

**ZR380KCE-TWD**

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	2	Displacement (cm <sup>3</sup> /Rev):	502.59
Condensing Temp. (°C)	54	49	Displacement (m <sup>3</sup> /Hr):	
Return Gas Temp. (°C)	18	13	Overall Length (mm):	447.04
Liquid Temp. (°C)	46	41	Overall Width (mm):	426.72
Capacity (Watts)	89680	77371	Overall Height (mm):	723.90
Power (W):	27100	23700	Mounting Length (mm):	266.70
Current (Amps):	46.2	41.5	Mounting Width (mm):	266.70
EER(BTU/Wh):	19.20	18.86	Mounting Height (mm):	734.06
Mass Flow (lbs/hr):	559.43	462.41	Suction Size (mm),Type:	381.00 / 203.20 Stub
Sound Data @			Discharge Size (mm),Type:	330.20 / 203.20 Stub
Sound Power (dBA):	88 Avg	93 Max	Initial Oil Charge (ml):	6299.26
Vibration mils(peak-peak):	3.7 Avg	5.0 Max	Oil Recharge (ml):	6003.52
Record Date:	2020-04-03		Net Weight (kg):	176.90
			Internal Free Volume (cm <sup>3</sup> ):	31643.30
			Horse Power:	30.0
			*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):	310						
LRA Low*(Amps):		No data available in table					
LRA Half Winding (Amps):							
MCC (Amps):	83						
Max Operating Current (Amps):	62.5						
RLA, MCC/1.4(use for contactor selection)(Amps):	59.3						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	53.2						
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

NULL  
NULL

### ZR380KCE-TWD

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

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

	-23.0 (1.9)	-20.0 (2.1)	-10.0 (3.2)	-5.0 (3.9)	0.0 (4.6)	2.0 (4.9)	7.0 (5.8)	15.0 (7.6)	20.0 (8.8)
<b>68.0</b> (30.4)					48,000 36,900 60.6 366 1.3 49.0	53,500 37,000 60.7 405 1.5 52.0	69,000 37,100 60.9 509 1.9 58.6	98,000 37,300 61.1 699 2.6 67.0	
<b>60.0</b> (25.3)				45,500 30,300 51.0 316 1.5 51.4	59,500 30,600 51.3 403 1.9 58.6	65,000 30,600 51.3 440 2.1 61.1	81,500 30,800 51.5 540 2.7 66.6	112,500 31,000 51.8 725 3.6 72.6	136,000 31,200 52.1 862 4.4 74.3
<b>54.0</b> (21.9)			40,000 26,200 45.0 263 1.5 50.7	52,500 26,400 45.3 339 2.0 58.3	66,500 26,600 45.5 422 2.5 64.5	72,500 26,600 45.6 458 2.7 66.6	89,500 26,800 45.8 555 3.3 70.8	122,000 27,100 46.2 740 4.5 74.4	147,000 27,500 46.6 876 5.4 74.1
<b>49.0</b> (19.4)			45,000 23,300 41.0 279 1.9 56.4	57,500 23,500 41.2 352 2.4 63.0	72,000 23,700 41.4 433 3.0 68.2	78,500 23,800 41.5 468 3.3 69.9	96,000 24,000 41.8 565 4.0 72.9	130,000 24,400 42.4 749 5.3 73.9	156,000 24,900 42.9 886 6.3 71.5
<b>40.0</b> (15.4)		29,800 18,500 34.5 176 1.6 49.0	52,000 19,000 35.1 297 2.7 63.9	65,000 19,200 35.4 366 3.4 68.6	80,500 19,400 35.6 445 4.2 71.6	87,500 19,500 35.8 480 4.5 72.3	106,500 19,800 36.2 576 5.4 72.4	144,000 20,600 37.1 763 7.0 67.2	172,500 21,400 38.0 904 8.0 59.9
<b>30.0</b> (11.8)	30,000 14,600 29.6 164 2.1 53.2	36,000 14,800 29.8 194 2.4 58.0	58,500 15,200 30.2 307 3.0 68.1	72,500 15,400 30.5 375 4.7 69.9	89,000 15,700 30.9 453 5.7 69.3	96,500 15,900 31.2 488 6.1 68.3	117,500 16,500 31.8 587 7.1 63.6	159,000 17,800 33.3 780 8.9 49.2	
<b>25.0</b> (10.2)	32,500 13,000 27.7 170 2.5 57.3	38,500 13,100 27.8 199 2.9 61.3	61,500 13,500 28.3 310 4.6 68.4	76,000 13,800 28.6 378 5.5 68.3	93,500 14,200 29.1 458 6.6 65.3	101,000 14,500 29.4 493 7.0 63.1	123,000 15,200 30.2 593 8.1 55.4		
<b>20.0</b> (8.8)	35,000 11,400 25.9 175 3.1 60.9	41,000 11,500 26.0 203 3.6 64.1	64,500 12,000 26.5 313 5.4 67.7	79,500 12,400 27.0 382 6.4 65.1	98,000 12,900 27.6 463 7.6 59.0	106,000 13,200 27.9 500 8.0 55.6			
<b>10.0</b> (6.4)	39,500 8,300 22.5 184 4.8 69.3	45,500 8,400 22.6 212 5.4 70.2	70,500 9,200 23.4 324 7.7 62.5	87,500 9,850 24.1 396 8.9 52.4					

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 @ 400 V