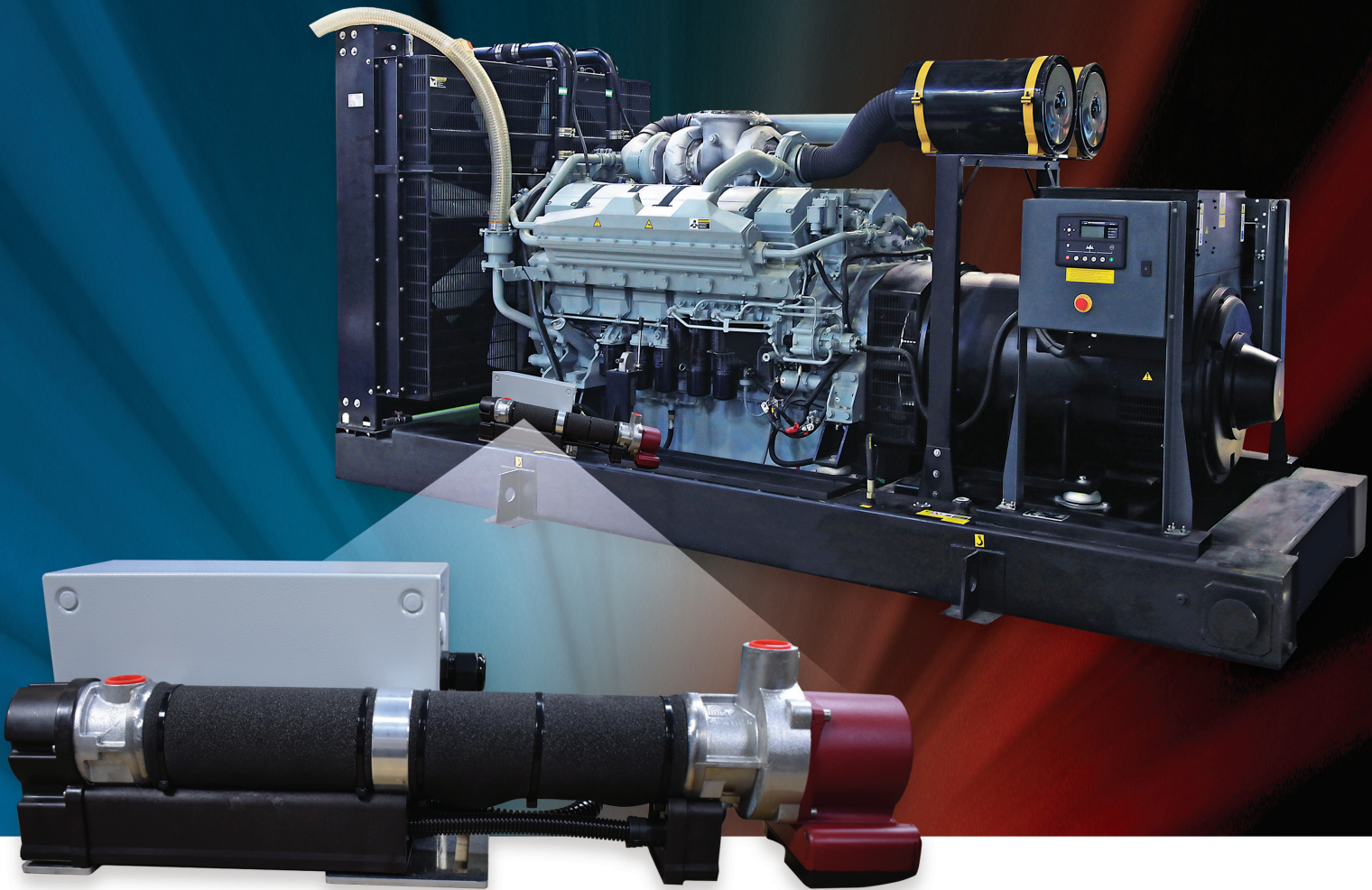


A Complete Line of
**CIRCULATION
HEATERS**
for The Power Generation Industry



POWER GENERATION CIRCULATION HEATERS

Phillips & Temro Industries is a global manufacturer that offers a full line of circulation heaters to meet the demanding requirements of the Power Generation industry. Our products are designed, tested and validated to meet OEM standards.

Benefits of using a Phillips & Temro Circulation Heater:

- Provides engine warming for quick, clean starts
- Reduces time to reach operating temperatures and full load acceptance
- All products are available with a safety thermostat to prevent overheat conditions



TopStart (0.5 kW to 12 kW, Single and 3 Phase)

Benefits

- Circulation pump for even heat distribution
- Compact, integrated pump for fast and even preheating
- Control box is used for applications larger than 4000W, 240V and/or 3-phase power

Features

- Volts: 120, 230, 240, 400, 440, 480, 600, 690
- Adjustable regulating thermostat: 32-176°F (0-80°C)
- Safety thermostat with manual reset: 230°F (110°C)



TopStart Biodiesel and Oil (1 kW to 2.7 kW)

The TopStart Biodiesel and Oil is an electrical preheating system with a circulating pump.

Benefits

- Improve cold starts and reduce wear
- Maintain oil viscosity
- Improve lubrication

Features

- Volts: 120, 230
- Adjustable regulating thermostat: 32-104°F (0-40°C)
- Safety thermostat with manual reset: 149°F (65°C)

ThermoStart (0.5 kW to 4 kW)

Benefits

- Ensures a full power start
- Compact and easy to install
- Reduces engine wear and fuel consumption

Features:

- Volts: 120, 208, 230, 240
- Adjustable regulating thermostat: 32-176°F (0-80°C)
- Safety thermostat 230°F (110°C) with manual reset
- Mounts vertically
- Rugged aluminum body



ThermoGen (3 kW to 4 kW)

Benefits

- Compact and easy to install
- Improves cold starts
- Reduces engine wear and fuel consumption

Features:

- Volts: 230, 240
- Regulating Thermostat: 35-50°C (95-122°F) 32-40°C (89-104°F)
- Safety thermostat 110°C (230°F), for overheat protection
- Cast aluminum housing



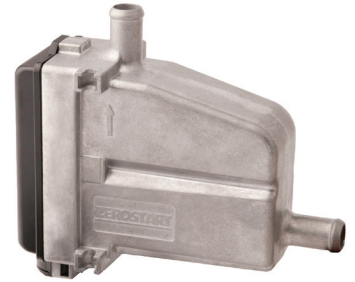
Circulation Tank Heater (0.75 kW to 2.25 kW)

Benefits

- Reduces time to reach operating temperature
- Durable aluminum housing is corrosion and impact resistant
- Cost effective coolant heater for small engine applications

Features:

- Volts: 120, 230, 240
- Regulating Thermostat: 60°- 80°F (16°- 27°C) 80°-100°F (27°-38°C) 100-120°F (38°-49°C)
- Safety Thermostat: 170-212°F (77°-100°C) 170-250°F (77°-121 °C)



Forced Flow Circulation Heaters

(1.5 kW, 2.7 kW)

Benefits

- Integrated pump provides uniform heat distribution throughout the engine for improved startability
- Eliminates overheat and degradation of coolant and hoses
- Reduces low level coolant alarms with elimination of boiling coolant

Features

- Volts: 120, 240
- Regulating thermostat: 1500W: 80-125°F (27-52C) 2700W: 90-115°F (32-46°C)
- Safety thermostat at 208°F (98°C) with automatic reset at 170 °F (77°C)



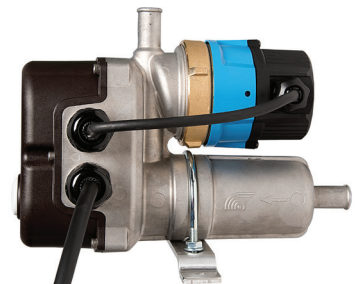
FlowStart (0.5 kW to 2 kW)

Benefits

- High efficiency integrated pump
- Even heat distribution allows for quick, cold starts and a warm engine
- Reduces engine wear

Features

- Volts: 120, 230, 240
- Regulating thermostat: 90°-104°F (32-40°C), 95°-122°F (35-50°C)
- Safety thermostat: 230°F (110°C) with manual reset
- Durable aluminum body





Power To Rely On – Across the Globe

Phillips & Temro Industries creates quality heating and cooling products that improve the performance of your stationary or portable power generator. PTI offers both standard and custom heating and cooling products for generators. We have offices, distributors, and manufacturing facilities worldwide.

For More Information

Please visit www.phillipsandtemro.com/locations or contact sales@phillipsandtemro.com

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