

SIERRA02-0434Y1 R134a / R513A / R1234yf 12/24 V DC VARIABLE SPEED



Brushless DC Variable Speed Compressor Technical Data Sheet

General Information

Compressor Part Number	SIERRA00167	3/8" ID Suction - 5/16" ID Discharge
Compressor Drawing	DCMX33-001	#10-32 Threaded Terminal Connections
Voltage Range:	9-30 V DC	
Controller Options (12/24V)	025F0095, 025F0219	
Wiring Diagram Drawing	DEM0020	

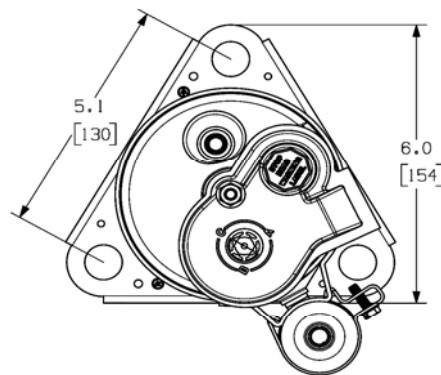
Application Information

Application	LBP, Refrigerator, Freezer
Refrigerant	R134A, R513A, R1234yf
Evaporator Temperature Range	-40° C to -12.2° C (-40° F to 10° F)
Condenser Temperature Range	26.7° C to 60° C (80° F to 140° F)
Maximum Discharge Temperature	126.7° C (260° F) (D2I) providing maximum motor temperature is not exceeded
Maximum Compression Ratio	25:1
Minimum Airflow Over Compressor	425 cfm @ 6" from Outside Diameter of Housing

Design

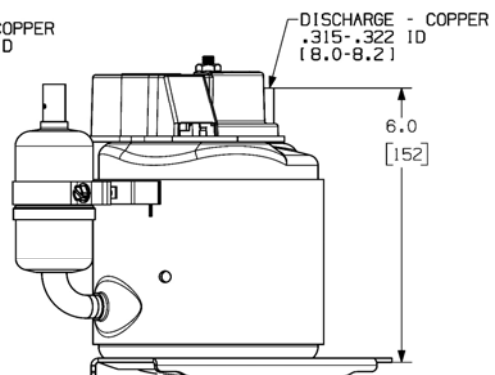
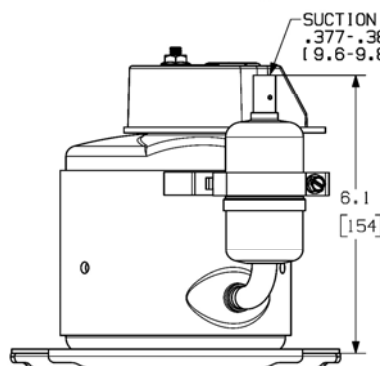
Displacement	7.1 cm ³ (0.434 in ³)
Oil Quantity	290 cc
Oil Type	PVE 68cSt
Weight	4.8 kg / 10.5 lb

Compressor Dimensions



Packaging Options

- Single Pack (add -SP suffix to part number when ordering)
- Pallet Pack (25 piece multiples)



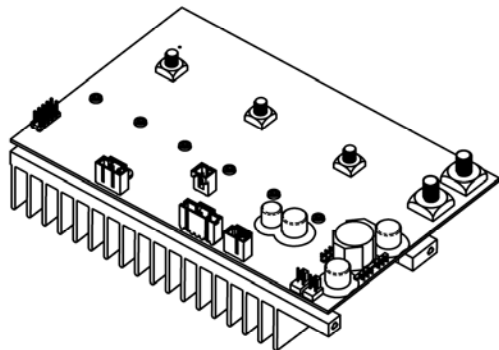
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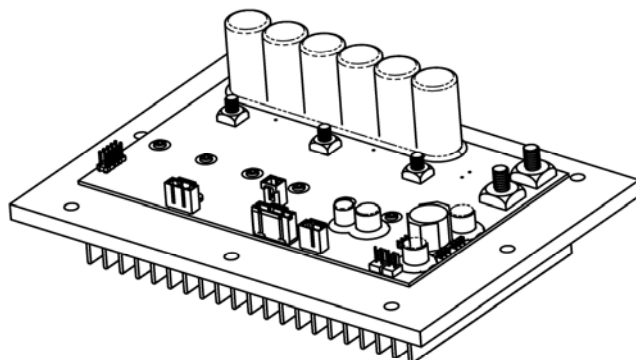


Controller Configurations

Custom controllers and configurations available



025F0095



025F0219

Performance Rating - R134a

ASHRAE LBP Conditions

Evaporator	Condenser	Ambient	Suction	Liquid
-10°F (-23.3°C)	130°F (54.4°C)	90°F (32.2°C)	90°F (32.2°C)	90°F (32.2°C)

Voltage	Speed RPM	Capacity		Current	Power	Efficiency	
		BTUH	W	A	W	EER	COP
12	1800	455	133	11.4	136.8	3.32	0.97
	2400	638	187	15.0	180.0	3.54	1.04
	3500	970	284	21.7	260.4	3.73	1.09
24	3600	989	290	12.7	304.8	3.24	0.95
	4800	1357	397	16.9	405.6	3.35	0.98
	6000	1725	505	21.1	506.4	3.41	1.00