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brand products



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Project Report

Refrigerant	R407C Dew Point
High Side Properties:	
Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	17.51
Dew Point, °C	45.00
Bubble Point, °C	40.10
Saturated vapour enthalpy, kJ/kg	425.00
Specific volume of saturated vapour, dm ³ /kg	12.70
Liquid Temperature, °C	40.10
Liquid enthalpy, kJ/kg	260.00
Low Side Properties:	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	3.20
Dew Point, °C	-10.00
Bubble Point, °C	-16.50
With vapour at, °C	0.00
Specific volume, dm ³ /kg	76.00
Enthalpy, kJ/kg	413.00
Operating Conditions:	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Superheat, K	10.00
Subcooling, K	0.00
Compressor Selected	ZR144KCE-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZR144KCE-TFD Data at 50 Hz**

Cooling Capacity, kW	17.20
Power, kW	8.00
COP	2.15
Current at 400 V, A	14.79
Suction Mass Flow, g/s	113.00
Heating Capacity, kW	24.80
Isentropic Eff., %	62.23

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	33.2
Length/Width, mm	281/285
Height, mm	533
Net Weight, kg	61.2
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	3.25
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	190 x 190 (0)
Sound Pressure @ 1m (HT), dBA	64
Sound Power (HT), dBA	75
Sound Power with Sound Shell (HT), dBA	66
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	13.3
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Low Side TS Max., °C	52
Low Side TS Min., °C	-35
Refrigerant's GWP	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	22.3
Locked Rotor Current, A	118
Winding Resistance, ohm	1.23
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Enclosure Class	IP21
Oil Service Valve	Schraeder Valve
Check Valve	Discharge Low Leak Check Valve
Discharge Temperature Protection	ASTP Therm-O-Disc In Scroll
Oil Charge	

ACCESSORIES OPTIONAL

Mounting Grommets	Rubber Grommet For Single
Adapter Kit	R1"1/4 -B 1"1/8 For TPTL for
Oil Control System	Parallel Operation
Sound Attenuation	ALCO Trax-Oil OM3
Mounting Grommets	Sound Shell (12dBA)
Crankcase Heater	Hard Mounts for Paralleling
Enclosure Class	90 W External
	IP66 With Molded Plug