEL HEATERS

WATTS	VOLTS	HOT ZONE	OVERALL LENGTH	MODEL NUMBER	SHIP WGT.
		in./ (mm)	in./ (mm)		Lbs./ (kg)
3000	240	11	17	3HS3217-**	9
	480	(279)	(432)	3HS3417-**	(4.1)
4500	240	17	23	3HS4.5223-**	10
	480	(432)	(584)	3HS4.5423-**	(4.5)
7500	240	21	29	3HS7.5229-**	12
	480	(533)	(737)	3HS7.5429-**	(5.4)
10500	240	26	34	3HS10.5234-**	14
	480	(660)	(864)	3HS10.5434-**	(6.4)

\*Three phase standard, single phase available as option. Add "-1" before thermal protector designator.

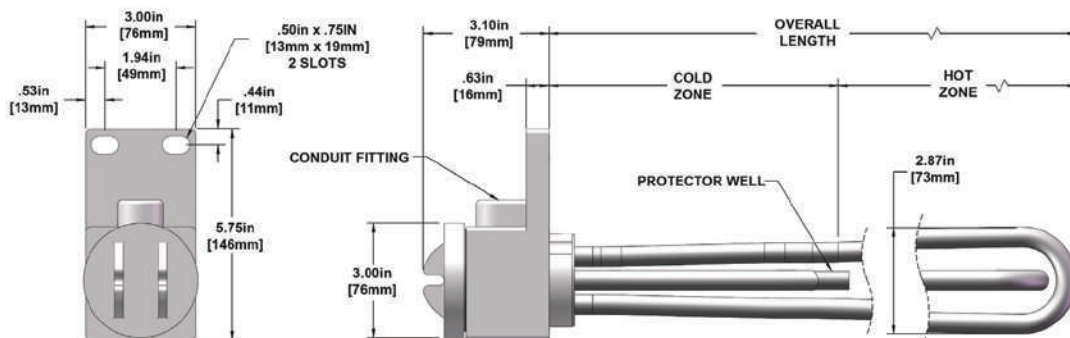
## Features & Values

- For use in most aqueous alkaline solutions and rinse 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 and titanium
- Watt densities up to 40 watts per square inch (6.2 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

## Specifications

<b>Wattages</b>	3,000 to 10,500 Watts
<b>Voltages</b>	200 to 600 Volts (600V on 4,500W or lower only)
<b>Temperature Range</b>	Up to 180°C (82°F)
<b>Options</b>	<ul style="list-style-type: none"> <li>▫ Special configurations &amp; lengths</li> <li>▫ Longer wire and conduit lengths</li> <li>▫ All metal welded junction box</li> </ul>
<b>Safety Features</b>	<ul style="list-style-type: none"> <li>▫ Grounded construction</li> <li>▫ Thermal protector built in. Replaceable PI protector standard for solutions up to 180°F (82°C).</li> <li>▫ See chart below for protector options</li> </ul>
<b>Certifications</b>	cULus compliant (except 600V)

## Dimensions



## Model Number Breakdown

Series	Wattage	Voltage	Overall Length (In.)	Phase	Type of Protector	Wire & Conduit Length
3HS = 3 element, 316 stainless steel	3 = 3000	1 = 120	17 = 3kW	no designator = three phase(std)	<b>Replaceable Fuse</b>	36" length standard (no designator)
	4,5 = 4500	2 = 240	23 = 4.5kW	-1 = single phase	P1 (std) = solutions up to 180°F	Specify variations from standard Ex: -X84 = 84"
	7,5 = 7500	3 = 380	29 = 7.5kW	M = Metal welded junction box (resettable protector required)	P4 = solutions up to 230°F	
	10,5 = 10500	4 = 480	34 = 10.5kW		P5 = solutions up to 300°F	
		5 = 415			<b>Resettable Fuse</b>	
		6 = 600			P2 = solutions up to 180°F	
		7 = 400			P6 = solutions up to 230°F	
		8 = 208			P7 = solutions up to 300°F	
		9 = 220				
		0 = 200				