



Project Report

Project Details: New Project

Contact:

Author Name:

Refrigerant R404A Dew Point

High Side Properties:

Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	20.47
Dew Point, °C	45.00
Bubble Point, °C	44.70
Saturated vapour enthalpy, kJ/kg	381.00
Specific volume of saturated vapour, dm³/kg	8.50

Low Side Properties:

Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	4.34
Dew Point, °C	-10.00
Bubble Point, °C	-10.60
With vapour at, °C	0.00
Specific volume, dm³/kg	48.00
Enthalpy, kJ/kg	369.00

Operating Conditions:

Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Superheat, K	10.00
Subcooling, K	0.00

Compressor Selected	3SC-100
---------------------	---------

**PERFORMANCE AT SPECIFIED OPERATING POINT
3SC-100 Data at 50 Hz**

Cooling Capacity, kW	17.55
Power, kW	8.78
COP	2.00
Current at 400 V, A	16.13
Suction Mass Flow, g/s	173.00
Heating Capacity, kW	25.90
Isentropic Eff., %	64.37

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	3
Displacement @ 50 Hz, m ³ /h	38.0
Bore/Stroke, mm	60.4/50.8
Length/Width, mm	682/370
Height, mm	480
Net Weight, kg	159
Gross Weight, kg	174
Suction, inch	1 3/8
Discharge, inch	1 1/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	3.7
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)
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	21.6
Locked Rotor Current, A	106
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

ACCESSORIES OPTIONAL

Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	70 W Internal
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Deep Oil Sump	Mounted
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Oil Control System	ALCO Trax-Oil OM3

D3DA 75X / 750
D3DC 100X / 1000
D3DS 100X / 1000

