FLOWSTART

The FlowStart is an electric coolant engine preheater with an integrated pump.

BENEFITS

- Even heat distribution allows for quick, cold starts and a warm engine ready to accept load
- Easy to install
- Reduces engine wear and thermal stress on hose and fittings

APPLICATIONS

- Diesel or natural gas genset applications

SPECIFICATIONS

Heating Unit

- Cast aluminum housing
- PA66 electrical cover
- 6.9 ft (2.1 m) power cable
- Heating element made of Incoloy 800

Circulating Pump

- Flow rate: 300L/h @ 1m height manometer (1.3 GPM @ 1.5PSI)
- IPX7 ingress protection level available

Regulating Thermostat

- 89-104 °F (32-40 °C)
- 95-122 °F (35-50 °C)

Safety Thermostat

- 230°F (110°C) safety thermostat with manual reset, rated at 25A

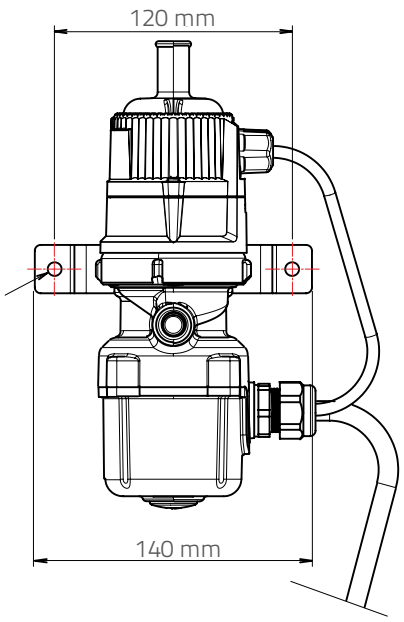
Available Power

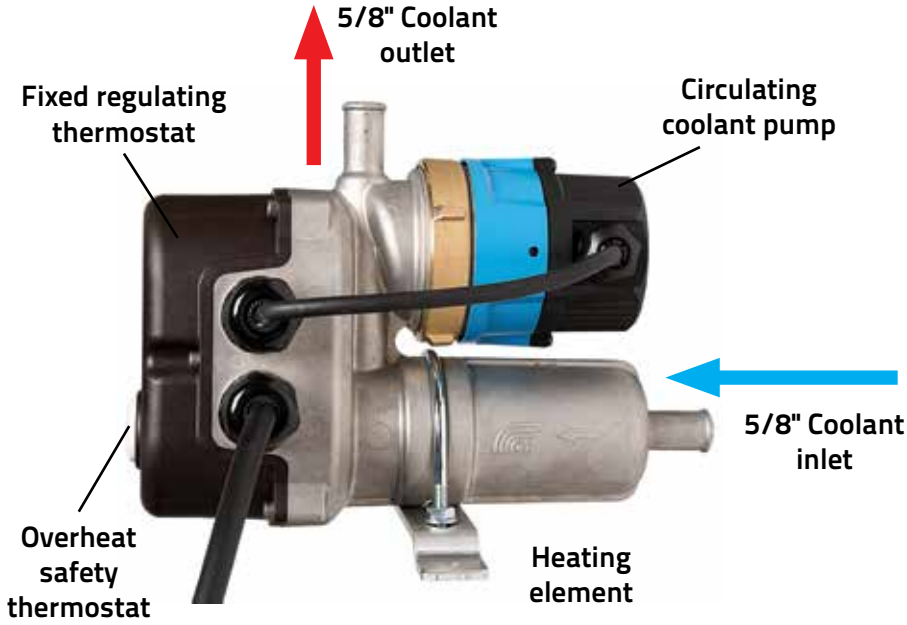
- 0.5-2 kW
- 120, 230 V

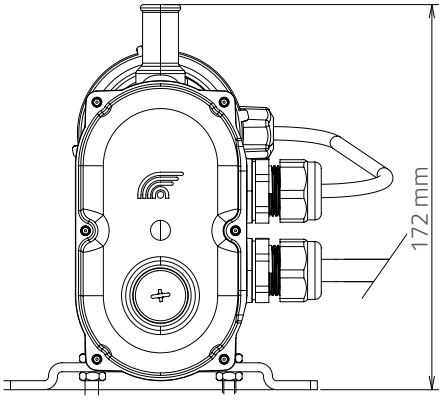
PHILLIPS & TEMRO industries®

phillipsandtemro.com

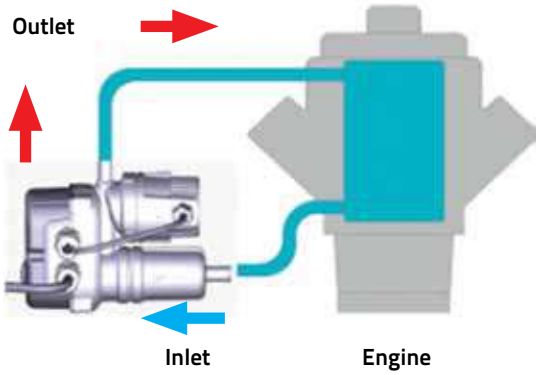
FLOWSTART

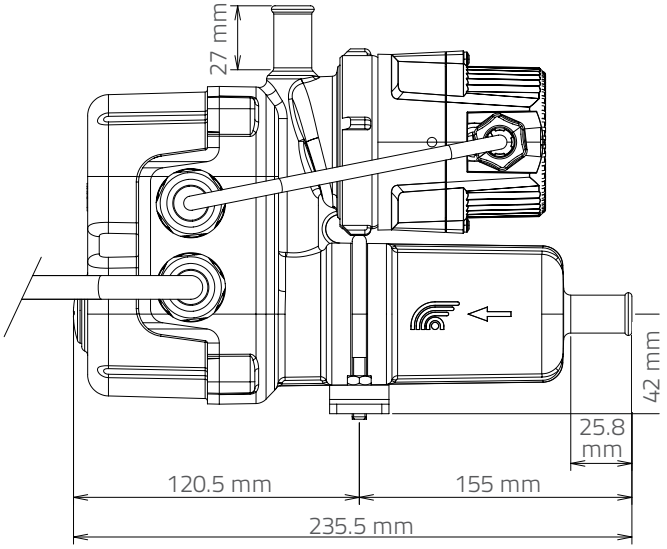






INSTALLATION DIAGRAM





MOUNTING KIT

9700 West 74th Street, Eden Prairie, MN 55344
Phone: 952-941-9700 ▪ Toll-Free: 1-800-328-6108
sales@phillipsandtemro.com

LIT0176P 0319 ©2019 Phillips & Temro Industries

PHILLIPS & TEMRO industries®

phillipsandtemro.com

PARTS LIST: UL LISTED

Part Number	Hertz	Volts	Phase	Watts	Regulating Thermostat	Safety Thermostat	Plug Type	Certifications
3305106	50-60	120	1	1000	95-122°F (35-50°C)	230°F (110°C)	NEMA 5-15	UL
3305114	50-60	120	1	1500	95-122°F (35-50°C)	230°F (110°C)	NEMA 5-20	UL
3305122	50-60	120	1	2000	95-122°F (35-50°C)	230°F (110°C)	NEMA L5-30	UL
3305130	50-60	208	1	1000	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL
3305134	50-60	208	1	1500	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL
3305138	50-60	208	1	2000	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL
3305146	50-60	240	1	1090	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL
3305150	50-60	240	1	1635	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL
3305154	50-60	240	1	2180	95-122°F (35-50°C)	230°F (110°C)	NEMA 6-15	UL

PARTS LIST: CE CERTIFIED

Part Number	Hertz	Volts	Phase	Watts	Regulating Thermostat	Safety Thermostat	Plug Type	Certifications
FS1201 500 3440 C	50-60	120	1	500	34-40°C (93-104°F)	None	CEE 7/7	CE
FS12011000 3440 C	50-60	120	1	1000	34-40°C (93-104°F)	None	CEE 7/7	CE
FS12011350 3440 C	50-60	120	1	1350	34-40°C (93-104°F)	None	CEE 7/7	CE
FS12011500 3440 C	50-60	120	1	1500	34-40°C (93-104°F)	None	CEE 7/7	CE
FS12012000 3440 C	50-60	120	1	2000	34-40°C (93-104°F)	None	CEE 7/7	CE
FS2301 500 3440 C	50-60	230	1	500	34-40°C (93-104°F)	None	CEE 7/7	CE
FS23011000 3440 C	50-60	230	1	1000	34-40°C (93-104°F)	None	CEE 7/7	CE
FS23011500 3440 C	50-60	230	1	1500	34-40°C (93-104°F)	None	CEE 7/7	CE
FS23012000 3440 C	50-60	230	1	2000	34-40°C (93-104°F)	None	CEE 7/7	CE
FS1201 500 3440 MC	50-60	120	1	500	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011000 3440 MC	50-60	120	1	1000	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011350 3440 MC	50-60	120	1	1350	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011500 3440 MC	50-60	120	1	1500	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12012000 3440 MC	50-60	120	1	2000	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS2301 500 3440 MC	50-60	230	1	500	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23011000 3440 MC	50-60	230	1	1000	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23011500 3440 MC	50-60	230	1	1500	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23012000 3440 MC	50-60	230	1	2000	34-40°C (93-104°F)	110°C (230°F) with manual reset	CEE 7/7	CE

PARTS LIST: CE CERTIFIED

Part Number	Hertz	Volts	Phase	Watts	Regulating Thermostat	Safety Thermostat	Plug Type	Certifications
FS1201 500 3550 C	50-60	120	1	500	35-50°C (95-122°F)	None	CEE 7/7	CE
FS12011000 3550 C	50-60	120	1	1000	35-50°C (95-122°F)	None	CEE 7/7	CE
FS12011350 3550 C	50-60	120	1	1350	35-50°C (95-122°F)	None	CEE 7/7	CE
FS12011500 3550 C	50-60	120	1	1500	35-50°C (95-122°F)	None	CEE 7/7	CE
FS12012000 3550 C	50-60	120	1	2000	35-50°C (95-122°F)	None	CEE 7/7	CE
FS2301 500 3550 C	50-60	230	1	500	35-50°C (95-122°F)	None	CEE 7/7	CE
FS23011000 3550 C	50-60	230	1	1000	35-50°C (95-122°F)	None	CEE 7/7	CE
FS23011500 3550 C	50-60	230	1	1500	35-50°C (95-122°F)	None	CEE 7/7	CE
FS23012000 3550 C	50-60	230	1	2000	35-50°C (95-122°F)	None	CEE 7/7	CE
FS1201 500 3550 MC	50-60	120	1	500	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011000 3550 MC	50-60	120	1	1000	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011350 3550 MC	50-60	120	1	1350	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12011500 3550 MC	50-60	120	1	1500	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS12012000 3550 MC	50-60	120	1	2000	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS2301 500 3550 MC	50-60	230	1	500	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23011000 3550 MC	50-60	230	1	1000	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23011500 3550 MC	50-60	230	1	1500	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE
FS23012000 3550 MC	50-60	230	1	2000	35-50°C (95-122°F)	110°C (230°F) with manual reset	CEE 7/7	CE

9700 West 74th Street, Eden Prairie, MN 55344
Phone: 952-941-9700 ▪ Toll-Free: 1-800-328-6108
sales@phillipsandtemro.com

LIT0176P 0319 ©2019 Phillips & Temro Industries

PHILLIPS & TEMRO industries®

phillipsandtemro.com