ZP42K5E-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	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	41900	57600
Power (W):	4060	2640
Current (Amps):	5.5	4.15
EER(BTU/Wh):	10.3	21.8
Mass Flow (lbs/hr):	617	708
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):	2.43
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):	41.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	9.7
Max Operating Current (Amps):	8.0
RLA, MCC/1.4(use for contactor selection)(Amps):	6.9
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	6.2
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	380/420	3	50	Air Conditioning

Service Parts

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-3447D6-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Pro, IP20, Standard, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X
(1) Variable Frequency Drive	EVH-3447D6-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H1S
(1) Variable Frequency Drive	EVM-3447D6-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Pro, IP20, With add on EMI filter, No Options, Frame 1

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, IP20, Standard, No Options, Frame 1
(1) Variable Frequency Drive	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, IP20, With add on EMI filter, No Options, Frame 1

Electrical Components

Electrical Components

Part No: 071-0501-27

Usage Description: Internal Protector

Vendor Part Number

34HM223

Vendor Name

SENSATA

Part No: 071-0572-26

Usage Description: Internal Protector

Vendor Part Number

UP18FY142-770

Vendor Name

UBUKATA

Part No: 071-0612-05

Usage Description: Internal Protector

Vendor Part Number

37HM218

Vendor Name

SENSATA

Stator

Part No: 546-2090-23

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.17

Run Wdg: 0.00

Stator

Part No: 546-2112-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.64

Run Wdg: 0.00

Stator

Part No: 546-2112-05

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 4.64

Run Wdg: 0.00

Stator

Part No: 546-2115-12

Usage Description: Stator

Stator

Part No: 846-2115-12

Usage Description: Stator

Resistance: +/-7%	Resistance: +/-7%
Start Wdg: 4.60	Start Wdg: 4.60
Run Wdg: 0.00	Run Wdg: 0.00

Nomenclature

ZP42K5E-TFD

Family Series

Z: Scroll

Application Range

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

Capacity

42K: 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

Nomenclature

ZP42K5E-TFD

Date	Data Group	Field	Old Data	New Data
30-May-2007	Status	Status	A	P
16-Aug-2005	Status	Status	P	A
22-Jul-2005	Sound	Sound Start	68	69
22-Jul-2005	Sound	Sound Start Max	76	77
01-Jul-2005	Sound	Sound Stop	56	63
01-Jul-2005	Sound	Sound Stop Max	64	71

Date	Data Group	Field	Old Data	New Data
01-Jun-2007	RatingRefNo	RatingRefNo	07-364	07-270
30-May-2007	RatingRefNo	RatingRefNo	05-1032	07-364
16-Aug-2005	RatingRefNo	RatingRefNo	04-1796	05-1032