ZP51K6E-TFD

HFC, R-410A, 60 Hz, 3 - Phase, 460 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.

Summary

Performance		
Evaporator Temp. (°F)	45	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	51700	70000
Power (W):	4800	3200
Current (Amps):	6.8	4.9
EER(BTU/Wh):	10.8	21.9
Mass Flow (lbs/hr):	752	853
Sound Data @ 50 / 115		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-04-25	

Mechanical	
Displacement (in^3/Rev):	2.94
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	16.94
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	17.22
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	36
Net Weight (lbs):	71.5
Internal Free Volume (in^3):	191
Horse Power:	

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

Electrical

LRA High* (Amps):	52.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	12.1
Max Operating Current (Amps):	11.0
RLA, MCC/1.4(use for contactor selection)(Amps):	8.6
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	7.8
RPM:	3500
Box IP :	21
UL File No:	SA2337
UL File Date:	2003-12-17

*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					

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-410A HFC	380/420	3	50	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	100-0605-02	1	SCREW- TAPTITE W/ LOCKWASHER	
99	527-0116-00	1	SPACER-MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
99	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	ROTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE
99	998-0034-18	1	ADAPTER 1-14 TO 1/2 ID	ROTALOCK TO SWEAT ADAPTER KIT DISCHARGE
99	998-0230-00	1	CONDUIT ADAPTOR KIT 5/8	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344009-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
CoreSense	971-0066-00	CoreSenseTM Diagnostics Module (2-Wire Module, 1-Phase Only)
CoreSense	971-0067-00	CoreSenseTM Diagnostics Module (3-Wire Module, 1-Phase Only)
Crankcase Heaters	018-0096-05	Crankcase Heater, 480V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0096-03	Crankcase Heater, 575V, 40W, 21.75" Lead Length

Category	Part Number	Description
Crankcase Heaters	018-0096-02	Crankcase Heater, 480V, 40W, 21.75" Lead Length

Electrical Components

Electrical Components

Part No: 071-0612-08

Usage Description: Internal Protector

Vendor Part Number

37HM220

Vendor Name

SENSATA

Stator

Part No: 546-2112-08

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.48

Run Wdg: 0.00

Nomenclature

ZP51K6E-TFD

Family Series

Z: Scroll

Application Range

P: A/C - R-410A/B

Capacity

51K: Capacity Multiplier-1000

Model Variation

6: Model Variation

Oil Type

E: Polyol Ester

Motor Type

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

D: 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application

Refrigerant	Freq	Phase	Voltage	Application

Nomenclature

ZP51K6E-TFD

Date	Data Group	Field	Old Data	New Data
13-Oct-2014	Status	Status	P	A
15-Jun-2014	Sound	Sound Start	63	69
15-Jun-2014	Sound	Sound Start Max	71	77
15-Jun-2014	Sound	Sound Stop	69	63
15-Jun-2014	Sound	Sound Stop Max	77	71
13-Oct-2014	Rating	PubCode		Y
20-Feb-2014	Rating	PubCode		PRE
26-Nov-2014	2 Pt Perf	EER Cond 2	21.8	21.9
26-Nov-2014	2 Pt Perf	Watts Cond 1	4790	4800
26-Nov-2014	2 Pt Perf	Watts Cond 2	3210	3200