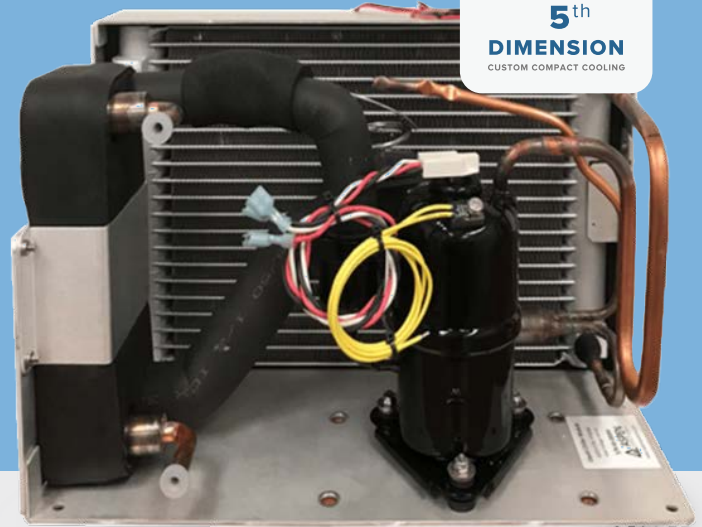


LCM-1400

Liquid Chiller Module Compact, Lightweight, Industrial Reliability

Part# FP00066 & FP00102



Background

Based on the success of the LCM-600 Aspen has expanded the product range to include the LCM-1400. These liquid chiller modules are used by customers that want to make use of Aspen's miniature refrigeration expertise, but also wanted a system which uses their own controls and coolant loop. The compact and lightweight LCM series provides purely the "core" of the refrigeration system and allows the end user to adapt the compact module directly into their system.

System Definition

The LCM-1400 consists of a compact, hermetically sealed refrigeration system (including a miniature variable speed compressor and drive board, condenser, fans, thermostatic expansion valve, and an evaporator). The system is fully charged with R-134a, insulated and mounted to a baseplate to drop directly into the end application. The user connects their coolant loop to the evaporator.

System Highlights

- Efficient operation
- Lightweight
- Compact footprint
- Low noise
- Easy to integrate
- Low cost



Aspen background

Aspen Systems is the world leader in miniature refrigeration systems. We have created refrigeration systems to meet specifications for dozens of customers with thousands of installations in personal cooling, manufacturing, mobile electronics, airborne electronics, lasers, military, and medical.

Liquid Chiller Module LCM-1400

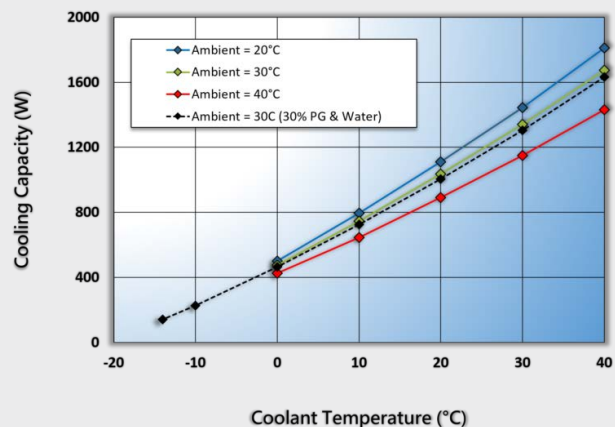
high performance, liquid cooling module

Specifications	FP00066	FP00102
Cooling Capacity	See graph below.	See graph below.
Compatible Fluids	Water, Water/Glycol Mix	Water, Water/Glycol Mix
Coolant Temperature	-15°C to 50°C	-15°C to 50°C
Maximum Compressure Power	480 W at 48 VDC	360 W at 24 VDC
Voltage	43-50 VDC	22-32 VDC
Maximum Compressure Current	10 A	15 A
Noise	<53 dBA	<53 dBA
Dimensions	335 x 228 x 212 mm	335 x 228 x 212 mm
Orientation	Within 30° of flat	Within 30° of flar
Weight	5.5 kg (12 lb)	5.5 kg (12 lb)
Operating Ambient Temperature	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
Storage Temp	-20°C to 50°C (-4°F to 122°F)	-20°C to 50°C (-4°F to 122°F)
Fan Power	19.4 W (at 48 VDC)	18.4 W (at 24 VDC)

Applications

- Laser Cooling
- Medical Devices
- Medical Aesthetics
- Electronics & Enclosures
- Electric Vehicle Systems & Components
- Laboratory Equipment
- Bio-sample Analyzers
- Patient Cooling
- Sensors & Detectors
- Data Centers, Communication Systems

Any application that requires small size, light weight or high efficiency.



Custom Configurations

To satisfy customers' application requirements, Aspen Sys-tems can custom-design air conditioning or cold plate cooling systems. Please contact one of our application engineers about your cooling requirements.