

VLR-600 Refrigeration Liquid Chiller



Koolance's VLR-600 is a compressor-refrigerant recirculating liquid chiller rated at 600W, or 2047 BTU/hr (@25°C liquid & ambient). The cooling system can be mounted to a 19-inch equipment rack and is 3U in height.

Chiller control is based on one of four configurable temperature set-points, including the option to lock liquid to ambient for avoiding condensation or to an external K-type thermocouple sensor (not included). Coolant flow rate, temperature, and reservoir level are monitored, and a USB port allows control and logging of most features using the [Koolance System Monitor](#) application. A 0-5V differential voltage output is also provided for industrial process monitoring.

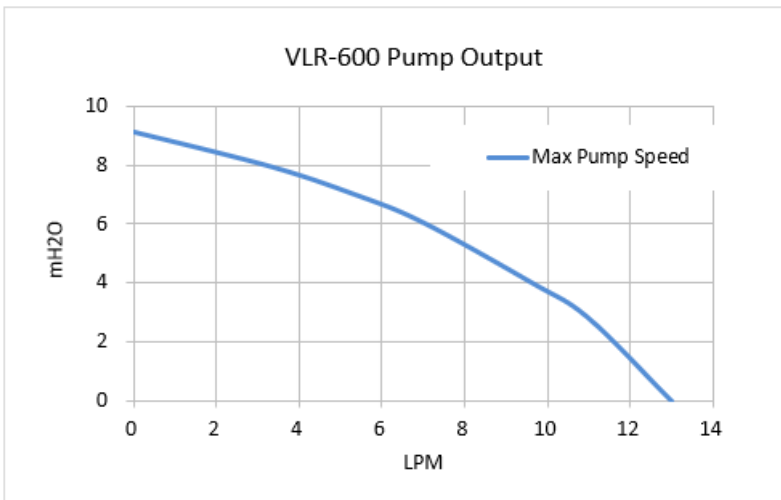
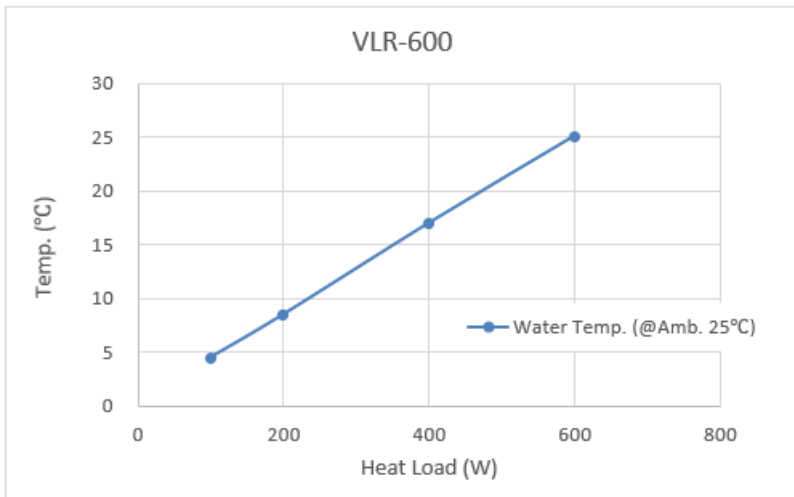
For added convenience during refilling and draining, Koolance QDT3 quick disconnects are located on the front. To utilize them, a [QDT3-F10X13](#) quick disconnect, funnel, and short fill/drain tubing are included with VLR-600.

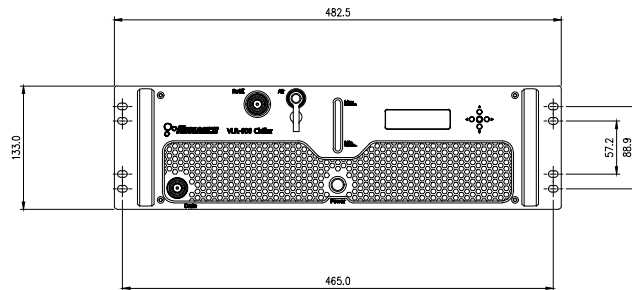
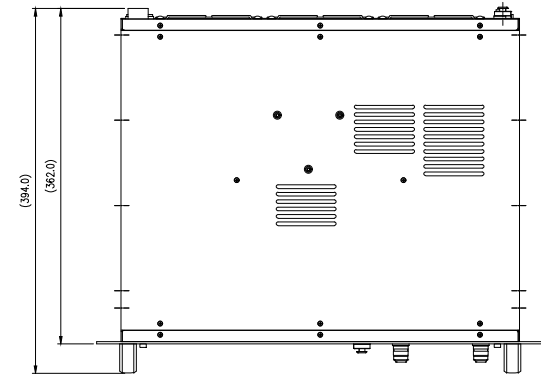
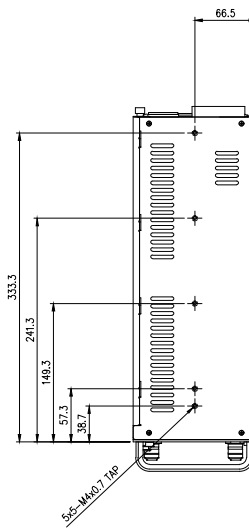
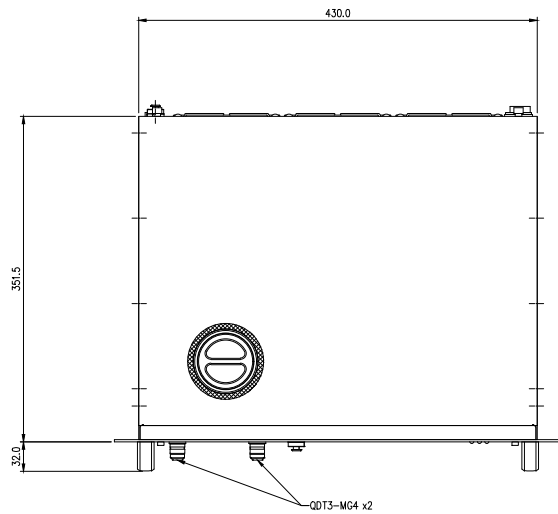
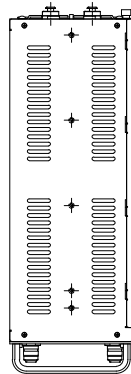
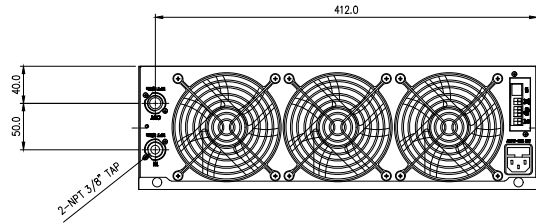
- Cooling capacity: 600W (2047BTU/hr) @ 25°C liquid/ambient
- Temperature options: liquid set-point, external thermocouple set-point, liquid and ambient delta-T, external thermocouple and ambient delta-T; toggle °C/°F
- Pump: 10 manual levels, up to 13LPM (3.4 GPM)
- Select only values you want displayed on the front 2-line OLED display (fixed or rotating)
- Show pump impeller speed in RPM
- Show coolant flow rate in LPM/GPM
- Show condenser fan speed in RPM
- Adjust audio alarm and relay trigger (NO or NC) based on: temperature, flow rate, coolant level, pump RPM, and condenser fan RPM
- Refrigerant: R-134a
- Maximum power consumption @ ambient (approximate): 240W @ 25°C
- Designed for an operational temperature range of 0-40°C (ambient and liquid)
- Reservoir capacity: 1.7 liters
- NPT 3/8in threads on back for fittings
- Koolance QDT3 series quick disconnects on front for easier filling/draining (1 pcs of QDT3-F10X13 fitting is included)
- Includes C13 to NEMA 5-15 power cord

NOTE: Keep unit upright at all times, and for at least 24 hours before applying power to ensure sufficient oil reaches the compressor.

General	
Weight	28.20 lb (12.79 kg)
Fitting Thread	NPT 3/8in
Max Pressure Tolerance @ 25°C	3kgf/cm2 (42.7psi)
Max Temperature Tolerance	40°C (104°F)
Min Temperature Tolerance (*No Freezing)	-20°C (-4°F)
Noise (dBA)	38-51

General	
Cooling Systems	
Cooling Capacity	600W (2047BTU/hr) @ 25°C liquid & ambient (0°C dT)
Display Type	OLED
Max Flow Rate (10-13mm ID)	13LPM (3.4 GPM)
Max Power Consumption	240W @ 25°C
Max Static Pressure (10-13mm ID)	0.9kgf/cm2 (13.2psi)
Power Source	100-240VAC, 50-60Hz
Temperature Sensors	Liquid & One K-Type Thermocouple (optional)
Temperature Stability	+/-0.5°C





NO.	DESCRIPTION				MATER'L		QUANTITY	REMARKS
					UNIT	MM	ITEM	VLR-600
					SCALE	N/S	TITLE	REV1.0 Ass'y
DATE	BY	BY	BY	APPRO	BY	3RD ANGLE		
JAN.27.2025	S.J.LEE					CODE NO.	DWG. NO.	PAGE