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EMERSON[™]



Project Report

Refrigerant	R407C Dew Point
High Side Properties:	
Condensing Temperature, °C	45.00
Abs. Condensing Pressure, bar	17.51
Dew Point, °C	45.00
Bubble Point, °C	40.10
Saturated vapour enthalpy, kJ/kg	425.00
Specific volume of saturated vapour, dm ³ /kg	12.70
Liquid Temperature, °C	40.10
Liquid enthalpy, kJ/kg	260.00
Low Side Properties:	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	3.20
Dew Point, °C	-10.00
Bubble Point, °C	-16.50
With vapour at, °C	0.00
Specific volume, dm ³ /kg	76.00
Enthalpy, kJ/kg	413.00
Operating Conditions:	
Evaporating Temperature, °C	-10.00
Condensing Temperature, °C	45.00
Suction Superheat, K	10.00
Subcooling, K	0.00
Compressor Selected	ZR40K3E-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZR40K3E-TFD Data at 50 Hz**

Cooling Capacity, kW	4.50
Power, kW	2.44
COP	1.85
Current at 400 V, A	4.67
Suction Mass Flow, g/s	29.60
Heating Capacity, kW	6.82
Isentropic Eff., %	53.51

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	9.43
Length/Width, mm	242/242
Height, mm	400
Net Weight, kg	27
Gross Weight, kg	31
Stub Suction, inch	3/4
Stub Discharge, inch	1/2
Oil Quantity, l	1.1
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 (HT), dBA	57
Sound Power (HT), dBA	68
Sound Power with Sound Shell (HT), dBA	60
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	3.10
High Side PS gauge, bar	29.5
Low Side PS gauge, bar	20
Low Side TS Max., °C	50
Refrigerant's GWP	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	7
Locked Rotor Current, A	46
Winding Resistance, ohm	4.03
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection
Mounting Grommets

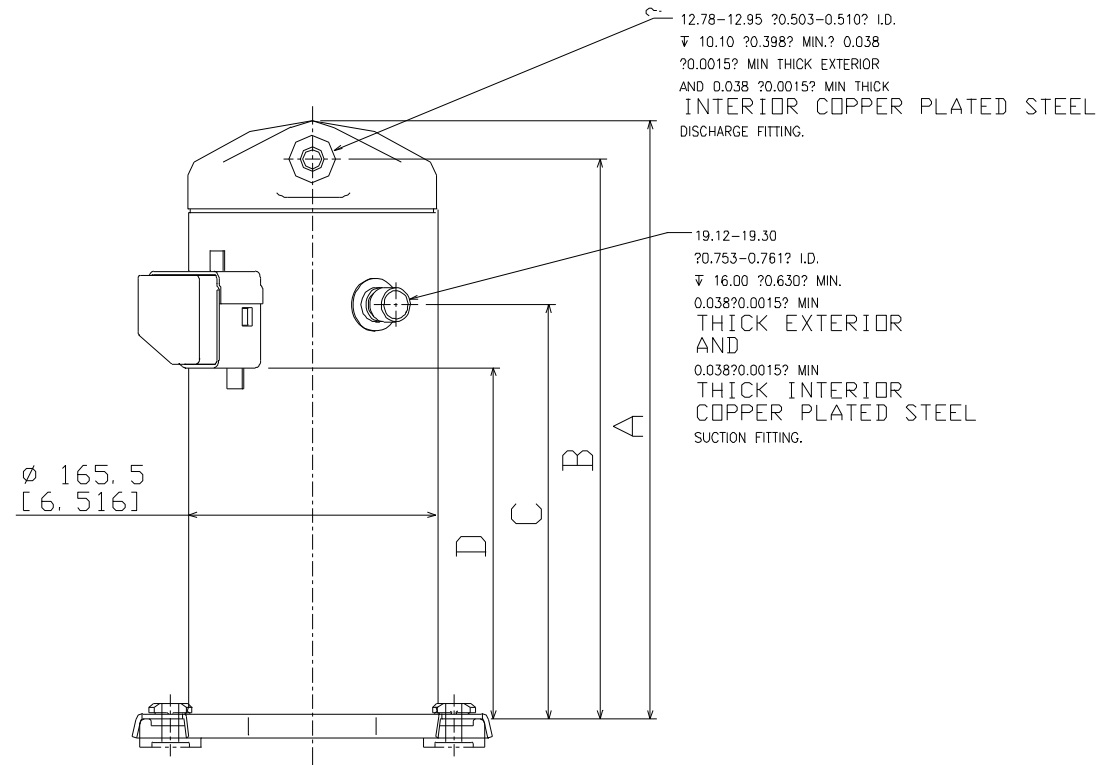
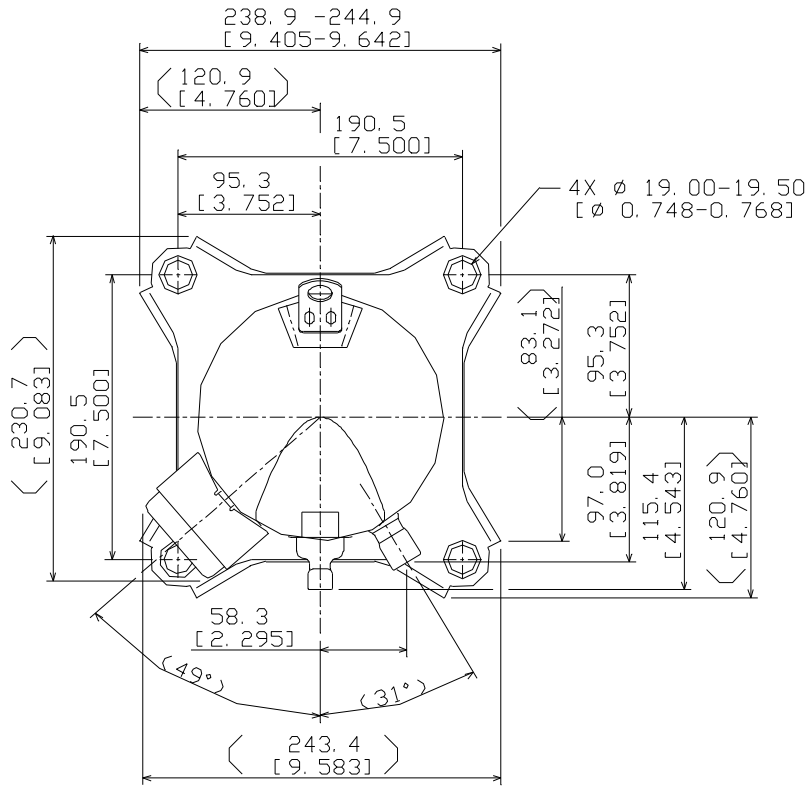
Internal Thermodisk
Standard

ACCESSORIES OPTIONAL

Crankcase Heater

70 W External

ZR22K3 to ZR40K3



Model	A ±3,0	B	C±3,0	D ±3,0
ZR22 K3 / K3E, ZR28 K3 / K3E	363	338,4	244,6	202,4
ZR34 K3 / K3E	386,5	361,0	264,5	222,3
ZR40 K3 / K3E	400,3	374,8	277,3	235,1