

Rating Conditions

18.3 °C Return Gas
 0 K Subcooling
 35 °C Ambient Air Over
 50 Hz Operation

MEDIUM TEMPERATURE

Blue Area Restrictions: 11°C Max Superheat

ZB21KQE-PFJ

HFC-404A
 COPELAND SCROLL®
 PFJ 220/240-1-50

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

	-23.0 (2.7)	-20.0 (3)	-15.0 (3.6)	-10.0 (4.3)	-5.0 (5.1)	0.0 (6)	5.0 (7)	7.0 (7.5)
60.0 (28.7) C P A M E %					4,350	5,200	6,200	6,650
					3,660	3,640	3,610	3,590
					16.4	16.3	16.2	16.1
					49	60	73	79
					1.2	1.4	1.7	1.9
					52.2	56.4	60.2	61.7
55.0 (25.7) C P A M E %				4,150	4,950	5,950	7,050	7,550
				3,280	3,260	3,240	3,210	3,200
				15.0	15.0	14.9	14.8	14.7
				41	50	61	74	80
				1.3	1.5	1.8	2.2	2.4
				52.3	56.5	60.3	63.6	64.8
50.0 (23) C P A M E %			3,800	4,650	5,600	6,650	7,900	8,450
			2,920	2,910	2,900	2,880	2,850	2,840
			13.8	13.7	13.7	13.6	13.6	13.5
			34	42	51	62	75	81
			1.3	1.6	1.9	2.3	2.8	3.0
			52.3	56.7	60.6	64.0	66.6	67.4
45.0 (20.4) C P A M E %	3,050	3,450	4,250	5,150	6,150	7,350	8,700	9,300
	2,590	2,600	2,590	2,590	2,580	2,560	2,540	2,530
	12.6	12.7	12.7	12.7	12.6	12.6	12.5	12.5
	25	29	35	43	52	64	77	83
	1.2	1.3	1.6	2.0	2.4	2.9	3.4	3.7
	48.7	51.7	56.4	60.6	64.2	67.0	68.7	69.0
40.0 (18.1) C P A M E %	3,300	3,750	4,600	5,600	6,700	8,000	9,500	10,100
	2,310	2,310	2,310	2,300	2,290	2,280	2,260	2,250
	11.7	11.7	11.8	11.7	11.7	11.7	11.6	11.6
	26	29	36	44	53	64	78	84
	1.4	1.6	2.0	2.4	2.9	3.5	4.2	4.5
	52.7	55.7	60.2	64.1	67.1	69.1	69.6	69.3
35.0 (16.1) C P A M E %	3,600	4,050	5,000	6,050	7,250	8,650	10,200	10,900
	2,050	2,050	2,050	2,050	2,040	2,030	2,020	2,010
	10.9	11.0	11.0	11.0	11.0	10.9	10.9	10.9
	26	30	36	44	54	65	78	84
	1.8	2.0	2.4	3.0	3.6	4.3	5.1	5.4
	56.3	59.2	63.4	66.8	69.0	69.8	68.8	67.8
25.0 (12.4) C P A M E %	4,100	4,600	5,650	6,850	8,250	9,800	11,600	
	1,620	1,620	1,630	1,620	1,620	1,620	1,610	
	9.8	9.8	9.8	9.8	9.8	9.8	9.8	
	26	30	37	45	55	66	80	
	2.5	2.9	3.5	4.2	5.1	6.1	7.2	
	61.8	64.2	67.2	68.8	68.5	65.8	60.4	
15.0 (9.4) C P A M E %	4,500	5,100	6,250	7,600	9,100			
	1,290	1,290	1,290	1,290	1,290			
	8.9	8.9	8.9	8.9	8.9			
	27	30	37	46	55			
	3.5	4.0	4.8	5.9	7.1			
	64.0	65.3	65.9	64.2	59.6			
10.0 (8.2) C P A M E %	4,700	5,300	6,500	7,900				
	1,150	1,150	1,150	1,150				
	8.6	8.6	8.6	8.6				
	27	30	37	46				
	4.1	4.6	5.7	6.9				
	63.4	63.8	62.6	58.5				

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 @ 220 V

ZB21KQE-PFJ

HFC, R-404A, 50 Hz, 1 - Phase, 220/240 V

Medium Temperature

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

Performance			Mechanical	
Evaporator Temp. (°C)	-7	7	Displacement (cm ³ /Rev):	49.49
Condensing Temp. (°C)	49	54	Displacement (m ³ /Hr):	
Return Gas Temp. (°C)	18	18	Overall Length (mm):	241.30
Liquid Temp. (°C)	49	54	Overall Width (mm):	241.30
Capacity (Watts)	5363	7737	Overall Height (mm):	404.62
Power (W):	2830	3150	Mounting Length (mm):	190.50
Current (Amps):	13.5	14.6	Mounting Width (mm):	190.50
EER(BTU/Wh):	11.04	14.27	Mounting Height (mm):	410.46
Mass Flow (lbs/hr):	48.38	81.27	Suction Size (mm),Type:	76.20 / 101.60 Stub
Sound Data @			Discharge Size (mm),Type:	25.40 / 50.80 Stub
Sound Power (dBA):	69 Avg	74 Max	Initial Oil Charge (ml):	1242.11
Vibration mils(peak-peak):	2.0 Avg	3.0 Max	Oil Recharge (ml):	1123.81
Record Date:	2006-08-23		Net Weight (kg):	29.03
			Internal Free Volume (cm ³):	2376.12
			Horse Power:	3.0

*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):	82.0						
LRA Low*(Amps):	75.0	Run Capacitor	014-0064-29	50.0	0.0	370	
LRA Half Winding (Amps):							
MCC (Amps):	21.5	Start Capacitor	014-0064-26	60.0	0.0	370	
Max Operating Current (Amps):	16.4 2						
RLA, MCC/1.4(use for contactor selection)(Amps):	15.4						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	13.8						
RPM:	290 0						
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
R-404A HFC	265	1	60	Medium Temperature