

ZPD83KCE-TF5

HFC, R-410A, 60Hz, 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.

Performance

Evap(°F)/Cond(°F)	45 / 130	45 / 100
RG(°F)/Liq(°F)	65 / 115	65 / 85
Capacity (Btu/hr)	82500	101000
Power (Watts):	7850	5660
Current (Amps):	23.00	17.95
EER (Btu/Wh):	10.50	17.85
Mass Flow (lbs/hr):	1215	1250
Sound Power (dBA):	78 Avg	83 Max
Vibration (mils(peak- Record Date:	2.0 Avg 2008-07-07	3.0 Max

Mechanical

Number of Cylinders:0	Displ(in^3/Rev):	4.71
Bore Size(in): 0.00	Displ(ft^3/hr):	572.40
Stroke(in): 0.00		
Overall Length (in): 9.69	Mounting Length (in):	7.50
Overall Width (in): 9.69	Mounting Width (in):	7.50
Overall Height (in): 19.46	Mounting Height (in):	19.71 *
Suction Size (in):	7/8 Stub	
Discharge Size (in):	1/2 Stub	
Oil Recharge (oz):	56	
Initial Oil Charge (oz):	60	
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*:	186.6	MCC (Amps):	37.5	UL File No:
LRA-Half Winding:		RPM:		UL File Date:
LRA Low*:		Max Operating Current:	33.0	
RLA(=MCC/1.4;use for contactor selection):	26.8			
RLA(=MCC/1.56;use for breaker & wire size	24			
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.				

Alternate Applications

Refrigerant	Freq (Hz)	Phase	Voltage	Application
R-410A HFC	50	3	200/220	A/C, 50% Load Of Compressor
R-410A HFC	60	3	200/230	A/C, 50% Load Of Compressor
R-410A HFC	50	3	200/220	Air Conditioning

RATING CONDITIONS

20 °F Superheat
15 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation

AIR CONDITIONING

ZPD83KCE-TF5

HFC-410A
COPELAND SCROLL®
TF5 200/230-3-60

Evaporating Temperature °F (Sat Dew Pt Pressure, psig)

-20(26) -10(36) 5(55) 20(78) 30(97) 40(118) 55(155) 70(200) 80(235)

Condensing Temperature °F (Sat Dew Pt Pressure, psig)	150 (611)C						62700	83000		
	P						9550	9980		
	A						27	28.05		
	M						1090	1415		
	E						6.5	8.3		
	%						66.2	67.7		
	140 (540)C					56700	68900	91100	118500	140000
	P					8330	8620	8950	9220	9410
	A					24.1	24.8	25.6	26.2	26.5
	M					918	1100	1430	1825	2130
125 (446)C	E					6.8	8	10.2	12.8	14.8
	%					66.6	68.1	69	67.2	63.9
	125 (446)C				52400	64200	78000	103000	133000	156500
	P				6910	7160	7350	7580	7840	8060
	A				20.8	21.35	21.8	22.35	22.75	23.05
	M				772	934	1120	1450	1850	2160
	E				7.6	8.9	10.6	13.6	17	19.4
	%				67.6	69.3	70.3	69.4	64.2	57.6
	110 (364)C				42300	58400	71500	86700	114000	146500
	P				5630	5950	6100	6230	6450	6770
100 (316)C	A				17.9	18.6	19	19.25	19.65	20.05
	M				582	786	949	1135	1470	1870
	E				7.5	9.8	11.8	13.9	17.6	21.7
	%				66.8	69.8	70.9	70.6	66.1	55.7
	100 (316)C		32000	45200	62300	76100	92200	120500		
	P		4760	5120	5350	5470	5590	5840		
	A		16.05	16.8	17.35	17.6	17.8	18.15		
	M		426	589	794	958	1145	1480		
	E		6.8	8.8	11.7	13.9	16.5	20.6		
	%		64.2	67.9	70.5	70.7	68.8	60.9		
90 (273)C	90 (273)C	26900	34200	48000	65900	80400	97200	127000		
	P	4130	4390	4640	4810	4910	5040	5350		
	A	14.8	15.3	15.8	16.2	16.4	16.6	16.95		
	M	341	431	594	799	963	1150	1480		
	E	6.5	7.8	10.3	13.7	16.4	19.3	23.7		
	%	61.9	64.8	68.6	70	68.6	64.5	52.4		
	75 (217)C	29700	37300	51900	70800	86100	104000			
	P	3690	3830	3970	4100	4230	4420			
	A	13.9	14.2	14.5	14.75	14.9	15.15			
	M	346	435	598	800	962	1145			
75 (217)C	E	8.1	9.8	13.1	17.3	20.4	23.5			
	%	61.7	64.9	67.7	65.8	60.9	52.4			
	60 (170)C	32300	40100	55100	74700	90600				
	P	3210	3280	3380	3550	3750				
	A	13.1	13.2	13.4	13.6	13.85				
	M	344	432	591	789	946				
	E	10.1	12.2	16.3	21	24.1				
	%	60.5	63	62.8	55.5	45.9				
	50 (142)C	33800	41600	56700	76600					
	P	2890	2940	3050	3290					
50 (142)C	A	12.55	12.65	12.8	13.1					
	M	338	423	578	771					
	E	11.7	14.2	18.6	23.3					
	%	58.5	59.8	56.3	44.5					

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 230 V

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)