ZPD83KCE-TFD

HFC, R-410A, 60 Hz, 3 - Phase, 460 V

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)	83000	101000
Power (W):	8000	5800
Current (Amps):	12.4	10
EER(BTU/Wh):	10.4	17.4
Mass Flow (lbs/hr):	1220	1250
Sound Data @		
Sound Power (dBA):	78 Avg	83 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-22	

Mechanical	
Displacement (in^3/Rev):	4.71
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	19.46
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	19.71
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	60
Oil Recharge (oz):	56
Net Weight (lbs):	89.9
Internal Free Volume (in^3):	
Horse Power:	

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

Electrical

LRA High* (Amps):	100.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	19.7
Max Operating Current (Amps):	16.5
RLA, MCC/1.4(use for contactor selection)(Amps):	14.1
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	12.6
RPM:	3500
Box IP :	21
UL File No:	SA2337
UL File Date:	2003-12-17

*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-410A HFC	460	3	60	A/C, 50% Load Of Compressor Model
R-410A HFC	380/420	3	50	A/C, 50% Load Of Compressor Model
R-410A HFC	380/420	3	50	Air Conditioning

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
99	527-0116-00	1	SPACER-MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
99	918-0043-07	1	HEATER-CRANKCASE	120V 70W WRAP AROUND
99	921-0235-00	1	CONNECTOR BLOCK KIT - SCROLL	
99	985-0199-00	1	THERMISTOR KIT	1/2" TUBE DIA FOR EXT DISCHARGE
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	ROTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE
99	998-0034-18	1	ADAPTER 1-14 TO 1/2 ID	ROTALOCK TO SWEAT ADAPTER KIT DISCHARGE

Accessories

Accessories

Category	Part Number	Description
Crankcase Heaters	018-0095-00	Crankcase Heater, 240V, 70W, 21" Lead Length
Crankcase Heaters	018-0095-01	Crankcase Heater, 480V, 70W, 21" Lead Length
Crankcase Heaters	018-0095-02	Crankcase Heater, 575V, 70W, 21" Lead Length
Crankcase Heaters	018-0095-03	Crankcase Heater, 240V, 70W, 32" Lead Length
Crankcase Heaters	018-0095-04	Crankcase Heater, 240V, 70W, 48” Lead Length
Crankcase Heaters	018-0095-05	Crankcase Heater, 480V, 70W, 48” Lead Length
Crankcase Heaters	018-0095-06	Crankcase Heater, 575V, 70W, 48" Lead Length

Category	Part Number	Description
Crankcase Heaters	018-0095-07	Crankcase Heater, 120V, 70W, 48" Lead Length

Electrical Components

Electrical Components

Part No: 071-0519-18

Usage Description: Internal Protector

Vendor Part Number

35HM500

Vendor Name

SENSATA

Stator

Part No: 546-2104-15

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Stator

Part No: 546-2104-14

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.79

Run Wdg: 0.00

Nomenclature

ZPD83KCE-TFD

Family Series

Z: Scroll

Application Range

P: A/C - R-410A/B

Modulation

D: Digital

Capacity

83K: Capacity Multiplier-1000

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
HFC R-410A	60	3 Ø	460 V	R1 A5
HFC R-410A	50	3 Ø	380/420 V	R1 A5
HFC R-410A	50	3 Ø	380/420 V	R1 AC

Nomenclature

ZPD83KCE-TFD

Date	Data Group	Field	Old Data	New Data
20-Mar-2006	Status	Status	P	A
20-Mar-2006	Status	Status	P	A
15-May-2014	Sound	Sound Start	59	72
15-May-2014	Sound	Sound Start Max	67	80
15-May-2014	Sound	Sound Stop	72	59
15-May-2014	Sound	Sound Stop Max	80	67
12-Jun-2013	Sound	Sound Start	72	59

Date	Data Group	Field	Old Data	New Data
12-Jun-2013	Sound	Sound Start Max	80	67
12-Jun-2013	Sound	Sound Stop	59	72