CR42K6E-PFV

HCFC, R-22, 60 Hz, 1 - Phase, 208/230 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)	39500	53600
Power (W):	3560	2900
Current (Amps):	16.7	14.5
EER(BTU/Wh):	11.1	18.5
Mass Flow (lbs/hr):	574	664
Sound Data @		
Sound Power (dBA):	76 Avg	81 Max
Vibration mils(peak-peak):	4.0 Avg	5.0 Max
Record Date:	2020-11-29	

Mechanical	
Displacement (in^3/Rev):	4.40
Displacement (ft^3/Hr):	
Overall Length (in):	10.23
Overall Width (in):	9.65
Overall Height (in):	14.56
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	14.94
Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	45
Oil Recharge (oz):	43
Net Weight (lbs):	74.0
Internal Free Volume (in^3):	
Horse Power:	

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

Electrical

LRA High* (Amps):	102.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	28.5
Max Operating Current (Amps):	22.8
RLA, MCC/1.4(use for contactor selection)(Amps):	20.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	18.3
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	014-0064-08	40.0	0.0	370	
Run Capacitor	014-0080-06	40.0	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-407C HFC	208/230	1	60	Air Conditioning

Refrigerant	Voltage	Phase	Frequency	Application

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	527-0044-08	1	SPACER-MOUNTING ASSM	
2	914-0006-03	1	CAP START KIT	
3	914-0037-18	1	RUN CAP KIT W/CLAMP	
4	940-0001-68	1	RELAY KIT	
10	918-0088-00	1	HEATER-CRANKCASE KIT	40/49W 240/265V FLEXIBLE
12	568-2010-00	1	C SERVICE KIT ASSM	
14	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	005-1210-00	1	COVER-TERMINAL BOX	

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVM-322025-E20ENN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-122025-E20ENN	EVM, 1Ø, 200-240v, Output 200-240v@25A, Pro, IP20, Standard, No Options, Frame 3
(1) Variable Frequency Drive	EVM-322025-N20MNN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, Standard, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322025-N20MFN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Basic, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-322025-E20EFN	EVM, 3Ø, 200-240v, Output 200-240v@25A, Pro, IP20, With add on EMI filter, No Options, Frame 2
(1) Variable Frequency Drive	EVM-122025-E20EFN	EVM, 1Ø, 200-240v, Output 200-240v@25A, Pro, IP20, With add on EMI filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-322025-R21BDN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 2

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322025-R21BEN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 2
(1) Variable Frequency Drive	EVH-322025-R54BDN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 2

Electrical Components

Electrical Components

Part No: 071-0508-19

Usage Description: Internal Protector

Vendor Part Number

15HM1493

Vendor Name

T I

Potential

Part No: 040-0166-27

Usage Description: Potential Relay

Vendor Part Number

RVA4AL6D-930

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

Run Capacitor

Part No: 014-0080-06

Low MFD: 40.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 440

Stator

Part No: 546-5081-00

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.37

Run Wdg: 0.59

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: 014-0064-08

Low MFD: 40.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Nomenclature

CR42K6E-PFV

Family Series

C: CR Compressors

Application Range

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

Capacity

42K: Capacity

Model Variation

6: Model Variation - 6

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
HCFC R-22	60	1 Ø	208/230 V	R1
HFC R-407C	50	1 Ø	200 V	R1 AC
HFC R-407C	60	1 Ø	208/230 V	R1 AC

Nomenclature

CR42K6E-PFV

Date	Data Group	Field	Old Data	New Data
29-Nov-2020	Sound	Discharge Pulse Ave	6.3	6.3
29-Nov-2020	Sound	Discharge Pulse Max	6.8	6.8
14-Jan-2014	Sound	Vibration Ave	2.6	4
14-Jan-2014	Sound	Vibration Max	3.6	5