









#### **ENGINE AVAILABILITY**

To improve equipment startability and availability, the OCSE maintains a consistent and uniform temperature by circulating heated coolant throughout the engine block and heated oil throughout the sump – eliminating hot spots and ensuring oil viscosity is at optimal levels for engine protection.



#### COMPLETE PACKAGED DESIGN

Designed as a user-friendly, pre-packaged system, the OCSE includes all necessary components and features a foot-mounted configuration to reduce overall footprint. Its remote automatic function and customer interface connections enable the OCSE to be easily integrated into any control system.



# **OCSE**

Hotstart's OCSE is a compact oil and coolant heating system for use in North American hazardous locations and is designed to maintain optimal engine starting temperatures and oil viscosity for gas compression or offshore equipment applications.





## REDUCED MAINTENANCE & EMISSIONS

When compared to cold engine starts, maintaining optimal engine temperature during down time lowers NOx emissions during startup. Engine heating also eliminates the need for extended idling, reducing overall maintenance expenses.



#### PREVENTS CONDENSATION

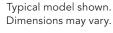
In warmer, humid climates, temperature variation can cause condensation to collect in the cylinders and oil pan, resulting in frequent maintenance and compromising the oil's lubrication properties. By maintaining temperatures above the dew point, the OCSE eliminates the risk of condensation forming during cool down periods.

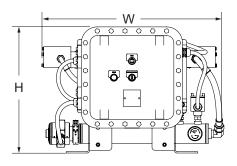


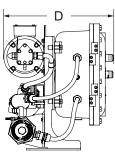


### OCSE









Height (H)	Width (W)	Depth (D)	Weight
22.8"	32.8"	19.73"	425 lbs
578 mm	833 mm	501 mm	193 kg

System					
Phase	three-phase (3 Ø)				
Voltage	208V   240V   480V				
Control Box Ingress	NEMA 4, 7, 9				
Min./Max. Ambient Temp.	-4°F/104°F (-20°C/40°C)				
Temperature Class	T3 Minimum				
Altitude Rating (Motor)	3,300 ft (1,000 m)				
Certification	UL-C/US Listed E471204 GPOB Class 1 DIV 2 Group D T3 Class 1 Zone 2 Group IIA T3				

Coolant				
Fluid Type	Coolant mix (50% water/50% glycol)			
Heat Power	3kW   6kW   9kW   12kW   18kW			
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	2 hp (1.5 kW)			
Flow	8.3-10 gpm (31.4-37.9 L/min)			
Inlet/Outlet	0.75" NPT			
Pressure Relief	100 psi (690 kPa)			

Oil				
Lubrication oil				
Coolant to oil heat exchanger				
2 hp (1.5 kW)				
2.3-5.7 gpm (8.7-21.6 L/min)				
0.5" NPT / 0.75" NPT   0.5" NPT				
75 psi (520 kPa), pressure relief limited				

Options shown represent typical tested or certified configurations. Additional options or configurations may be available. For assistance with your heating system application, contact Hotstart Oil & Gas office at 281.600.3700 or oil.gas@hotstart.com.

#### Optional Lockout/Tagout Breaker Box for Hazardous Locations

#### Breaker Box

Optional breaker box provides a lockout/tagout disconnection point and overcurrent protection for Class I, Group D, Div 1 and 2 classified heating systems.



Height	Length	Width	Weight
7.78"	20.5"	10.5"	45 lbs
230 mm	152 mm	161 mm	20.4 kg

#### 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. Certification level of system dependent on component configuration. For assistance in selecting the heating system for your application, contact the Hotstart Oil & Gas office at 281.600.3700 or oil.gas@hotstart.com.