

# Dual Fluid Heating System DLV



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

## BENEFITS & FEATURES

### IDLE REDUCTION – COMPLETE HEATING

By heating and circulating both coolant and oil throughout the entire engine, the DLV heating system eliminates unnecessary idling and saves fuel all while ensuring engine lubrication oil is kept at the optimal starting temperature.

### POWERFUL & RELIABLE

The DLV heating system is capable of heating engines up to 300 L displacement and features accurate PT-100 temperature sensors. Users can easily adjust the desired temperature for coolant and oil heat independently.

### EASY INSTALLATION AND OPERATION

The DLV 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 DLV systems are available, allowing the pumps and tanks to be installed near the engine plumbing ports while the control box is placed in a location convenient for system operator access and monitoring.



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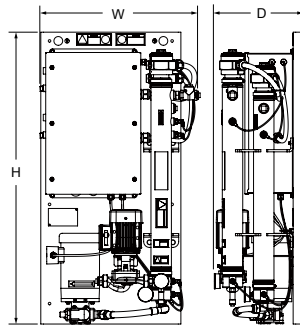
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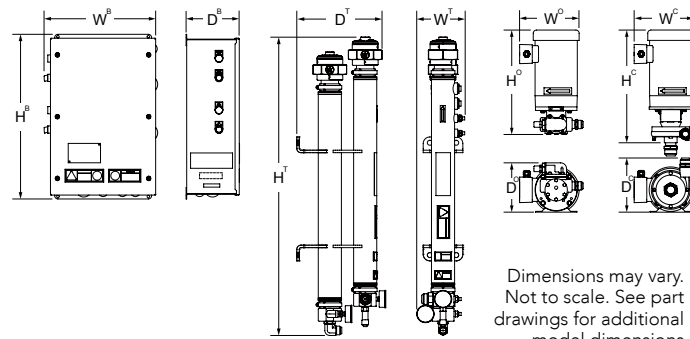
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See part drawings for additional model dimensions.



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

Height (H)	Width (W)	Depth (D)	Weight
50"	26.9"	15.9"	310 lbs
1270 mm	683 mm	404 mm	141 kg

System				
Phase	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/Oil Motor Ingress	IP55 / 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	CE-compliant models available			

Coolant		
Fluid Type	Water   Coolant mix (50% water / 50% glycol)	
Heat Power	24kW	30kW   36kW
Temp. Control	Adjustable, 32–212 °F (0–100 °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)	

Oil		
Fluid Type	Lubrication oil	
Heat Power	6kW	9kW   12kW
Temp. Control	Adjustable, 32–212 °F (0–100 °C)	
Temp. High-limit	300 °F (149 °C)	
Pump Power	2 hp (1.5 kW)	
Flow	10 gpm (37.9 L/min)	20 gpm (75.7 L/min)
Inlet/Outlet (10 gpm)	1" NPT	
Inlet/Outlet (20 gpm)	1.5" NPT / 1" NPT	
Pressure Relief	75 psi (525 kPa)	

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 509.600.3700 or [sales@hotstart.com](mailto:sales@hotstart.com).

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> )
25.5"	16.29"	8"	45.1	13.5"	6.7"
648 mm	414 mm	203 mm	1147 mm	342 mm	171 mm
Oil Assy. Height (H <sup>O</sup> )	Oil Assy. Width (W <sup>O</sup> )	Oil Assy. Depth (D <sup>O</sup> )	Coolant Assy. Height (H <sup>C</sup> )	Coolant Assy. Width (W <sup>C</sup> )	Coolant Assy. Depth (D <sup>C</sup> )
16.4"	9.3"	7.7"	17.7"	9.3"	8.5"
416 mm	237 mm	196 mm	449 mm	237 mm	216 mm

## ORDERING INFORMATION

### DLV Plate-Mounted

Engine Displacement	Oil Volume	Power Supply		Coolant kW	Oil kW	Amps	Model Number
		V	Hz				
9000–12000 CID 150–200L	50–250 gal 190–950L	480	60	24	6	41	DLV3240-0604-00
		575	60	24	6	33	DLV3240-0605-00
12000–15000 CID 200–250L	50–250 gal 190–950L	400	50	30	9	62	DLV3300-090A-00
		480	60	30	9	52	DLV3300-0904-00
		575	60	30	9	43	DLV3300-0905-00

### DLV Modular (-M00)

Engine Displacement	Oil Volume	Power Supply		Coolant kW	Oil kW	Amps	Model Number
		V	Hz				
9000–12000 CID 150–200L	50–250 gal 190–950L	480	60	24	6	41	DLV3240-0604-M00
		575	60	24	6	33	DLV3240-0605-M00
12000–15000 CID 200–250L	50–250 gal 190–950L	400	50	30	9	62	DLV3300-090A-M00
		480	60	30	9	52	DLV3300-0904-M00
		575	60	30	9	43	DLV3300-0905-M00

Other wattages available.  
Consult the factory.