

# ZR108KCE-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):	88100	106500
Power (Watts):	7580	5310
Current (Amps):	13.8	11.1
EER (Btu/Wh):	11.6	20.0
Mass Flow (lbs/hr):	1280.0	1325.0
Sound Power(dBA):	74 Ave	79 Max
Vibration (mils(peak-peak)):	3.0 Ave	4.5 Max
Record Date:	2007-12-06	

## Mechanical

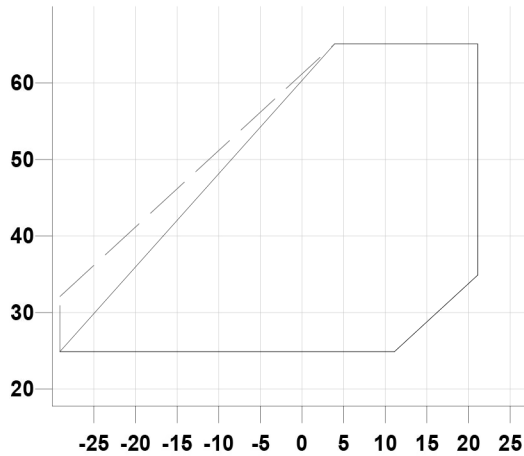
Number of Cylinders:	0	Displ (in <sup>3</sup> /Rev):	8.721
Bore Size (in):	0.0	Displ (ft <sup>3</sup> /hr):	878.1523
Stroke (in):	0.0		
Overall Length (in):	10.38	Mounting Length (in):	7.5
Overall Width (in):	11.23	Mounting Width(in):	7.5
Overall Height (in):	21.0	Mounting Height (in):	21.75*
Suction Size (in):	1 3/8 Stub		
Discharge Size (in):	7/8 Stub		
Initial Oil Charge (oz):	110		
Oil Recharge (oz):	106		
Net Weight (lbs):	132.0		
Internal Free Volume (in <sup>3</sup> ):	809.0		
HorsePower	9.0		
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

## Electrical

LRA-High*:	111	MCC (Amps):	24.2	UL File No.:	SA-2337
LRA-Half Winding:		RPM:	2900	UL File Date:	27-Sep-1996
LRA-Low*:	100	Max Operating Current:	16.8	CSA File No.:	LR3104C
RLA(=MCC/1.4; use for contactor selection): 17.3					
RLA(=MCC/1.56; use for breaker & wire size selection): 15.5					
*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



Minimum evaporating temp. with:  
 ——— 25°C Suction Gas Return  
 - - - 10K Suction Superheat

Suction Superheat 10.0K

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond °C	Capacity kW											
	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
25	8.48	10.75	13.50	16.75	20.60	25.00	30.20	32.50	36.20			
30	7.93	10.15	12.80	15.95	19.60	23.90	29.00	31.20	34.80	38.00	41.40	
35	7.34	9.50	12.05	15.05	18.60	22.80	27.60	29.70	33.20	36.30	39.50	46.80
40		8.82	11.25	14.15	17.55	21.50	26.20	28.20	31.50	34.40	37.60	44.60
45			10.45	13.20	16.45	20.20	24.60	26.60	29.70	32.50	35.60	42.20
50				12.20	15.25	18.85	23.00	24.90	27.90	30.60	33.40	39.80
55					14.05	17.40	21.40	23.10	25.90	28.50	31.20	37.30
60						15.95	19.65	21.30	23.90	26.30	28.90	34.60
65							17.85	19.35	21.80	24.10	26.50	31.90
	Power Input kW											
	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
25	3.74	3.80	3.84	3.89	3.96	4.06	4.23	4.31	4.46			
30	4.19	4.26	4.30	4.34	4.38	4.45	4.56	4.62	4.74	4.85	4.99	
35	4.67	4.77	4.82	4.85	4.88	4.92	5.00	5.04	5.11	5.20	5.30	5.56
40		5.32	5.39	5.43	5.46	5.48	5.52	5.55	5.60	5.65	5.72	5.92
45			6.02	6.08	6.11	6.12	6.14	6.16	6.19	6.22	6.27	6.40
50				6.79	6.84	6.85	6.86	6.87	6.88	6.90	6.93	7.01
55					7.64	7.67	7.68	7.68	7.68	7.69	7.70	7.75
60						8.58	8.59	8.60	8.59	8.59	8.60	8.62
65							9.61	9.61	9.61	9.61	9.61	9.61
	Current 400V, A											
	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
25	9.46	9.46	9.45	9.47	9.52	9.64	9.86	9.97	10.19			
30	9.95	10.01	10.03	10.03	10.05	10.11	10.23	10.30	10.44	10.59	10.76	
35	10.40	10.53	10.60	10.63	10.64	10.66	10.71	10.75	10.82	10.91	11.02	11.33
40		11.05	11.19	11.26	11.29	11.30	11.31	11.32	11.35	11.39	11.45	11.62
45			11.81	11.95	12.02	12.04	12.04	12.03	12.03	12.04	12.05	12.13
50				12.71	12.85	12.91	12.91	12.90	12.89	12.87	12.86	12.86
55					13.78	13.91	13.95	13.95	13.93	13.91	13.88	13.82
60						15.05	15.15	15.17	15.17	15.15	15.12	15.04
65							16.55	16.59	16.62	16.62	16.60	16.52
	Mass Flow g/s											
	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
25	48.30	60.20	74.20	90.50	110.00	132.00	157.00	168.00	186.00			
30	47.20	59.30	73.60	90.00	109.50	131.50	157.00	168.00	186.00	201.00	218.00	
35	45.90	58.20	72.60	89.50	108.50	130.50	156.00	167.00	185.00	201.00	218.00	254.00
40		56.90	71.40	88.00	107.50	129.50	155.00	166.00	184.00	200.00	217.00	253.00
45			69.90	86.50	106.00	128.00	154.00	165.00	183.00	198.00	215.00	252.00
50				85.00	104.50	126.50	152.00	163.00	181.00	197.00	213.00	250.00
55					102.00	124.50	149.50	161.00	179.00	194.00	211.00	248.00
60						122.00	147.00	158.00	176.00	192.00	209.00	246.00
65							144.50	155.00	173.00	189.00	206.00	243.00