

# ZPD120KCE-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	35
Condensing Temp. (°F)	130	120
Return Gas Temp. (°F)	65	55
Liquid Temp. (°F)	115	105
Capacity (BTU/hr)	123000	109500
Power (W):	11100	9860
Current (Amps):	16.7	15.2
EER(BTU/Wh):	11.1	11.1
Mass Flow (lbs/hr):	1815	1530
Sound Data @		
Sound Power (dBA):	79 Avg	84 Max
Vibration mils(peak-peak):	3.0 Avg	4.5 Max
Record Date:	2017-03-22	
Mechanical		
Displacement (in^3/Rev):	6.93	
Displacement (ft^3/Hr):		
Overall Length (in):	11.54	
Overall Width (in):	11.23	
Overall Height (in):	21.00	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	21.75
<b>Suction Size (in),Type:</b>	1 3 / 8 Stub
<b>Discharge Size (in),Type:</b>	7 / 8 Stub
<b>Initial Oil Charge (oz):</b>	110
<b>Oil Recharge (oz):</b>	106
<b>Net Weight (lbs):</b>	136.0
<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>	125.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	28
<b>Max Operating Current (Amps):</b>	22.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	20.0
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	17.9
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<b>UL File Date:</b>	2007-02-07

\*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	529-0099-00	1	POWER CABLE-MOLDED PLUG	
99	910-0182-00	1	VALVE-SOLENOID	
99	910-0715-00	1	VALVE-OIL ADJUSTMENT 1/4FL X M9	
99	918-0047-00	1	HEATER-CRANKCASE	120V 90W WRAP AROUND
99	918-0047-01	1	HEATER-CRANKCASE	240V 90W WRAP AROUND
99	918-0047-02	1	HEATER-CRANKCASE	480V 90W WRAP AROUND
99	921-0227-00	1	CONNECTOR BLOCK KIT	
99	985-0200-00	1	THERMISTOR KIT	
99	998-0010-00	1	SIGHTGLASS KIT	

Accessories

Accessories		
Category	Part Number	Description
Digital Components	543-0024-01	Digital Compressor Controller
Digital Components	998-0060-09	240V Digital Solenoid Coil

Electrical Components

Electrical Components
Part No: 071-0519-34
Usage Description: Internal Protector
<u>Vendor Part Number</u>
35HM528
<u>Vendor Name</u>

SENSATA

Part No: 071-0519-58

Usage Description: Internal Protector

Vendor Part Number

35HM550

Vendor Name

SENSATA

**Stator**

Part No: 546-2111-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.27

Run Wdg: 0.00

**Stator**

Part No: 546-2081-44

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 1.24

Run Wdg: 0.00

Nomenclature

ZPD120KCE-TFD

**Family Series**

**Z:** Scroll

**Application Range**

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

**Modulation**

**D:** Digital

**Capacity**

**120K:** 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**

Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	60	3 Ø	460 V	R1 A5
<a href="#">HFC R-410A</a>	50	3 Ø	380/420 V	R1 A5
Nomenclature				
<a href="#">ZPD120KCE-TFD</a>				
Date	Data Group	Field	Old Data	New Data
10-Jun-2008	Status	Status	P	A
10-Jun-2008	Status	Status	P	A
06-Apr-2008	Sound	Sound Ave	74	79
06-Apr-2008	Sound	Sound Ave	74	79
06-Apr-2008	Sound	Sound Max	79	84
06-Apr-2008	Sound	Sound Max	79	84
02-Apr-2008	Sound	Sound Ave	79	74
02-Apr-2008	Sound	Sound Ave	79	74
02-Apr-2008	Sound	Sound Max	84	79
02-Apr-2008	Sound	Sound Max	84	79