CRNQ-050E-PFV

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

Air Conditioning

Production Status: Preliminary data only - Contact your Emerson Climate Technologies Representative.

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)	59600	78400
Power (W):	6010	5140
Current (Amps):	26.85	23.05
EER(BTU/Wh):	9.9	15.25
Mass Flow (lbs/hr):	861	968
Sound Data @		
Sound Power (dBA):	0 Avg	0 Max
Vibration mils(peak-peak):	5.0 Avg	6.0 Max
Record Date:	2018-08-21	

Mechanical	
Displacement (in^3/Rev):	6.22
Displacement (ft^3/Hr):	
Overall Length (in):	11.38
Overall Width (in):	9.38
Overall Height (in):	16.13
Mounting Length (in):	7.50
Mounting Width (in):	7.50
Mounting Height (in):	16.50

Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	70
Oil Recharge (oz):	66
Net Weight (lbs):	91.0
Internal Free Volume (in^3):	
Horse Power:	

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

Electrical

LRA High* (Amps):	142.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	48
Max Operating Current (Amps):	
RLA, MCC/1.4(use for contactor selection)(Amps):	34.3
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	30.8
RPM:	
Box IP :	
UL File No:	
UL File Date:	1984-12-28

*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	014-0064-17	55.0	0.0	440	
Run Capacitor	014-0064-17	55.0	0.0	440	
Run Capacitor	014-0080-08	55.0	0.0	440	PREMIUM KIT USAGE
Start Capacitor	014-0006-15	270.0	324.0	330	HIGH TORQUE
Start Capacitor	014-0061-29	108.0	130.0	330	LOW TORQUE

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application

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

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	521-0191-00	1	TERMINAL-SCREW GROUP	
99	521-0192-00	1	TERMINAL KIT	
99	527-0116-00	1	SPACER-MOUNTING ASSM	
99	914-0006-10	1	CAP START KIT	
99	914-0037-21	1	RUN CAP KIT	
99	918-0088-04	1	HEATER-CRANKCASE KIT	45/55W 240/265V FLEXIBLE
99	921-0227-00	1	CONNECTOR BLOCK KIT	
99	940-0001-68	1	RELAY KIT	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322048-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, Standard, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Basic, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVM-322048-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@48A, Pro, IP20, With add on EMI filter, No Options, Frame 4
(1) Variable Frequency Drive	EVH-322048-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 3

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322048-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 3
(1) Variable Frequency Drive	EVH-322048-R21BDB	EVH, 3Ø, 200-240v, Output 200-240v@48A, LCD Keypad, IP21, With 5% DC Link Choke, With Bypass, Frame H2S

Electrical Components

Electrical Components

Part No: 071-0480-00

Usage Description: Internal Protector

Vendor Part Number

UP6MY1000-A01

Vendor Name

UBUKATA

Part No: 071-0483-00

Usage Description: Internal Protector

Vendor Part Number

16HM101-3

Vendor Name

T I

Stator

Part No: 546-5072-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.36

Run Wdg: 0.38

Stator

Part No: 546-5072-03

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.36

Run Wdg: 0.38

Stator

Part No: 846-5072-04

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.36

Run Wdg: 0.38

Potential

Part No: 040-0166-18

Usage Description: Potential Relay

Vendor Part Number

RVA4AH6D-950

Vendor Name

ELECTRICA

Potential

Part No: 040-0166-27

Usage Description: Potential Relay

Vendor Part Number

RVA4AL6D-930

Vendor Name

ELECTRICA

Start Capacitor

Part No: 014-0006-15

Low MFD: 270.0

Start Capacitor

Part No: 014-0061-29

Low MFD: 108.0

Type:Start Capacitor

High MFD: 324.0

Usage Description: Start Capacitor

Volts: 330

Type:Start Capacitor

High MFD: 130.0

Usage Description: Start Capacitor

Volts: 330

Run Capacitor

Part No: 014-0064-17

Low MFD: 55.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

Run Capacitor

Part No: 014-0080-08

Low MFD: 55.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

Nomenclature

CRNQ-050E-PFV

Family Series

C: CR Compressors

Application Range

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

Capacity

: Capacity

Oil Type

: --

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
HFC R-407C	50	1 Ø	200 V	R1 AC
HFC R-407C	60	1 Ø	208/230 V	R1 AC

Nomenclature

CRNQ-050E-PFV

Date	Data Group	Field	Old Data	New Data
14-Jan-2014	Sound	Vibration Ave	0	5
14-Jan-2014	Sound	Vibration Max	0	6
21-Aug-2018	Rating	PubCode	P	PRE