

Coolant Heating System

CGM

Hotstart's CGM heating system is a coolant preheater, developed to heat marine engines as well as diesel and gas engines for stationary land power, and mining equipment.



CE



CLEAN, FULL POWER STARTS

Marine heating systems allow large-displacement propulsion engines to start clean and deliver full-power right away without a warm-up delay or idling. Engine heating in humid marine environments prevents condensation from forming in the cylinders during cool down periods – eliminating starting issues and reducing maintenance.



DESIGN FLEXIBILITY

The CGM heater is available in a range of voltages up to 690 V, custom interfaces as needed and component configuration for 50 and 60 Hz allowing for easy integration into existing ship power.



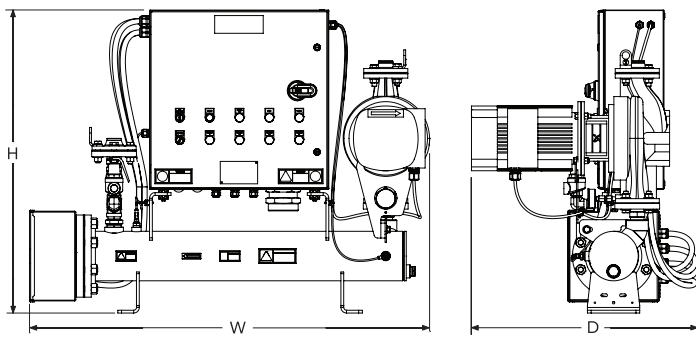
COMPLETE PACKAGED DESIGN

Designed with usability, reliability and safety in mind, the CGM's configuration features a remote automatic function, customer interface connections, pressure relief valve and two PT-100 sensors for accurate temperature monitoring and control.



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.



MODEL INFORMATION

Proper heating system specification is dependent on multiple factors, including heated area dimensions, fluid volumes, ambient conditions, and other considerations. Additional heating system options not listed, including heat power, may be available. For assistance in selecting the heating system for your application, contact the Hotstart Europe office at europa@hotstart.com.

Height (H)	Width (W)	Depth (D)	Weight
41"	54"	30"	300 lbs
1041 mm	1372 mm	762 mm	136 kg

System	
Phase	three-phase (3 Ø)
Voltage (50 Hz)	400 V (380-415 V) 690 V
Voltage (60 Hz)	380 V 440 V 480 V 600 V 690 V
Control Box Ingress	NEMA 4 / IP66
Motor Ingress	IP55
Min./Max. Ambient Temp.	-4 °F / 104 °F (-20 °C / 40 °C)
Certification	CE conformance Marine Society certification available

Coolant	
Fluid Type	Coolant mix (50% water / 50% glycol)
Heat Power*	81 kW 90 kW 99 kW 108 kW 120 kW 132 kW 144 kW
Temp. Control	32–176 °F (0–80 °C), adjustable
Control Set Point	122 °F (50 °C), factory set
Temp. High-limit	195 °F (90 °C)
Pump Power	5.5 hp (4 kW)
Flow (50 Hz)	103 gpm @ 98 ft H ₂ O (23.4 m ³ /hr @ 30 m H ₂ O)
Flow (60 Hz)	99 gpm @ 91 ft H ₂ O (22.5 m ³ /hr @ 27.7 m H ₂ O)
Inlet/Outlet	1.5" NPT
Pressure Relief	100 psi (690 kPa)
Max. Pressure	100 psi (690 kPa)

*Heat power is available in three or four stages.

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 europa@hotstart.com.