ZR144KCE-TFD

HFC, R-407C, 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)	142000	122500
Power (W):	12350	10850
Current (Amps):	18.15	16.3
EER(BTU/Wh):	11.5	11.3
Mass Flow (lbs/hr):	2070	1715
Sound Data @		
Sound Power (dBA):	80 Avg	85 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2017-03-22	

Mechanical	
Displacement (in^3/Rev):	11.65
Displacement (ft^3/Hr):	
Overall Length (in):	10.38
Overall Width (in):	11.23
Overall Height (in):	21.00
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	21.75
Suction Size (in),Type:	1 3 / 8 Stub
Discharge Size (in),Type:	7 / 8 Stub
Initial Oil Charge (oz):	110
Oil Recharge (oz):	106
Net Weight (lbs):	135.0
Internal Free Volume (in^3):	809
Horse Power:	

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

Electrical

LRA High* (Amps):	125.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	29
Max Operating Current (Amps):	22.3
RLA, MCC/1.4(use for contactor selection)(Amps):	20.7
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	18.6
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	1996-09-27

*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-134a HFC	460	3	60	Air Conditioning
R-134a HFC	380/420	3	50	Air Conditioning
R-407C HFC	380/420	3	50	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0047-00	1	HEATER-CRANKCASE	120V 90W WRAP AROUND
1	918-0047-01	1	HEATER-CRANKCASE	240V 90W WRAP AROUND
1	918-0047-02	1	HEATER-CRANKCASE	480V 90W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
11	998-0010-00	1	SIGHTGLASS KIT	
13	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	DISCHARGE SWEAT TO ROTALOCK
13	998-0034-04	1	ADAP KIT 13/8"SWT / 13/4 RL	SUCTION SWEAT TO ROTALOCK
13	998-0034-07	1	ADAP KIT 11/4 RL / 3/4"SWT	DISCHARGE ROTALOCK TO SWEAT
13	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	DISCHARGE ROTALOCK TO SWEAT
13	998-0034-10	1	ADAP KIT 13/4 RL / 11/8"SWT	SUCTION ROTALOCK TO SWEAT

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-344023-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344023-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@23A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344023-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344023-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@23A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

Electrical Components

Electrical Components

Part No: 071-0519-34

Usage Description: Internal Protector

Vendor Part Number

35HM528

Vendor Name

SENSATA

Part No: 071-0519-58

Usage Description: Internal Protector

Vendor Part Number

35HM550

Vendor Name

SENSATA

Part No: 071-0573-03

Usage Description: Internal Protector

Vendor Part Number

UP28PY051-700

Vendor Name

UBUKATA

Stator

Part No: 546-2111-02

Usage Description: Stator

Stator

Part No: 546-2081-44

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.24

Run Wdg: 0.00

Stator

Part No: 846-2081-42

Usage Description: Stator

Resistance: +/-7%	Resistance: +/-7%
Start Wdg: 1.27	Start Wdg: 1.24
Run Wdg: 0.00	Run Wdg: 0.00

Nomenclature

ZR144KCE-TFD

Family Series

Z: Scroll

Application Range

R: A/C - R-22/407C/134a

Capacity

144K: 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-134a	60	3 Ø	460 V	R1 AC
HFC R-134a	50	3 Ø	380/420 V	R1 AC
HFC R-407C	50	3 Ø	380/420 V	R1 AC

Nomenclature

ZR144KCE-TFD

Date	Data Group	Field	Old Data	New Data
18-Jul-2005	Sound	Vibration Ave	3.5	3
09-Jan-2003	Sound	Sound Start	0	83
09-Jan-2003	Sound	Sound Start Max	0	91
09-Jan-2003	Sound	Sound Stop	0	75

Date	Data Group	Field	Old Data	New Data
09-Jan-2003	Sound	Sound Stop Max	0	83
27-Aug-2007	RatingRefNo	RatingRefNo	04-774	07-802
24-Sep-2004	RatingRefNo	RatingRefNo	01-922	04-774
23-Sep-2004	Rating	PubCode		Y
31-Jan-2005	Mech	CFH	1415.8012	1415.19356