

# ZP120KCE-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	35
Condensing Temp. (°F)	130	120
Return Gas Temp. (°F)	65	55
Liquid Temp. (°F)	115	105
Capacity (BTU/hr)	123000	109000
Power (W):	11100	9760
Current (Amps):	32.8	29.8
EER(BTU/Wh):	11.1	11.2
Mass Flow (lbs/hr):	1815	1525
Sound Data @		
Sound Power (dBA):	79 Avg	84 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2019-11-15	
Mechanical		
Displacement (in^3/Rev):	6.93	
Displacement (ft^3/Hr):		
Overall Length (in):	10.38	
Overall Width (in):	11.23	
Overall Height (in):	21.00	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	21.75
<b>Suction Size (in),Type:</b>	1 3 / 8 Stub
<b>Discharge Size (in),Type:</b>	7 / 8 Stub
<b>Initial Oil Charge (oz):</b>	110
<b>Oil Recharge (oz):</b>	106
<b>Net Weight (lbs):</b>	135.0
<b>Internal Free Volume (in^3):</b>	809
<b>Horse Power:</b>	

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

<b>LRA High* (Amps):</b>	239.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	52
<b>Max Operating Current (Amps):</b>	44.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	37.1
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	33.3
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	1996-09-27

\*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	918-0047-00	1	HEATER-CRANKCASE	120V 90W WRAP AROUND
1	918-0047-01	1	HEATER-CRANKCASE	240V 90W WRAP AROUND
1	918-0047-02	1	HEATER-CRANKCASE	480V 90W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
9	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	DISCHARGE ROTALOCK
11	998-0010-00	1	SIGHTGLASS KIT	
14	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	DISCHARGE SWEAT TO ROTALOCK
14	998-0034-04	1	ADAP KIT 13/8"SWT / 13/4 RL	SUCTION SWEAT TO ROTALOCK
14	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	DISCHARGE ROTALOCK TO SWEAT
14	998-0034-13	1	ADPTR 13/4-12 TO 13/8 ID	SUCTION ROTALOCK TO SWEAT

### Accessories

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Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322048-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVH-322048-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 3

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322048-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

### Electrical Components

Electrical Components	
Part No: 071-0505-33	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2081-30
<u>Vendor Part Number</u>	Usage Description: Stator
32HM1501	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 0.31
SENSATA	Run Wdg: 0.00

### Nomenclature

ZP120KCE-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>120K:</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				
Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	50	3 Ø	200/220 V	R1 AC
Nomenclature				
<a href="#">ZP120KCE-TF5</a>				
Date	Data Group	Field	Old Data	New Data
30-Jul-2002	UL	CSAFileNo		LR3104C
30-Jul-2002	UL	ULFileDate	1/1/1900	9/27/96
30-Jul-2002	UL	ULFileNo		SA2337
22-Jun-2006	Sound	Sound Ave	80	79
22-Jun-2006	Sound	Sound Max	85	84
18-Jul-2005	Sound	Vibration Ave	2.5	3
18-Jul-2005	Sound	Vibration Max	3.5	4.5
04-Oct-2002	Sound	Sound Start	0	83
04-Oct-2002	Sound	Sound Start Max	0	91
04-Oct-2002	Sound	Sound Stop	0	75