

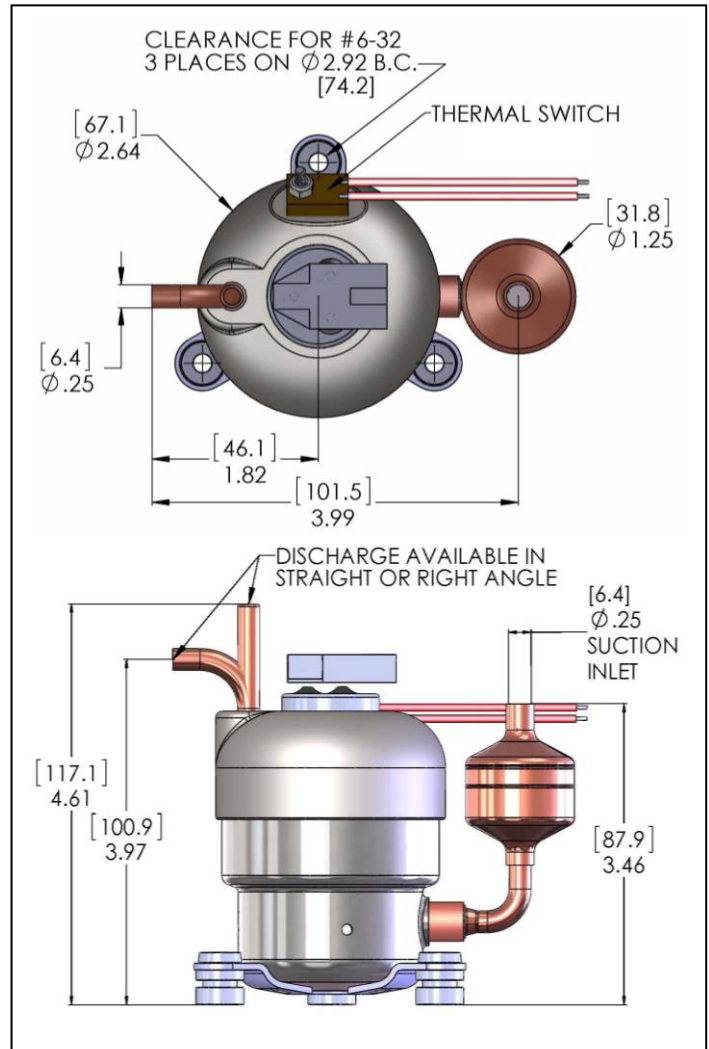
Q-Series

Low Noise, Miniature, Variable Speed Rotary Refrigeration Compressors

Worldwide patents pending



Compressor Specifications	
Refrigerants	R134a / R404a / R1234yf R513a/ R290 / R600a
Oil Type	Consult Factory
Oil Quantity	Factory Charged
Motor / Drive	BLDC / Sensorless
Speed Range	1400 – 6500 RPM
Evaporator Temp. Range	-22~75°F (-30~24°C)
Max Condensing Temp.	140°F (60°C)
Max Discharge Temp.	212°F (100°C)
Max Ambient Temp.	120°F (49°C)
Max Dome Temp.	212°F (100°C)
Max Operating Pressure	350 psi (2.4 MPa)
Suction Port Size	¼" ID Cup
Discharge Port Size	¼" OD Tube
Cooling Capacity-ASHRAE T	R-134a
1.4cc	360 Watts / 1228 BTU's
1.9cc	455 Watts / 1552 BTU's
Noise Level @ 1 meter	~ 40 dBA
Weight	1.4cc ~ 900g 1.9cc ~ 925g



Compressor Ordering Guide

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- 0 – Standard Compressor
- 1 – UL Approved Compressor
- 1 – HFC/HFO Refrigerants (R134a/R404a/R513a/R1234yf)
- 2 – HC Refrigerants (R290/R600a)
- 4 – Straight Discharge Tube
- 5 – Right Angle Discharge Tube
- 12 – (10-16) Volt Input
- 16 – (10-60) Volt Input **Requires Aspen DC-DC Converter
- 24 – (20-30) Volt Input
- 48 – (43-60) Volt Input
- 4 – 1.4cc
- 9 – 1.9cc

Sample Order # Q9 - 24 - 4101

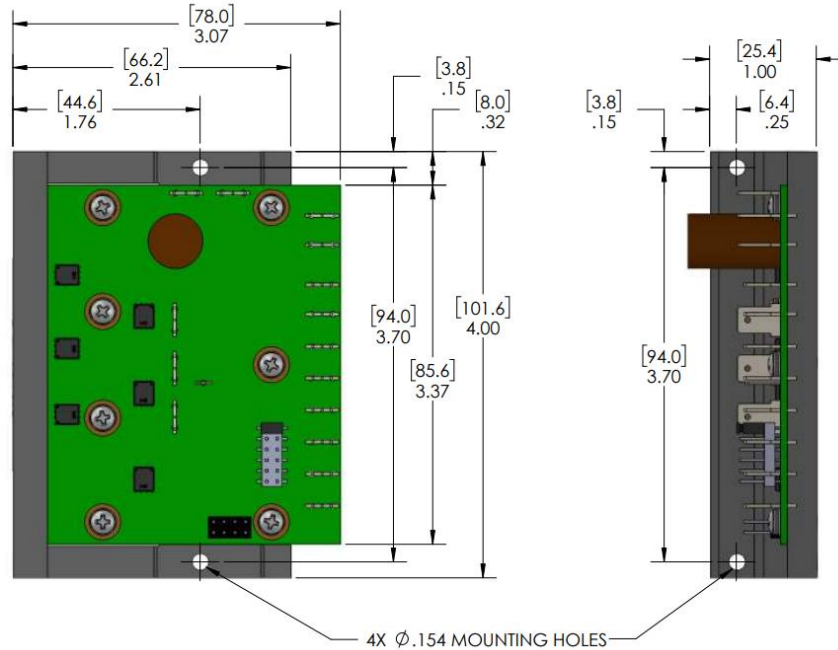
Description – 1.9cc compressor
(20-30) Volt Input
Straight Discharge Tube
HFC/HFO Refrigerant
Standard Compressor

Compressor Application Notes:

1. Compressor is supplied with a factory charge of 23 cc's of 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 Universal Quiet Sinusoidal Drive & DC-DC Converter

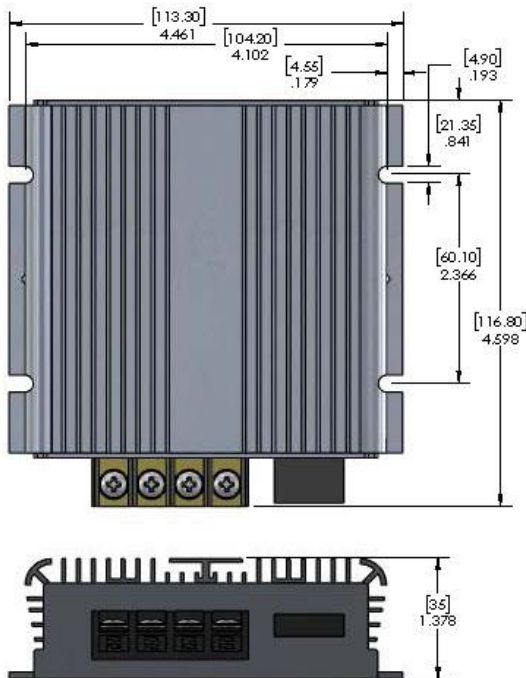
Universal Quiet Sinusoidal Drive



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:

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.
1. Maximum current to the compressor is automatically limited by the drive board by reducing the compressor speed as the current approaches set limits, however, a suitable inline fuse is required for branch circuit protection and safe operation. See Universal Low Noise Sinusoidal Motor Controller Instructions for installation instructions.