



# Select 8

**Copeland**<sup>™</sup>  
brand products



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## Project Report

Project Details: frigotehnie.ro  
Contact: Kubitech  
RO

Author Name:

Refrigerant	R449A Dew Point
<b>High Side Properties:</b>	
Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	18.75
Dew Point, °C	45.00
Bubble Point, °C	40.50
Saturated vapour enthalpy, kJ/kg	413.00
Specific volume of saturated vapour, dm <sup>3</sup> /kg	11.30
Liquid Temperature, °C	40.50
Liquid enthalpy, kJ/kg	261.00
<b>Low Side Properties:</b>	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	3.58
Dew Point, °C	-10.00
Bubble Point, °C	-15.80
With vapour at, °C	0.00
Specific volume, dm <sup>3</sup> /kg	66.40
Enthalpy, kJ/kg	402.00
<b>Operating Conditions:</b>	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Superheat, K	10.00
Subcooling, K	0.00
Compressor Selected	ZB114K5E-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT  
ZB114K5E-TFD Data at 50 Hz**

Cooling Capacity, kW	24.30
Power, kW	11.60
COP	2.09
Current at 400 V, A	23.23
Suction Mass Flow, g/s	173.00
Heating Capacity, kW	35.30
Isentropic Eff., %	61.88

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	43.4
Length/Width, mm	280/280
Height, mm	552
Net Weight, kg	66.2
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	72
Sound Power (MT), dBA	83
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	33.5
Locked Rotor Current, A	174
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 54 (IEC 34)

***ACCESSORIES INCLUDED***

Discharge Temperature Protection  
Mounting Grommets

Internal Thermistor  
Standard

***ACCESSORIES OPTIONAL***

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

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

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

