CR53KQE-TFD

HCFC, R-22, 60 Hz, 3 - Phase, 380/460 V , Also Available with Variable Frequency Drives

High Temp

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	20
Condensing Temp. (°F)	130	120
Return Gas Temp. (°F)	65	65
Liquid Temp. (°F)	130	120
Capacity (BTU/hr)	48800	29100
Power (W):	5160	3830
Current (Amps):	8	6.3
EER(BTU/Wh):	9.4	7.6
Mass Flow (lbs/hr):	770	426
Sound Data @		
Sound Power (dBA):	76 Avg	81 Max
Vibration mils(peak-peak):	4.0 Avg	5.0 Max
Record Date:	2014-02-26	

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):	55.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	12.7
Max Operating Current (Amps):	12.7
RLA, MCC/1.4(use for contactor selection)(Amps):	9.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	8.1
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	380/420	3	50	Air Conditioning
R-22 HCFC	380/460	3	60	Air Conditioning
R-22 HCFC	380/420	3	50	High Temp
R-22 HCFC	380/460	3	60	UL High Temp

Refrigerant	Voltage	Phase	Frequency	Application
R-407C HFC	380/420	3	50	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	527-0044-00	1	SPACER-MOUNTING ASSM	
99	918-0088-01	1	HEATER-CRANKCASE KIT	40W 480V FLEXIBLE

Accessories

Accessories

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344012-R54BDB	EVH, 3Ø, 380-480v, Output 380-480v@11A, LCD Keypad, IP54, With 5% DC Link Choke, With Bypass, Frame H3X

Electrical Components

Electrical Components

Part No: 071-0501-48

Usage Description: Internal Protector

Vendor Part Number

34HM507

Vendor Name

T.I.

Stator

Part No: 546-2100-10

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.77

Run Wdg: 0.00

Stator

Part No: 546-2061-76

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 2.77

Run Wdg: 0.00

Nomenclature

CR53KQE-TFD

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

D: 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	50	3 Ø	380/420 V	R1 AC
HCFC R-22	60	3 Ø	380/460 V	R1 R1
HCFC R-22	50	3 Ø	380/420 V	R1 HT
HCFC R-22	60	3 Ø	380/460 V	R1 AC
HFC R-407C	50	3 Ø	380/420 V	R1 AC
HFC R-407C	60	3 Ø	380/460 V	R1 AC

Nomenclature

CR53KQE-TFD

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
12-Aug-2011	RatingRefNo	RatingRefNo		NA

Date	Data Group	Field	Old Data	New Data
06-Mar-2014	2 Pt Perf	Cap Cond 1	53200	53000
06-Mar-2014	2 Pt Perf	Cap Cond 2	67300	67500
06-Mar-2014	2 Pt Perf	Watts Cond 1	5210	5200