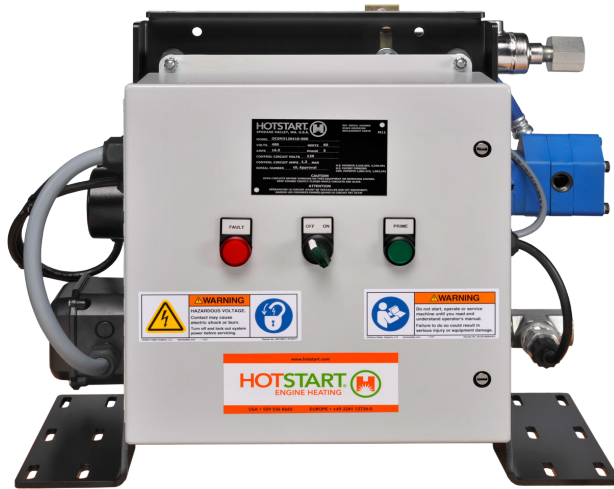


# Oil & Coolant Heating System OCSM



Hotstart's OCSM heating system is an oil and coolant heater, developed to heat and circulate oil and engine coolant to maintain optimal temperatures for diesel and gas engines for stationary land power, marine and mining equipment.



## CLEAN, FULL POWER STARTS

Engine availability is critical for marine, machinery and backup power generation applications. The OCSM heats and circulates engine lube oil throughout the engine sump and external piping while also preheating and circulating engine coolant, allowing for easy starts and decreased wear and tear.



## DESIGN FLEXIBILITY

The OCSM's controls allow for easy power connection and enables automatic heater operation, eliminating the need for additional customer-supplied control components.



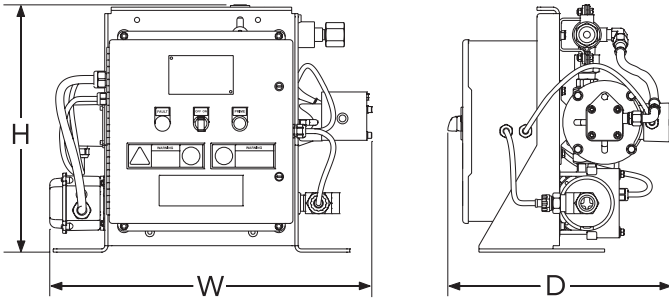
## COMPACT PACKAGED DESIGN

The OCSM can be used in a variety of applications and installations. Its compact design features an integrated coolant to oil heat exchanger, allowing for maximum heat output in a small space.



## SUPPORT & SERVICE

Hotstart's offices in North America, Europe and Asia – combined with our partner and dealer network around the globe, decrease delivery times and provide localized service and support.



Height (H)	Width (W)	Depth (D)	Weight
19.5"	25.0"	17.3"	125 lbs
496 mm	635 mm	440 mm	57 kg

System	
Phase	single-phase (1 Ø)   three-phase (3 Ø)
Voltage (50 Hz)	230V   400V (380-415 V)
Voltage (60 Hz)	120V   208V   240V   480V   600V
Control Box Ingress	NEMA 4
Coolant Motor Ingress (50 Hz)	IP44
Coolant Motor Ingress (60 Hz)	NEMA 2
Oil Motor Ingress	IP44
Min./Max. Ambient Temp.	-4°F / 104°F (-20°C / 40°C)
Certification	UL-C/US listed - E250789 CE conformance to LVD 2006/95/EC, EMC 2004/108/EC, PED 97/23/EC

Coolant	
Fluid Type	Coolant mix (50% water/50% glycol)
Heat Power	3kW   6kW   9kW   12kW
Temp. Control	100–120°F (38–49°C), fixed*
Temp. High-limit	165–205°F (74–96°C), fixed
Pump Power	0.13 hp (97 W)
Flow	10 gpm @ 10ft H <sub>2</sub> O (2.2 m <sup>3</sup> /hr @ 3 m H <sub>2</sub> O)
Inlet/Outlet	1" NPT

\* Additional temperature control options are available, contact Hotstart for more information.

Oil	
Fluid Type	Lubrication oil
Heat Power	Coolant to oil heat exchanger
Pump Power	0.33 hp (0.25 kW)
Flow (50 Hz)	3.31 gpm (0.75 m <sup>3</sup> /hr)
Flow (60 Hz)	4 gpm (0.9 m <sup>3</sup> /hr)
Inlet/Outlet	0.5" NPT

Options shown represent typical tested or certified configurations. Additional options or configurations may be available. For assistance with your heating system application, contact Hotstart at 509.536.8660 or [sales@hotstart.com](mailto:sales@hotstart.com).

## Model Information

Proper heating system specification is dependent on multiple factors, including heated area dimensions, fluid volumes, ambient conditions, and other considerations. For assistance in selecting the heating system for your application, contact the Hotstart at 509.536.8660 or [sales@hotstart.com](mailto:sales@hotstart.com).

