

ZP57K3E-TFD

HFC, R-410A, 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):	54.24
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)	13921	17145	Overall Height (mm):	454.91
Power (W):	4610	3000	Mounting Length (mm):	190.50
Current (Amps):	8.1	6.2	Mounting Width (mm):	190.50
EER(BTU/Wh):	17.50	33.13	Mounting Height (mm):	461.26
Mass Flow (lbs/hr):	88.20	91.35	Suction Size (mm),Type:	177.80 / 203.20 Stub
Sound Data @ 45 / 130			Discharge Size (mm),Type:	25.40 / 50.80 Stub
Sound Power (dBA):	71 Avg	76 Max	Initial Oil Charge (ml):	1656.14
Vibration mils(peak-peak):	2.0 Avg	3.0 Max	Oil Recharge (ml):	1537.85
Record Date:	2015-10-12		Net Weight (kg):	41.73
			Internal Free Volume (cm ³):	4457.26
			Horse Power:	
			*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):	74.0	No data available in table					
LRA Low*(Amps):	67.0						
LRA Half Winding (Amps):							
MCC (Amps):	15						
Max Operating Current (Amps):	11.0						
RLA, MCC/1.4(use for contactor selection)(Amps):	10.7						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	9.6						
RPM:	2900						
Box IP :	21						
UL File No:	SA-2337						
UL File Date:	1993-07-26						

*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

ZP57K3E-TFD

HFC-410A
COPELAND SCROLL®
TFD 380/420-3-50

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

	-23.0 (3.6)	-19.0 (4.1)	-14.0 (5)	-10.0 (5.7)	-5.0 (6.8)	0.0 (8)	4.0 (9)	8.0 (10.2)	13.0 (11.8)
61.0 (39.2) C P A M E %						9,350	11,000	12,850	15,400
						5,600	5,500	5,400	5,300
						9.3	9.2	9.1	9.0
						66	77	89	105
						1.7	2.0	2.4	2.9
						56.0	60.8	64.9	68.9
56.0 (35.1) C P A M E %					8,350	10,300	12,050	14,000	16,700
					5,000	4,920	4,850	4,780	4,700
					8.6	8.5	8.4	8.3	8.2
					55	68	78	90	106
					1.7	2.1	2.5	2.9	3.5
				54.7	60.8	64.9	68.2	71.1	
51.0 (31.3) C P A M E %				7,350	9,200	11,250	13,050	15,000	17,800
				4,490	4,400	4,330	4,270	4,220	4,160
				7.9	7.8	7.7	7.7	7.6	7.5
				46	57	69	80	91	107
				1.6	2.1	2.6	3.1	3.6	4.3
			53.3	59.8	65.1	68.4	70.9	72.5	
46.0 (27.9) C P A M E %			6,700	8,050	9,950	12,050	13,950	16,000	19,000
			3,980	3,920	3,860	3,800	3,750	3,710	3,660
			7.3	7.2	7.2	7.1	7.1	7.0	6.9
			40	48	59	70	81	92	108
			1.7	2.1	2.6	3.2	3.7	4.3	5.2
		53.2	58.7	64.3	68.7	71.2	72.6	72.8	
41.0 (24.8) C P A M E %		5,700	7,300	8,700	10,650	12,850	14,800	17,000	20,100
		3,520	3,470	3,430	3,380	3,330	3,300	3,260	3,210
		6.8	6.7	6.7	6.6	6.6	6.5	6.5	6.4
		33	42	49	60	71	81	93	109
		1.6	2.1	2.5	3.2	3.9	4.5	5.2	6.3
	51.3	58.5	63.3	68.1	71.4	72.9	73.2	71.7	
36.0 (21.9) C P A M E %	5,050	6,250	7,850	9,300	11,300	13,600	15,600	17,900	21,200
	3,100	3,070	3,040	3,010	2,970	2,930	2,890	2,850	2,810
	6.3	6.3	6.2	6.2	6.2	6.1	6.1	6.1	6.0
	28	35	43	50	60	72	82	93	109
	1.6	2.0	2.6	3.1	3.8	4.7	5.4	6.3	7.5
50.6	56.7	63.0	67.0	70.8	72.9	73.3	72.3	68.7	
32.0 (19.8) C P A M E %	5,450	6,650	8,250	9,750	11,800	14,150	16,300	18,700	22,000
	2,790	2,770	2,740	2,710	2,670	2,630	2,600	2,560	2,510
	6.0	6.0	5.9	5.9	5.9	5.8	5.8	5.8	5.7
	29	35	44	51	61	72	83	94	110
	2.0	2.4	3.0	3.6	4.4	5.4	6.3	7.3	8.8
54.7	60.2	65.8	69.2	72.0	73.1	72.4	70.2	64.5	
27.0 (17.4) C P A M E %	5,850	7,050	8,750	10,250	12,400	14,850	17,100	19,600	23,100
	2,460	2,440	2,420	2,390	2,350	2,310	2,270	2,220	2,150
	5.7	5.7	5.6	5.6	5.6	5.5	5.5	5.4	5.3
	30	36	44	51	61	73	83	95	111
	2.4	2.9	3.6	4.3	5.3	6.4	7.5	8.8	10.7
58.8	63.5	68.0	70.5	72.1	71.7	69.5	65.2	56.4	

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