

# ZPD83KCE-TF5

HFC, R-410A, 60 Hz, 3 - Phase, 200/230 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)	82500	101000
Power (W):	7850	5660
Current (Amps):	23	17.95
EER(BTU/Wh):	10.5	17.85
Mass Flow (lbs/hr):	1215	1250
Sound Data @		
Sound Power (dBA):	78 Avg	83 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2008-07-07	
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	

<b>Mounting Height (in):</b>	19.71
<b>Suction Size (in),Type:</b>	7 / 8 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	60
<b>Oil Recharge (oz):</b>	56
<b>Net Weight (lbs):</b>	89.9
<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>	186.6
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	37.5
<b>Max Operating Current (Amps):</b>	33.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	26.8
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	24.0
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA2337
<b>UL File Date:</b>	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	200/230	3	60	A/C, 50% Load Of Compressor Model
R-410A HFC	200/220	3	50	A/C, 50% Load Of Compressor Model
R-410A HFC	200/220	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	921-0234-00	1	CONNECTOR BLOCK KIT	
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
Crankcase Heaters	018-0095-07	Crankcase Heater, 120V, 70W, 48" Lead Length

Category	Part Number	Description
Compressor	010-0005-00	Compressor 100W 200V 400W 200V 400W 200V 400W

Electrical Components

Electrical Components	
Part No: 071-0519-32	<b>Stator</b>
Usage Description: Internal Protector	Part No: 546-2104-22
<u>Vendor Part Number</u>	Usage Description: Stator
35HM408	Resistance: +/-7%
<u>Vendor Name</u>	Start Wdg: 0.50
SENSATA	Run Wdg: 0.00

Nomenclature

ZPD83KCE-TF5
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Modulation</b>
<b>D:</b> Digital
<b>Capacity</b>
<b>83K:</b> Capacity Multiplier-1000
<b>Oil Type</b>
<b>E:</b> Polyol Ester
<b>Motor Type</b>
<b>T:</b> 3 Phase
<b>Motor Protection</b>
<b>F:</b> Internal Inherent Protection
<b>Voltage</b>
<b>5:</b> 60Hz (200/230-3) 50Hz (200/220-3)

Miscellaneous

Alternate Application				
Refrigerant	Freq	Phase	Voltage	Application

Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	50	3 Ø	200/220 V	R1 AC
<a href="#">HFC R-410A</a>	50	3 Ø	200/220 V	R1 AC
Nomenclature <a href="#">ZPD83KCE-TF5</a>				
Date	Data Group	Field	Old Data	New Data
07-Jul-2008	Status	Status	P	A
07-Jul-2008	Status	Status	P	A
07-Jul-2008	Rating	PubCode		Y
05-Feb-2008	Rating	PubCode		PRE
07-Jul-2008	2 Pt Perf	Amp Cond 1	18	18.1
07-Jul-2008	2 Pt Perf	Amp Cond 1	23.5	23
07-Jul-2008	2 Pt Perf	Amp Cond 2	17.9	17.95
07-Jul-2008	2 Pt Perf	Amp Cond 2	15.7	15.75
07-Jul-2008	2 Pt Perf	Cap Cond 1	31500	32400
07-Jul-2008	2 Pt Perf	Cap Cond 2	40500	41500