

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	ZBD21KCE-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZBD21KCE-TFD Data at 50 Hz**

Cooling Capacity, kW	4.71
Power, kW	2.14
COP	2.20
Current at 400 V, A	4.21
Suction Mass Flow, g/s	29.70
Heating Capacity, kW	6.74

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	8.35
Length/Width, mm	243/243
Height, mm	432
Net Weight, kg	30.2
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.24
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	58
Sound Power (MT), dBA	69
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	4.1
Max. High Side Internal Free Volume, l	0.5
Max. Internal Free Volume, l	4.60
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	6.7
Locked Rotor Current, A	40
Winding Resistance, ohm	4.83
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Mounting Grommets	Standard
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ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Discharge Temperature Protection	Discharge line thermostat
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

MODEL NUMBER	A	B	C	D	E	F	G
ZBD21KC/KCE	432.4	414.3	363.6	261.6	218.9	75.0	50.0
ZBD29KC/KCE	463.2	445.2	394.3	291.3	249.7	75.0	50.0

