

# ZP24K5E-TF5

HFC, R-410A, 60 Hz, 3 - Phase, 200/230 V

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)	24000	32800
Power (W):	2420	1570
Current (Amps):	7.3	5.4
EER(BTU/Wh):	9.9	20.9
Mass Flow (lbs/hr):	353	403
Sound Data @ 45 / 130		
Sound Power (dBA):	69 Avg	74 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	1.39	
Displacement (ft^3/Hr):		
Overall Length (in):	9.56	
Overall Width (in):	9.56	
Overall Height (in):	15.27	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	16.02
<b>Suction Size (in),Type:</b>	3 / 4 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	25
<b>Oil Recharge (oz):</b>	21
<b>Net Weight (lbs):</b>	46.8
<b>Internal Free Volume (in^3):</b>	129.6

#### Horse Power:

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

<b>LRA High* (Amps):</b>	58.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	13
<b>Max Operating Current (Amps):</b>	9.5
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	9.3
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	8.3
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	2003-12-16

\*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	918-0052-00	1	CRANKCASE HEATER KIT	240V 40W WRAP AROUND
1	918-0052-01	1	CRANKCASE HEATER KIT	120V 40W WRAP AROUND
2	527-0044-15	1	SPACER - MOUNTING ASSM	
7	998-0510-38	1	VLV KIT 3/4"SWT/1 1/4-12UNC	SUCTION ROTALOCK
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	998-0034-01	1	ADAP KIT 3/4"SWT / 1 1/4 RL	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-07	1	ADAP KIT 1 1/4 RL / 3/4"SWT	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

### Accessories

### Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322011- E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@11A, Pro, IP20, Standard, No Options, Frame 1
(1) Variable Frequency Drive	EVH-322011- R54BDB	EVH, 3Ø, 200-240v, Output 200-240v@11A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-322011- R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@11A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-322011- R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@11A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-322011- R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@11A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-322011- R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@11A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVM-322011- E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@11A, Pro, IP20, With add on EMI filter, No Options, Frame 1

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322011-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@11A, Basic, IP20, With add on EMI filter, No Options, Frame 1
(1) Variable Frequency Drive	EVM-322011-N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@11A, Basic, IP20, Standard, No Options, Frame 1

### Electrical Components

Electrical Components
Part No: 071-0572-37
Usage Description: Internal Protector
<u>Vendor Part Number</u>
UP18MY122-770
<u>Vendor Name</u>
UBUKATA

### Nomenclature

ZP24K5E-TF5
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Capacity</b>
<b>24K:</b> Capacity Multiplier-1000
<b>Oil Type</b>
<b>E:</b> Polyol Ester
<b>Motor Type</b>
<b>T:</b> 3 Phase
<b>Motor Protection</b>
<b>F:</b> Internal Inherent Protection
<b>Voltage</b>
<b>5:</b> 60Hz (200/230-3) 50Hz (200/220-3)

### Miscellaneous

Alternate Application
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Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	50	3 Ø	200/220 V	R1 AC
Nomenclature				
<a href="#">ZP24K5E-TF5</a>				
Date	Data Group	Field	Old Data	New Data
17-Feb-2006	Status	Status	P	A
01-Oct-2008	RatingRefNo	RatingRefNo	05-51	08-1136
30-Sep-2008	Rating	PubCode		Y
16-Feb-2006	Rating	PubCode	PRE	Y
03-Nov-2004	Rating	PubCode		PRE
19-Sep-2005	Mech	Rech Oil Charge	19	21
02-Nov-2005	Elec	Hi LRA	61.0	58.0
02-Nov-2005	Elec	Lo LRA	53.0	
03-Oct-2005	Elec	Hi LRA	54.7	61.0
03-Oct-2005	Elec	Lo LRA	50.8	53.0