



Minimum Evaporating Temp. With:

— 20 °C Suction Gas Return

— Maximum Evaporating Temperature

— Maximum Pressure Limit

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Ambient °C	Cooling Capacity, kW							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
27.0	8.98	10.75	12.70	14.85	17.20	19.70	20.70	22.30
32.0	8.39	10.00	11.80	13.80	15.95	18.25	19.20	20.70
38.0	7.67	9.12	10.75	12.50	14.40	16.45	17.30	18.60
43.0	7.04	8.34	9.77	11.35	13.05	14.85	15.60	16.80
46.0	6.65	7.85	9.16	10.60	12.15	13.85		
49.0		7.34	8.54					

50 Hz

ZXDE-075E-TFD

R404A Dew Point

Ambient °C	Total Power Input, kW							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
27.0	4.35	4.63	4.93	5.22	5.52	5.83	5.94	6.12
32.0	4.69	5.00	5.31	5.62	5.94	6.26	6.39	6.58
38.0	5.16	5.48	5.81	6.15	6.49	6.83	6.96	7.16
43.0	5.61	5.94	6.29	6.64	6.99	7.34	7.48	7.69
46.0	5.91	6.25	6.60	6.96	7.32	7.67		
49.0		6.58	6.94					

Ambient °C	Current at 400 V, A							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
27.0	8.76	9.09	9.42	9.77	10.13	10.52	10.68	10.93
32.0	9.18	9.56	9.93	10.31	10.71	11.11	11.28	11.54
38.0	9.75	10.19	10.62	11.04	11.47	11.90	12.08	12.35
43.0	10.28	10.77	11.25	11.71	12.17	12.63	12.81	13.09
46.0	10.63	11.16	11.66	12.15	12.62	13.10		
49.0		11.56	12.09					

Ambient °C	Mass Flow, g/s							
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
27.0	65.00	79.60	96.80	117.00	140.50	168.00	180.00	200.00
32.0	64.50	78.90	95.90	115.50	139.00	166.50	178.50	199.00
38.0	63.80	77.90	94.50	114.00	137.00	164.00	176.50	196.50
43.0	63.20	77.00	93.10	112.00	134.50	161.50	174.00	194.50
46.0	62.80	76.30	92.20	111.00	133.50	160.00		
49.0		75.60	91.10					

CONDENSING UNIT MECHANICAL AND PHYSICAL DATA

Condenser/Fan Type	ZX075E/60 W
Base mounting (hole dia), mm	580 x 388 (12)
Number of Fans	2
Air Flow, m ³ /s	1.64
Total Fan Power Input, W	246
Height, mm	1244
Depth/Width, mm	1035/447
Suction Diameter, inch	7/8
Liquid Line, inch	1/2
Suction Type	Cu Tube
High Side PS gauge, bar	28.8
Receiver Capacity, l	5.9
Low Side PS gauge, bar	21
Net Weight, kg	118
Sound Pressure @ 10m (MT), dBA	42
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10.0/45.0/20.0 °C at 50 Hz

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

Compressor Maximum Operating Current, A	14
Compressor Locked Rotor Current, A	100

ACCESSORIES INCLUDED

Crankcase Heater	70 W External
Liquid Injection	DTC Valve
Oil separator	ALCO OSH-404
Liquid sight glass	ALCO MIA 012
Compressor contactor	12 A
Control circuit fuse	S7-904-5355-0
HP Switch	ALCO PS3 WDS (Automatic reset)
Electronic controller	Emerson XCM25D
Filter Drier	ALCO ADK Plus
Circuit breaker, over current relay	20 A

ACCESSORIES OPTIONAL

LP Adjustable Pressure Switch	Alco PS1-A3A
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50 Hz

ZXDE-075E-TFD

R404A Dew Point

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00



Select 8

Copeland[™]
brand products



EMERSON[™]



Project Report

Project Details: New Project

Contact:

Author Name:

Refrigerant	R404A Dew Point
High Side Properties:	
Condensing Temperature, °C	43.10
Abs. Condensing Pressure, bar	19.58
Dew Point, °C	43.10
Bubble Point, °C	42.80
Saturated vapour enthalpy, kJ/kg	381.00
Specific volume of saturated vapour, dm ³ /kg	9.00
Liquid Temperature, °C	0.00
Liquid enthalpy, kJ/kg	-1.00
Low Side Properties:	
Evaporating Temperature, °C	-10.00
Evaporating Abs. Pressure, bar	4.34
Dew Point, °C	-10.00
Bubble Point, °C	-10.60
With vapour at, °C	20.00
Specific volume, dm ³ /kg	53.00
Enthalpy, kJ/kg	388.00
Operating Conditions:	
Evaporating Temperature, °C	-10.00
Suction Return Temperature, °C	20.00
Ambient, °C	32.00
Condensing Unit Selected	ZXDE-075E-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT
ZXDE-075E-TFD Data at 50 Hz**

Cooling Capacity, kW	11.80
Total Power Input, kW	5.31
COP	2.23
Current at 400 V, A	9.93
Mass Flow, g/s	95.90
Heating Capacity, kW	16.65
Condensing Temperature, °C	43.10
Subcooling, K	0.00

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