

# ZP104KCE-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)	106000	94000
Power (W):	9380	8300
Current (Amps):	14.4	13.15
EER(BTU/Wh):	11.3	11.35
Mass Flow (lbs/hr):	1535	1290
Sound Data @		
Sound Power (dBA):	76 Avg	81 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2017-11-07	
Mechanical		
Displacement (in <sup>3</sup> /Rev):	5.88	
Displacement (ft <sup>3</sup> /Hr):		
Overall Length (in):	11.70	
Overall Width (in):	10.33	
Overall Height (in):	22.00	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	22.75
<b>Suction Size (in),Type:</b>	1 1 / 8 Stub
<b>Discharge Size (in),Type:</b>	7 / 8 Stub
<b>Initial Oil Charge (oz):</b>	85
<b>Oil Recharge (oz):</b>	81
<b>Net Weight (lbs):</b>	105.8
<b>Internal Free Volume (in^3):</b>	454

**Horse Power:**

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

<b>LRA High* (Amps):</b>	130.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	23
<b>Max Operating Current (Amps):</b>	18.2
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	16.4
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	14.7
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA2337
<b>UL File Date:</b>	2012-06-20

\*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 (400v)
R-410A HFC	380/420	3	50	Air Conditioning

## Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
99	527-0221-00	1	SPACER-MOUNTING ASSM	
99	529-0099-00	1	POWER CABLE-MOLDED PLUG	
99	910-0715-00	1	VALVE-OIL ADJUSTMENT 1/4FL X M9	
99	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
99	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND
99	921-0227-00	1	CONNECTOR BLOCK KIT	
99	998-0010-00	1	SIGHTGLASS KIT	
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	DISCHARGE SWEAT TO ROTALOCK
99	998-0034-03	1	ADAP KIT 11/8"SWT / 13/4 RL	SUCTION SWEAT TO ROTALOCK
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	DISCHARGE 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	EVH-344023-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S
(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-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-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H2S
(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

Category	Part Number	Description
(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-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, Standard, No Options, Frame 2

## Electrical Components

Electrical Components	
Part No: 071-0519-61	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2142-01
<u>Vendor Part Number</u>	Usage Description: Stator
35HM554	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.38
SENSATA	Run Wdg: 0.00

## Nomenclature

ZP104KCE-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>104K:</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>D:</b> 60Hz (460-3) 50Hz (380/420-3)

## Miscellaneous

Alternate Application
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Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	50	3 Ø	380/420 V	R1 A4

Nomenclature

[ZP104KCE-TFD](#)

Date	Data Group	Field	Old Data	New Data
22-Feb-2013	Status	Status	P	A
02-Jan-2013	RatingRefNo	RatingRefNo	11-743	12-3496
22-Feb-2013	Rating	PubCode		Y
20-Dec-2012	Rating	PubCode		PRE
25-May-2012	Rating	PubCode	Y	PRE
23-Mar-2017	2 Pt Perf	MassFlow Cond 1	1565	1535
23-Mar-2017	2 Pt Perf	MassFlow Cond 2	1310	1290
22-Feb-2013	2 Pt Perf	Max Evap	50	80
05-Feb-2013	2 Pt Perf	Amp Cond 1	14.5	14.4
05-Feb-2013	2 Pt Perf	Amp Cond 2	13.25	13.15