

# ZP54K5E-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)	54300	73600
Power (W):	5070	3400
Current (Amps):	14.4	10.45
EER(BTU/Wh):	10.7	21.7
Mass Flow (lbs/hr):	799	905
Sound Data @		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in <sup>3</sup> /Rev):	3.12	
Displacement (ft <sup>3</sup> /Hr):		
Overall Length (in):	9.56	
Overall Width (in):	9.56	
Overall Height (in):	16.94	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	17.17
<b>Suction Size (in),Type:</b>	7 / 8 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	42
<b>Oil Recharge (oz):</b>	36
<b>Net Weight (lbs):</b>	71.6
<b>Internal Free Volume (in^3):</b>	190.8

**Horse Power:**

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

<b>LRA High* (Amps):</b>	110.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	24.4
<b>Max Operating Current (Amps):</b>	20.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	17.4
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	15.6
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	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
1	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
1	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
8	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK
9	998-7026-00	1	HEATER JUNCTION BOX KIT	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
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

### 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

## Electrical Components

Electrical Components	
Part No: 071-0501-67	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
34HM407	
<u>Vendor Name</u>	
SENSATA	
Part No: 071-0572-47	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
UP18TY332-220	
<u>Vendor Name</u>	
SENSATA	
Part No: 071-0613-16	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2090-07
<u>Vendor Part Number</u>	Usage Description: Stator
34HM415	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 0.68
SENSATA	Run Wdg: 0.00
<b>Stator</b>	<b>Stator</b>
Part No: 546-2112-01	Part No: 846-2115-22
Usage Description: Stator	Usage Description: Stator
Resistance: +/-7%	Resistance: +/-7%
Start Wdg: 0.86	Start Wdg: 0.92
Run Wdg: 0.00	Run Wdg: 0.00

## Nomenclature

ZP54K5E-TF5

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**Family Series**

**Z:** Scroll

**Application Range**

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

**Capacity**

**54K:** Capacity Multiplier-1000

**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
<a href="#">HFC R-410A</a>	50	3 Ø	200/220 V	R1 AC

Nomenclature

[ZP54K5E-TF5](#)

Date	Data Group	Field	Old Data	New Data
02-Jan-2006	Status	Status	P	A
18-Mar-2016	Sound	Sound Start	79	69
18-Mar-2016	Sound	Sound Start Max	87	77
15-Mar-2016	Sound	Sound Start	69	79
15-Mar-2016	Sound	Sound Start Max	77	87
19-Dec-2005	Sound	Sound Ave	68	71
19-Dec-2005	Sound	Sound Max	73	76
01-Jun-2007	RatingRefNo	RatingRefNo	05-143	07-276
09-Oct-2015	Rating	PubCode		Y
22-Dec-2005	Rating	PubCode	PRE	Y