



Refrigerant	R449A Dew Point
<b>High Side Properties:</b>	
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 <sup>3</sup> /kg	11.30
<b>Low Side Properties:</b>	
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 <sup>3</sup> /kg	72.50
Enthalpy, kJ/kg	421.00
<b>Operating Conditions:</b>	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Return Temperature, °C	20.00
Subcooling, K	0.00
Compressor Selected	ZBD38KCE-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT  
ZBD38KCE-TFD Data at 50 Hz**

Cooling Capacity, kW	8.16
Power, kW	3.51
COP	2.32
Current at 400 V, A	6.54
Suction Mass Flow, g/s	51.40
Heating Capacity, kW	11.50

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	14.4
Length/Width, mm	246/250
Height, mm	481
Net Weight, kg	38.1
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
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	60
Sound Power (MT), dBA	71
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	21
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	11.3
Locked Rotor Current, A	64
Winding Resistance, ohm	2.8
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	NTC sensor
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Mounting Grommets	Hard Mounts for Paralleling
Solenoid valve	Standard
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Valve Coil	24V AC
Solenoid Valve Kit	220 V Ac 12" lead Length
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC2-552
Digital Control Kit	EC3-652
Digital Driver	EC3-D13

# ZBD 30,38,45 KCE ZBD 28 KCB

