

## Single Fluid Heating System

# CLV



Modular CLV model not shown.  
Contact Hotstart for more information.



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



### IDLE REDUCTION - MADE SIMPLE

The CLV is a complete heating system, circulating heated coolant throughout the engine's water jacket, eliminating unnecessary idling, saving fuel and reducing wear and tear from cold starts.



### POWERFUL & RELIABLE

The CLV heating system is capable of heating engines up to 300 L displacement and features accurate PT-100 temperature sensors, allowing users to easily adjust the desired temperature.



### EASY INSTALLATION AND OPERATION

The CLV control box is equipped with a convenient side-mounted controls and a removable lid to maximize possible installation locations in locomotives where equipment space is at a premium.

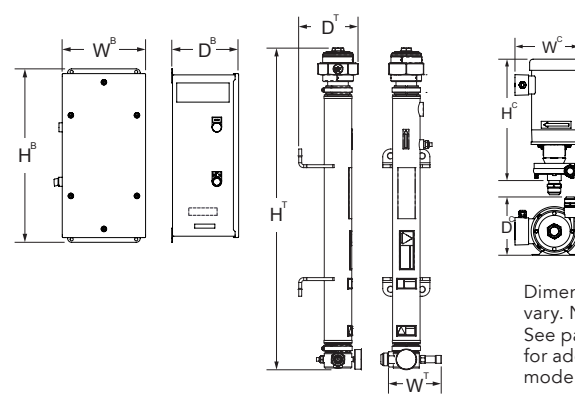
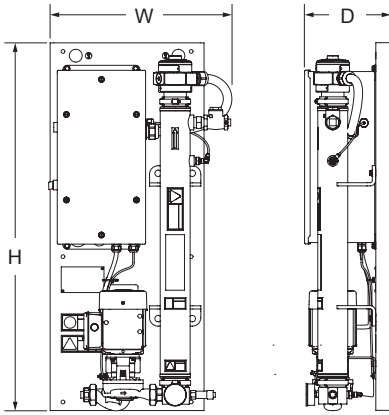


### PLATE-MOUNTED OR MODULAR

To further minimize overall footprint, modular CLV systems are available, allowing the pump and tank to be installed near the engine plumbing ports while the control box may be placed in a location convenient for system operator access and monitoring.



See part drawings for additional model dimensions.



Dimensions may vary. Not to scale. See part drawings for additional model dimensions

Height (H)	Width (W)	Depth (D)	Weight
43"	21.4"	10.1"	175 lbs
1092 mm	544 mm	256 mm	79.5 kg

Box Height (H <sup>B</sup> )	Box Width (W <sup>B</sup> )	Box Depth (D <sup>B</sup> )	Tank Height (H <sup>T</sup> )	Tank Depth (D <sup>T</sup> )	Tank Width (W <sup>T</sup> )
21.5"	10.3"	8"	41"	8.1"	6.7"
546 mm	262 mm	203 mm	1041 mm	206 mm	171 mm

Coolant Assy. Height (H <sup>C</sup> )	Coolant Assy. Width (W <sup>C</sup> )	Coolant Assy. Depth (D <sup>C</sup> )
18.9"	9.3"	8.8"
479 mm	237 mm	225 mm

System	
Phase	single-phase (1 Ø)   three-phase (3 Ø)
Voltage (60 Hz)	208V   240V   480V   575V
Voltage (50 Hz)	220V   380V   400V   415V
Control Box Ingress	NEMA 4/IP66
Coolant Motor Ingress	IP55
Min./Max. Ambient Temp.	-4°F/104°F (-20°C/40°C)
Vibration Specification	Meets IEC 60068-2-64
Shock Specification	Meets IEC 60068-2-27
Certification	CSA C/US CE-compliant models available

## Ordering Information

### CLV Plate-Mounted

Engine Displacement	Power Supply			kW	Amps	Model Number
	V	Hz	Phase			
2000–3000 CID 38–49L	240	60	1	11	50	CLV11102-00
			3			CLV31802-00
3000–10000 CID 49–164L	480	60	3	24	31	CLV32404-00
			3			CLV33004-00
10000–15000 CID 164–250L	480	60	3	36	45	CLV33604-00
			3			CLV33604-00

Coolant	
Fluid Type	Water   Coolant mix (50% water/50% glycol)
Heat Power	11 kW   18 kW   24 kW   30 kW   36 kW
Temp. Control	Adjustable, 32–176°F (0–80°C)
Temp. High-limit	194°F (90°C)
Pump Power	0.75 hp (0.55 kW)
Flow (60 Hz)	49 gpm @ 23 ft WC (185.5 L/min @ 7 m WC)
Flow (50 Hz)	41 gpm @ 20 ft WC (155.2 L/min @ 6 m WC)
Inlet/Outlet	1" NPT
Pressure Relief	100 psi (690 kPa)

### CLV Modular (-M00)

Engine Displacement	Power Supply			kW	Amps	Model Number
	V	Hz	Phase			
2000–3000 CID 38–49L	240	60	1	11	50	CLV11102-M00
			3			CLV31802-M00
3000–10000 CID 49–164L	480	60	3	24	31	CLV32404-M00
			3			CLV33004-M00
10000–15000 CID 164–250L	480	60	3	36	45	CLV33604-M00
			3			CLV33604-M00

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).

Other wattages available. Consult the factory.

