

### Rating Conditions

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

50 Hz Operation

### AIR CONDITIONING

### ZP54KSE-TFM

HFC-410A  
COPELAND SCROLL®  
TFM 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 %						8,620	10,150	11,800	14,100
						5,070	5,030	4,980	4,910
						8.4	8.4	8.3	8.2
						61	71	82	96
						1.7	2.0	2.4	2.9
					57.1	61.3	64.9	68.3	
56.0 (35.1) C P A M E %					7,710	9,570	11,200	12,950	15,400
					4,510	4,460	4,420	4,370	4,310
					7.5	7.5	7.4	7.4	7.3
					51	63	73	83	98
					1.7	2.1	2.5	3.0	3.6
				56.3	62.2	66.0	69.1	71.8	
51.0 (31.3) C P A M E %				6,750	8,520	10,450	12,150	14,050	16,650
				4,010	3,970	3,930	3,890	3,840	3,780
				6.8	6.7	6.7	6.6	6.5	6.5
				43	53	65	74	85	100
				1.7	2.1	2.7	3.1	3.7	4.4
			54.8	61.5	66.8	70.1	72.6	74.4	
46.0 (27.9) C P A M E %			6,100	7,450	9,280	11,300	13,100	15,050	17,800
			3,560	3,540	3,500	3,460	3,420	3,380	3,320
			6.1	6.1	6.0	6.0	5.9	5.8	5.7
			37	45	55	66	76	86	101
			1.7	2.1	2.7	3.3	3.8	4.5	5.4
		54.2	60.1	66.1	70.7	73.3	75.0	75.5	
41.0 (24.8) C P A M E %		5,130	6,720	8,090	9,980	12,100	13,950	16,050	18,950
		3,170	3,150	3,120	3,090	3,050	3,010	2,970	2,910
		5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1
		30	39	46	56	67	77	88	103
		1.6	2.1	2.6	3.2	4.0	4.6	5.4	6.5
	51.2	59.4	64.6	69.8	73.5	75.3	75.9	74.7	
36.0 (21.9) C P A M E %	4,500	5,690	7,290	8,690	10,650	12,850	14,800	17,000	20,100
	2,810	2,800	2,780	2,760	2,720	2,680	2,650	2,610	2,560
	5.0	5.0	4.9	4.9	4.9	4.8	4.7	4.7	4.6
	25	31	40	47	57	68	78	89	104
	1.6	2.0	2.6	3.2	3.9	4.8	5.6	6.5	7.8
49.6	56.7	63.8	68.4	72.6	75.1	75.7	74.9	71.4	
32.0 (19.8) C P A M E %	4,920	6,100	7,710	9,130	11,150	13,400	15,450	17,750	20,900
	2,540	2,530	2,510	2,490	2,460	2,420	2,390	2,360	2,310
	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.3	4.3
	26	32	41	48	57	68	78	89	104
	1.9	2.4	3.1	3.7	4.5	5.5	6.5	7.5	9.1
54.3	60.6	66.8	70.7	73.9	75.2	74.7	72.4	66.5	
27.0 (17.4) C P A M E %	5,400	6,570	8,190	9,650	11,700	14,100	16,250	18,600	22,000
	2,230	2,230	2,210	2,190	2,160	2,130	2,100	2,070	2,030
	4.2	4.2	4.1	4.1	4.0	4.0	4.0	3.9	3.9
	28	34	41	48	58	69	79	90	105
	2.4	3.0	3.7	4.4	5.4	6.6	7.7	9.0	10.8
59.5	64.8	69.8	72.5	74.3	73.7	71.2	66.5	56.9	

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

**ZP54KSE-TFM**

HFC, R-410A, 50 Hz, 3 - Phase, 380/420 V . [Also Available with Variable Frequency Drives](#)

**Air Conditioning**

**Production Status:** Non U.S. model with restricted sales - Contact your Emerson Climate Technologies Representative.

Performance			Mechanical	
Evaporator Temp. (°C)	7	7	Displacement (cm <sup>3</sup> /Rev):	51.13
Condensing Temp. (°C)	54	38	Displacement (m <sup>3</sup> /Hr):	
Return Gas Temp. (°C)	18	18	Overall Length (mm):	242.82
Liquid Temp. (°C)	46	29	Overall Width (mm):	242.82
Capacity (Watts)	12924	16236	Overall Height (mm):	430.28
Power (W):	4210	2740	Mounting Length (mm):	190.50
Current (Amps):	7.1	4.85	Mounting Width (mm):	190.50
EER(BTU/Wh):	17.84	34.32	Mounting Height (mm):	436.12
Mass Flow (lbs/hr):	81.27	85.80	Suction Size (mm),Type:	177.80 / 203.20 Stub
Sound Data @			Discharge Size (mm),Type:	25.40 / 50.80 Stub
Sound Power (dBA):	70 Avg	75 Max	Initial Oil Charge (ml):	1242.11
Vibration mils(peak-peak):	2.5 Avg	3.5 Max	Oil Recharge (ml):	1123.81
Record Date:	2018-03-01		Net Weight (kg):	33.02
			Internal Free Volume (cm <sup>3</sup> ):	3126.64
			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):	51.5						
LRA Low*(Amps):	47.0	No data available in table					
LRA Half Winding (Amps):							
MCC (Amps):	12.1						
Max Operating Current (Amps):	10.3						
RLA, MCC/1.4(use for contactor selection)(Amps):	8.6						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	7.8						
RPM:	2900						
Box IP :	21						
UL File No:							
UL File Date:							

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

**Alternate Applications**

Refrigerant	Voltage	Phase	Frequency	Application
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