

# 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	

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

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

<b>LRA High* (Amps):</b>	102.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	28.5
<b>Max Operating Current (Amps):</b>	22.8
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	20.4
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	18.3
<b>RPM:</b>	
<b>Box IP :</b>	
<b>UL File No:</b>	
<b>UL File Date:</b>	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
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### 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	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-5081-00
<u>Vendor Part Number</u>	Usage Description: Stator
15HM1493	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 2.37
T I	Run Wdg: 0.59
<b>Potential</b>	<b>Start Capacitor</b>
Part No: 040-0166-27	Part No: 014-0006-13
Usage Description: Potential Relay	Low MFD: 189.0
<u>Vendor Part Number</u>	Type:Start Capacitor
RVA4AL6D-930	High MFD: 227.0
<u>Vendor Name</u>	Usage Description: Start Capacitor
ELECTRICA	Volts: 330
<b>Start Capacitor</b>	<b>Run Capacitor</b>
Part No: 014-0061-13	Part No: 014-0064-08
Low MFD: 64.0	Low MFD: 40.0
Type:Start Capacitor	Type:Run Capacitor
High MFD: 77.0	High MFD: 0.0
Usage Description: Start Capacitor	Usage Description: Run Capacitor
Volts: 330	Volts: 370
<b>Run Capacitor</b>	
Part No: 014-0080-06	
Low MFD: 40.0	
Type:Run Capacitor	
High MFD: 0.0	
Usage Description: Run Capacitor	
Volts: 440	

Nomenclature

CR42K6E-PFV	
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<b>Family Series</b>	
<b>C:</b> CR Compressors	
<b>Application Range</b>	
<b>R:</b> R-22/ High Temp. A/C & Heat Pump	
<b>Capacity</b>	
<b>42K:</b> Capacity	
<b>Model Variation</b>	
<b>6:</b> Model Variation - 6	
<b>Oil Type</b>	
<b>E:</b> Polyol Ester	
<b>Motor Type</b>	
<b>P:</b> 1 Phase/Capacitor Run, Permanent Split Capacitor	
<b>Motor Protection</b>	
<b>F:</b> Internal Inherent Protection	
<b>Voltage</b>	
<b>V:</b> 60Hz (208/230-1) 50Hz (200-1)	

Miscellaneous

Alternate Application				
Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HCFC R-22</a>	50	1 Ø	200 V	R1
<a href="#">HCFC R-22</a>	60	1 Ø	208/230 V	R1
<a href="#">HFC R-407C</a>	50	1 Ø	200 V	R1 AC
<a href="#">HFC R-407C</a>	60	1 Ø	208/230 V	R1 AC
Nomenclature				
<a href="#">CR42K6E-PFV</a>				
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