ZP91KCE-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)	90500	80400
Power (W):	8230	7280
Current (Amps):	12.55	11.45
EER(BTU/Wh):	11	11.05
Mass Flow (lbs/hr):	1335	1120
Sound Data @		
Sound Power (dBA):	75 Avg	80 Max
Vibration mils(peak-peak):	2.5 Avg	3.5 Max
Record Date:	2011-03-30	

Mechanical	
Displacement (in^3/Rev):	5.16
Displacement (ft^3/Hr):	
Overall Length (in):	9.57
Overall Width (in):	9.77
Overall Height (in):	17.45
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	18.20
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	3 / 4 Stub
Initial Oil Charge (oz):	60
Oil Recharge (oz):	56
Net Weight (lbs):	90.0
Internal Free Volume (in^3):	264.5
Horse Power:	

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

Electrical

LRA High* (Amps):	100.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	20
Max Operating Current (Amps):	16.2
RLA, MCC/1.4(use for contactor selection)(Amps):	14.3
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	12.8
RPM:	3500
Box IP :	21
UL File No:	
UL File Date:	1993-07-26

*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
1	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
1	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND
2	527-0221-00	1	SPACER-MOUNTING ASSM	
7	998-0510-38	1	VLV KIT 3/4"SWT/1 1/4-12UNC	DISCHARGE ROTALOCK
8	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK
9	998-7024-00	1	HEARTER JUNCTION BOX KIT	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	921-0235-00	1	CONNECTOR BLOCK KIT - SCROLL	
99	998-0034-01	1	ADAP KIT 3/4"SWT / 11/4 RL	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-344016-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344016-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H1S

Electrical Components

Electrical Components

Part No: 071-0519-18

Usage Description: Internal Protector

Vendor Part Number

35HM500

Vendor Name

SENSATA

Part No: 071-0519-63

Usage Description: Internal Protector

Vendor Part Number

35HM555

Vendor Name

SENSATA

Stator

Part No: 546-2093-54

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2104-14

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2104-15

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2122-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.65

Run Wdg: 0.00

Stator

Part No: 546-2122-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.65

Run Wdg: 0.00

Nomenclature

ZP91KCE-TFD

Family Series

Z: Scroll

Application Range

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

Capacity

91K: 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 AC
HFC R-410A	50	3 Ø	380/420 V	R1 A4

Nomenclature

ZP91KCE-TFD

Date	Data Group	Field	Old Data	New Data
19-Nov-2009	Status	Status	P	A
04-Nov-2009	RatingRefNo	RatingRefNo	09-361	09-819
18-Nov-2009	Rating	PubCode		Y
10-Feb-2009	Rating	PubCode		PRE
15-Aug-2009	Mech	CFH		627.570592
15-Aug-2009	Mech	Cu In Per Rev		5.164
15-Aug-2009	Mech	Init Oil Charge		60
15-Aug-2009	Mech	Rech Oil Charge		56

Date	Data Group	Field	Old Data	New Data
19-Nov-2009	2 Pt Perf	Amp Cond 2	9.85	11.45