ZR28K3E-TFD
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

Evaporator Temp. (°C)	7	7
Condensing Temp. (°C)	54	38
Return Gas Temp. (°C)	18	18
Liquid Temp. (°C)	46	29
Capacity (Watts)	6653	8030
Power (W):	2140	1400
Current (Amps):	3.9	3
EER(BTU/Wh):	18.01	33.30
Mass Flow (lbs/hr):	41.58	42.84
Sound Data @		
Sound Power (dBA):	65 Avg	70 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2005-07-15	

Mechanical

Displacement (cm^3/Rev):	39.33
Displacement (m^3/Hr):	
Overall Length (mm):	246.13
Overall Width (mm):	246.13
Overall Height (mm):	376.94
Mounting Length (mm):	190.50
Mounting Width (mm):	190.50
Mounting Height (mm):	383.03
Suction Size (mm),Type:	76.20 / 101.60 Stub
Discharge Size (mm),Type:	25.40 / 50.80 Stub
Initial Oil Charge (ml):	1123.81
Oil Recharge (ml):	1005.52
Net Weight (kg):	25.40
Internal Free Volume (cm^3):	2867.72
Horse Power:	2.5

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

Electrical

LRA High* (Amps):	32.0
LRA Low*(Amps):	30.0
LRA Half Winding (Amps):	
MCC (Amps):	7
Max Operating Current (Amps):	5.1
RLA, MCC/1.4(use for contactor selection)(Amps):	5.0
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	4.5
RPM:	2900
Box IP :	21
UL File No:	
UL File Date:	1994-06-14

*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

ZR36K3-TFD

HCFC-22

COPELAND SCROLL®

TFD 380/420-3-50

Condensing Temperature °C (Sat. Dew Pt. Pressure, bar)		Evaporating Temperature °C (Sat. Dew Pt. Pressure, bar)									
		-20.0 (2.5)	**-15.0** (3)	**-10.0** (3.5)	**-5.0** (4.2)	**0.0** (5)	**5.0** (5.8)	**7.0** (6.2)	**10.0** (6.8)	**12.0** (7.2)
65.0 (27)	C						7,000	7,550	8,500	9,150
	P						3,470	3,460	3,440	3,420
	A						5.8	5.8	5.7	5.7
	M						49	53	59	63
	E						2.0	2.2	2.5	2.7
	%						58.1	60.2	63.1	64.8
60.0 (24.3)	C					6,150	7,550	8,150	9,150	9,850
	P					3,120	3,090	3,080	3,060	3,040
	A					5.3	5.3	5.3	5.2	5.2
	M					42	50	54	60	65
	E					2.0	2.4	2.7	3.0	3.2
	%					57.1	62.3	64.2	66.7	68.3
55.0 (21.8)	C				5,350	6,650	8,100	8,700	9,750	10,450
	P				2,800	2,780	2,750	2,740	2,720	2,700
	A				4.9	4.9	4.9	4.8	4.8	4.8
	M				35	43	52	55	61	66
	E				1.9	2.4	2.9	3.2	3.6	3.9
	%				55.5	61.1	65.8	67.5	69.6	70.8
50.0 (19.4)	C			4,600	5,750	7,050	8,600	9,250	10,300	11,050
	P			2,510	2,490	2,470	2,440	2,430	2,410	2,400
	A			4.5	4.5	4.5	4.5	4.5	4.4	4.4
	M			29	36	44	53	56	62	67
	E			1.8	2.3	2.9	3.5	3.8	4.3	4.6
	%			53.4	59.3	64.5	68.6	70.0	71.6	72.4
45.0 (17.3)	C		3,850	4,900	6,100	7,500	9,050	9,750	10,850	11,650
	P		2,240	2,230	2,220	2,190	2,170	2,160	2,140	2,120
	A		4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
	M		24	30	37	45	53	57	63	67
	E		1.7	2.2	2.8	3.4	4.2	4.5	5.1	5.5
	%		50.6	57.0	62.5	67.1	70.5	71.5	72.4	72.6
40.0 (15.3)	C	3,150	4,100	5,200	6,450	7,900	9,550	10,250	11,400	12,200
	P	1,990	1,990	1,980	1,970	1,950	1,920	1,910	1,890	1,880
	A	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.8	3.8
	M	19	24	31	37	45	54	58	64	68
	E	1.6	2.1	2.6	3.3	4.1	5.0	5.4	6.0	6.5
	%	47.0	54.0	60.0	65.1	68.9	71.2	71.7	71.6	71.1
35.0 (13.5)	C	3,350	4,350	5,500	6,800	8,300	10,000	10,750	11,900	12,750
	P	1,770	1,770	1,760	1,750	1,730	1,700	1,690	1,670	1,660
	A	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6
	M	19	25	31	38	46	55	58	65	69
	E	1.9	2.5	3.1	3.9	4.8	5.9	6.4	7.1	7.7
	%	50.2	56.9	62.5	66.8	69.7	70.6	70.3	69.0	67.6
30.0 (11.9)	C	3,550	4,600	5,750	7,150	8,700	10,450	11,200	12,450	13,350
	P	1,580	1,580	1,570	1,550	1,530	1,500	1,490	1,470	1,460
	A	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.4
	M	20	25	32	39	46	55	59	65	69
	E	2.3	2.9	3.7	4.6	5.7	7.0	7.5	8.5	9.1
	%	53.2	59.4	64.3	67.6	69.1	68.1	66.9	64.0	61.3
27.0 (11)	C	3,700	4,750	5,950	7,350	8,900	10,700	11,500	12,750	13,650
	P	1,470	1,470	1,460	1,440	1,420	1,390	1,380	1,360	1,350
	A	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3
	M	20	26	32	39	47	56	59	66	70
	E	2.5	3.2	4.1	5.1	6.3	7.7	8.4	9.4	10.1
	%	54.8	60.6	65.0	67.6	68.0	65.6	63.7	59.6	56.0

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 @ 380 V