

Rating Conditions

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

50 Hz Operation

**LOW
 TEMPERATURE**

**HFCs Require Use of Polyol Ester
 Lubricant Approved on Form 93-11**

ZF40K4E-TWD

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

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

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

C	11,050	13,900	17,400			
P	3,130	3,350	3,640			
A	10.3	10.4	10.6			
M	54	68	85			
E	3.5	4.1	4.8			
%	53.7	50.9	45.6			

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

ZF40K4E-TWD

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

Low Temp, Low Condensing (Scroll)

Production Status: This compressor and/or application of this compressor is not available to U.S. OEM customers. A field replacement is currently available through a U.S. Emerson Climate Technologies Wholesaler. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance			Mechanical	
Evaporator Temp. (°C)	-32	-40	Displacement (cm ³ /Rev):	204.35
Condensing Temp. (°C)	10	10	Displacement (m ³ /Hr):	
Return Gas Temp. (°C)	18	18	Overall Length (mm):	315.98
Liquid Temp. (°C)	10	10	Overall Width (mm):	368.30
Capacity (Watts)	13892	9349	Overall Height (mm):	549.66
Power (W):	4570	4140	Mounting Length (mm):	219.71
Current (Amps):	11.5	11.1	Mounting Width (mm):	219.71
EER(BTU/Wh):	17.67	13.08	Mounting Height (mm):	568.71
Mass Flow (lbs/hr):	78.75	52.67	Suction Size (mm),Type:	330.20 / 101.60 Rotalock
Sound Data @			Discharge Size (mm),Type:	279.40 / 101.60 Rotalock
Sound Power (dBA):	83 Avg	88 Max	Initial Oil Charge (ml):	4140.36
Vibration mils(peak-peak):	2.0 Avg	3.0 Max	Oil Recharge (ml):	4051.64
Record Date:	2004-06-16		Net Weight (kg):	96.16
			Internal Free Volume (cm ³):	17353.83
			Horse Power:	13.0
			*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):	167	No data available in table					
LRA Low*(Amps):	151						
LRA Half Winding (Amps):							
MCC (Amps):	31						
Max Operating Current (Amps):	25.1						
RLA, MCC/1.4(use for contactor selection)(Amps):	22.1						
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	19.9						
RPM:	2900						
Box IP :	54						
UL File No:	SA-9747						
UL File Date:	1994-07-12						

*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	Low Temp, Liquid Injected
R-22 HCFC	460	3	60	Low Temp, Liquid Injected
R-22 HCFC	380/420	3	50	Medium Temp, Liquid Injected
R-22 HCFC	460	3	60	Medium Temp, Liquid Injected
R-404A HFC	460	3	60	Low Temp, Low Condensing (Scroll)
R-404A HFC	460	3	60	Low Temp, Liquid Injected
R-404A HFC	380/420	3	50	Low Temp, Liquid Injected
R-404A HFC	460	3	60	Medium Temp, Liquid Injected
R-404A HFC	380/420	3	50	Medium Temp, Liquid Injected
R-507 HFC	460	3	60	Low Temp, Low Condensing (Scroll)
R-507 HFC	380/420	3	50	Low Temp, Low Condensing (Scroll)
R-507 HFC	380/420	3	50	Low Temp, Liquid Injected
R-507 HFC	460	3	60	Low Temp, Liquid Injected
R-507 HFC	460	3	60	Medium Temp, Liquid Injected
R-507 HFC	380/420	3	50	Medium Temp, Liquid Injected