

ZP38K5E-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	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	38000	51600
Power (W):	3600	2370
Current (Amps):	10.3	7.35
EER(BTU/Wh):	10.55	21.8
Mass Flow (lbs/hr):	560	635
Sound Data @ 45 / 130		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	2.18	
Displacement (ft^3/Hr):		
Overall Length (in):	9.56	
Overall Width (in):	9.56	
Overall Height (in):	16.94	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	17.17
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	36
Net Weight (lbs):	67.0
Internal Free Volume (in^3):	209.5

Horse Power:

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

Electrical

LRA High* (Amps):	83.1
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	21.2
Max Operating Current (Amps):	14.0
RLA, MCC/1.4(use for contactor selection)(Amps):	15.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	13.6
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	2003-12-17

*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

Reference	Component	Quantity	Description	Comment
1	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
1	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
8	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK
9	998-7026-00	1	HEATER JUNCTION BOX KIT	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	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- 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	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
(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

Category	Part Number	Description
(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: 071-0501-10	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
34HM111	
<u>Vendor Name</u>	
SENSATA	
Part No: 071-0572-46	
Usage Description: Internal Protector	
<u>Vendor Part Number</u>	
UP18TY032550	
<u>Vendor Name</u>	
UBUKATA	
Part No: 071-0690-00	Stator
Usage Description: Internal Protector	Part No: 546-2090-03
<u>Vendor Part Number</u>	Usage Description: Stator
34HM122	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 1.03
SENSATA	Run Wdg: 0.00
Stator	Stator
Part No: 546-2115-11	Part No: 846-2115-11
Usage Description: Stator	Usage Description: Stator
Resistance: +/-7%	Resistance: +/-7%
Start Wdg: 1.13	Start Wdg: 1.13
Run Wdg: 0.00	Run Wdg: 0.00

Nomenclature

ZP38K5E-TF5

Family Series

Z: Scroll

Application Range

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

Capacity

38K: 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
HFC R-410A	50	3 Ø	200/220 V	R1 AC
Nomenclature				
ZP38K5E-TF5				
Date	Data Group	Field	Old Data	New Data
03-Nov-2005	Status	Status	P	A
10-Feb-2012	RatingRefNo	RatingRefNo	07-265	12-155
01-Jun-2007	RatingRefNo	RatingRefNo	05-410	07-265
10-Feb-2012	Rating	PubCode		Y
07-Feb-2012	Rating	PubCode	PRE	N
02-Nov-2005	Rating	PubCode	PRE	Y
08-Apr-2005	Rating	PubCode		PRE
19-Sep-2005	Mech	Rech Oil Charge	34	38
10-Feb-2012	2 Pt Perf	Amp Cond 1	10.2	10.3
10-Feb-2012	2 Pt Perf	Amp Cond 2	7.3	7.35