



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
Liquid Temperature, °C	40.70
Liquid enthalpy, kJ/kg	262.00
<b>Low Side Properties:</b>	
Evaporating Temperature, °C	-35.00
Evaporating Abs. Pressure, bar	1.29
Dew Point, °C	-35.00
Bubble Point, °C	-40.70
With vapour at, °C	20.00
Specific volume, dm <sup>3</sup> /kg	213.00
Enthalpy, kJ/kg	425.00
<b>Operating Conditions:</b>	
Evaporating Temperature, °C	-35.00
Condensing Temperature, °C	45.00
Suction Return Temperature, °C	20.00
Subcooling, K	0.00
Compressor Selected	ZFD13KVE-TFD EVI

**PERFORMANCE AT SPECIFIED OPERATING POINT  
ZFD13KVE-TFD EVI Data at 50 Hz**

Cooling Capacity, kW	3.04
Power, kW	2.82
COP	1.08
Current at 400 V, A	5.44
Suction Mass Flow, g/s	12.60
Heating Capacity, kW	5.72
Economiser Load, kW	0.98
Intermediate Dew Temperature, °C	-11.10
Liquid Temperature LO, °C	-11.60

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	11.7
Length/Width, mm	246/250
Height, mm	481
Net Weight, kg	38.6
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
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 (0)
Sound Pressure @ 1m (LT), dBA	65
Sound Power (LT), dBA	76
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
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	9
Locked Rotor Current, A	64
Winding Resistance, ohm	2.75
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection  
Mounting Grommets

NTC sensor  
Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater  
Mounting Grommets  
Oil Control System  
Sound Attenuation  
Valve Coil  
Valve Coil  
Solenoid Valve Kit  
Solenoid Valve Kit  
Digital Tubing Kit  
Digital Tubing Kit  
Digital Control Kit  
Digital Control Kit  
Digital Driver

70 W External  
Hard Mounts for Paralleling  
ALCO Trax-Oil OM3  
Sound Shell (10dBA)  
220V  
24V AC  
220 V Ac 12" lead Length  
24 V Ac 12" lead Length  
220 V 0.3m Rotalock  
24 V 0.3m Rotalock  
EC2-552  
EC3-652  
EC3-D13

# ZFD13,18KVE

VAPOR INJECTION  
FITTING (BRAZED)  
Ø 12.80-12.90

SOLENOID FITTING  
Ø 9.65-9.77

1.00-14UNS-2A  
ROTALOCK DISCHARGE

1.25-12UNF 2A  
ROTALOCK SUCTION

Ø 185.5

