## POWERHEAT {P}





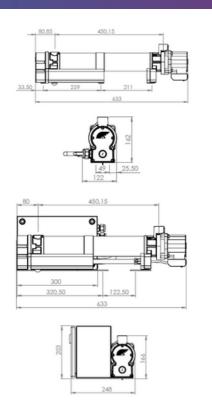


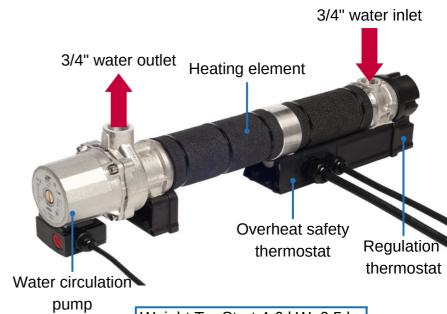
## TopStart 4-12 kW

The TopStart is an electric coolant heater for all types of water-cooled engines. It is universal, reliable, easy to install, and maintenance free.

The 4-12 kW heaters are suited for large industrial engines in both stationary (generator sets) and mobile applications (generator sets, diesel locomotives). The heater can be put into service a few hours before starting the engine, in order to keep the engine permanently at the required temperature. This ensures an easy full power start whatever the ambient temperature and avoids cold start mechanical damage.

Heating unit	Circulating pump	Heating element
<ul> <li>Die casted aluminum body</li> <li>PA66 protection covers and support base</li> <li>150 cm power cable</li> <li>3/4" water outlet and inlet + connection kit</li> </ul>	<ul> <li>Flooded rotor pump</li> <li>Max. flowrate: 1.6 to 2m³/h to 3m height manometer</li> <li>Adjustable speed</li> <li>Available voltage: 120V or 230V</li> <li>Available frequencies: 50 Hz or 60 Hz</li> </ul>	<ul> <li>Low watt density heating element made of Incoloy 800 (7,5W / cm²) which increases its lifetime and those of the coolant</li> <li>Available powers: 4 Kw - 12 Kw</li> <li>Available voltages: 230V / 400V / 440V / 480V / 690V</li> </ul>
Safety thermostat	Water temperature control thermostat	Option: control terminal – available voltages
<ul> <li>Security thermostat with manual reset, rated 25A, 6.000 cycles (110 °C / 230°F)</li> </ul>	<ul> <li>Adjustable thermostat 0°C - 80°C rated 25A, 100.000 cycles</li> <li>Available temperature interval: 0°C - 80°C (32°F - 176°F)</li> </ul>	<ul> <li>3*400 V → 3*480V</li> <li>3*400V + N, 1*230V</li> <li>3*600V</li> </ul>





Weight TopStart 4-6 kW: 6.5 kg Weight TopStart 9 kW: 7.5 kg Weight Topstart 12 kW: 8.6 kg

Control box (230V / 3\*400V + N)



Weight: 5.5 kg

Control box (3\*400V / 3\*480V)



Weight: 7.5 kg

The TopStart heater is delivered with:

Connection kit



Fixation kit



## **Your PowerHeat partner:**



En-Gen Diesel Products Unit 15 Faraday Road, Gapton Hall Industrial Estate Great Yarmouth, Norfolk, NR31 0NF +44 (0)1493 738 397 sales@engen-diesel.com www.engen-diesel.com