

# ZP103KCE-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	35
Condensing Temp. (°F)	130	120
Return Gas Temp. (°F)	65	55
Liquid Temp. (°F)	115	105
Capacity (BTU/hr)	105000	93000
Power (W):	9550	8450
Current (Amps):	14.3	13.2
EER(BTU/Wh):	11	11
Mass Flow (lbs/hr):	1550	1300
Sound Data @		
Sound Power (dBA):	77 Avg	82 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2019-11-15	
Mechanical		
Displacement (in^3/Rev):	5.88	
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>	114.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	26
<b>Max Operating Current (Amps):</b>	21.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	18.6
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	16.7
<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	380/420	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

### Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-344023-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344023-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

### Electrical Components

Electrical Components	
Part No: 071-0519-36	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2081-46
<u>Vendor Part Number</u>	Usage Description: Stator
35HM531	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.37
SENSATA	Run Wdg: 0.00
<b>Stator</b>	
Part No: 546-2111-01	
Usage Description: Stator	
Resistance: +/-7%	
Start Wdg: 1.47	
Run Wdg: 0.00	

### Nomenclature

ZP103KCE-TFD
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Capacity</b>
<b>103K:</b> Capacity Multiplier-1000
<b>Oil Type</b>
<b>E:</b> 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
<a href="#">HFC R-410A</a>	50	3 Ø	380/420 V	R1 AC

## Nomenclature

[ZP103KCE-TFD](#)

Date	Data Group	Field	Old Data	New Data
16-May-2007	Sound	Sound Ave	76	77
16-May-2007	Sound	Sound Max	81	82
22-Jun-2006	Sound	Sound Ave	77	76
22-Jun-2006	Sound	Sound Max	82	81
18-Jul-2005	Sound	Vibration Ave	2.5	3
18-Jul-2005	Sound	Vibration Max	3.5	4.5
02-Dec-2002	Sound	Sound Ave	80	77
02-Dec-2002	Sound	Sound Max	85	82
02-Dec-2002	RatingRefNo	RatingRefNo	01-581	02-849
15-Nov-2019	Rating	PubCode	N	A