ZR57KCE-TFD
HCFC, R-22, 50 Hz, 3 - Phase, V
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

Evaporator Temp. (°C)	7	7
Condensing Temp. (°C)	54	38
Return Gas Temp. (°C)	18	18
Liquid Temp. (°C)	46	29
Capacity (Watts)	13979	16324
Power (W):	4480	3160
Current (Amps):	8.1	6.55
EER(BTU/Wh):	18.09	29.90
Mass Flow (lbs/hr):	88.32	90.47
Sound Data @		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2021-03-02	

Mechanical

Displacement (cm^3/Rev):	77.18
Displacement (m^3/Hr):	
Overall Length (mm):	246.13
Overall Width (mm):	246.13
Overall Height (mm):	450.85
Mounting Length (mm):	190.50
Mounting Width (mm):	190.50
Mounting Height (mm):	457.20
Suction Size (mm),Type:	177.80 / 203.20 Stub
Discharge Size (mm),Type:	25.40 / 50.80 Stub
Initial Oil Charge (ml):	1951.88
Oil Recharge (ml):	1833.59
Net Weight (kg):	36.29
Internal Free Volume (cm^3):	4506.43
Horse Power:	

*Overall compressor height on Copeland Brand Product's specified mounting grommets.

Electrical

LRA High* (Amps):	61.8
LRA Low*(Amps):	55.5
LRA Half Winding (Amps):	
MCC (Amps):	11.6
Max Operating Current (Amps):	11.00
RLA, MCC/1.4(use for contactor selection)(Amps):	8.3
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	7.4
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.

Capacitors

Type	Part No	Low MFD	High MFD	Volts	User Description
No data available in table					

Rating Conditions

11.1 K Superheat

8.3 K Subcooling

35 °C Ambient Air Over

50 Hz Operation

AIR CONDITIONING

ZR57KCE-TFD

HCFC-22

COPELAND SCROLL®

-3-50

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

		-29.0 (1.7)	**-23.0** (2.2)	**-18.0** (2.6)	**-12.0** (3.3)	**-7.0** (3.9)	**0.0** (5)	**5.0** (5.8)	**10.0** (6.8)	**13.0** (7.4)	**16.0** (8.1)	**18.0** (8.6)	**21.0** (9.4)
65.0 (27)	C								13,600	15,100	16,600	17,700	19,350
	P								5,520	5,500	5,470	5,460	5,440
	A								9.4	9.4	9.4	9.3	9.3
	M								94	104	113	120	130
	E								2.5	2.7	3.0	3.2	3.6
	%								62.9	64.6	65.9	66.5	66.9
60.0 (24.3)	C							12,150	14,450	16,000	17,600	18,700	20,400
	P							5,020	4,990	4,970	4,950	4,940	4,920
	A							8.8	8.7	8.7	8.7	8.7	8.7
	M							81	95	105	114	121	131
	E							2.4	2.9	3.2	3.6	3.8	4.2
	%							61.6	64.7	65.9	66.7	66.9	66.7
55.0 (21.8)	C						10,650	12,850	15,300	16,850	18,500	19,650	21,500
	P						4,570	4,540	4,520	4,500	4,480	4,470	4,460
	A						8.2	8.2	8.2	8.1	8.1	8.1	8.1
	M						69	82	96	106	115	122	132
	E						2.3	2.8	3.4	3.8	4.1	4.4	4.8
	%						59.7	63.4	65.7	66.5	66.6	66.3	65.2
49.0 (19)	C					8,610	11,400	13,700	16,250	17,850	19,550	20,800	22,600
	P					4,080	4,050	4,020	4,000	3,980	3,970	3,970	3,960
	A					7.6	7.6	7.6	7.5	7.5	7.5	7.5	7.5
	M					54	70	83	97	106	116	122	133
	E					2.1	2.8	3.4	4.1	4.5	4.9	5.2	5.7
	%					55.9	61.9	64.6	65.9	65.7	64.8	63.8	61.6
43.0 (16.5)	C				7,420	9,200	12,100	14,500	17,100	18,800	20,600	21,800	23,700
	P				3,610	3,600	3,570	3,550	3,530	3,520	3,510	3,510	3,510
	A				7.1	7.1	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	M				45	55	71	84	98	107	116	123	133
	E				2.1	2.6	3.4	4.1	4.9	5.3	5.9	6.2	6.8
	%				53.5	58.3	63.2	64.8	64.4	63.2	61.0	59.1	55.5
38.0 (14.6)	C			5,950	7,820	9,670	12,700	15,150	17,800	19,550	21,400	22,600	24,600
	P			3,250	3,240	3,220	3,200	3,180	3,170	3,170	3,160	3,160	3,170
	A			6.7	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
	M			35	46	56	72	85	98	107	117	123	133
	E			1.8	2.4	3.0	4.0	4.8	5.6	6.2	6.8	7.2	7.8
	%			49.5	55.7	59.9	63.5	63.8	61.8	59.4	56.0	53.1	48.0
27.0 (11)	C		5,270	6,660	8,670	10,650	13,850	16,400	19,250				
	P		2,480	2,480	2,470	2,460	2,450	2,440	2,450				
	A		5.8	5.8	5.8	5.8	5.8	5.8	5.8				
	M		29	36	47	57	73	85	99				
	E		2.1	2.7	3.5	4.3	5.7	6.7	7.9				
	%		50.4	55.2	59.9	62.0	61.1	57.1	49.9				
21.0 (9.4)	C		5,600	7,040	9,120	11,150	14,400	17,050					
	P		2,070	2,070	2,060	2,050	2,050	2,060					
	A		5.4	5.4	5.4	5.4	5.4	5.4					
	M		30	37	47	57	73	85					
	E		2.7	3.4	4.4	5.4	7.0	8.3					
	%		54.8	59.0	62.1	62.3	57.5	49.9					
10.0 (6.8)	C		6,190	7,700	9,870	11,950							
	P		1,300	1,300	1,300	1,310							
	A		4.6	4.6	4.6	4.6							
	M		31	38	48	57							
	E		4.8	5.9	7.6	9.2							
	%		69.5	70.7	68.0	61.2							

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