CR53KQE-PFV

HCFC, R-22, 60 Hz, 1 - Phase, 208/230 V , Also Available with Variable Frequency Drives

UL High Temp

Production Status:

Summary

Performance		
Evaporator Temp. (°F)	45	45
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)		
Liquid Temp. (°F)		
Capacity (BTU/hr)	52250	68000
Power (W):	4920	4230
Current (Amps):		
EER(BTU/Wh):	10.62	16.08
Mass Flow (lbs/hr):		
Sound Data @		
Sound Power (dBA):	78 Avg	83 Max
Vibration mils(peak-peak):	4.0 Avg	5.0 Max
Record Date:		

Mechanical	
Displacement (in^3/Rev):	5.47
Displacement (ft^3/Hr):	
Overall Length (in):	10.63
Overall Width (in):	9.22
Overall Height (in):	14.81
Mounting Length (in):	7.50
Mounting Width (in):	7.50
Mounting Height (in):	15.19

Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	45
Oil Recharge (oz):	43
Net Weight (lbs):	77.0
Internal Free Volume (in^3):	
Horse Power:	

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

Electrical

LRA High* (Amps):	140.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	40.5
Max Operating Current (Amps):	
RLA, MCC/1.4(use for contactor selection)(Amps):	28.9
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	26.0
RPM:	
Box IP :	
UL File No:	
UL File Date:	

*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
Run Capacitor	014-0064-18	60.0	0.0	440	
Start Capacitor	014-0006-13	189.0	227.0	330	HIGH TORQUE
Start Capacitor	014-0061-13	64.0	77.0	330	LOW TORQUE

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-22 HCFC	208/230	1	60	Air Conditioning
R-22 HCFC	200	1	50	UL High Temp

Refrigerant	Voltage	Phase	Frequency	Application
R-407C HFC	200	1	50	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	527-0044-00	1	SPACER-MOUNTING ASSM	
99	914-0006-03	1	CAP START KIT	
99	914-0037-22	1	RUN CAP KIT	
99	918-0088-00	1	HEATER-CRANKCASE KIT	40/49W 240/265V FLEXIBLE
99	940-0001-59	1	RELAY KIT	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322031-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322031-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322031-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322031-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322031-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S
(1) Variable Frequency Drive	EVH-322031-R54BDB	EVH, 3Ø, 200-240v, Output 200-240v@31A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X

Electrical Components

Electrical Components

Part No: 071-0509-02

Stator

Usage Description: Internal Protector

Vendor Part Number

15HM1613

Vendor Name

T.I.

Stator

Part No: 546-5081-57

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.02

Run Wdg: 0.42

Start Capacitor

Part No: 014-0006-13

Low MFD: 189.0

Type:Start Capacitor

High MFD: 227.0

Usage Description: Start Capacitor

Volts: 330

Run Capacitor

Part No: 014-0064-18

Low MFD: 60.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

Part No: 546-5081-53

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.02

Run Wdg: 0.42

Potential

Part No: 040-0166-18

Usage Description: Potential Relay

Vendor Part Number

RVA4AH6D-950

Vendor Name

ELECTRICA

Start Capacitor

Part No: 014-0061-13

Low MFD: 64.0

Type:Start Capacitor

High MFD: 77.0

Usage Description: Start Capacitor

Volts: 330

Nomenclature

CR53KQE-PFV

Family Series

C: CR Compressors

Application Range

R: R-22/ High Temp. A/C & Heat Pump

Capacity

53K: Capacity

Model Variation

Q: Quiet Compressor

Oil Type

E: Polyol Ester

Motor Type

P: 1 Phase/Capacitor Run, Permanent Split Capacitor

Motor Protection

F: Internal Inherent Protection

Voltage

V: 60Hz (208/230-1) 50Hz (200-1)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	50	1 Ø	200 V	R1 R1
HCFC R-22	60	1 Ø	208/230 V	R1 AC
HFC R-407C	50	1 Ø	200 V	R1 AC
HFC R-407C	60	1 Ø	208/230 V	R1 AC

Nomenclature

CR53KQE-PFV

Date	Data Group	Field	Old Data	New Data
14-Jan-2014	Sound	Vibration Ave	3	4
14-Jan-2014	Sound	Vibration Max	4	5
12-Aug-2011	RatingRefNo	RatingRefNo		NA
12-Aug-2011	2 Pt Perf	EER Cond 2		16.08