

MESA18-0146Y4
R134a
24 V DC
VARIABLE SPEED (1200-6000 rpm)



Brushless DC Variable Speed Compressor Technical Data Sheet

General Information

Compressor Part Number	MESA00004	1/4" (6.54 mm) ID Suction 3/16" (4.95 mm) ID Discharge
Compressor Drawing	DCMX43	
Controller	025F0361	
Controller Drawing	DGMX0089	
Wiring Diagram	DEMX0058	

Design

Number of Cylinders	2
Total Displacement	2.4 cm ³ (0.146 in ³)
Oil Quantity	50 cc
Oil Type	POE - 170 cSt
Weight	1.20 kg / 2.65 lb

Application Information

Evaporator Temperature Range	-25° C to 20° C (-13° F to 68° F)
Condenser Temperature Range	8.6° C to 72° C (47.5° F to 162° F)
Maximum Discharge Temperature	115° C (239° F)
Maximum Compression Ratio	13:1
Minimum Compressor Cooling	1 m/s airflow over compressor

Rated Performance

Application	Speed	Capacity		Power	Efficiency	
		Watts	BTU	Watts	COP	EER
LBP	1200	21	72	36	0.58	1.98
	1800	39	132	46	0.85	2.90
	2640	62	211	59	1.06	3.60
	3480	80	272	74	1.09	3.71
	4320	109	372	89	1.23	4.19
	5160	133	454	107	1.24	4.25
HBP	6000	150	511	123	1.22	4.15
	1200	106	361	53	2.01	6.85
	1800	164	560	72	2.29	7.82
	2640	247	842	91	2.71	9.26
	3480	332	1133	114	2.90	9.90
	4320	407	1391	140	2.91	9.95
5160	495	1691	165	3.00	10.25	
6000	576	1965	181	3.19	10.88	

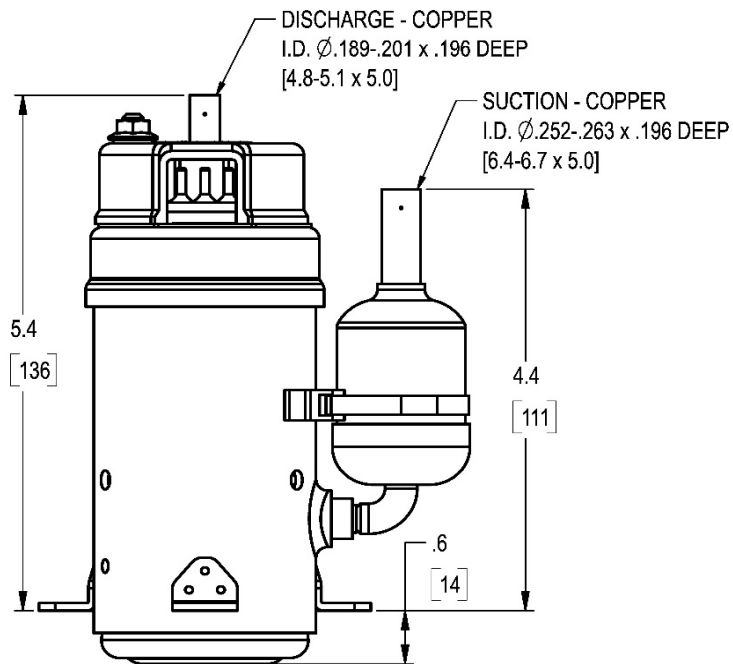
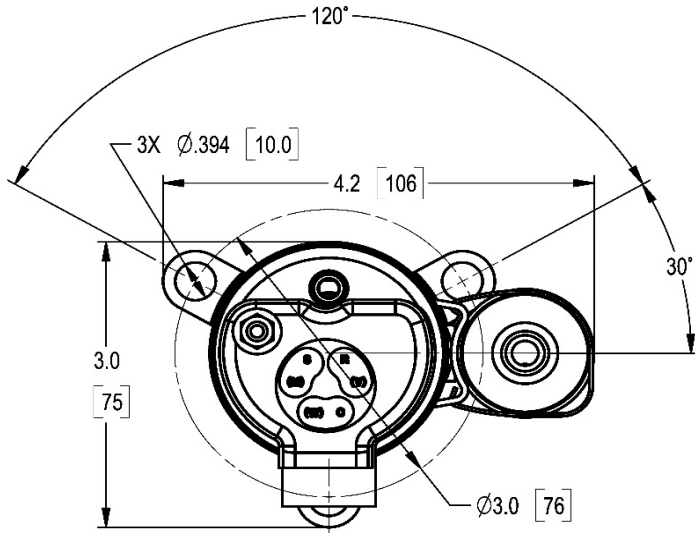
Rating Condition

	HBP		LBP	
Condensing Temperature	130°F	(54.4°C)	130°F	(54.4°C)
Evaporating Temperature	45°F	(7.2°C)	-10°F	(-23.3°C)
Return Gas Temperature	95°F	(35.0°C)	90°F	(32.2°C)
Liquid Temperature	115°F	(46.1°C)	90°F	(32.2°C)
Ambient Temperature	95°F	(35.0°C)	90°F	(32.2°C)
Compressor Cooling	1 m/s air cooling			
Controller	025F0361			

MESA18-0146Y4



Compressor Dimensions



Controller Configuration

