

Rating Conditions

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

MEDIUM TEMPERATURE

Blue Area Restrictions: 8.3°C Min
 Superheat

ZB66KQE-TFD

HFC-404A
 COPELAND SCROLL®
 TFD 380/420-3-50

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

		-30.0 (2)	-20.0 (3)	-10.0 (4.3)	-5.0 (5.1)	0.0 (6)	5.0 (7)	7.0 (7.5)
60.0 (28.7)	C			10,600	12,800	15,300	18,100	19,400
	P			9,850	9,850	9,850	9,800	9,800
	A			16.9	16.9	16.9	16.9	16.9
	M			118	144	176	213	230
	E			1.1	1.3	1.6	1.9	2.0
	%			52.7	57.3	61.3	64.7	65.8
50.0 (23)	C		9,100	13,600	16,300	19,400	22,900	24,500
	P		7,850	7,900	7,900	7,900	7,950	7,950
	A		14.3	14.3	14.4	14.4	14.5	14.5
	M		81	124	151	182	219	236
	E		1.2	1.7	2.1	2.5	2.9	3.1
	%		51.7	61.5	65.1	67.8	69.4	69.7
40.0 (18.1)	C		11,050	16,300	19,500	23,300	27,500	29,400
	P		6,250	6,350	6,400	6,450	6,550	6,600
	A		12.3	12.5	12.6	12.6	12.8	12.8
	M		85	128	155	187	225	242
	E		1.8	2.6	3.1	3.6	4.2	4.5
	%		60.2	67.9	70.1	70.8	69.8	68.9
30.0 (14.1)	C	8,250	12,750	18,800	22,500	26,900	32,000	34,000
	P	4,920	5,000	5,150	5,250	5,350	5,500	5,550
	A	10.9	11.0	11.2	11.3	11.4	11.5	11.6
	M	56	87	131	159	191	230	248
	E	1.7	2.5	3.6	4.3	5.0	5.8	6.2
	%	56.2	65.8	70.4	70.1	67.8	63.1	60.5
20.0 (10.8)	C	9,350	14,250	21,100	25,400			
	P	3,990	4,100	4,260	4,370			
	A	10.0	10.1	10.3	10.4			
	M	57	88	133	161			
	E	2.3	3.5	5.0	5.8			
	%	61.1	67.5	67.0	63.2			
10.0 (8.2)	C	10,350	15,700					
	P	3,270	3,370					
	A	9.5	9.5					
	M	58	89					
	E	3.2	4.7					
	%	62.4	64.0					
0.0 (6)	C	11,300						
	P	2,670						
	A	9.1						
	M	59						
	E	4.2						
	%	59.8						
(9.0) (4.5)	C	12,150						
	P	2,150						
	A	8.7						
	M	60						
	E	5.7						
	%	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

ZB66KQE-TFD

HFC, R-404A, 50 Hz, 3 - Phase, 380/420 V . [Also Available with Variable Frequency Drives](#)

Medium Temp, Low Condensing

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):	142.90
Condensing Temp. (°C)	54	49	Displacement (m ³ /Hr):	
Return Gas Temp. (°C)	18	18	Overall Length (mm):	263.65
Liquid Temp. (°C)	54	49	Overall Width (mm):	284.23
Capacity (Watts)	22420	15679	Overall Height (mm):	546.10
Power (W):	8700	7700	Mounting Length (mm):	190.50
Current (Amps):	15.5	14.1	Mounting Width (mm):	190.50
EER(BTU/Wh):	14.95	11.89	Mounting Height (mm):	552.45
Mass Flow (lbs/hr):	236.88	142.38	Suction Size (mm),Type:	330.20 / 203.20 Stub
Sound Data @			Discharge Size (mm),Type:	177.80 / 203.20 Stub
Sound Power (dBA):	77 Avg	82 Max	Initial Oil Charge (ml):	3253.14
Vibration mils(peak-peak):	3.0 Avg	4.0 Max	Oil Recharge (ml):	3134.84
Record Date:	2006-02-16		Net Weight (kg):	59.87
			Internal Free Volume (cm ³):	13257.08
			Horse Power:	9.0

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

Electrical		Capacitors					
LRA High* (Amps):	111.0	Type	Part No	Low MFD	High MFD	Volts	User Description
LRA Low*(Amps):	100.0	No data available in table					
LRA Half Winding (Amps):							
MCC (Amps):	24.5						
Max Operating Current (Amps):	17.5						
RLA, MCC/1.4(use for contactor selection)(Amps):	17.5						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	15.7						
RPM:	2900						
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-22 HCFC	380/420	3	50	High Temperature, Low Condensing
R-22 HCFC	460	3	60	High Temperature, Low Condensing
R-404A HFC	460	3	60	Medium Temp, Low Condensing
R-507 HFC	460	3	60	Medium Temp, Low Condensing
R-507 HFC	380/420	3	50	Medium Temp, Low Condensing