

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^3/Rev):	5.88	
Displacement (ft^3/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	

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

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

LRA High* (Amps):	130.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	23
Max Operating Current (Amps):	18.2
RLA, MCC/1.4(use for contactor selection)(Amps):	16.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	14.7
RPM:	3500
Box IP :	21
UL File No:	SA2337
UL File Date:	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	Stator
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
Family Series
Z: Scroll
Application Range
P: A/C - R-410A/B
Capacity
104K: Capacity Multiplier-1000
Oil Type
E: 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
HFC R-410A	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