



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	ZB38KCE-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZB38KCE-TFD Data at 50 Hz**

Cooling Capacity, kW	8.34
Power, kW	3.87
COP	2.15
Current at 400 V, A	7.17
Suction Mass Flow, g/s	52.50
Heating Capacity, kW	12.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.5
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
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 (8.5)
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. Internal Free Volume, l	4.20
High Side PS gauge, bar	32
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.74
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater
Oil Control System
Sound Attenuation
Rotalock valves

70 W External
ALCO Trax-Oil OM3
Sound Shell (10dBA)
suction and discharge

MODEL NUMBER	A±3.0	B±3.0	E	F	G ₋	H
ZF13K4 / K4E ZF15K4 / K4E ZF18K4 / K4E	442.0	409.6	79.5	340.9	47.5	120.2
ZS30K4 / K4E ZS38K4 / K4E ZS45K4 / K4E	437.7	409.6	79.5	OMIT	47.5	OMIT
ZB30KC / KCE ZB38KC / KCE ZB42KC / KCE ZB45KC / KCE						

LIQUID INJECTION FITTING
[11/16-16 UN-2A THREADS]
[0.25 ID]

25.4 [1.00-14] THREAD
ROTALOCK SPUD
DISCHARGE

31.75 [1.250-12] THREAD
ROTALOCK SPUD
SUCTION

