

# ZP49K5E-TFD

HFC, R-410A, 60 Hz, 3 - Phase, 460 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	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	50000	67000
Power (W):	4650	3090
Current (Amps):	6.5	4.65
EER(BTU/Wh):	10.75	21.7
Mass Flow (lbs/hr):	736	823
Sound Data @ 45 / 130		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	2.83	
Displacement (ft^3/Hr):		
Overall Length (in):	9.56	
Overall Width (in):	9.56	
Overall Height (in):	16.94	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

<b>Mounting Height (in):</b>	17.17
<b>Suction Size (in),Type:</b>	7 / 8 Stub
<b>Discharge Size (in),Type:</b>	1 / 2 Stub
<b>Initial Oil Charge (oz):</b>	42
<b>Oil Recharge (oz):</b>	36
<b>Net Weight (lbs):</b>	72.8
<b>Internal Free Volume (in^3):</b>	190.8

**Horse Power:**

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

<b>LRA High* (Amps):</b>	52.0
<b>LRA Low*(Amps):</b>	
<b>LRA Half Winding (Amps):</b>	
<b>MCC (Amps):</b>	11
<b>Max Operating Current (Amps):</b>	9.0
<b>RLA, MCC/1.4(use for contactor selection)(Amps):</b>	7.9
<b>RLA, MCC/1.56(use for breaker &amp; wire size selection)(Amps):</b>	7.1
<b>RPM:</b>	3500
<b>Box IP :</b>	21
<b>UL File No:</b>	SA-2337
<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	380/420	3	50	Air Conditioning

### Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
1	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
7	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK
8	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK
9	998-7026-00	1	HEATER JUNCTION BOX KIT	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
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

### Accessories

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Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344009-R21BDN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP21, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R21BEN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP21, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R54BDN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP54, With 5% DC Link Choke, No Options, Frame 1
(1) Variable Frequency Drive	EVH-344009-R54BEN	EVH, 3Ø, 380-480v, Output 380-480v@9A, LCD Keypad, IP54, With 5% DC Link Choke + EMI Filter, No Options, Frame 1
CoreSense	571-0066-00	CoreSense™ Diagnostics Module (2 wire)
CoreSense	571-0066-01	CoreSense Diagnostics (Fixed Speed AC)
CoreSense	571-0067-00	CoreSense™ Diagnostics Module (3 wire)
CoreSense	571-0067-01	CoreSense Diagnostics (Fixed Speed HP)
CoreSense	571-0072-00	CoreSense Diagnostics (Two Stage UT)

Category	Part Number	Description
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Electrical Components

Electrical Components

Part No: 071-0501-55

Usage Description: Internal Protector

Vendor Part Number

34HM513

Vendor Name

SENSATA

Part No: 071-0501-57

Usage Description: Internal Protector

Vendor Part Number

34HM515

Vendor Name

SENSATA

Part No: 071-0572-03

Usage Description: Internal Protector

Vendor Part Number

UP18KY142-770

Vendor Name

UBUKATA

Part No: 071-0612-08

Usage Description: Internal Protector

Vendor Part Number

37HM220

Vendor Name

SENSATA

**Stator**

Part No: 546-2090-24

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.20

Run Wdg: 0.00

**Stator**

Part No: 546-2115-13

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.70

Run Wdg: 0.00

**Stator**

Part No: 546-2090-00

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.20

Run Wdg: 0.00

**Stator**

Part No: 546-2112-02

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.48

Run Wdg: 0.00

**Stator**

Part No: 846-2115-13

Usage Description: Stator

Resistance: +/-7%

Start Wdg: 3.70

Run Wdg: 0.00

# Nomenclature

ZP49K5E-TFD
<b>Family Series</b>
<b>Z:</b> Scroll
<b>Application Range</b>
<b>P:</b> A/C - R-410A/B
<b>Capacity</b>
<b>49K:</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>D:</b> 60Hz (460-3) 50Hz (380/420-3)

# Miscellaneous

Alternate Application				
Refrigerant	Freq	Phase	Voltage	Application
<a href="#">HFC R-410A</a>	50	3 Ø	380/420 V	R1 AC
Nomenclature				
<a href="#">ZP49K5E-TFD</a>				
Date	Data Group	Field	Old Data	New Data
24-Mar-2009	Status	Status	P	A
23-Mar-2009	Rating	PubCode		Y
12-Nov-2008	Rating	PubCode		PRE
11-Mar-2009	Elec	Max OpCur	N/A	9.0
11-Mar-2009	Elec	MCC	12.1	11.0
11-Mar-2009	Elec	RLA	N/A	7.9
11-Dec-2012	2 Pt Perf	MassFlow Cond 1	737	736
11-Dec-2012	2 Pt Perf	MassFlow Cond 2	824	823

Date	Data Group	Field	Old Data	New Data
24-Mar-2009	2 Pt Perf	Amp Cond 1	6.4	6.5