ZP31K6E-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)	31100	42500
Power (W):	2970	1950
Current (Amps):	4.3	3.3
EER(BTU/Wh):	10.5	21.85
Mass Flow (lbs/hr):	459	524
Sound Data @		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-04-25	

Mechanical	
Displacement (in^3/Rev):	1.79
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):	48.4
Internal Free Volume (in^3):	115.3
Horse Power:	

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

Electrical

LRA High* (Amps):	38.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	9
Max Operating Current (Amps):	6.5
RLA, MCC/1.4(use for contactor selection)(Amps):	6.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	5.8
RPM:	3500
Box IP :	21
UL File No:	SA2337
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
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
99	100-0605-02	1	SCREW- TAPTITE W/ LOCKWASHER	
99	527-0044-15	1	SPACER - MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	918-0052-00	1	CRANKCASE HEATER KIT	240V 40W WRAP AROUND
99	918-0052-01	1	CRANKCASE HEATER KIT	120V 40W WRAP AROUND
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
99	998-0034-18	1	ADAPTER 1-14 TO 1/2 ID	ROTALOCK TO SWEAT ADAPTER KIT DISCHARGE
99	998-0230-00	1	CONDUIT ADAPTOR KIT 5/8	

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	EVM-3447D6-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Basic, IP20, With add on EMI filter, No Options, Frame 1
(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-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@7.6A, Pro, IP20, With add on EMI filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-3447D6-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP21, 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-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1

Category	Part Number	Description
(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-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	EVH-3447D6-	EVH, 3Ø, 380-480v, Output 380-480v@7.6A, LCD Keypad, IP54, With 5%

Electrical Components

Electrical Components

Part No: 071-0572-36

Usage Description: Internal Protector

Vendor Part Number

UP18MY202-770

Vendor Name

UBUKATA

Nomenclature

ZP31K6E-TFD

Family Series

Z: Scroll

Application Range

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

Capacity

31K: Capacity Multiplier-1000

Model Variation

6: Model Variation

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

ZP31K6E-TFD

Date	Data Group	Field	Old Data	New Data
28-Jan-2015	Status	Status	P	A
01-Feb-2016	Sound	Sound Start	69	68
01-Feb-2016	Sound	Sound Start Max	77	76
01-Feb-2016	Sound	Sound Stop	63	60
01-Feb-2016	Sound	Sound Stop Max	71	69
28-Jan-2015	Rating	PubCode		Y
02-Sep-2014	Rating	PubCode		PRE
16-Mar-2015	Elec	Max OpCur	13.0	6.5
29-Apr-2016	2 Pt Perf	EER Cond 1	10.3	10.5
29-Apr-2016	2 Pt Perf	EER Cond 2	21.5	21.85