

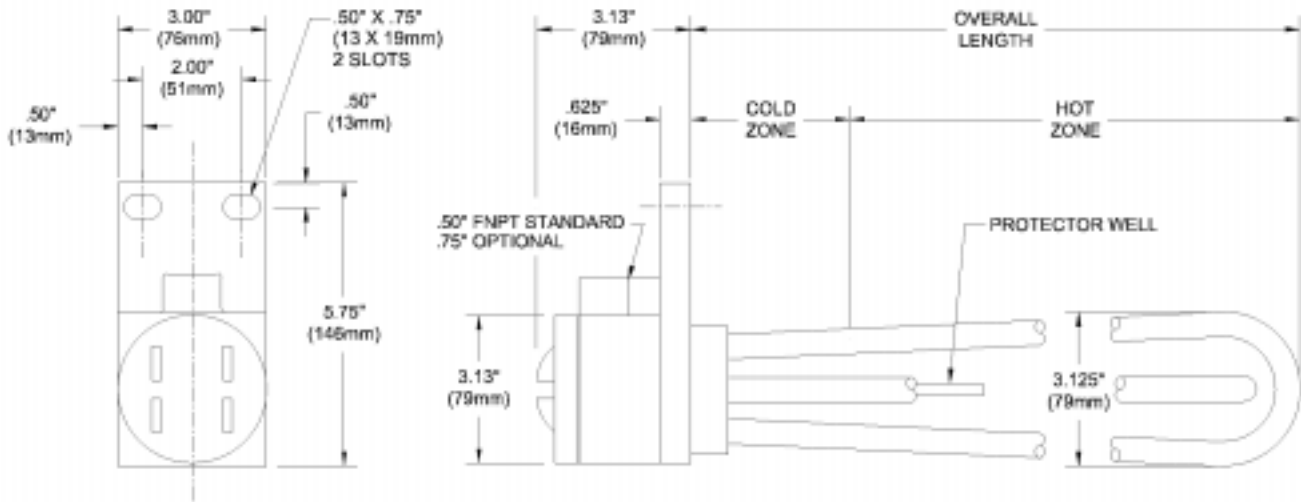
3HS SERIES, THREE ELEMENT STAINLESS STEEL HEATERS					
WATTS	VOLTS	HOT ZONE In./(mm)	OVERALL LENGTH In./(mm)	MODEL NUMBER	SHIP WGT. Lbs./(kg)
3000	240	10	17	3HS3217-**-	9
	480	(255)	(430)	3HS3417-**-	(4)
4500	240	16	23	3HS4.5223-**-	10
	480	(405)	(585)	3HS4.5423-**-	(4.5)
7500	240	20	29	3HS7.5229-**-	12
	480	(510)	(735)	3HS7.5429-**-	(5.5)
10500	240	25	34	3HS10.5234-**-	14
	480	(635)	(865)	3HS10.5434-**-	(6.5)

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

Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** For use in most aqueous alkaline solutions and rinse tanks. Check solution recommendation chart or with your chemical supplier for proper sheath material selection.
- ◆ **RUGGED CONSTRUCTION:** Heavy wall metal sheaths in 316 stainless steel.
- ◆ **OUTSTANDING PERFORMANCE:** Watt densities of 40 watts per square inch (6.2 w/cm²) use minimal space and 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, CSA and CE.
- ◆ **SIZES:** 3,000 watts to 10,500 watts.
- ◆ **VOLTAGES:** 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Three phase standard, single phase available.
- ◆ **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.
 - Longer wire and conduit lengths.
 - Lower watt densities for highly viscous solutions.
 - Titanium elements.
 - Temperature and level controls sized to match the heater.

DIMENSIONS



3 ELEMENT OVER THE SIDE HEATER

Series	Wattage	Voltage	Overall Length	Options	Type of Fuse	Wire and Conduit Length
	3 = 3000 4.5 = 4500 7.5 = 7500 10.5 = 10500	2 = 240 4 = 480 -208- = 208 -380- = 380 -415- = 415 -600- = 600	17 = 3kW 23 = 4.5kW 29 = 7.5kW 34 = 10.5kW			36" length standard (no designator) specify variations from standard Ex: -X84 = 84"
	3HS = 3 element, 316 stainless steel					
	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					
					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	

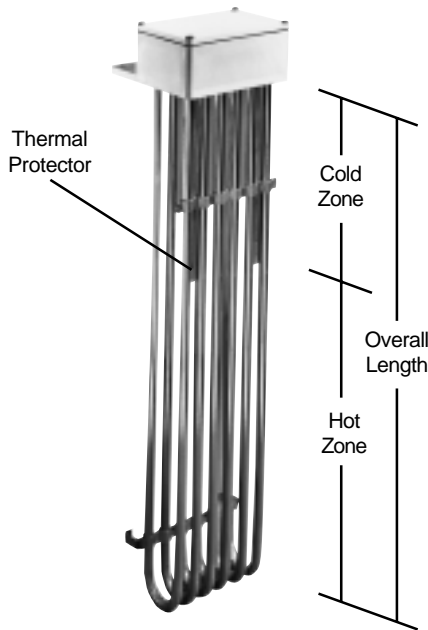
ORDERING EXAMPLE:

3HS3417-PII

3 element, 316 stainless steel, 3000 watt, 480 volt, 17" overall length, PII fuse.

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Star Electric to Order Call 1.800.345.0369



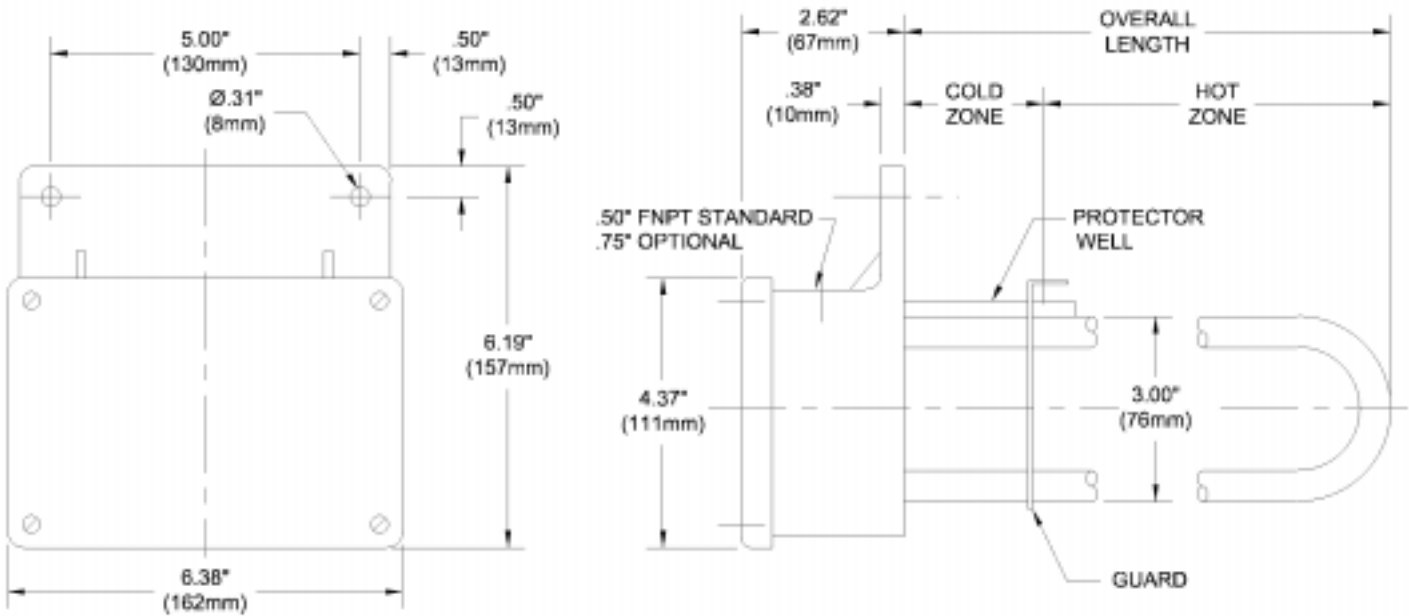
6HS SERIES, SIX ELEMENT STAINLESS STEEL HEATERS					
WATTS	VOLTS	HOT ZONE In./(mm)	OVERALL LENGTH In./(mm)	MODEL NUMBER	SHIP WGT. Lbs./(kg)
6000	240	10	17	6HS6217-**	12
	480	(255)	(430)	6HS6417-**	(5.5)
9000	240	16	23	6HS9223-**	13
	480	(405)	(585)	6HS9423-**	(6)
15000	240	20	29	6HS15229-**	16
	480	(510)	(735)	6HS15429-**	(7.5)
21000	240	25	34	6HS21234-**	18
	480	(635)	(865)	6HS21434-**	(8.5)

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

Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** For use in most aqueous alkaline solutions and rinse tanks. Check solution recommendation chart or with your chemical supplier for proper sheath material selection.
- ◆ **RUGGED CONSTRUCTION:** Heavy wall metal sheaths in 316 stainless steel.
- ◆ **OUTSTANDING PERFORMANCE:** Watt densities of 40 watts per square inch (6.2 w/cm²) use minimal space and 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, CSA and CE.
- ◆ **SIZES:** 6,000 watts to 21,000 watts.
- ◆ **VOLTAGES:** 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Three phase standard, single phase available.
- ◆ **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).
 - L-Shaped and other special configurations and lengths.
 - Longer wire and conduit lengths.
 - Lower watt densities for highly viscous solutions.
 - Titanium elements.
 - Temperature and level controls sized to match the heater.

DIMENSIONS



6 ELEMENT OVER THE SIDE HEATER

Series	Wattage	Voltage	Overall Length	Options	Type of Fuse	Wire and Conduit Length
	6 = 6000 9 = 9000 15 = 15000 21 = 21000	2 = 240 4 = 480 -208 = 208 -380 = 380 -415 = 415 -600 = 600	17 = 6kW 23 = 9kW 29 = 15kW 34 = 21kW			36" length standard (no designator) specify variations from standard Ex: -X84 = 84"
	6HS = 6 element, 316 stainless steel					
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						
					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

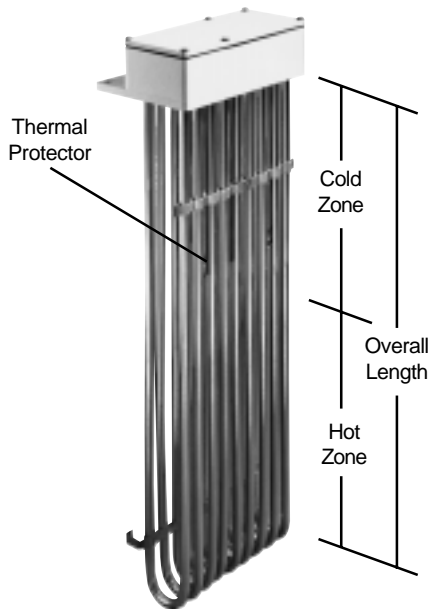
ORDERING EXAMPLE:

6HS6217-1-PI

6 element, 316 stainless steel, 6000 watt, 240 volt, 17" overall length, single phase, PI fuse.



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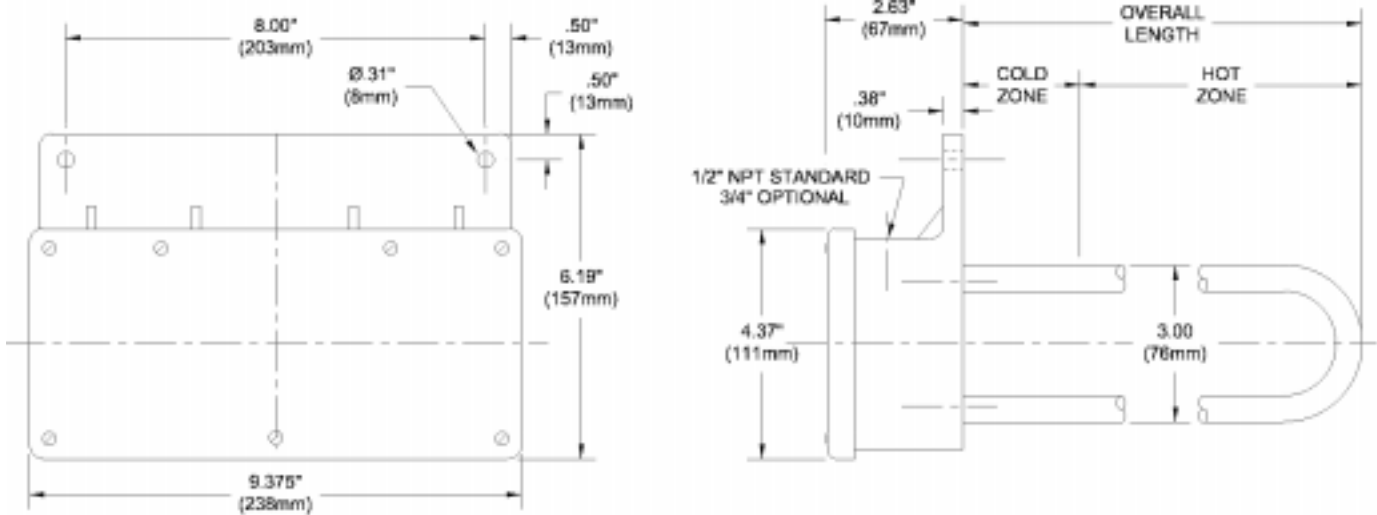
9HS SERIES, NINE ELEMENT STAINLESS STEEL HEATERS					
WATTS	VOLTS	HOT ZONE	OVERALL LENGTH	MODEL NUMBER	SHIP WGT. Lbs./kg
		In./mm	In./mm		
9000	240	10	17	9HS9217-**	16
	480	(255)	(430)	9HS9417-**	(7.5)
13500	240	16	23	9HS13.5223-**	19
	480	(405)	(585)	9HS13.5423-**	(9)
22500	240	20	29	9HS22.5229-**	23
	480	(510)	(735)	9HS22.5429-**	(10.5)
31500	240	25	34	9HS31.5234-**	25
	480	(635)	(835)	9HS31.5434-**	(11.5)

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

Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** For use in most aqueous alkaline solutions and rinse tanks. Check solution recommendation chart or with your chemical supplier for proper sheath material selection.
- ◆ **RUGGED CONSTRUCTION:** Heavy wall metal sheaths in 316 stainless steel.
- ◆ **OUTSTANDING PERFORMANCE:** Watt densities of 40 watts per square inch (6.2 w/cm²) use minimal space and 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, CSA and CE.
- ◆ **SIZES:** 9,000 watts to 31,500 watts.
- ◆ **VOLTAGES:** 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Three phase standard, single phase available.
- ◆ **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).
 - L-Shaped and other special configurations and lengths.
 - Longer wire and conduit lengths.
 - Lower watt densities for highly viscous solutions.
 - Titanium elements.
 - Temperature and level controls sized to match the heater.

DIMENSIONS



9 ELEMENT OVER THE SIDE HEATER

Series	Wattage	Voltage	Overall Length	Options	Type of Fuse	Wire and Conduit Length
	9 = 9000 13.5 = 13500 22.5 = 22500 31.5 = 31500	2 = 240 4 = 480 -208- = 208 -380- = 380 -415- = 415 -600- = 600	17 = 9kW 23 = 13.5kW 29 = 22.5kW 34 = 31.5kW			36" length standard (no designator) specify variations from standard Ex: -X84 = 84"
	9HS = 9 element, 316 stainless steel					
	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					
					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	

ORDERING EXAMPLE:

9HS9-208-17-PIM-X96

9 element, 316 stainless steel, 9000 watt, 208 volt, 17" overall length, PIM fuse, 96" conduit and leads.

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Star Electric to Order Call 1.800.345.0369