

**ZR250KCE-TWD**

HCFC, R-22, 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	2	Displacement (cm <sup>3</sup> /Rev):	325.12
Condensing Temp. (°C)	54	49	Displacement (m <sup>3</sup> /Hr):	
Return Gas Temp. (°C)	18	13	Overall Length (mm):	426.72
Liquid Temp. (°C)	46	41	Overall Width (mm):	375.92
Capacity (Watts)	59786	51874	Overall Height (mm):	726.44
Power (W):	17700	15700	Mounting Length (mm):	266.70
Current (Amps):	29.6	26.8	Mounting Width (mm):	266.70
EER(BTU/Wh):	19.54	19.20	Mounting Height (mm):	736.60
Mass Flow (lbs/hr):	376.73	317.51	Suction Size (mm),Type:	381.00 / 203.20 Stub
Sound Data @			Discharge Size (mm),Type:	330.20 / 203.20 Stub
Sound Power (dBA):	83 Avg	88 Max	Initial Oil Charge (ml):	4672.69
Vibration mils(peak-peak):	3.5 Avg	5.0 Max	Oil Recharge (ml):	4376.95
Record Date:	2016-06-10		Net Weight (kg):	139.25
			Internal Free Volume (cm <sup>3</sup> ):	24629.66
			Horse Power:	20.0
			*Overall compressor height on Copeland Brand Product's specified mounting grommets.	

Electrical		Capacitors					
LRA High* (Amps):	225.0	Type	Part No	Low MFD	High MFD	Volts	User Description
LRA Low*(Amps):		No data available in table					
LRA Half Winding (Amps):							
MCC (Amps):	47						
Max Operating Current (Amps):	42.0						
RLA, MCC/1.4(use for contactor selection)(Amps):	33.6						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	30.1						
RPM:	2900						
Box IP :	56						
UL File No:	SA-2337						
UL File Date:	2000-11-28						

\*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

### ZR250KCE-TWD

HCFC-22  
COPELAND SCROLL®  
TWD 380/420-3-50

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

	-25.0 (2)	-20.0 (2.5)	-10.0 (3.5)	-5.0 (4.2)	0.0 (5)	5.0 (5.8)	10.0 (6.8)	15.0 (7.9)	20.0 (9.1)
65.0 (27) C P A M E %					38,000	47,500	58,000	69,000	
					22,200	22,300	22,400	22,400	
					35.9	36.0	36.1	36.2	
					271	333	400	473	
					1.7	2.1	2.6	3.1	
				55.8	61.6	65.8	68.8		
60.0 (24.3) C P A M E %					42,000	51,500	62,000	73,500	86,500
					19,900	19,900	20,000	20,100	20,200
					32.5	32.7	32.8	32.9	33.0
					285	344	408	479	559
					2.1	2.6	3.1	3.7	4.3
				61.3	65.8	68.9	70.7	71.2	
50.0 (19.4) C P A M E %			32,000	40,000	48,500	58,000	69,000	81,000	95,500
			15,800	15,900	16,000	16,100	16,300	16,400	16,600
			26.9	27.1	27.2	27.4	27.6	27.7	27.9
			203	250	300	355	416	486	566
			2.0	2.5	3.0	3.6	4.2	5.0	5.8
		59.1	64.5	68.0	70.1	70.8	69.9	67.4	
45.0 (17.3) C P A M E %			34,500	42,000	51,000	60,500	72,000	85,000	100,000
			14,200	14,300	14,400	14,600	14,800	14,900	15,200
			24.8	25.0	25.2	25.4	25.6	25.8	26.0
			210	254	303	357	419	489	569
			2.4	3.0	3.5	4.2	4.9	5.7	6.6
		62.9	67.0	69.3	70.1	69.4	67.0	62.6	
40.0 (15.3) C P A M E %		22,600	36,500	44,500	53,000	63,500	75,000	89,000	104,500
		12,500	12,800	12,900	13,100	13,300	13,500	13,700	13,900
		22.7	23.1	23.2	23.4	23.6	23.9	24.1	24.3
		136	214	257	305	359	421	492	574
		1.8	2.9	3.4	4.1	4.8	5.6	6.5	7.5
	53.6	65.4	68.2	69.3	68.7	66.4	62.2	55.6	
30.0 (11.9) C P A M E %		26,300	40,000	48,500	58,000	69,000	82,000	97,000	
		10,100	10,400	10,600	10,800	11,000	11,300	11,500	
		19.8	20.2	20.4	20.6	20.8	21.1	21.4	
		148	219	261	310	365	429	504	
		2.6	3.9	4.6	5.4	6.3	7.3	8.4	
	61.1	67.1	67.2	65.4	61.4	55.2	46.3		
25.0 (10.4) C P A M E %		27,900	42,000	50,500	60,500	72,500	86,000		
		9,050	9,350	9,550	9,750	10,000	10,300		
		18.6	18.9	19.1	19.4	19.6	19.9		
		151	222	264	313	370	436		
		3.1	4.5	5.3	6.2	7.2	8.4		
	63.6	66.8	65.3	61.6	55.4	46.6			
20.0 (9.1) C P A M E %		29,400	44,000	53,000	63,500	76,000			
		8,000	8,300	8,500	8,750	9,000			
		17.4	17.7	17.9	18.2	18.5			
		154	225	268	319	378			
		3.7	5.3	6.2	7.3	8.4			
	66.1	66.1	62.6	56.5	47.5				
10.0 (6.8) C P A M E %		33,000	49,000	59,000					
		5,800	6,150	6,350					
		14.9	15.2	15.4					
		163	237	283					
		5.7	8.0	9.3					
	74.1	64.1	54.0						

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 @ 400 V