

ZP51K6E-TF5

HFC, R-410A, 60 Hz, 3 - Phase, 200/230 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):	13.7	9.8
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):	71.7
Internal Free Volume (in^3):	291

Horse Power:

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

Electrical

LRA High* (Amps):	110.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	24.9
Max Operating Current (Amps):	19.0
RLA, MCC/1.4(use for contactor selection)(Amps):	17.8
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	16.0
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	200/220	3	50	Air Conditioning

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	EVM-322025-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322025-R54BDB	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-322025-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S
(1) Variable Frequency Drive	EVH-322025-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322025-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322025-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322025-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322025-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322025-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency	EVM-322025-	EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, Standard, No

Electrical Components

Electrical Components	
Part No: 071-0613-16	Stator
Usage Description: Internal Protector	Part No: 546-2112-01
<u>Vendor Part Number</u>	Usage Description: Stator
34HM415	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 0.86
SENSATA	Run Wdg: 0.00

Nomenclature

ZP51K6E-TF5
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
5: 60Hz (200/230-3) 50Hz (200/220-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HFC R-410A	50	3 Ø	200/220 V	R1 AC
Nomenclature				
ZP51K6E-TF5				

Date	Data Group	Field	Old Data	New Data
13-Oct-2014	Status	Status	P	A
15-Jun-2014	Sound	Sound Ave	68	71
15-Jun-2014	Sound	Sound Max	73	76
15-Jun-2014	Sound	Vibration Ave	2.5	2
15-Jun-2014	Sound	Vibration Max	3.5	3
11-Jun-2014	Sound	Sound Ave	71	68
11-Jun-2014	Sound	Sound Max	76	73
11-Jun-2014	Sound	Sound Start	63	69
11-Jun-2014	Sound	Sound Start Max	71	77
11-Jun-2014	Sound	Sound Stop	69	63