



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, dm ³ /kg	11.30
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, dm ³ /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	ZBD57KCE-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZBD57KCE-TFD Data at 50 Hz**

Cooling Capacity, kW	12.60
Power, kW	5.37
COP	2.35
Current at 400 V, A	9.38
Suction Mass Flow, g/s	79.50
Heating Capacity, kW	17.75

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	21.4
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	43.1
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	1.89
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 (19)
Sound Pressure @ 1m (MT), dBA	68
Sound Power (MT), dBA	79
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	1
Max. Low Side Internal Free Volume, l	6.3
Max. High Side Internal Free Volume, l	0.5
Max. Internal Free Volume, l	6.80
High Side PS gauge, bar	32
Low Side PS gauge, bar	20
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	15.9
Locked Rotor Current, A	102
Winding Resistance, ohm	1.72
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

ZBD57KCE

