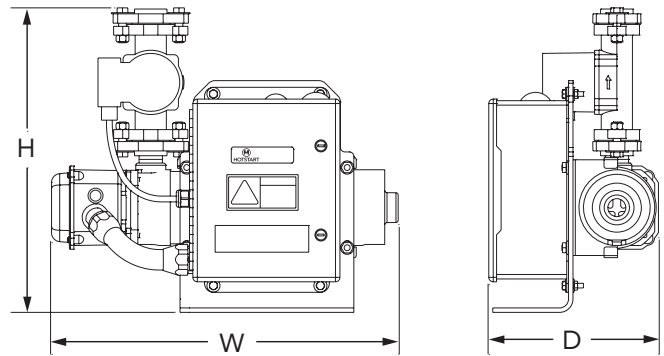
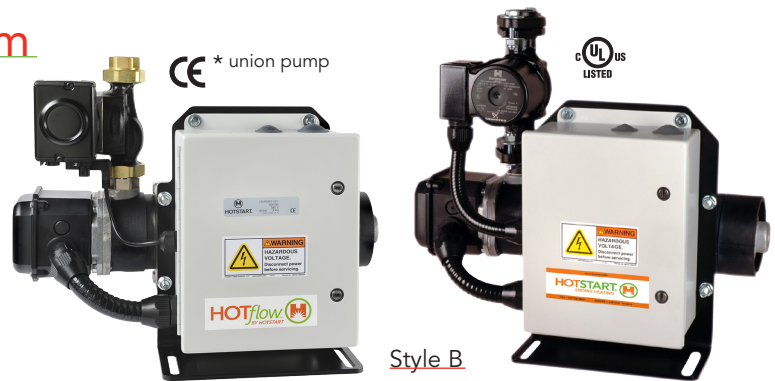


CSM HOTflow® Heating System

HOTSTART's CSM HOTflow® heating system is a complete coolant preheater with thermostat, pump and all required controls. The CSM model heats engines ranging in size from up to 100 L displacement.

Forced circulation of the coolant delivers uniform heating throughout the entire engine, extends element life and offers a significant reduction in electrical consumption.



APPLICATION

HOTflow® model CSM was developed to pre-heat diesel and gas engines for stationary land power, marine, large mining and construction equipment.

SPECIFICATIONS

- Heating Fluid: Engine coolant (50% glycol/50% water)
- Heat Power: 3, 6, 9, 10.5 and 12 kW
- Voltage Range: 1 or 3 Phase 120-690 V (50 or 60 Hz)
- Fixed Thermostat: 100°-120 °F (38°-49 °C)
- Flow: 10GPM (2.2m³/hr) @ 10ft head (3 mWc)
- Pump Power: 70W (50 Hz), 97W (60 Hz)
- Max Pressure: 125 psi (860 kPa)
- Pressure Loss: 0.2 psi (1.5 kPa)
- Inlet Plumbing: 1.0" NPT
- Outlet Plumbing: 1.0" NPT
- Min/Max Ambient Temp: -4 °F (-20 °C)/104 °F (40 °C)
- Main Control Box Ingress Protection: NEMA 4 (IP66)
- Motor Ingress Protection: IP44 (CE compliant), NEMA 2 (UL listed)

FEATURES

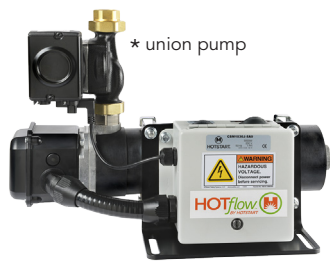
- UL-C/US listed - (60 Hz models) - E250789CE
- CE compliant (*select models)
- Controls for automatic operation
- Compact design
- Easy to install

DIMENSIONS & WEIGHT

	Height (H)	Width (W)	Depth (D)	Weight
Style A	15.0" 383 mm	19.4" 493 mm	9.5" 242 mm	37 lbs. 16.8 kg
Style B	17.0" 434 mm	19.4" 493 mm	9.5" 242 mm	54 lbs. 24.5 kg

* If a union pump is installed, the model's height (H) will decrease by approximately 1.5" (38 mm)

CSM HOTflow® Heating System



Style A



Style B



PART NUMBERS

Engine Size		Power Supply			Heating System			Style
CID	Liter	Volts	Phase	Hz	Part Number	kW	Amps	
1000-2000	15-30	120	1	60	CSM10301-000	3	26.3	A
		208	1	60	CSM10308-000	3	15.1	A
		208	3	60	CSM30308-000	3	8.7	B
		230	1	50	* CSM1030J-5A0	3	13.7	A
		240	1	60	CSM10302-000	3	13.1	A
		480	1	60	CSM10304-000	3	3.8	B
		480	3	60	CSM30304-000	3	4.4	B
2000-3000	25-50	208	1	60	CSM10608-000	6	29.6	A
		208	3	60	CSM30608-000	6	17.1	B
		230	1	50	* CSM1060J-5A0	6	26.7	A
		240	1	60	CSM10602-000	6	25.6	A
		400	3	50	* CSM3060A-5A0	6	8.9	B
		440	3	60	* CSM3060F-5A1	6	8.1	B
		480	1	60	CSM10604-000	6	12.8	B
		480	3	60	CSM30604-000	6	7.4	B
3000-4500	50-75	575	3	60	CSM30605-000	6	6.2	B
		208	1	60	CSM10908-000	9	44.0	A
		208	3	60	CSM30908-000	9	25.4	B
		230	1	50	* CSM1090J-5A0	9	39.8	A
		240	1	60	CSM10902-000	9	38.1	A
		400	3	50	* CSM3090A-5A0	9	13.2	B
		440	3	60	* CSM3090F-5A1	9	12.2	B
		480	1	60	CSM10904-000	9	19.1	B
4500-6000	75-100	480	3	60	CSM30904-000	9	11.0	B
		575	3	60	CSM30905-000	9	9.2	B
		208	1	60	CSM11058-000	10.5	51.2	B
		208	3	60	CSM31208-000	12	33.7	B
		230	1	50	* CSM1120J-5A0	12	52.8	B
		240	1	60	CSM11202-000	12	50.6	B
		400	3	50	* CSM3120A-5A0	12	17.5	B
440	3	60	* CSM3120F-5A0	12	15.9	B		
480	1	60	CSM11204-000	12	25.3	B		
480	3	60	CSM31204-000	12	14.6	B		
575	3	60	CSM31205-000	12	12.2	B		

* CE compliant/union pump configuration

Other voltages available. Consult the factory.