



Select8

COPELAND

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Project Report

Refrigerant	R449A Dew Point
High Side Properties:	
Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	18.86
Dew Point, °C	45.00
Bubble Point, °C	40.70
Saturated vapour enthalpy, kJ/kg	414.00
Specific volume of saturated vapour, dm³/kg	11.30
Liquid Temperature, °C	40.70
Liquid enthalpy, kJ/kg	262.00
Low Side Properties:	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	3.61
Dew Point, °C	-10.00
Bubble Point, °C	-15.40
With vapour at, °C	20.00
Specific volume, dm³/kg	72.50
Enthalpy, kJ/kg	421.00
Operating Conditions:	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Return Temperature, °C	20.00
Subcooling, K	0.00
Compressor Selected	ZB95K5E-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZB95K5E-TFD Data at 50 Hz**

Cooling Capacity, kW	21.10
Power, kW	9.75
COP	2.16
Current at 400 V, A	18.89
Suction Mass Flow, g/s	132.50
Heating Capacity, kW	30.30
Isentropic Eff., %	62.45

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	36.4
Length/Width, mm	280/280
Height, mm	552
Net Weight, kg	64.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.37
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 (MT), dBA	70
Sound Power (MT), dBA	81
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	2
Max. Internal Free Volume, l	14.0
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	28.2
Locked Rotor Current, A	140
Winding Resistance, ohm	1.09
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection
Mounting Grommets

Internal Thermistor
Standard

ACCESSORIES OPTIONAL

Crankcase Heater
Enclosure Class
Mounting Grommets
Oil Control System
Sound Attenuation
Rotalock valves

90 W External
IP66 With Molded Plug
Hard Mounts for Paralleling
ALCO Trax-Oil OM3
Sound Shell (10dBA)
suction and discharge

MODEL NUMBER	A	B	C	D	E
ZB58/66/76K5E	533.6	501.8	277.3	245.7	93.0
ZB95/114K5E	551.5	519.5	295.0	263.3	93.0

