



Screw Plug Heaters - Type IP

Applications:

90 Watts Per Square Inch
Ultra Clean Water

60 and 45 Watts Per Square Inch

For heating clean water only in commercial and/or residential applications.

30 and 35 Watts Per Square Inch

For Fuel Gas , low temperature air and gas heating

23 and 20 Watts Per Square Inch

For heat transfer oil, cleaners, high temperature air and gas heating.

15 and 12 Watts Per Square Inch

For lubricating oils, medium viscosity oils, high temperature air and gas heating.

8 and 6 Watts Per Square Inch

For #5 and #6 fuel oil heating, viscous materials, raw crude oil, residual oils, high temperature air and gas heating.

4 and 2 Watts Per Square Inch

For asphalt and other hard-to-heat substances, extra high temperature air and gas.

Standard Features:

Heating Elements

Alloy 800 (UNS08000) Sheath Material
Sealed Terminals

Spacer/Support

High Temperature Alloy Material
Rugged Design
"Evenflow" Configuration

Construction

Welded Heating Elements
Welded Terminal Housing

Service

Wiring Modifiable in Field
Assembly repairable at Factory



Optional Features

Terminal Housings

-ER Explosion Resistant
-LT Liquid Tight
-GP General Purpose

Plug Materials

Carbon Steel
304SS
316SS

Sensors

Thermostats
Cutouts
Type J,K,E Thermocouples
100 Ohm RTD's
Simplex or Duplex
Optional Tube Wells

Certifications

CSA	UL
ATEX	IEC eX
CRN	

Screw Plug Heaters - Type IP

90 Watts/Sq. Inch

1.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1P1N7T1D	0.75	1	120	1	4	6.00	1.44
1P1N7T2D	0.75	1	240	1	2	6.00	1.44
1P1N8T1D	1.00	1	120	1	5	7.00	1.44
1P1N8T2D	1.00	1	240	1	2	7.00	1.44
1P1N9T2D	1.25	1	240	1	3	8.00	1.44
1P1N9T1D	1.25	1	120	1	6	8.25	1.44
1P1N11T1D	1.50	1	120	1	7	9.50	1.44
1P1N11T2D	1.50	1	240	1	4	9.50	1.44
1P1N12T2D	1.80	1	240	1	4	11.00	1.44
1P1N13T1D	2.00	1	120	1	10	12.50	1.44
1P1N13T2D	2.00	1	240	1	5	12.50	1.44
1P1N18T1D	2.50	1	120	1	12	16.50	1.44
1P1N18T2D	2.50	1	240	1	6	16.50	1.44
1P1N25T2D	3.00	1	240	1	7	24.00	5.44
1P1N23R2D	4.00	1	240	1	10	22.00	1.44
1P1N24T2D	4.00	1	240	1	10	23.00	1.44
1P1N42T2D	7.00	1	240	1	17	41.00	1.44

1.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1HP2N7T1D	1.50	2	120	1	7	5.75	1.19
1HP2N7T2D	1.50	2	240	1	4	5.75	1.19
1HP2N8T1D	2.00	2	120	1	10	6.75	1.19
1HP2N8T2D	2.00	2	240	1	5	6.75	1.19
1HP3N7T1D	2.25	3	120	1	11	5.75	1.19
1HP3N7T2D	2.25	3	240	1	5	5.75	1.19
1HP2N9T2D	2.50	2	240	1	6	7.75	1.19
1HP2N9T1D	2.50	2	120	1	12	8.00	1.19
1HP3N8T1D	3.00	3	120	1	14	6.75	1.19
1HP3N8T2D	3.00	3	240	1	7	6.75	1.19
1HP2N11T1D	3.00	2	120	1	14	9.25	1.19
1HP2N11T2D	3.00	2	240	1	7	9.25	1.19
1HP2N12T2D	3.60	2	240	1	9	10.75	1.19
1HP3N9T2D	3.75	3	240	1	9	7.75	1.19
1HP3N9T1D	3.75	3	120	1	18	8.00	1.19
1HP2N13T1D	4.00	2	120	1	19	12.25	1.19
1HP2N13T2D	4.00	2	240	1	10	12.25	1.19
1HP3N11T1D	4.50	3	120	1	22	9.25	1.19
1HP3N11T2D	4.50	3	240	1	11	9.25	1.19
1HP2N18T1D	5.00	2	120	1	24	16.25	1.19
1HP2N18T2D	5.00	2	240	1	12	16.25	1.19
1HP3N12T2D	5.40	3	240	1	13	10.75	1.19
1HP3N13T1D	6.00	3	120	1	29	12.25	1.19
1HP3N13T2D	6.00	3	240	1	14	12.25	1.19
1HP2N25T2D	6.00	2	240	1	14	23.75	5.19
1HP3N18T1D	7.50	3	120	1	36	16.25	1.19
1HP3N18T2D	7.50	3	240	1	18	16.25	1.19
1HP2N23R2D	8.00	2	240	1	19	21.75	1.19
1HP2N24T2D	8.00	2	240	1	19	22.75	1.19
1HP3N25T2D	9.00	3	240	1	22	23.75	5.19
1HP3N23R2D	12.00	3	240	1	29	21.75	1.19

Screw Plug Heaters - Type IP

1HP3N24T2D	12.00	3	240	1	29	22.75	1.19
1HP2N42T2D	14.00	2	240	1	34	40.75	1.19
1HP3N42T2D	21.00	3	240	1	51	40.75	1.19

60 Watts/Sq. Inch

1.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1P1N12Q2D	1.20	1	240	1	3	11.00	1.44
1P1N18Q2D	1.90	1	240	1	5	17.00	1.44
1P1N24Q2D	2.60	1	240	1	6	23.00	1.44
1P1N30Q2D	3.30	1	240	1	8	29.00	1.44
1P1N42Q2D	4.80	1	240	1	12	41.00	1.44
1P1N48Q2D	5.50	1	240	1	13	47.00	1.44

1.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1HP2N12Q2D	2.40	2	240	1	6	10.75	1.19
1HP3N12Q2D	3.60	3	240	1	9	10.75	1.19
1HP2N18Q2D	3.80	2	240	1	9	16.75	1.19
1HP2N24Q2D	5.20	2	240	1	13	22.75	1.19
1HP3N18Q2D	5.70	3	240	1	14	16.75	1.19
1HP2N30Q2D	6.60	2	240	1	16	28.75	1.19
1HP3N24Q2D	7.80	3	240	1	19	22.75	1.19
1HP2N42Q2D	9.60	2	240	1	23	40.75	1.19
1HP3N30Q2D	9.90	3	240	1	24	28.75	1.19
1HP2N48Q2D	11.00	2	240	1	26	46.75	1.19
1HP3N42Q2D	14.40	3	240	1	35	40.75	1.19
1HP3N48Q2D	16.50	3	240	1	40	46.75	1.19

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P2N18B4D	5.00	2	480	1	6	17.13	3.06
2P2N20B4D	5.75	2	480	1	7	19.13	3.06
2P3N18B4D	7.50	3	480	1	9	17.13	3.06
2P2N25B2D	7.67	2	240	1	18	24.63	3.06
2P2N25B4D	7.67	2	480	1	9	24.63	3.06
2P3N20B4D	8.63	3	480	1	10	19.13	3.06
2P2N33B2D	10.00	2	240	1	24	32.13	3.06
2P2N33B4D	10.00	2	480	1	12	32.13	3.06
2P3N25B2D	11.50	3	240	1	28	24.63	3.06
2P3N25B4D	11.50	3	480	1	14	24.63	3.06
2P2N38B4D	12.00	2	480	1	14	37.63	5.06
2P2N36B4D	12.83	2	480	1	15	35.13	3.06
2P2N43B4D	13.33	2	480	1	16	42.13	5.06
2P3N33B2D	15.00	3	240	1	36	32.13	3.06
2P3N33B4D	15.00	3	480	1	18	32.13	3.06
2P2N52B4D	16.67	2	480	1	20	51.13	5.06
2P2N57B4D	16.67	2	480	1	20	56.13	10.06
2P3N38B4D	18.00	3	480	1	22	37.63	5.06
2P3N36B4D	19.25	3	480	1	23	35.13	3.06
2P3N43B4D	20.00	3	480	1	24	42.13	5.06
2P2N61B4D	20.00	2	480	1	24	60.63	5.06
2P3N52B4D	25.00	3	480	1	30	51.13	5.06

Screw Plug Heaters - Type IP

2P3N57B4D	25.00	3	480	1	30	56.13	10.06
2P3N61B4D	30.00	3	480	1	36	60.63	5.06

2.5 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2HP2N18B4D	5.00	2	480	1	6	16.81	2.75
2HP2N20B4D	5.75	2	480	1	7	18.81	2.75
2HP3N18B4D	7.50	3	480	1	9	16.81	2.75
2HP2N25B4D	7.67	2	480	1	9	24.31	2.75
2HP2N25B2D	7.67	2	240	1	18	24.31	2.75
2HP3N20B4D	8.63	3	480	1	10	18.81	2.75
2HP2N33B2D	10.00	2	240	1	24	31.81	2.75
2HP2N33B4D	10.00	2	480	1	12	31.81	2.75
2HP3N25B4D	11.50	3	480	1	14	24.31	2.75
2HP3N25B2D	11.50	3	240	1	28	24.31	2.75
2HP2N38B4D	12.00	2	480	1	14	37.31	4.75
2HP2N36B4D	12.83	2	480	1	15	34.81	2.75
2HP2N43B4D	13.33	2	480	1	16	41.81	4.75
2HP3N33B4D	15.00	3	480	1	18	31.81	2.75
2HP3N33B2D	15.00	3	240	1	36	31.81	2.75
2HP2N52B4D	16.67	2	480	1	20	50.81	4.75
2HP2N57B4D	16.67	2	480	1	20	55.81	9.75
2HP3N38B4D	18.00	3	480	1	22	37.31	4.75
2HP3N36B4D	19.25	3	480	1	23	34.81	2.75
2HP3N43B4D	20.00	3	480	1	24	41.81	4.75
2HP2N61B4D	20.00	2	480	1	24	60.31	4.75
2HP3N52B4D	25.00	3	480	1	30	50.81	4.75
2HP3N57B4D	25.00	3	480	1	30	55.81	9.75
2HP3N61B4D	30.00	3	480	1	36	60.31	4.75

45 Watts/Sq. Inch

2.0 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2P2N10H4D	2.00	2	480	1	2	9.63	3.06
2P3N10H4D	3.00	3	480	1	4	9.63	3.06
2P2N18H2D	4.00	2	240	1	10	17.13	3.06
2P2N18H4D	4.00	2	480	1	5	17.13	3.06
2P2N20H2D	5.00	2	240	1	12	19.13	3.06
2P2N20H4D	5.00	2	480	1	6	19.13	3.06
2P3N18H2D	6.00	3	240	1	14	17.13	3.06
2P3N18H4D	6.00	3	480	1	7	17.13	3.06
2P2N25H4D	6.00	2	480	1	7	24.63	3.06
2P2N25H2D	6.00	2	240	1	14	24.63	3.06
2P3N20H2D	7.50	3	240	1	18	19.13	3.06
2P3N20H4D	7.50	3	480	1	9	19.13	3.06
2P2N33H4D	8.00	2	480	1	10	32.13	3.06
2P2N33H2D	8.00	2	240	1	19	32.13	3.06
2P3N25H2D	9.00	3	240	1	22	24.63	3.06
2P3N25H4D	9.00	3	480	1	11	24.63	3.06
2P2N40H2D	10.00	2	240	1	24	39.63	3.06
2P2N40H4D	10.00	2	480	1	12	39.63	3.06
2P3N33H2D	12.00	3	240	1	29	32.13	3.06
2P3N33H4D	12.00	3	480	1	14	32.13	3.06
2P2N48H4D	12.00	2	480	1	14	47.13	3.06

Screw Plug Heaters - Type IP

2P2N52H4D	12.00	2	480	1	14	51.13	5.06
2P3N40H2D	15.00	3	240	1	36	39.63	3.06
2P3N40H4D	15.00	3	480	1	18	39.63	3.06
2P2N61H4D	16.67	2	480	1	20	60.63	5.06
2P3N48H4D	18.00	3	480	1	22	47.13	3.06
2P3N52H4D	18.00	3	480	1	22	51.13	5.06
2P3N61H4D	25.00	3	480	1	30	60.63	5.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP2N10H4D	2.00	2	480	1	2	9.31	2.75
2HP3N10H4D	3.00	3	480	1	4	9.31	2.75
2HP2N18H4D	4.00	2	480	1	5	16.81	2.75
2HP2N18H2D	4.00	2	240	1	10	16.81	2.75
2HP2N20H4D	5.00	2	480	1	6	18.81	2.75
2HP2N20H2D	5.00	2	240	1	12	18.81	2.75
2HP3N18H4D	6.00	3	480	1	7	16.81	2.75
2HP3N18H2D	6.00	3	240	1	14	16.81	2.75
2HP2N25H4D	6.00	2	480	1	7	24.31	2.75
2HP2N25H2D	6.00	2	240	1	14	24.31	2.75
2HP3N20H2D	7.50	3	240	1	18	18.81	2.75
2HP3N20H4D	7.50	3	480	1	9	18.81	2.75
2HP2N33H4D	8.00	2	480	1	10	31.81	2.75
2HP2N33H2D	8.00	2	240	1	19	31.81	2.75
2HP3N25H2D	9.00	3	240	1	22	24.31	2.75
2HP3N25H4D	9.00	3	480	1	11	24.31	2.75
2HP2N40H4D	10.00	2	480	1	12	39.31	2.75
2HP2N40H2D	10.00	2	240	1	24	39.31	2.75
2HP3N33H2D	12.00	3	240	1	29	31.81	2.75
2HP3N33H4D	12.00	3	480	1	14	31.81	2.75
2HP2N48H4D	12.00	2	480	1	14	46.81	2.75
2HP2N52H4D	12.00	2	480	1	14	50.81	4.75
2HP3N40H4D	15.00	3	480	1	18	39.31	2.75
2HP3N40H2D	15.00	3	240	1	36	39.31	2.75
2HP2N61H4D	16.67	2	480	1	20	60.31	4.75
2HP3N48H4D	18.00	3	480	1	22	46.81	2.75
2HP3N52H4D	18.00	3	480	1	22	50.81	4.75
2HP3N61H4D	25.00	3	480	1	30	60.31	4.75

35 Watts/Sq. Inch

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P2N48F4D	6.67	2	480	1	8	46.13	13.06
2P3N48F4D	10.00	3	480	1	12	46.13	13.06
2P2N61F4D	10.00	2	480	1	12	59.13	13.06
2P3N61F4D	15.00	3	480	1	18	59.13	13.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP2N48F4D	6.67	2	480	1	8	45.81	12.75
2HP3N48F4D	10.00	3	480	1	12	45.81	12.75
2HP2N61F4D	10.00	2	480	1	12	58.81	12.75
2HP3N61F4D	15.00	3	480	1	18	58.81	12.75

Screw Plug Heaters - Type IP

30 Watts/Sq. Inch

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P2N44G4D	6.00	2	480	1	7	43.63	10.06
2P2N56G4D	8.00	2	480	1	10	55.63	10.06
2P3N44G4D	9.00	3	480	1	11	43.63	10.06
2P3N56G4D	12.00	3	480	1	14	55.63	10.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP2N44G4D	6.00	2	480	1	7	43.31	9.75
2HP2N56G4D	8.00	2	480	1	10	55.31	9.75
2HP3N44G4D	9.00	3	480	1	11	43.31	9.75
2HP3N56G4D	12.00	3	480	1	14	55.31	9.75

23 Watts/Sq. Inch

1.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1P1N7T2DD	0.19	1	120	1	1	6.00	1.44
1P1N8T2DD	0.25	1	120	1	1	7.00	1.44
1P1N8T4D	0.25	1	240	1	1	7.00	1.44
1P1N9T2DD	0.31	1	120	1	2	8.00	1.44
1P1N11T2DD	0.38	1	120	1	2	9.50	1.44
1P1N11T4D	0.38	1	240	1	1	9.50	1.44
1P1N12T2DD	0.45	1	120	1	2	11.00	1.44
1P1N12T4D	0.45	1	240	1	1	11.00	1.44
1P1N13T4D	0.50	1	240	1	1	12.38	1.44
1P1N13T2DD	0.50	1	120	1	2	12.50	1.44
1P1N18T2DD	0.63	1	120	1	3	16.50	1.44
1P1N18T4D	0.63	1	240	1	2	16.50	1.44
1P1N21T4D	0.75	1	240	1	2	20.00	1.44
1P1N25T2DD	0.75	1	120	1	4	24.00	5.44
1P1N23R2DD	1.00	1	120	1	5	22.00	1.44
1P1N23R4D	1.00	1	240	1	2	22.00	1.44
1P1N24T2DD	1.00	1	120	1	5	23.00	1.44
1P1N24T4D	1.00	1	240	1	2	23.00	1.44
1P1N30T4D	1.25	1	240	1	3	29.00	1.44
1P1N36T4D	1.50	1	240	1	4	35.00	1.44
1P1N42T2DD	1.75	1	120	1	8	41.00	1.44

1.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1HP2N7T2DD	0.38	2	120	1	2	5.75	1.19
1HP2N8T2DD	0.50	2	120	1	2	6.75	1.19
1HP2N8T4D	0.50	2	240	1	1	6.75	1.19
1HP3N7T2DD	0.56	3	120	1	3	5.75	1.19
1HP2N9T2DD	0.63	2	120	1	3	7.75	1.19
1HP3N8T2DD	0.75	3	120	1	4	6.75	1.19
1HP3N8T4D	0.75	3	240	1	2	6.75	1.19
1HP2N11T2DD	0.75	2	120	1	4	9.25	1.19
1HP2N11T4D	0.75	2	240	1	2	9.25	1.19
1HP2N12T2DD	0.90	2	120	1	4	10.75	1.19
1HP2N12T4D	0.90	2	240	1	2	10.75	1.19

Screw Plug Heaters - Type IP

1HP3N9T2DD	0.94	3	120	1	5	7.75	1.19
1HP2N13T4D	1.00	2	240	1	2	12.13	1.19
1HP2N13T2DD	1.00	2	120	1	5	12.25	1.19
1HP3N11T2DD	1.13	3	120	1	5	9.25	1.19
1HP3N11T4D	1.13	3	240	1	3	9.25	1.19
1HP2N18T2DD	1.25	2	120	1	6	16.25	1.19
1HP2N18T4D	1.25	2	240	1	3	16.25	1.19
1HP3N12T2DD	1.35	3	120	1	6	10.75	1.19
1HP3N12T4D	1.35	3	240	1	3	10.75	1.19
1HP3N13T4D	1.50	3	240	1	4	12.13	1.19
1HP3N13T2DD	1.50	3	120	1	7	12.25	1.19
1HP2N21T4D	1.50	2	240	1	4	19.75	1.19
1HP2N25T2DD	1.50	2	120	1	7	23.75	5.19
1HP3N18T2DD	1.88	3	120	1	9	16.25	1.19
1HP3N18T4D	1.88	3	240	1	5	16.25	1.19
1HP2N23R2DD	2.00	2	120	1	10	21.75	1.19
1HP2N23R4D	2.00	2	240	1	5	21.75	1.19
1HP2N24T2DD	2.00	2	120	1	10	22.75	1.19
1HP2N24T4D	2.00	2	240	1	5	22.75	1.19
1HP3N21T4D	2.25	3	240	1	5	19.75	1.19
1HP3N25T2DD	2.25	3	120	1	11	23.75	5.19
1HP2N30T4D	2.50	2	240	1	6	28.75	1.19
1HP3N23R2DD	3.00	3	120	1	14	21.75	1.19
1HP3N23R4D	3.00	3	240	1	7	21.75	1.19
1HP3N24T2DD	3.00	3	120	1	14	22.75	1.19
1HP3N24T4D	3.00	3	240	1	7	22.75	1.19
1HP2N36T4D	3.00	2	240	1	7	34.75	1.19
1HP2N42T2DD	3.50	2	120	1	17	40.75	1.19
1HP3N30T4D	3.75	3	240	1	9	28.75	1.19
1HP3N36T4D	4.50	3	240	1	11	34.75	1.19
1HP3N42T2DD	5.25	3	120	1	25	40.75	1.19

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P2N10M2D	1.00	2	240	1	2	9.63	3.06
2P3N10M2D	1.50	3	240	1	4	9.63	3.06
2P2N13M1D	1.50	2	120	1	7	12.63	3.06
2P2N13M2D	1.50	2	120	1	7	12.63	3.06
2P2N13M4D	1.50	2	480	1	2	12.63	3.06
2P2N18M2D	2.00	2	240	1	5	17.13	3.06
2P2N18M4D	2.00	2	480	1	2	17.13	3.06
2P3N13M4D	2.25	3	480	1	3	12.63	3.06
2P3N13M1D	2.25	3	120	1	11	12.63	3.06
2P3N13M2D	2.25	3	120	1	11	12.63	3.06
2P2N20M2D	2.50	2	240	1	6	19.13	3.06
2P2N20M4D	2.50	2	480	1	3	19.63	3.06
2P3N18M4D	3.00	3	480	1	4	17.13	3.06
2P3N18M2D	3.00	3	240	1	7	17.13	3.06
2P2N25M1D	3.00	2	120	1	14	24.63	3.06
2P2N25M2D	3.00	2	240	1	7	24.63	3.06
2P2N25M4D	3.00	2	480	1	4	24.63	3.06
2P3N20M2D	3.75	3	240	1	9	19.13	3.06
2P3N20M4D	3.75	3	480	1	5	19.63	3.06
2P2N33M4D	4.00	2	480	1	5	32.13	3.06

Screw Plug Heaters - Type IP

2P3N25M1D	4.50	3	120	1	22	24.63	3.06
2P3N25M2D	4.50	3	240	1	11	24.63	3.06
2P3N25M4D	4.50	3	480	1	5	24.63	3.06
2P2N40M2D	5.00	2	240	1	12	39.63	3.06
2P2N40M4D	5.00	2	480	1	6	39.63	3.06
2P3N33M4D	6.00	3	480	1	7	32.13	3.06
2P2N48M4D	6.00	2	480	1	7	47.13	3.06
2P2N52M4D	6.67	2	480	1	8	51.13	5.06
2P2N52M2D	6.67	2	240	1	16	51.13	5.06
2P2N59M4D	6.67	2	480	1	8	57.13	12.06
2P3N40M2D	7.50	3	240	1	18	39.63	3.06
2P3N40M4D	7.50	3	480	1	9	39.63	3.06
2P3N48M4D	9.00	3	480	1	11	47.13	3.06
2P3N52M4D	10.00	3	480	1	12	51.13	5.06
2P3N52M2D	10.00	3	240	1	24	51.13	5.06
2P3N59M4D	10.00	3	480	1	12	57.13	12.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP2N10M2D	1.00	2	240	1	2	9.31	2.75
2HP3N10M2D	1.50	3	240	1	4	9.31	2.75
2HP2N13M1D	1.50	2	120	1	7	12.31	2.75
2HP2N13M4D	1.50	2	480	1	2	12.31	2.75
2HP2N13M2D	1.50	2	120	1	7	12.31	2.75
2HP2N18M2D	2.00	2	240	1	5	16.81	2.75
2HP2N18M4D	2.00	2	480	1	2	16.81	2.75
2HP3N13M2D	2.25	3	120	1	11	12.31	2.75
2HP3N13M1D	2.25	3	120	1	11	12.31	2.75
2HP3N13M4D	2.25	3	480	1	3	12.31	2.75
2HP2N20M2D	2.50	2	240	1	6	18.81	2.75
2HP2N20M4D	2.50	2	480	1	3	19.31	2.75
2HP3N18M2D	3.00	3	240	1	7	16.81	2.75
2HP3N18M4D	3.00	3	480	1	4	16.81	2.75
2HP2N25M4D	3.00	2	480	1	4	24.31	2.75
2HP2N25M2D	3.00	2	240	1	7	24.31	2.75
2HP2N25M1D	3.00	2	120	1	14	24.31	2.75
2HP3N20M2D	3.75	3	240	1	9	18.81	2.75
2HP3N20M4D	3.75	3	480	1	5	19.31	2.75
2HP2N33M4D	4.00	2	480	1	5	31.81	2.75
2HP3N25M4D	4.50	3	480	1	5	24.31	2.75
2HP3N25M2D	4.50	3	240	1	11	24.31	2.75
2HP3N25M1D	4.50	3	120	1	22	24.31	2.75
2HP2N40M2D	5.00	2	240	1	12	39.31	2.75
2HP2N40M4D	5.00	2	480	1	6	39.31	2.75
2HP3N33M4D	6.00	3	480	1	7	31.81	2.75
2HP2N48M4D	6.00	2	480	1	7	46.81	2.75
2HP2N52M2D	6.67	2	240	1	16	50.81	4.75
2HP2N52M4D	6.67	2	480	1	8	50.81	4.75
2HP2N59M4D	6.67	2	480	1	8	56.81	11.75
2HP3N40M4D	7.50	3	480	1	9	39.31	2.75
2HP3N40M2D	7.50	3	240	1	18	39.31	2.75
2HP3N48M4D	9.00	3	480	1	11	46.81	2.75
2HP3N52M2D	10.00	3	240	1	24	50.81	4.75
2HP3N52M4D	10.00	3	480	1	12	50.81	4.75

Screw Plug Heaters - Type IP

2HP3N59M4D	10.00	3	480	1	12	56.81	11.75
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20 Watts/Sq. Inch

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P3N18B4Y	2.50	3	480	1	3	17.13	3.06
2P3N20B4Y	2.88	3	480	1	3	19.13	3.06
2P3N25B2Y	3.75	3	240	1	9	24.63	3.06
2P3N25B4Y	3.75	3	480	1	5	24.63	3.06
2P3N33B2Y	5.00	3	240	1	12	32.13	3.06
2P3N33B4Y	5.00	3	480	1	6	32.13	3.06
2P3N38B4Y	6.00	3	480	1	7	37.63	5.06
2P3N36B4Y	6.38	3	480	1	8	35.13	3.06
2P3N43B4Y	6.63	3	480	1	8	42.13	5.06
2P3N52B4Y	8.25	3	480	1	10	51.13	5.06
2P3N52B2Y	8.25	3	240	1	20	51.13	5.06
2P3N57B4Y	8.25	3	480	1	10	56.13	10.06
2P3N61B4Y	10.00	3	480	1	12	60.63	5.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP3N18B4Y	2.50	3	480	1	3	16.81	2.75
2HP3N20B4Y	2.88	3	480	1	3	18.81	2.75
2HP3N25B4Y	3.75	3	480	1	5	24.31	2.75
2HP3N25B2Y	3.75	3	240	1	9	24.31	2.75
2HP3N33B4Y	5.00	3	480	1	6	31.81	2.75
2HP3N33B2Y	5.00	3	240	1	12	31.81	2.75
2HP3N38B4Y	6.00	3	480	1	7	37.31	4.75
2HP3N36B4Y	6.38	3	480	1	8	34.81	2.75
2HP3N43B4Y	6.63	3	480	1	8	41.81	4.75
2HP3N52B4Y	8.25	3	480	1	10	50.81	4.75
2HP3N52B2Y	8.25	3	240	1	20	50.81	4.75
2HP3N57B4Y	8.25	3	480	1	10	55.81	9.75
2HP3N61B4Y	10.00	3	480	1	12	60.31	4.75

15 Watts/Sq. Inch

1.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
1P1N12Q2DD	0.30	1	120	1	1	11.00	1.44
1P1N12Q4D	0.30	1	240	1	1	11.00	1.44
1P1N18Q2DD	0.48	1	120	1	2	17.00	1.44
1P1N24Q2DD	0.65	1	120	1	3	23.00	1.44
1P1N24Q4D	0.65	1	240	1	2	23.00	1.44
1P1N30Q2DD	0.83	1	120	1	4	29.00	1.44
1P1N30Q4D	0.83	1	240	1	2	29.00	1.44
1P1N36Q4D	1.00	1	240	1	2	35.00	1.44
1P1N42Q2DD	1.20	1	120	1	6	41.00	1.44
1P1N42Q4D	1.20	1	240	1	3	41.00	1.44
1P1N48Q2DD	1.38	1	120	1	7	47.00	1.44
1P1N48Q4D	1.38	1	240	1	3	47.00	1.44

1.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
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Screw Plug Heaters - Type IP

1HP2N12Q2DD	0.60	2	120	1	3	10.75	1.19
1HP2N12Q4D	0.60	2	240	1	1	10.75	1.19
1HP3N12Q2DD	0.90	3	120	1	4	10.75	1.19
1HP3N12Q4D	0.90	3	240	1	2	10.75	1.19
1HP2N18Q2DD	0.95	2	120	1	5	16.75	1.19
1HP2N24Q2DD	1.30	2	120	1	6	22.75	1.19
1HP2N24Q4D	1.30	2	240	1	3	22.75	1.19
1HP3N18Q2DD	1.43	3	120	1	7	16.75	1.19
1HP2N30Q2DD	1.65	2	120	1	8	28.75	1.19
1HP2N30Q4D	1.65	2	240	1	4	28.75	1.19
1HP3N24Q2DD	1.95	3	120	1	9	22.75	1.19
1HP3N24Q4D	1.95	3	240	1	5	22.75	1.19
1HP2N36Q4D	2.00	2	240	1	5	34.75	1.19
1HP2N42Q2DD	2.40	2	120	1	12	40.75	1.19
1HP2N42Q4D	2.40	2	240	1	6	40.75	1.19
1HP3N30Q2DD	2.48	3	120	1	12	28.75	1.19
1HP3N30Q4D	2.48	3	240	1	6	28.75	1.19
1HP2N48Q2DD	2.75	2	120	1	13	46.75	1.19
1HP2N48Q4D	2.75	2	240	1	7	46.75	1.19
1HP3N36Q4D	3.00	3	240	1	7	34.75	1.19
1HP3N42Q2DD	3.60	3	120	1	17	40.75	1.19
1HP3N42Q4D	3.60	3	240	1	9	40.75	1.19
1HP3N48Q2DD	4.13	3	120	1	20	46.75	1.19
1HP3N48Q4D	4.13	3	240	1	10	46.75	1.19

2.0 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2P3N10H4Y	1.00	3	480	1	1	9.63	3.06
2P3N18H2Y	2.00	3	240	1	5	17.13	3.06
2P3N18H4Y	2.00	3	480	1	2	17.13	3.06
2P3N20H2Y	2.50	3	240	1	6	19.13	3.06
2P3N20H4Y	2.50	3	480	1	3	19.13	3.06
2P3N25H2Y	3.00	3	240	1	7	24.63	3.06
2P3N25H4Y	3.00	3	480	1	4	24.63	3.06
2P3N33H2Y	4.00	3	240	1	10	32.13	3.06
2P3N33H4Y	4.00	3	480	1	5	32.13	3.06
2P3N40H2Y	5.00	3	240	1	12	39.63	3.06
2P3N40H4Y	5.00	3	480	1	6	39.63	3.06
2P3N48H4Y	6.00	3	480	1	7	47.13	3.06
2P3N52H4Y	6.00	3	480	1	7	51.13	5.06
2P3N61H4Y	8.25	3	480	1	10	60.63	5.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP3N10H4Y	1.00	3	480	1	1	9.31	2.75
2HP3N18H4Y	2.00	3	480	1	2	16.81	2.75
2HP3N18H2Y	2.00	3	240	1	5	16.81	2.75
2HP3N20H2Y	2.50	3	240	1	6	18.81	2.75
2HP3N20H4Y	2.50	3	480	1	3	18.81	2.75
2HP3N25H2Y	3.00	3	240	1	7	24.31	2.75
2HP3N25H4Y	3.00	3	480	1	4	24.31	2.75
2HP3N33H2Y	4.00	3	240	1	10	31.81	2.75
2HP3N33H4Y	4.00	3	480	1	5	31.81	2.75
2HP3N40H4Y	5.00	3	480	1	6	39.31	2.75

Screw Plug Heaters - Type IP

2HP3N40H2Y	5.00	3	240	1	12	39.31	2.75
2HP3N48H4Y	6.00	3	480	1	7	46.81	2.75
2HP3N52H4Y	6.00	3	480	1	7	50.81	4.75
2HP3N61H4Y	8.25	3	480	1	10	60.31	4.75

12 Watts/Sq. Inch

1.0 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
1P1N6W1D	0.13	1	120	1	1	5.00	1.44
1P1N8W1D	0.18	1	120	1	1	9.25	1.44
1P1N8W2D	0.18	1	240	1	0	9.25	1.44
1P1N12W2D	0.25	1	240	1	1	12.88	1.44
1P1N29W1D	0.50	1	120	1	2	29.00	1.44

1.5 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
1HP2N6W1D	0.25	2	120	1	1	4.75	1.19
1HP2N8W1D	0.35	2	120	1	2	9.00	1.19
1HP2N8W2D	0.35	2	240	1	1	9.00	1.19
1HP3N6W1D	0.38	3	120	1	2	4.75	1.19
1HP2N12W2D	0.50	2	240	1	1	12.63	1.19
1HP3N8W1D	0.53	3	120	1	3	9.00	1.19
1HP3N8W2D	0.53	3	240	1	1	9.00	1.19
1HP3N12W2D	0.75	3	240	1	2	12.63	1.19
1HP2N29W1D	1.00	2	120	1	5	28.75	1.19
1HP3N29W1D	1.50	3	120	1	7	28.75	1.19

2.0 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2P3N48F4Y	3.25	3	480	1	4	47.63	16.06
2P3N61F4Y	5.00	3	480	1	6	60.63	13.06

2.5 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2HP3N48F4Y	3.25	3	480	1	4	47.31	15.75
2HP3N61F4Y	5.00	3	480	1	6	60.31	12.75

10 Watts/Sq. Inch

2.0 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2P3N44G4Y	3.00	3	480	1	4	43.63	10.06
2P3N56G4Y	4.00	3	480	1	5	55.63	10.06

2.5 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2HP3N44G4Y	3.00	3	480	1	4	43.31	9.75
2HP3N56G4Y	4.00	3	480	1	5	55.31	9.75

8 Watts/Sq. Inch

2.0 Inch Heaters

Part Number	kW	No. Ele.	Volts	Circuits	Amps	OAL	CL
2P3N10M2Y	0.50	3	240	1	1	9.63	3.06

Screw Plug Heaters - Type IP

2P3N13M4Y	0.75	3	480	1	1	12.63	3.06
2P3N13M1Y	0.75	3	120	1	4	12.63	3.06
2P3N13M2Y	0.75	3	120	1	4	12.63	3.06
2P3N18M4Y	1.00	3	480	1	1	17.13	3.06
2P3N18M2Y	1.00	3	240	1	2	17.13	3.06
2P3N20M2Y	1.25	3	240	1	3	19.13	3.06
2P3N20M4Y	1.25	3	480	1	2	19.63	3.06
2P3N25M1Y	1.50	3	120	1	7	24.63	3.06
2P3N25M2Y	1.50	3	240	1	4	24.63	3.06
2P3N25M4Y	1.50	3	480	1	2	24.63	3.06
2P3N33M4Y	2.00	3	480	1	2	32.13	3.06
2P3N40M2Y	2.50	3	240	1	6	39.63	3.06
2P3N40M4Y	2.50	3	480	1	3	39.63	3.06
2P3N48M4Y	3.00	3	480	1	4	47.13	3.06
2P3N52M4Y	3.25	3	480	1	4	51.13	5.06
2P3N52M2Y	3.25	3	240	1	8	51.13	5.06
2P3N59M4Y	3.25	3	480	1	4	57.13	12.06

2.5 Inch Heaters

<u>Part Number</u>	<u>kW</u>	<u>No. Ele.</u>	<u>Volts</u>	<u>Circuits</u>	<u>Amps</u>	<u>OAL</u>	<u>CL</u>
2HP3N10M2Y	0.50	3	240	1	1	9.31	2.75
2HP3N13M2Y	0.75	3	120	1	4	12.31	2.75
2HP3N13M1Y	0.75	3	120	1	4	12.31	2.75
2HP3N13M4Y	0.75	3	480	1	1	12.31	2.75
2HP3N18M2Y	1.00	3	240	1	2	16.81	2.75
2HP3N18M4Y	1.00	3	480	1	1	16.81	2.75
2HP3N20M2Y	1.25	3	240	1	3	18.81	2.75
2HP3N20M4Y	1.25	3	480	1	2	19.31	2.75
2HP3N25M4Y	1.50	3	480	1	2	24.31	2.75
2HP3N25M2Y	1.50	3	240	1	4	24.31	2.75
2HP3N25M1Y	1.50	3	120	1	7	24.31	2.75
2HP3N33M4Y	2.00	3	480	1	2	31.81	2.75
2HP3N40M4Y	2.50	3	480	1	3	39.31	2.75
2HP3N40M2Y	2.50	3	240	1	6	39.31	2.75
2HP3N48M4Y	3.00	3	480	1	4	46.81	2.75
2HP3N52M2Y	3.25	3	240	1	8	50.81	4.75
2HP3N52M4Y	3.25	3	480	1	4	50.81	4.75
2HP3N59M4Y	3.25	3	480	1	4	56.81	11.75