ZP20K5E-PFV

HFC, R-410A, 60 Hz, 1 - Phase, 208/230 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	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	20000	27300
Power (W):	2040	1330
Current (Amps):	8.95	5.95
EER(BTU/Wh):	9.8	20.6
Mass Flow (lbs/hr):	295	336
Sound Data @ 45 / 130		
Sound Power (dBA):	66 Avg	71 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2020-10-20	

Mechanical	
Displacement (in^3/Rev):	1.18
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	15.27
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	16.02
Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	25
Oil Recharge (oz):	21
Net Weight (lbs):	47.4
Internal Free Volume (in^3):	129.6
Horse Power:	

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

Electrical

LRA High* (Amps):	58.3
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	21
Max Operating Current (Amps):	11.5
RLA, MCC/1.4(use for contactor selection)(Amps):	15.0
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	13.5
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	2003-12-16

*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
Run Capacitor	014-0064-07	35.0	0.0	370	
Start Capacitor	014-0061-27	88.0	106.0	330	OPTIONAL

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
No data available in table				

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0052-00	1	CRANKCASE HEATER KIT	240V 40W WRAP AROUND
1	918-0052-01	1	CRANKCASE HEATER KIT	120V 40W WRAP AROUND
2	527-0044-15	1	SPACER - MOUNTING ASSM	
7	998-0510-38	1	VLV KIT 3/4"SWT/1 1/4-12UNC	SUCTION ROTALOCK
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
13	914-0037-11	1	RUN CAP KIT W/CLAMP	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	998-0034-01	1	ADAP KIT 3/4"SWT / 11/4 RL	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-07	1	ADAP KIT 11/4 RL / 3/4"SWT	ROTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322017-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R54BDB	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-322017-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322017-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322017-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@17A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S
(1) Variable Frequency Drive	EVM-322017-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322017-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@17A, Basic, IP20, With add on EMI filter, No Options, Frame 2

Electrical Components

Electrical Components

Part No: 071-0512-41

Usage Description: Internal Protector

Vendor Part Number

15HM2458-102

Vendor Name

SENSATA

Part No: 071-0642-04

Usage Description: Internal Protector

Vendor Part Number

UP14HY5245

Vendor Name

UBUKATA

Part No: 071-0642-14

Usage Description: Internal Protector

Vendor Part Number

UP14IY524

Vendor Name

UBUKATA

Stator

Part No: 546-5016-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Stator

Part No: 546-5127-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Stator

Part No: 546-5127-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Stator

Part No: 546-5131-02

Usage Description: Stator

Stator

Part No: 846-5016-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.83

Run Wdg: 1.50

Stator

Part No: 846-5016-63

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Stator

Part No: 846-5127-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Stator

Part No: 846-5127-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.64

Run Wdg: 1.30

Potential

Part No: 040-0166-37

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

Run Capacitor

Part No: 014-0064-07

Low MFD: 35.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Nomenclature

ZP20K5E-PFV

Family Series

Z: Scroll

Application Range

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

Capacity

20K: Capacity Multiplier-1000

Oil Type

E: Polyol Ester

Motor Type

P: 1 Phase/Capacitor Run, Permanent Split Capacitor

Motor Protection

F: Internal Inherent Protection

Voltage

V: 60Hz (208/230-1) 50Hz (-)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
No data available in table				

Nomenclature

ZP20K5E-PFV

Date	Data Group	Field	Old Data	New Data
27-May-2005	Status	Status	P	A
14-Jun-2005	Sound	Sound Max	69	71
27-May-2005	Sound	Sound Max	71	69
27-May-2005	Sound	Sound Stop	60	56
27-May-2005	Sound	Sound Stop Max	69	64
05-May-2005	Sound	Sound Stop	56	60
05-May-2005	Sound	Sound Stop Max	64	69
30-Apr-2006	RatingRefNo	RatingRefNo	04-522	06-383
27-May-2005	RatingRefNo	RatingRefNo	04-552	04-522
26-May-2005	Rating	PubCode		Y