ZP90KCE-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)	90500	80000
Power (W):	8350	7450
Current (Amps):	26.3	24
EER(BTU/Wh):	10.8	10.8
Mass Flow (lbs/hr):	1340	1120
Sound Data @		
Sound Power (dBA):	77 Avg	82 Max
Vibration mils(peak-peak):	2.5 Avg	4.0 Max
Record Date:	2019-11-15	

Mechanical	
Displacement (in^3/Rev):	5.14
Displacement (ft^3/Hr):	
Overall Length (in):	10.38
Overall Width (in):	11.23
Overall Height (in):	18.75
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	19.50
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):	127.0
Internal Free Volume (in^3):	639
Horse Power:	

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

Electrical

LRA High* (Amps):	195.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	46
Max Operating Current (Amps):	36.0
RLA, MCC/1.4(use for contactor selection)(Amps):	32.9
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	29.5
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	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

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	
11	998-0010-00	1	SIGHTGLASS KIT	
15	910-0715-00	1	VALVE-OIL ADJUSTMENT 1/4FL X M9	

Accessories

Accessories

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
(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

Category	Part Number	Description
(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: 071-0519-33

Usage Description: Internal Protector

Vendor Part Number

35HM409

Vendor Name

T. I.

Stator

Part No: 546-2081-43

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.40

Run Wdg: 0.00

Nomenclature

ZP90KCE-TF5

Family Series

Z: Scroll

Application Range

P: A/C - R-410A/B

Capacity

90K: Capacity Multiplier-1000

Oil Type

E: Polyol Ester

Motor Type

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

5: 60Hz (200/230-3) 50Hz (200/220-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application

Refrigerant	Freq	Phase	Voltage	Application

Nomenclature

ZP90KCE-TF5

Date	Data Group	Field	Old Data	New Data
24-Nov-2003	Status	Status	P	A
03-Sep-2003	Status	Status	A	P
22-Feb-2011	Sound	Sound Max	79	82
01-May-2008	Sound	Sound Ave	74	77
22-Jun-2006	Sound	Sound Ave	77	74
22-Jun-2006	Sound	Sound Max	82	79
18-Jul-2005	Sound	Vibration Max	3.5	4
09-Jul-2010	RatingRefNo	RatingRefNo	03-719	10-511
10-Nov-2003	RatingRefNo	RatingRefNo	03-607	03-719
15-Jul-2005	Rating	PubCode		Y