

ZR72KCE-TFD

HFC, R-407C, Dew Point, 50 Hz, 3 - Phase, 380/420 V
Air Conditioning

Performance

Evap(°F)/Cond(°F)	<u>45/130</u>	<u>45/100</u>
RG(°F)/Liq(°F)	<u>65/115</u>	<u>65/85</u>
Capacity (Btu/hr):	56500	69000
Power (Watts):	5150	3520
Current (Amps):	9.1	6.5
EER (Btu/Wh):	11.0	19.6
Mass Flow (lbs/hr):	825.0	855.0

Sound Power(dBA): 72 Ave 77 Max
Vibration (mils(peak-peak)): 2.0 Ave 3.0 Max

Record Date: 2005-04-15

Mechanical

Number of Cylinders:	0	Displ (in ³ /Rev):	5.983
Bore Size (in):	0.0	Displ (ft ³ /hr):	602.4522
Stroke (in):	0.0		

Overall Length (in): 9.48 Mounting Length (in): 7.5
Overall Width (in): 9.71 Mounting Width(in): 7.5
Overall Height (in): 17.75 Mounting Height (in): 18.0*

Suction Size (in): 7/8 Stub
Discharge Size (in): 1/2 Stub
Initial Oil Charge (oz): 60
Oil Recharge (oz): 56
Net Weight (lbs): 85.0
Internal Free Volume (in³): 248.0
HorsePower 6.0

* Overall compressor height on Copeland Brand Product's specified mounting grommets.

Electrical

LRA-High*:	74.0	MCC (Amps):	14.0	UL File No.:	SA-2337
LRA-Half Winding:		RPM:	2900	UL File Date:	26-Jul-1993
LRA-Low*:	67.0	Max Operating Current:	13.0	CSA File No.:	LR3104C

RLA(=MCC/1.4; use for contactor selection): 10

RLA (=MCC/1.56; use for breaker & wire size selection): 9

*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

Alternate Applications

<u>Refrigerant</u>	<u>Frequency(Hz)</u>	<u>Phase</u>	<u>Voltage</u>	<u>Application</u>
R-134a HFC	60	3	460	Air Conditioning
R-407C HFC	60	3	460	Air Conditioning
R-134a HFC	50	3	380/420	Air Conditioning

Model: ZR72KCE-TFD

Capacity

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10
30	6.21	6.22	6.22	6.24	6.26	6.31	6.39
35	6.67	6.67	6.67	6.67	6.68	6.72	6.78
40	7.23	7.22	7.20	7.19	7.19	7.22	7.27
45	-	7.85	7.83	7.80	7.80	7.81	7.85
50	-	-	8.55	8.52	8.50	8.50	8.53
55	-	-	-	9.33	9.30	9.29	9.31
60	-	-	-	-	10.21	10.19	10.20
65	-	-	-	-	11.24	11.21	11.21

Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10
30	157.84	194.84	236.08	282.19	333.79	391.50	455.96
35	155.35	192.65	234.14	280.43	332.16	389.94	454.41
40	151.78	189.37	231.07	277.53	329.36	387.19	451.64
45	-	185.03	226.94	273.54	325.45	383.30	447.71
50	-	-	221.79	268.51	320.48	378.33	442.68
55	-	-	-	262.50	314.50	372.33	436.59
60	-	-	-	-	307.58	365.36	429.52
65	-	-	-	-	299.76	357.47	421.51

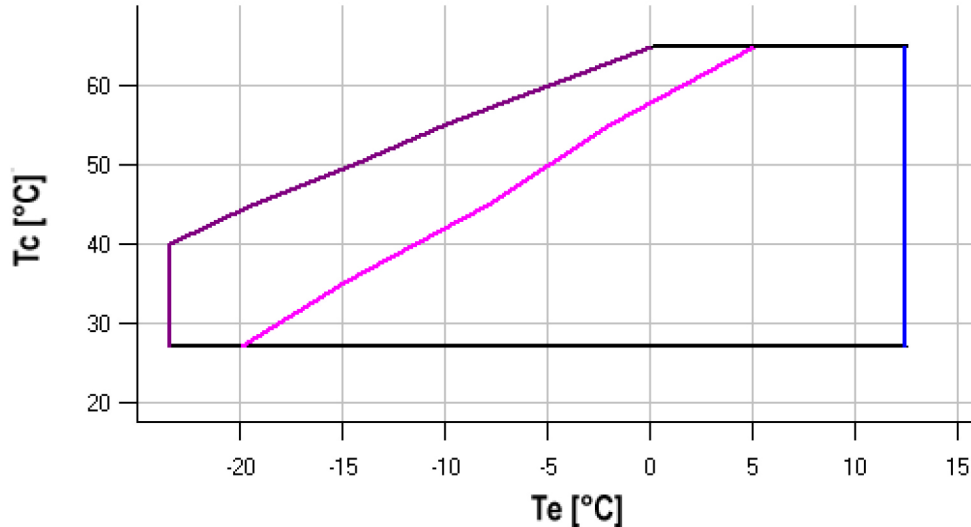
Model: ZR72KCE-TFD

Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10
30	2.33	2.91	3.57	4.31	5.12	6.01	6.97
35	1.99	2.50	3.09	3.74	4.47	5.27	6.14
40	1.67	2.12	2.64	3.21	3.85	4.57	5.35
45	-	1.78	2.23	2.73	3.29	3.92	4.61
50	-	-	1.87	2.30	2.79	3.34	3.94
55	-	-	-	1.93	2.35	2.82	3.35
60	-	-	-	-	1.96	2.37	2.83
65	-	-	-	-	1.63	1.98	2.37

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

Operating conditions: 10K suction superheat, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]