CR53KQE-TF5

HCFC, R-22, 60 Hz, 3 - Phase, 200/230 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)	53000	67500
Power (W):	5200	4290
Current (Amps):	16	14
EER(BTU/Wh):	10.2	15.7
Mass Flow (lbs/hr):	780	870
Sound Data @		
Sound Power (dBA):	76 Avg	81 Max
Vibration mils(peak-peak):	4.0 Avg	5.0 Max
Record Date:	2014-03-06	

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):	107
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	25.5
Max Operating Current (Amps):	
RLA, MCC/1.4(use for contactor selection)(Amps):	18.2
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	16.3
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
No data available in table					

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-22 HCFC	200/240	3	50	Air Conditioning
R-22 HCFC	200/230	3	60	High Temp
R-22 HCFC	200/240	3	50	High Temp
R-22 HCFC	200/240	3	50	UL High Temp

Refrigerant	Voltage	Phase	Frequency	Application
R-407C HFC	200/230	3	60	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	527-0044-00	1	SPACER-MOUNTING ASSM	
99	918-0088-00	1	HEATER-CRANKCASE KIT	40/49W 240/265V FLEXIBLE

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
(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
(1) Variable Frequency Drive	EVH-322025-R54BEN	EVH, 3Ø, 200-240v, Output 200-240v@25A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 2

Electrical Components

Electrical Components

Part No: 071-0501-53

Usage Description: Internal Protector

Vendor Part Number

34HM402

Vendor Name

T.I.

Stator

Part No: 546-2061-77

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.71

Run Wdg: 0.00

Stator

Part No: 546-2061-72

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 0.71

Run Wdg: 0.00

Nomenclature

CR53KQE-TF5

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

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

5: 60Hz (200/230-3) 50Hz (200/240-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	50	3 Ø	200/240 V	R1 R1
HCFC R-22	50	3 Ø	200/240 V	R1 HT
HCFC R-22	50	3 Ø	200/240 V	R1 AC
HCFC R-22	60	3 Ø	200/230 V	R1 HT
HFC R-407C	60	3 Ø	200/230 V	R1 AC
HFC R-407C	50	3 Ø	200/240 V	R1 AC

Nomenclature

CR53KQE-TF5

Date	Data Group	Field	Old Data	New Data
14-Jan-2014	Sound	Vibration Ave	3	4
14-Jan-2014	Sound	Vibration Max	4.5	5
31-Oct-2016	2 Pt Perf	Max Cond	-1	140
31-Oct-2016	2 Pt Perf	Max Evap	-1	45
31-Oct-2016	2 Pt Perf	Min Cond	-1	80
31-Oct-2016	2 Pt Perf	Min Evap	-1	0
06-Mar-2014	2 Pt Perf	Amp Cond 2	13.9	14
06-Mar-2014	2 Pt Perf	Cap Cond 1	53200	53000
06-Mar-2014	2 Pt Perf	EER Cond 1	10.1	10.2
06-Mar-2014	2 Pt Perf	EER Cond 2	15.6	15.7