

2.8cc Twin Series Low Noise, Miniature, Rotary BLDC Refrigeration Compressor

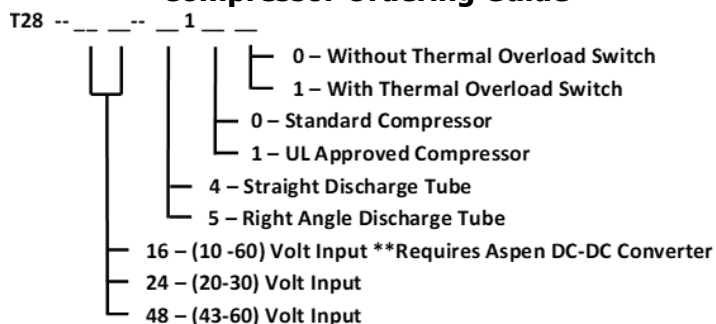
Worldwide patents pending



Compressor Specifications

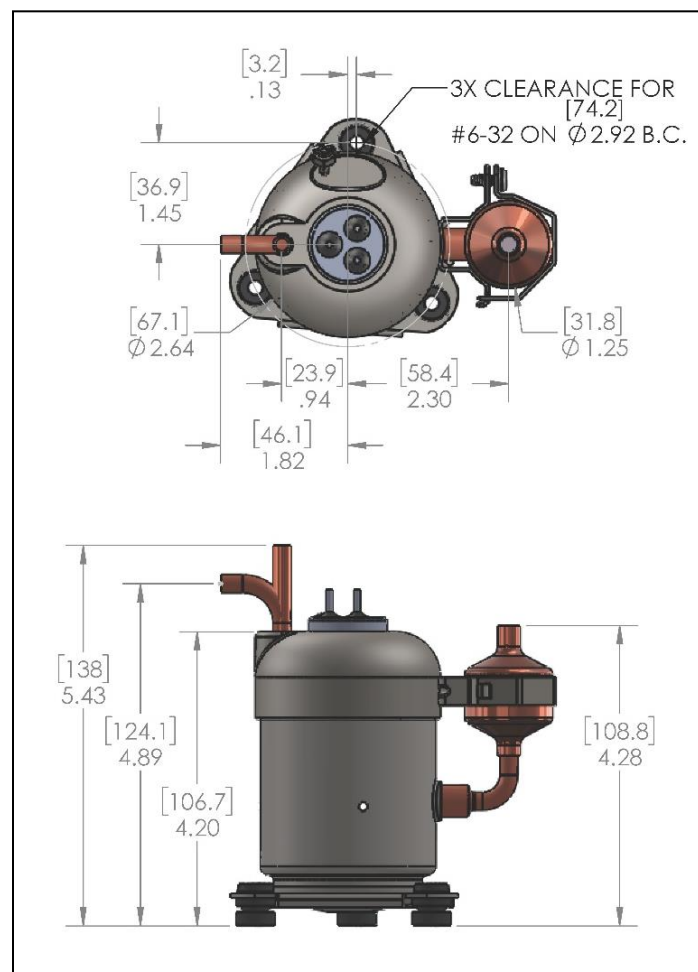
Refrigerant	R134a / R404a / R410a / R290a / R600a
Oil Type	Emkarate POE RL 68H
Oil Quantity	Factory Charged
Motor / Drive	BLDC / Sensorless
Speed Range	2100 – 6500 RPM
Evaporator Temp. Range	-22~75°F (-30~24°C)
Max Condensing Temp.	160°F (71°C)
Max Discharge Temp.	240°F (115°C)
Max Ambient Temp.	120°F (49°C)
Max Dome Temp.	240°F (115°C)
Max Operating Pressure	350 psi (2.4 MPa)
Suction Port Size	1/4" ID Cup
Discharge Port Size	1/4" OD Tube
Analog Voltage Speed Command (Linear)	0 - .6 VDC = OFF .80 VDC: 2,300 RPM 4.5 VDC: 6,500 RPM
Cooling Capacity-ASHRAE T 2.8cc	R-134a 720 W
Noise Level @ 1 meter	~ 40 dBA
Weight	~ 1400g

Compressor Ordering Guide



Sample Order # T28 - 24 - 4101

**Description – 2.8cc compressor
Straight Discharge Tube
(20-30) Volt Input
Standard Compressor
With Thermal Overload Switch**

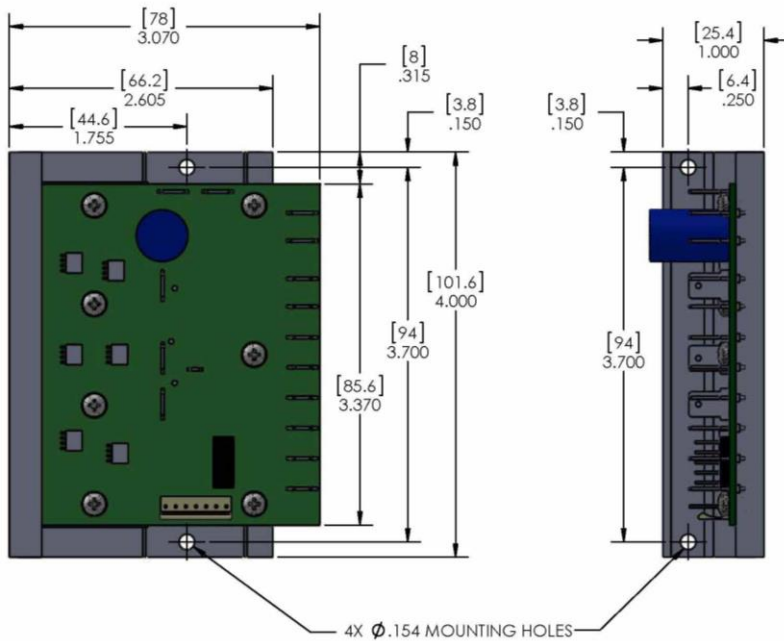


Compressor Application Notes:

1. Compressor is supplied with Emkarate RL68 POE oil. Addition oil will be required if operating compressor in systems with long tubes, large heat exchangers or internal surfaces that can trap oil and prevent adequate return to the compressor.
2. Recommended airflow over compressor is 1 meter/sec.

ASPEN High Capacity Drive Board & DC-DC Converter

High Capacity Drive Board

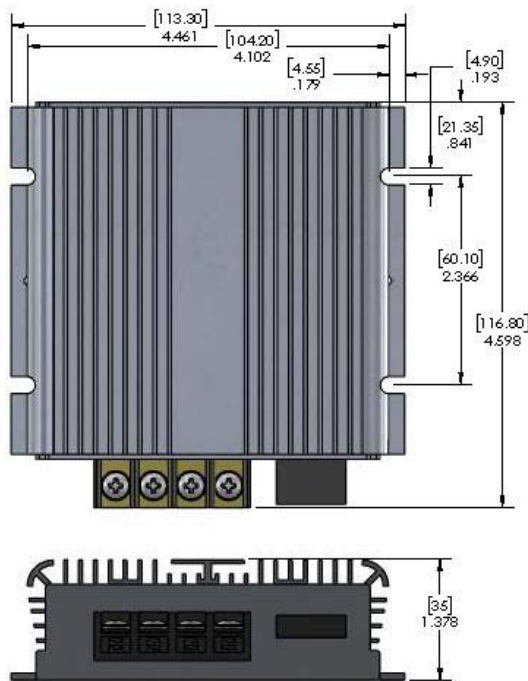


Drive Board Options

Input Voltage	Max Current
20-30V	15A
43-60V	8A
10-60V**	8-35A**

Requires use of Aspen DC-DC Converter in conjunction with Compressor Drive. Max current based on voltage input

DC-DC Converter



Compressor Drive & Converter Application Notes:

1. Drive Board is conformally coated, however, care should be taken to prevent operation in corrosive or wet environments. Drive board is thermally protected, however, airflow over the drive board/ converter and heat sink is highly recommended.
2. Maximum current to the compressor is automatically limited by the drive board by reducing the compressor speed as the current approaches set limits.