

ASPEN A-Series Miniature Rotary Compressor

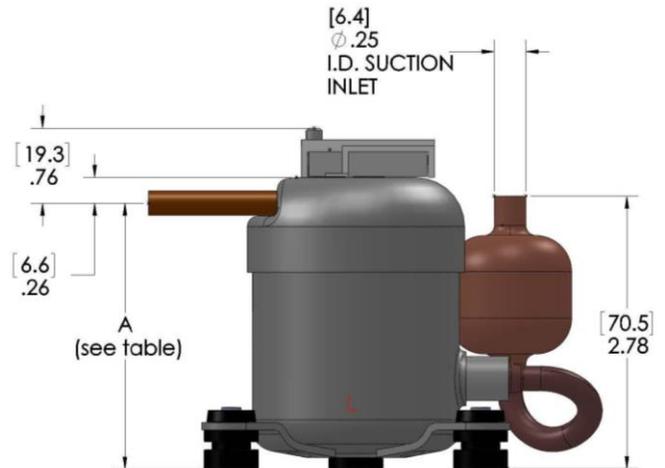
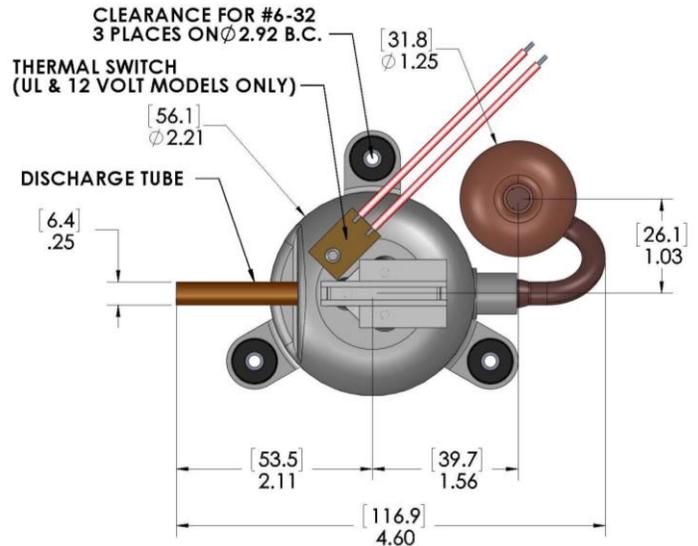


Refrigerant	HFC-134a / HFC-404a
Oil Type	POE RL 68H
Oil Quantity	Factory Charged With 21cc's of Emkarate RL68H POE Oil
Motor	Brushless DC
Speed Range	2100 – 6500 RPM
Evaporator Temperature Range	0–75°F (-18–24°C)
Condenser Temperature Range	80–160°F (27–71°C)
Max Discharge Temp.	265°F (130°C)
Max Compartment Temp.	130°F (54°C)
Suction Port Size	0.25" ID Cup
Discharge Port Size	0.25" OD Tube
Motor Drive Type	Sensorless
Analog Voltage Speed Command (Linear)	0 - .6 VDC = OFF .70 VDC = ~2100 RPM 4.5 VDC = ~6500 RPM
HFC-134a Cooling Capacity	ASHRAE Conditions
*1.4cc	360 watts / 1230 Btuh
1.9cc	455 watts / 1550 Btuh

* 12 volt compressor capacity will be less at these conditions

Application Notes:

1. Drive Board must not be subject to corrosive or wet environments. Drive board is thermally protected, however continuous airflow over the drive board and heat sink is recommended.
2. Compressor is supplied with 21cc's of Emkarate RL68 POE oil. Additional oil may be required if operating compressor in systems with large internal volumes or areas that oil will gather prior to being returned to the compressor



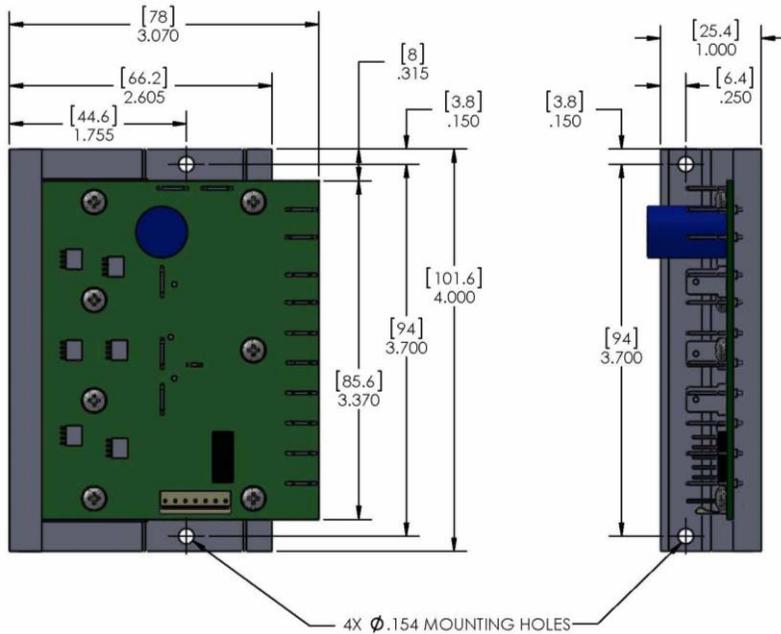
Ordering Information

Model #	Displacement	Voltage Range	**Max Continuous Current	Weight g / oz	Height "A": mm / in	Agency Approvals
14-12-1101	1.4cc	11-16 Vdc	9.5 Amps	590 g / 21oz	[66.8] / 2.63	
14-24-1101	1.4cc	20-30 Vdc	9.5 Amps	590 g / 21oz	[66.8] / 2.63	
19-24-1101	1.9cc	20-30 Vdc	9.5 Amps	680 g / 24oz	[68.8] / 2.71	
19-48-1101	1.9cc	43-60 Vdc	9.5 Amps	680 g / 24oz	[68.8] / 2.71	

** Max current is automatically regulated by the compressor control board

ASPEN High Capacity Drive Board & DC-DC Converter

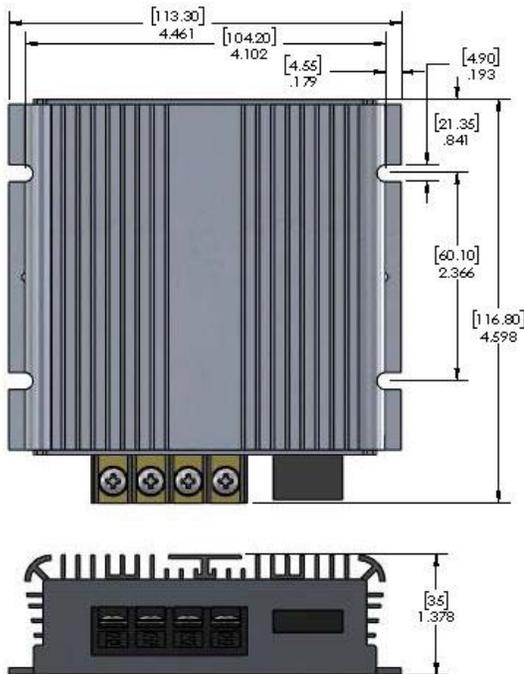
High Capacity Drive Board



Drive Board Options

Input Voltage	Max Current
10-16V	15A
20-30V	15A
43-60V	8A
10-60V**	8-35A**

DC-DC Converter



Compressor Drive & Converter Application Notes:

3. 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.
4. Maximum current to the compressor is automatically limited by the drive board by reducing the compressor speed as the current approaches set limits.