



Project Report

Project Details: New Project

Contact:

Author Name:

Refrigerant	R134a
High Side Properties:	
Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	11.60
Dew Point, °C	45.00
Bubble Point, °C	45.00
Saturated vapour enthalpy, kJ/kg	422.00
Specific volume of saturated vapour, dm ³ /kg	17.40
Low Side Properties:	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	2.01
Dew Point, °C	-10.00
Bubble Point, °C	-10.00
With vapour at, °C	0.00
Specific volume, dm ³ /kg	104.50
Enthalpy, kJ/kg	401.00
Operating Conditions:	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Superheat, K	10.00
Subcooling, K	0.00
Compressor Selected	4SF-100

**PERFORMANCE AT SPECIFIED OPERATING POINT
4SF-100 Data at 50 Hz**

Cooling Capacity, kW	15.35
Power, kW	7.16
COP	2.15
Current at 400 V, A	12.92
Suction Mass Flow, g/s	112.50
Heating Capacity, kW	22.20
Isentropic Eff., %	60.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	4
Displacement @ 50 Hz, m ³ /h	56.0
Bore/Stroke, mm	63.5/50.8
Length/Width, mm	680/485
Height, mm	495
Net Weight, kg	178
Gross Weight, kg	194
Rotalock Discharge, inch	1 1/8
Suction, inch	1 5/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	3.3
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Base mounting (hole dia), mm	381 x 305 (18)
Sound Pressure @ 1m, dBA	72.4
Sound Power, dBA	83.4
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	1430
Refrigerant's classification	A1

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	27.1
Locked Rotor Current, A	105
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch
Mounting Springs

OPS2 Sensor
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ACCESSORIES OPTIONAL

Additional Cooling
Capacity Control
Crankcase Heater
Discharge Temperature Protection
Enclosure Class
Oil Pressure Switch
Unloaded start
Deep Oil Sump
Adapter Kit
Check Valve
Oil Control System

70 W Vertical Air Flow Fan
Capacity Steps 50%
100 W Internal
Head PTC sensor
IP 56
OPS2 Electronic Switch
Available
Mounted
For Parallel Operation
For unloaded start operation
ALCO Trax-Oil OM3

D4SF, D4SL

