ZR81KCE-TFD

HCFC, R-22, 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	45
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	65
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	82000	96500
Power (W):	6950	5000
Current (Amps):	11	9.1
EER(BTU/Wh):	11.8	19.3
Mass Flow (lbs/hr):	1200	1240
Sound Data @		
Sound Power (dBA):	75 Avg	80 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2014-04-09	

Mechanical	
Displacement (in^3/Rev):	6.58
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	17.95
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	18.20
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	3 / 4 Stub
Initial Oil Charge (oz):	60
Oil Recharge (oz):	56
Net Weight (lbs):	86.0
Internal Free Volume (in^3):	258
Horse Power:	

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

Electrical

LRA High* (Amps):	100.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	17
Max Operating Current (Amps):	15.0
RLA, MCC/1.4(use for contactor selection)(Amps):	12.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	10.9
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	1993-07-26

*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-22 HCFC	380/420	3	50	Air Conditioning
R-407C HFC	460	3	60	Air Conditioning

Refrigerant	Voltage	Phase	Frequency	Application

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
1	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-344016-E20ENN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-N20MNN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-N20MFN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-344016-E20EFN	EVM, 3Ø, 380-480v, Output 380-480v@16A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-344016-R21BDB	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H1S
(1) Variable Frequency Drive	EVH-344016-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@16A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H1S

Electrical Components

Electrical Components

Part No: 071-0519-18

Usage Description: Internal Protector

Vendor Part Number

35HM500

Vendor Name

SENSATA

Part No: 071-0519-62

Usage Description: Internal Protector

Vendor Part Number

35HM551

Vendor Name

SENSATA

Stator

Part No: 546-1209-13

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2093-53

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2093-54

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2122-00

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.65

Run Wdg: 0.00

Stator

Part No: 546-2122-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.65

Run Wdg: 0.00

Stator

Part No: 546-2129-01

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.65

Run Wdg: 0.00

Nomenclature

ZR81KCE-TFD

Family Series

Z: Scroll

Application Range

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

Capacity

81K: 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
HCFC R-22	50	3 Ø	380/420 V	R1 AC
HFC R-134a	60	3 Ø	460 V	R1 AC
HFC R-134a	50	3 Ø	380/420 V	R1 AC
HFC R-407C	60	3 Ø	460 V	R1 AC
HFC R-407C	50	3 Ø	380/420 V	R1 AC

Nomenclature

ZR81KCE-TFD

Date	Data Group	Field	Old Data	New Data

No data available in table