

**VLX-450 Inline 450W Chiller Subassembly,  
24VDC (Rev.1.2)**



VLX-450 is a ready-to-integrate, compact, open frame chiller. Cooling performance is 450W, or 1535 BTU/hr @25°C liquid & ambient (0°C delta-T). External liquid coolant must be pumped through the VLX-450's copper-brazed stainless steel plate heat exchanger via two G 1/4 BSPP fittings. Fittings and coolant pump are not included.

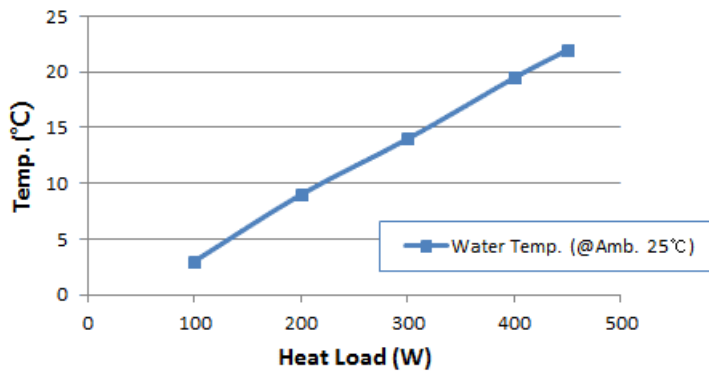
A toggle switch selects between two methods of chiller control: 0-5V input signal or manual speed knob. Wire terminals are readily accessed if an alternative control scheme is desired.

- Cooling capacity: 450W (1535BTU/hr) @ 25°C liquid/ambient
- Refrigerant: R-134a
- Power input: 24VDC, 250W
- Designed for an operational temperature range of 0-40°C (ambient and liquid)
- G 1/4 BSPP threads on plate heat exchanger for inlet/outlet fittings

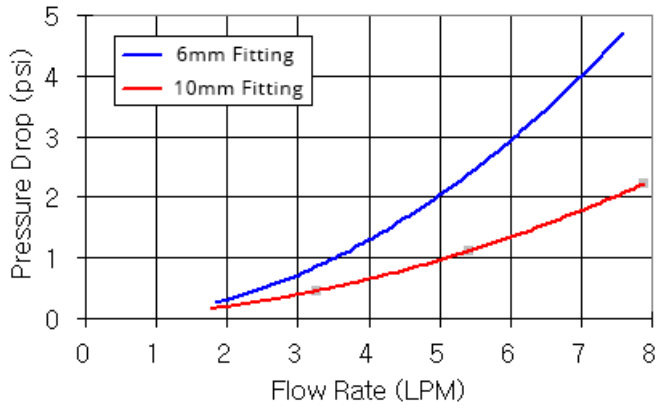
NOTE: Requires 24VDC input power. Koolance offers a separate [power supply](#) for AC wall outlet sources. Keep unit upright at all times, and for at least 24 hours before applying power to ensure sufficient oil reaches the compressor.

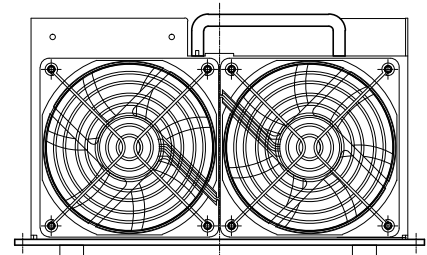
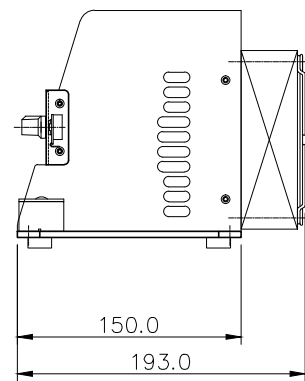
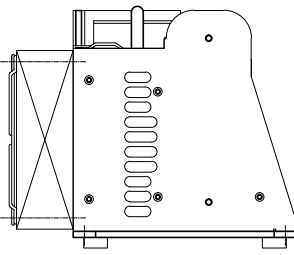
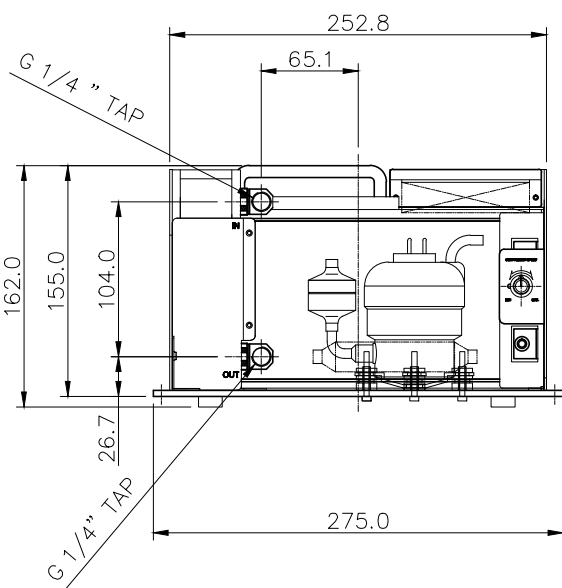
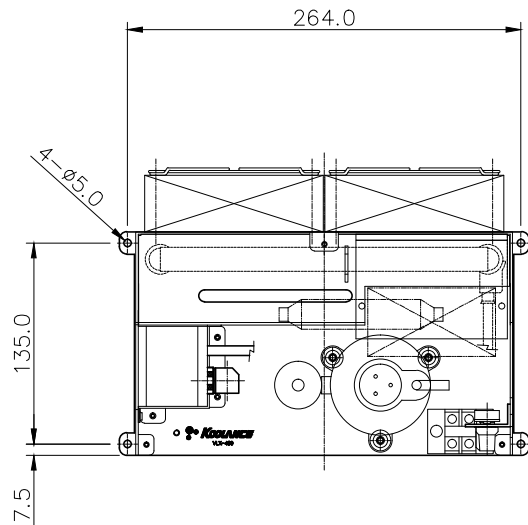
| <b>General</b>                |  |
|-------------------------------|--|
| Weight                        | 10.20 lb (4.63 kg)                                 |
| Fitting Thread                | G 1/4 BSPP   |
| Max Pressure Tolerance @ 25°C | 2kgf/cm2 (28.5psi)                                 |
| Max Temp. Operating Tolerance | 40°C (104°F)                                       |
| Noise (dBA)                   | 49-52  |
| <b>Cooling Systems</b>        |  |
| Cooling Capacity              | 450W (1535BTU/hr) @ 25°C liquid & ambient (0°C dT) |
| Max Power Consumption         | 230W   |
| Power Source                  | 24 VDC   |

### VLX-450 Water Temperature



### VLX-450 Pressure Drop Vs. Flow Rate





| NO.  | DISCRIPTION     |  |  |  | MATER'L  |          | QUANTITY | REMARKS  |
|------|-----------------|--|--|--|----------|----------|----------|----------|
|      |                 |  |  |  | UNIT     | MM       |          |          |
|      | <b>KOOLANCE</b> |  |  |  | SCALE    | N/S      | ITEM     | VLX-450  |
| DATE |                 |  |  |  | BY       | BY       | BY       | APPRO BY |
|      | S.J.LEE         |  |  |  | CODE NO. | DWG. NO. | PAGE     |          |