



# Select 8

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**Project Report**

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Author Name:

Refrigerant	R407C Dew Point
<b>High Side Properties:</b>	
Condensing Temperature, °C	50.00
Condensing Abs. Pressure, bar	19.85
Dew Point, °C	50.00
Bubble Point, °C	45.37
Saturated vapour enthalpy, kJ/kg	425.41
Specific volume of saturated vapour, dm <sup>3</sup> /kg	10.97
Liquid Temperature, °C	45.37
Liquid enthalpy, kJ/kg	269.01
<b>Low Side Properties:</b>	
Evaporating Temperature, °C	0.00
Evaporating Abs. Pressure, bar	4.61
Dew Point, °C	0.00
Bubble Point, °C	6.27-
With vapour at, °C	20.00
Specific volume, dm <sup>3</sup> /kg	56.22
Enthalpy, kJ/kg	427.25
<b>Operating Conditions:</b>	
Evaporating Temperature, °C	0.00
Condensing Temperature, °C	50.00
Suction Return Temperature, °C	20.00
Subcooling, K	0.00
Compressor Selected	D6SJ-400X

**PERFORMANCE AT SPECIFIED OPERATING POINT  
D6SJ-400X Data at 50Hz**

Cooling Capacity, kW	78.60
Power, kW	29.80
COP	2.63
Current at 400 V, A	52.74
Mass Flow, g/s	497.00
Heat Rejection, kW	107.00
Isentropic Eff., %	66.04

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	6
Displacement @ 50 Hz, m <sup>3</sup> /h	127
Bore/Stroke, mm	74.7/55.6
Length/Width, mm	760/565
Height, mm	545
Net Weight, kg	252
Gross Weight, kg	268
Rotalock Discharge, inch	1 3/8
Suction, inch	2 1/8
Oil Quantity, l	6.8
Frequency Range, Hz	25 - 60
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 (18.0)
Sound Pressure @ 1m, dBA	80
Sound Power, dBA	91
High Side PS, bar(g)	32.5
Low Side PS, bar(g)	22.5
Refrigerant's GWP	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	71.8
Locked Rotor Current, A	304
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4
Deep Oil Sump	Mounted

**ACCESSORIES OPTIONAL**

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Capacity Steps 66/33%
Crankcase Heater	200 W Internal
Discharge Temperature Protection	Head PTC sensor
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Oil Control System	ALCO Trax-Oil OM3
Inverter	Emerson Industrial Automation, Unidrive M400 07 400 770

D6SJ

