

ZR47KCE-TFD

HFC, R-407C, 50 Hz, 3 - Phase, 380/420 V [. Also Available with Variable Frequency Drives](#)

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance			Mechanical	
Evaporator Temp. (°C)	7	7	Displacement (cm ³ /Rev):	64.24
Condensing Temp. (°C)	54	38	Displacement (m ³ /Hr):	
Return Gas Temp. (°C)	18	18	Overall Length (mm):	246.13
Liquid Temp. (°C)	46	29	Overall Width (mm):	246.13
Capacity (Watts)	10961	13247	Overall Height (mm):	430.53
Power (W):	3440	2230	Mounting Length (mm):	190.50
Current (Amps):	6.5	5.1	Mounting Width (mm):	190.50
EER(BTU/Wh):	18.52	34.49	Mounting Height (mm):	436.37
Mass Flow (lbs/hr):	68.67	70.56	Suction Size (mm),Type:	177.80 / 203.20 Stub
Sound Data @			Discharge Size (mm),Type:	25.40 / 50.80 Stub
Sound Power (dBA):	71 Avg	76 Max	Initial Oil Charge (ml):	1360.40
Vibration mils(peak-peak):	2.0 Avg	3.0 Max	Oil Recharge (ml):	1242.11
Record Date:	2005-04-15		Net Weight (kg):	28.12
			Internal Free Volume (cm ³):	3359.34
			Horse Power:	4.0
			*Overall compressor height on Copeland Brand Product's specified mounting grommets.	

Electrical		Capacitors					
		Type	Part No	Low MFD	High MFD	Volts	User Description
LRA High* (Amps):	48.0	No data available in table					
LRA Low*(Amps):	43.0						
LRA Half Winding (Amps):							
MCC (Amps):	10						
Max Operating Current (Amps):	8.0						
RLA, MCC/1.4(use for contactor selection)(Amps):	7.1						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	6.4						
RPM:	2900						
Box IP :	21						
UL File No:	SA-2337						
UL File Date:	1994-06-14						

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

Rating Conditions

11.1 K Superheat
8.3 K Subcooling
35 °C Ambient Air Over

50 Hz Operation

AIR CONDITIONING

ZR47KCE-TFD

HFC-407C - Dew Pt.
COPELAND SCROLL®
TFD 380/420-3-50

Condensing Temperature °C
(Sat. Dew Pt. Pressure, bar)

Evaporating Temperature °C (Sat. Dew Pt. Pressure, bar)

	-29.0 (1.5)	-23.0 (1.9)	-18.0 (2.3)	-12.0 (3)	-7.0 (3.6)	0.0 (4.6)	5.0 (5.5)	10.0 (6.4)	13.0 (7.1)	16.0 (7.8)	18.0 (8.3)	21.0 (9.1)
65.0 (28.4) C P A M E %								10,750	12,050	13,400	14,350	15,800
								4,310	4,290	4,290	4,300	4,320
								7.5	7.5	7.5	7.6	7.6
								76	84	92	98	107
								2.5	2.8	3.1	3.3	3.7
							67.2	69.5	71.1	71.8	72.2	
60.0 (25.3) C P A M E %							9,400	11,350	12,700	14,050	15,100	16,600
							3,910	3,900	3,910	3,920	3,940	3,990
							7.1	7.1	7.1	7.1	7.1	7.2
							63	75	83	91	97	106
							2.4	2.9	3.3	3.6	3.8	4.2
						64.1	67.9	69.4	70.1	70.2	69.5	
55.0 (22.5) C P A M E %						8,200	10,000	12,050	13,400	14,850	15,900	17,500
						3,480	3,480	3,500	3,520	3,560	3,590	3,650
						6.5	6.5	6.6	6.6	6.7	6.7	6.8
						53	63	75	83	91	97	106
						2.4	2.9	3.5	3.8	4.2	4.4	4.8
					62.5	66.7	69.2	69.7	69.4	68.7	66.8	
49.0 (19.4) C P A M E %					6,650	8,900	10,800	12,950	14,350	15,900	16,900	18,600
					2,960	2,970	2,990	3,030	3,070	3,130	3,170	3,250
					5.9	6.0	6.0	6.0	6.1	6.1	6.2	6.3
					41	54	64	76	83	91	97	106
					2.2	3.0	3.6	4.3	4.7	5.1	5.3	5.7
				61.2	67.5	70.1	70.8	70.0	68.2	66.5	63.1	
43.0 (16.7) C P A M E %				5,850	7,250	9,600	11,600	13,850	15,300	16,900	18,000	19,800
				2,460	2,490	2,510	2,550	2,610	2,660	2,720	2,770	2,870
				5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.8
				35	42	55	65	77	84	92	98	107
				2.4	2.9	3.8	4.6	5.3	5.8	6.2	6.5	6.9
			63.4	68.0	72.4	73.3	71.7	69.3	65.8	62.9	57.6	
38.0 (14.6) C P A M E %			4,750	6,200	7,700	10,150	12,200	14,550	16,100	17,800	19,000	20,900
			2,080	2,130	2,150	2,180	2,220	2,290	2,340	2,410	2,470	2,570
			5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.4
			27	35	43	55	66	77	85	93	99	108
			2.3	2.9	3.6	4.7	5.5	6.4	6.9	7.4	7.7	8.1
		63.3	69.0	72.9	75.7	74.8	71.0	67.0	61.9	57.8	50.8	
27.0 (10.8) C P A M E %		4,000	5,050	6,700	8,300	11,050	13,400	16,000				
		1,580	1,610	1,630	1,630	1,640	1,680	1,740				
		4.5	4.6	4.6	4.6	4.6	4.6	4.6				
		21	27	35	42	55	66	78				
		2.5	3.2	4.1	5.1	6.7	8.0	9.2				
	60.4	65.6	71.0	73.9	73.4	68.4	59.0					
21.0 (9.1) C P A M E %		3,750	4,900	6,650	8,400	11,350	13,850					
		1,530	1,540	1,520	1,500	1,490	1,510					
		4.6	4.6	4.6	4.6	4.5	4.5					
		18	24	32	41	54	65					
		2.5	3.2	4.4	5.6	7.6	9.2					
	48.7	55.0	61.2	64.2	62.5	55.5						
10.0 (6.4) C P A M E %		2,500	3,850	5,850	7,900							
		1,850	1,780	1,690	1,610							
		5.3	5.3	5.2	5.1							
		8	15	24	33							
		1.4	2.2	3.5	4.9							
	14.3	21.7	28.3	30.8								

C: Capacity (W), P: Power (W), A: Current (Amps), M: Mass Flow (gm/s), E: COP, %: Isentropic Efficiency (%)

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 380 V