

ELECTRIC HEATER

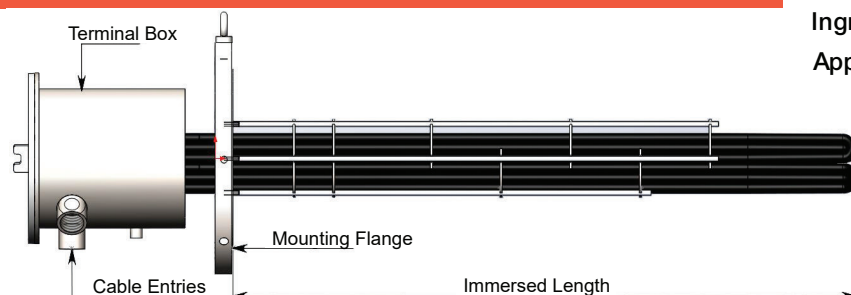
THE KEY TO THERMAL AND PROCESS HEATING



The standard heaters offer off-the-shelf solutions for heating in Zone 1 or 2 hazardous areas and are certified to ATEX/IECEX flameproof standards. Available in flange and thread connections, a heater can be constructed from SS304L or SS316L to suit client's budget.

A selection of designs for heat flux covers different process mediums from asphalt (bitumen), hot oil, chemical solutions to water, etc.

FLANGE MOUNTING



Technical Data

Duty Range

1kW, 2kW, 3kW, 5kW
(Single Phase),
5 ~ 100kW (Three Phase)

Flange

SS304L, SS316L

Working Pressure/ Temperature

15 Barg/180°C (limited to
150lb flanges)

Hazardous Certification

EX II 2 G/D, Ex db
IIA/IIB/IIC T1-T6 Gb, Ex tb
IIIC T85 ~ T450°C DB

Elements

SS304L, SS316L

Nominal Voltage

230V, Single Phase/400V,
Three Phase

Ambient

Terminal Box

Ingress Protection

Applications

-50°C ~+ 60°C

Cast Iron

IP66

Low heat flux heaters

- all kinds of process medium including gas, crude oil and asphalt

Medium heat flux heaters

- CIP tank and caustic solutions

High heat flux heaters

- mainly targeted at water heating

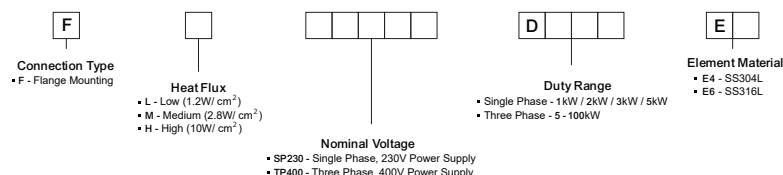
Over-temperature Protection

1 x elements over-temperature
protection (thermostatic control)

Process Control (optional)

1 x thermostatic control, please
indicate set point

Place Your Order



Power Supply (V)		Model	Heater Duty (kW)	Immersed Length (mm)	Flange Size (inch)	NOS. of Cable Entries (see notes)
230V SP	L	F-L-SP230-D001-XX	1	580.2	3	Type A
		F-L-SP230-D002-XX	2	757.2	4	Type A
		F-L-SP230-D003-XX	3	578.6	6	Type B
		F-L-SP230-D005-XX	5	932.6	6	Type B
	M	F-M-SP230-D001-XX	1	504.2	3	Type A
		F-M-SP230-D002-XX	2	504.2	3	Type A
		F-M-SP230-D003-XX	3	504.2	4	Type A
		F-M-SP230-D005-XX	5	807.2	4	Type A
	H	F-H-SP230-D002-XX	2	304.2	3	Type A
		F-H-SP230-D005-XX	5	368.2	3	Type A
400V 3PH	L	F-L-TP400-D005-XX	5	932.6	6	Type B
		F-L-TP400-D008-XX	8	991.6	6	Type B
		F-L-TP400-D012-XX	12	1109.6	6	Type B
		F-L-TP400-D018-XX	18	1106.4	8	Type C
		F-L-TP400-D025-XX	25	1308.4	8	Type C
		F-L-TP400-D030-XX	30	1560.4	3	Type C

400V 3PH	M	F-M-TP400-D005-XX	5	805.6	6	Type B
		F-M-TP400-D008-XX	8	654.6	6	Type B
		F-M-TP400-D012-XX	12	654.6	6	Type B
		F-M-TP400-D018-XX	18	730.6	6	Type B
		F-M-TP400-D025-XX	25	802.4	8	Type C
		F-M-TP400-D030-XX	30	802.4	8	Type C
	H	F-H-TP400-D005-XX	5	262.2	4	Type A
		F-H-TP400-D010-XX	10	474.2	4	Type A
		F-H-TP400-D020-XX	20	898.2	4	Type A
		F-H-TP400-D035-XX	35	790.6	6	Type B
		F-H-TP400-D050-XX	50	755.6	6	Type B
		F-H-TP400-D080-XX	80	724.4	8	Type C
		F-H-TP400-D100-XX	100	752.4	8	Type C

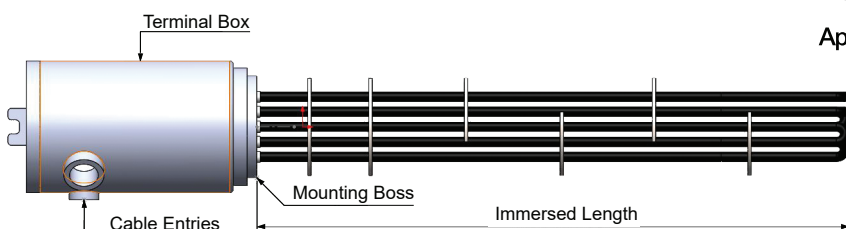
NOTES

Type A: 1 x M20, 1 x M25 / M20

Type B: 1 x M20, 2 x M32 / M20

Type C: 1 x M20, 2 x M40 / M32

THREAD MOUNTING



Terminal Box

Ingress Protection

Applications

Cast Iron

IP66

Low heat flux heaters

- all kinds of process medium including crude oil and asphalt

Medium heat flux heaters

- CIP tank and caustic solutions

High heat flux heaters

- mainly targeted at water heating

1 x elements over-temperature protection (thermostatic control)

1 x thermostatic control, please indicate set point

Technical Data

Duty Range

1kW, 2kW, 3kW, 5kW
(larger duties available in flange connection)

Boss

Brass

Working Pressure/ Temperature

Up to 5 Barg / Up to 80°C

Hazardous Certification

EX II 2 G/D, Ex db
IIA/IIB/IIC T1-T6 Gb, Ex tb
IIIC T85 ~ T450°C DB

Elements

SS304L, SS316L

Nominal Voltage

230V, Single Phase

Ambient

-50°C ~+ 60°C

Over-temperature Protection

Process Control (optional)

Place Your Order

T
Connection Type
• T - Thread Mounting

Heat Flux
• L - Low (1.2W/ cm²)
• M - Medium (2.8W/ cm²)
• H - High (10W/ cm²)
*Subject to applications

S P 2 3 0

Nominal Voltage
• SP230 - Single Phase, 230V Power Supply

D

Duty Range
• Single Phase - 1kW / 2kW / 3kW / 5kW

E

Element Material
• E4 - SS304L
• E6 - SS316L

	Model	Heater Duty (kW)	Immersed Length (mm)	Mounting Thread Size(inch)	NOS. of Cable Entries
L	F-L-SP230-D001-XX	1	598	2	1 x M20, 1 x M25
	F-L-SP230-D002-XX	2	598	3	
	F-L-SP230-D003-XX	3	874	3	
M	F-M-SP230-D001-XX	1	401	2	
	F-M-SP230-D002-XX	2	519	2	
	F-M-SP230-D003-XX	3	578	3	
	F-M-SP230-D005-XX	5	638	3	
H	F-H-SP230-D002-XX	2	443	2	
	F-H-SP230-D005-XX	5	543	2	

NOTES

Heaters with thread connection is not recommended for gas processes.

SINGAPORE

MALAYSIA

CHINA

INDONESIA

UAE

Singapore [Office]

7030 Ang Mo Kio Avenue 5,
Northstar #08-65,
Singapore, 569980
RCB No: 201539578M

Malaysia [Factory]

No. 31, Jalan Gemilang 6, Taman
Perindustrian Cemerlang, 81800
Ulu Tiram, Johor, Malaysia
Reg No: 1202241-W

✉ sales@dfiniti-t.com
🌐 www.dfiniti-t.com
in Dfiniti Technologies
T +65-6908 0869 | F +65-6282 0218

