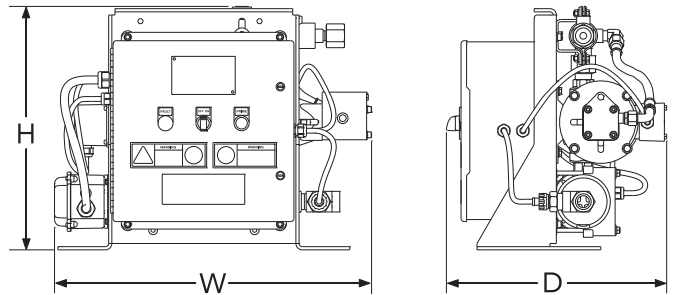


OCSM Coolant & Oil Heating System

The HOTSTART OCSM is a multi-use heating system that heats a combination of liquids simultaneously. The system can heat coolant and lube oil or coolant and fuel for engines ranging in size from 15L-75L displacement.

The OCSM includes a coolant heating chamber, coolant and lube oil pumps, a coolant-to-oil heat exchanger and all required controls.



APPLICATION

The OCSM was developed to pre-heat diesel and gas engines for stationary land power, marine, large mining and construction equipment.

SPECIFICATIONS

- Primary Heating Fluid: Engine Coolant
- Secondary Heating Fluid: Engine Oil
- Heat Power: 6, 9, 12 kW
- Voltage Range: 1 or 3 Phase 120-600V (50 or 60Hz)
- Temperature Controller: Fixed 100°-120°F (38°-49°C)
- High-Limit Temp. Control: Fixed 165°-205°F (74°-96°C)
- Fluid Capacity: Coolant - 0.7 gal (2.6L)
Oil - 0.2 gal (0.8L)
- Pump Power: Coolant - 0.04 Hp (0.03 kW)
Oil - 0.33 Hp (.25 kW)
- Maximum Pressure: 125 psi (860 kPa)
- Flow: Coolant - 10 GPM (2.2 m³/hr) @ 10ft head (0.3 bar)
Oil - 4 GPM (0.9 m³/hr) @ 1750 RPM
- Inlet/Outlet Plumbing: Coolant - Female 1.0" NPT
Oil - 0.5" NPT
- Main Control Box Ingress Protection: NEMA Type 4
- Motor Ingress Protection:
Coolant - IP44 (50Hz), NEMA type 2 (60Hz)
Oil - TEFC6

FEATURES

- UL-C/US listed - E250789
- CE compliant to LVD 2006/95/EC, EMC 2004/108/EC and PED 97/23/EC
- Controls for automatic operation
- Compact design
- Easy to install

DIMENSIONS & WEIGHT

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

OCSM HOTflow™ Heating System



PART NUMBERS

Engine Size		Power Supply			Heating System		
CID	Liter	Volts	Phase	Hz	Part Number	kW	Amps
1000-2000	15-30	208	1	60	OCSM1060810-000	6	32.4
		230	1	50	OCSM1060C10-000	6	29.3
		240	1	60	OCSM1060210-000	6	28.0
		208	3	60	OCSM3060810-000	6	18.5
		230	3	50	OCSM3060C10-000	6	16.8
		240	3	60	OCSM3060210-000	6	16.0
		480	3	60	OCSM3060410-000	6	8.0
2000-3000	25-50	208	1	60	OCSM1090810-000	9	46.9
		230	1	50	OCSM1090C10-000	9	42.3
		240	1	60	OCSM1090210-000	9	40.5
		208	3	60	OCSM3090810-000	9	26.8
		230	3	50	OCSM3090C10-000	9	24.3
		240	3	60	OCSM3090210-000	9	23.3
		480	3	60	OCSM3090410-000	9	11.6
3000-4500	50-75	208	3	60	OCSM3120810-000	12	35.1
		230	3	50	OCSM3120C10-000	12	31.8
		240	3	60	OCSM3120210-000	12	30.5
		480	3	60	OCSM3120410-000	12	15.2