

OMEGA R32 Round Flow Cassette IDU

SUBMITTAL DATA

220V/1/50-60Hz 380V/3/50-60Hz

Job: _____
 Location: _____
 Schedule No.: _____
 System Designation: _____

Engineer: _____
 Architect: _____
 Date: _____
 For: Reference Approval Review Construction

FEATURES

- Build in Drain Pump
- 360 Angle Airflow
- Long Distance Air Delivery
- High-Efficiency DC Motor
- Wifi
- Heat Exchanger Self-cleaning



1. Specifications

3.1 Specifications Sheet

3.1.1 Cassette Type

model			TECM112J0T-LWL036	TECR118J0T-LWL053	TECR124J0T-LWL070	TECR130J0T-LWL085	TECR136J0T-LWL105
Indoor unit			TECM112J0T-LWL036	TECR118J0T-LWL053	TECR124J0T-LWL070	TECR130J0T-LWL085	TECR136J0T-LWL105
Outdoor unit			TCHB112J0T-LSL036	TCHB118J0T-LSL053	TCHB124J0T-LSL070	TCHB130J0T-LTL085	TCHB136J0T-LTL105
Type			heating pump	heating pump	heating pump	heating pump	heating pump
Control type			remote controller	remote controller	remote controller	remote controller	remote controller
Declared cooling capacity	btu/h		12500(6200~16600)	18000(2115~19050)	24000(7500~25500)	30000 (7600~32000)	36000(10500~42000)
Declared heating capacity	btu/h		13500(6800~18400)	19800(2600~20820)	26900(7900~28500)	32000 (9200~33200)	40000(11200~46000)
Declared cooling capacity	W		3770(600~4860)	5300(620~5580)	7030(2200~7500)	8790 (2230~9380)	10550(3080~12300)
Declared heating capacity	W		4000(700~5400)	5800(760~6100)	7900(2320~8350)	9380 (2700~9730)	11720(3280~13500)
Pdesignc	W		3770	5300	7030	8800	10550
SEER declared	Btu/W		21	21	21	21	21
Energy Class			A++	A++	A++	A++	A++
Pdesignh Average	W		4000	4300	6000	7400	8500
SCOP Average declared	W/W		4.00	4.00	4.0	4.0	4.1
Energy Class(Average)			A+	A+	A+	A+	A+
Declare capacity(-10℃)	W		3270	3300	5450	6550	6800
Back up heating capacity(-10℃)	W		730	1000	550	750	1700
Annual energy consumption	Cooling	kwh/a	335	294	402	485	596
	Average	kwh/a	1514	1505	2075	2550	2902
Moisture removal	Liters/h		1.2	1.5	2.00	2.6	3.60
Indoor sound power(S/H/M/L/Mute)	dB(A)		57/52/51/50/48	55/52/49/46/44	59/56/52/49/47	61/57/53/50/45	63/60/59/57/53
Indoor sound power(Standard rating conditions)	dB(A)		52	52	56	57	60
Outdoor sound power(Standard rating conditions)	dB(A)		61	62	64	66	67
Indoor sound pressure(S/H/M/L/Mute)	dB(A)		47/52/51/50/38	45/42/39/36/34	49/46/42/39/37	51/47/43/40/35	53/50/49/47/43
Indoor sound pressure(Standard rating conditions)	dB(A)		42	42	46	47	50
Outdoor sound pressure(Standard rating conditions)	dB(A)		52	52	54	56	57
Electrical Data							
Power supply			Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P	Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P	Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P	Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P	Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P
Power supply side			Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Voltage Range	V		176~265	176~265	176~265	176~265	176~265
Cooling Operating current	Indoor	A	0.5(0.2~1.0)	0.5(0.2~1.0)	0.8(0.2~1.0)	0.8(0.2~1.0)	0.6(0.3~0.7)
	Outdoor	A	7.6(1.8~12.0)	7.5(1.8~12.0)	10.2(3.8~14)	11.7(3.8~14.9)	14.6(1.0~20.3)
Heating Operating current	Indoor	A	0.5(0.2~1.0)	0.5(0.2~1.0)	0.8(0.2~1.0)	0.8(0.2~1.0)	0.6(0.3~0.7)
	Outdoor	A	8.2(1.6~11)	7.1(1.6~11)	8.5(4.0~13)	10(4.0~13.9)	15.0(1.4~16.3)
Cooling Power consumption	Indoor	W	30(20~100)	60(20~100)	100(20~135)	100(20~135)	120(50~140)
	Outdoor	W	1600(295~2550)	1625(395~2750)	2390(710~3165)	2690(710~3415)	3180(210~4460)
Heating Power consumption	Indoor	W	40(20~100)	60(20~100)	100(20~135)	100(20~135)	120(50~140)
	Outdoor	W	1650(250~2300)	1620(350~2400)	2330(745~2965)	2630(745~3215)	3280(300~3560)
Max. power consump	W		2850	2850	3500	3600	4600
Max.current	A		13	13	15	16.5	21
Refrigerating System							
Refrigerant type/Charge/GWP/CO2 equivalent			R32/0.95kg/675/0.642tonnes	R32/0.95kg/675/0.642tonnes	R32/1.35kg/675/0.911tonnes	R32/1.4kg/675/0.944tonnes	R32/2.10kg/675/1.418tonnes
Compressor	Type		Rotary	Rotary	Rotary	Rotary	Rotary
	Model		KSN140D53UFZ3	KSN140D53UFZ3	C-6RZ180H3AAF	C-6RZ210H3CDF	KTF240D43UMT
Indoor air circulation Cooling/heating	m3/h		700/730	1150/1220	1400/1500	1500/1650	1800/1900
Indoor fan type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Indoor fan	Cooling	rpm	830/800/700/600/580	560/500/450/350/320	680/590/500/430/360	700/610/520/450/380	800/720/680/620/520

1. Specifications

speed S/H/ML/Mute	Heating	rpm	930/840/800/730/680	560/500/450/350/320	680/590/500/430/360	700/610/520/450/380	800/720/680/620/520
	Dry	rpm	730/730	350/350	430/430	450/450	620/620
	Sleep	rpm	830/800/700/600/580	560/500/450/350/320	680/590/500/430/360	700/610/520/450/380	800/720/680/620/520
Outdoor fan type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Outdoor air circulation		m3/h	2550	2650	3500	4000	5000
Outdoor fan speed		rpm	730	770	880	950	930
External Static Pressure(Rated)		Pa	0	0	0	0	0
External Static Pressure(Range)		Pa	0	0	0	0	0
Connections			5*1.5mm ²	5*1.5mm ²	5*1.5mm ²	5*1.5mm ²	3*1.5mm ² +3*0.75 mm ²
Connecting Wiring		Core x Size	outdoor: 3*2.5mm ² ; outdoor to indoor: 5*1.5mm ²	outdoor: 3*2.5mm ² ; outdoor to indoor: 5*1.5mm ²	outdoor: 3*2.5mm ² ; outdoor to indoor: 5*1.5mm ²	outdoor: 3*2.5mm ² ; outdoor to indoor: 5*1.5mm ²	outdoor: 3*2.5mm ² ; outdoor to indoor: 3*1.5mm ² +3*0.75 mm ²
Expension device			Capillary +EXV	Capillary +EXV	Capillary +EXV	Capillary +EXV	Capillary +EXV
Connecting Pipe	Gas	Inches	3/8"	3/8"	1/2"	5/8"	5/8"
	Liquid	Inches	1/4"	1/4"	1/4"	3/8"	3/8"
Application area		m ²	20-35	20-35	27~45	35-60	39~71
Max. refrigerant pipe length		m	30	30	30	30	50
Max. difference in level		m	15	15	15	15	25
Operation temperature range		℃	16-31	16-31	16-31	16-31	16-31
Ambient temperature range	Outdoor	℃	Cooling:-15-50/Heating:-15-24	Cooling:-15-50/Heating:-15-24	Cooling:-15-50/Heating:-15-24	Cooling:-15-50/Heating:-15-24	Cooling:-15-50/Heating:-15-24
	Indoor	℃	Cooling:17-32/Heating:0-30	Cooling:17-32/Heating:0-30	Cooling:17-32/Heating:0-30	Cooling:17-32/Heating:0-30	Cooling:17-32/Heating:0-30
Net dimensions (W x H x D)	Indoor	mm	580x580x255	840×840×245	840×840×245	840×840×245	840×840×290
	Outdoor	mm	780×605×307	780×605×307	845×700×342	845×700×342	910×804×378
	Panel	mm	650x650x30	950x950x45	950x950x45	950x950x45	950x950x45
Net weight	Indoor	kg	19	23	24	24	26
	Outdoor	kg	30	30	40	41	55
	Panel	kg	2.5	6	6	6	6
Packing dimensions (W x H x D)	Indoor	mm	725x725x300	935×935×305	935×935×305	935×935×305	935×935×355
	Outdoor	mm	890×385×643	890×385×643	960×747×430	960×747×430	1022x855x480
	Panel	mm	745x745x100	1055x1055x90	1055x1055x90	1055x1055x90	1055x1055x90
w/i pipe	Outdoor	mm	/	/	/	/	/
Gross weight	Indoor	kg	21	27	28	28	31
	Outdoor	kg	32	33	44	45	60
	Panel	kg	4.5	9	9	9	9

1. Specifications

model			TECR148J0T-LWL140	TECR160J0T-LWL160
Indoor unit			TECR148J0T-LWL140	TECR160J0T-LWL160
Outdoor unit			TCHB148J0T-LTL140	TCHB160J7T-LTL160
Type			heating pump	heating pump
Control type			remote controller	remote controller
Declared cooling capacity	btu/h		48000(12000~54000)	55000(14000~59000)
Declared heating capacity	btu/h		55000(14000~59000)	58000(15000~70000)
Declared cooling capacity	W		14070(3520~15830)	16000((4100~17290)
Declared heating capacity	W		16120(4100~17290)	17000(4400~20520)
Pdesignc	W		14000	16000
SEER declared	Btu/W		21	19
Energy Class			A++	A++
Pdesignh Average	W		11200	11900
SCOP Average declared	W/W		4.0	4.0
Energy Class(Average)			A+	A+
Declare capacity(-10℃)	W		9500	10290
Back up heating capacity(-10℃)	W		1700	1610
Annual energy consumption	Cooling	kwh/a	820	960
	Average	kwh/a	3900	4259
Moisture removal	Liters/h		4.8	5.40
Indoor sound power(S/H/M/L/Mute)		dB(A)	63/61/59/57/54	63/61/59/57/54
Indoor sound power(Standard rating conditions)		dB(A)	61	61
Outdoor sound power(Standard rating conditions)		dB(A)	72	73
Indoor sound pressure(S/H/M/L/Mute)		dB(A)	53/51/49/47/44	53/51/49/47/44
Indoor sound pressure(Standard rating conditions)		dB(A)	51	51
Outdoor sound pressure(Standard rating conditions)		dB(A)	62	63
Electrical Data				
Power supply			Indoor: 220-240V~/50-60Hz/1P Outdoor: 380~415V~/50-60Hz/3P	Indoor: 220-240V~/50-60Hz/1P Outdoor: 380~415V~/50-60Hz/3P
Power supply side			Outdoor	Outdoor
Voltage Range		V	Indoor: 176~265 Outdoor: 304~458	Indoor: 220-240V~/50-60Hz/1P Outdoor: 380~415V/50-60Hz/3P
Cooling Operating current	Indoor	A	1.0(0.6~1.4)	1.2 (0.5~1.5)
	Outdoor	A	7.7(1.4~10.6)	9.0 (1.9~10.0)
Heating Operating current	Indoor	A	1.0(0.6~1.4)	1.2 (0.5~1.5)
	Outdoor	A	7.8(1.7~9.8)	8.8 (1.7~10.7)
Cooling Power consumption	Indoor	W	280(45~420)	140 (45~180)
	Outdoor	W	4700(745~5780)	5900 (1020~6440)
Heating Power consumption	Indoor	W	280(45~420)	140 (45~180)
	Outdoor	W	5100(920~5430)	5800 (920~6950)
Max. power consump		W	6200	7000
Max.current		A	12.0	12.0

1. Specifications

Refrigerant type/Charge/GWP/CO2 equivalent			R32/2.10kg/675/1.418tonnes	R32/2.60kg/675/1.418tonnes
Compressor	Type		Rotary	Rotary
	Model		C-7RZ320H3CCF	GTH420SKPC8DQ
Indoor air circulation Cooling/heating		m3/h	1800/2000	2000/2100
Indoor fan type			centrifugal fan	centrifugal fan
Indoor fan speed	Cooling	rpm	880/800/750/680/600	880/800/750/680/600
	Heating	rpm	880/800/750/680/600	880/800/750/680/600
	Dry	rpm	680/680	680/680
	Sleep	rpm	880/800/750/680/600	880/800/750/680/600
Outdoor fan type			Propeller fan	Propeller fan
Outdoor air circulation		m3/h	5600	6400
Outdoor fan speed		rpm	700	740
Connections			3×0.75mm ² 通讯线	3×0.75mm ² 通讯线
Connecting Wiring	Core x Size		Indoor: 3×1.0mm ² Outdoor: 5×2.5mm ²	Indoor: 3×1.0mm ² Outdoor: 5×2.5mm ²
Expansion device			Capillary +EXV	Capillary +EXV
Connecting Pipe	Gas	Inches	5/8"	5/8"
	Liquid	Inches	3/8"	3/8"
Application area		m ²	50~95	55~105
Max. refrigerant pipe length		m	60	60
Max. difference in level		m	30	30
Operation temperature range		℃	16-31	16-31
Ambient temperature range	Outdoor	℃	Cooling:-15-50/Heating:-15-24	Cooling:-15-50/Heating:-15-24
	Indoor	℃	Cooling:17-32/Heating:0-27	Cooling:17-32/Heating:0-27
Net dimensions (W x H x D)	Indoor	mm	840×840×290	840×840×290
	Outdoor	mm	1010×858×436	1010×858×436
	Panel	mm	950x950x45	950x950x45
Net weight	Indoor	kg	28	28
	Outdoor	kg	74	82
	Panel	kg	6	6
Packing dimensions (W x H x D)	Indoor	mm	935×935×355	935×935×355
	Outdoor	mm	1145×970×535	1145×970×535
	Panel	mm	1055x1055x90	1055×1055×90
w/i pipe	Outdoor	mm	/	/
Gross weight	Indoor	kg	33	33
	Outdoor	kg	86	94
	Panel	kg	9	9

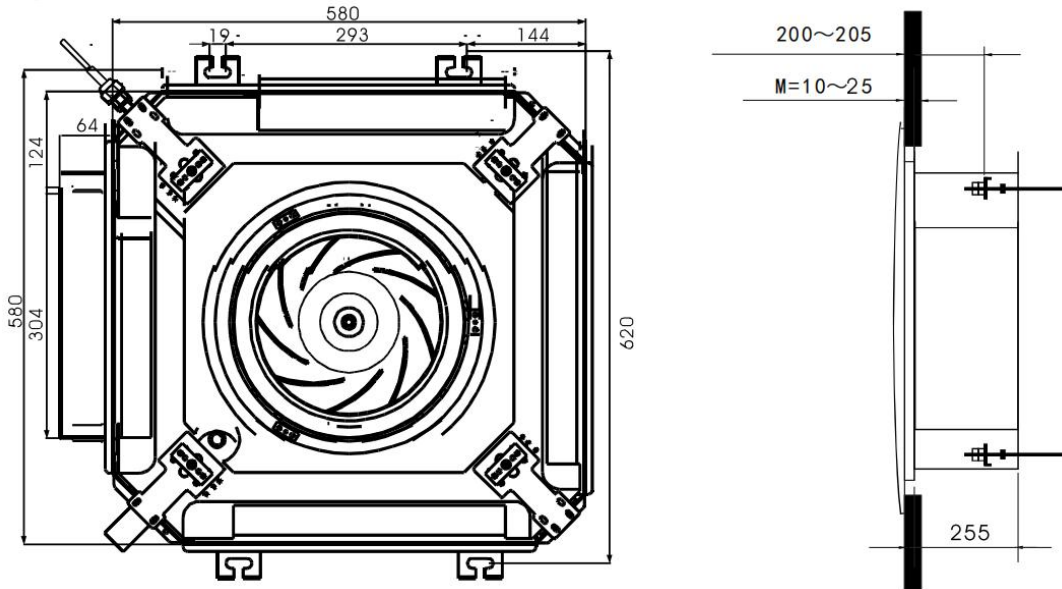
2-DIMENSIONAL DRAWINGS - (MM)

2 Dimensions

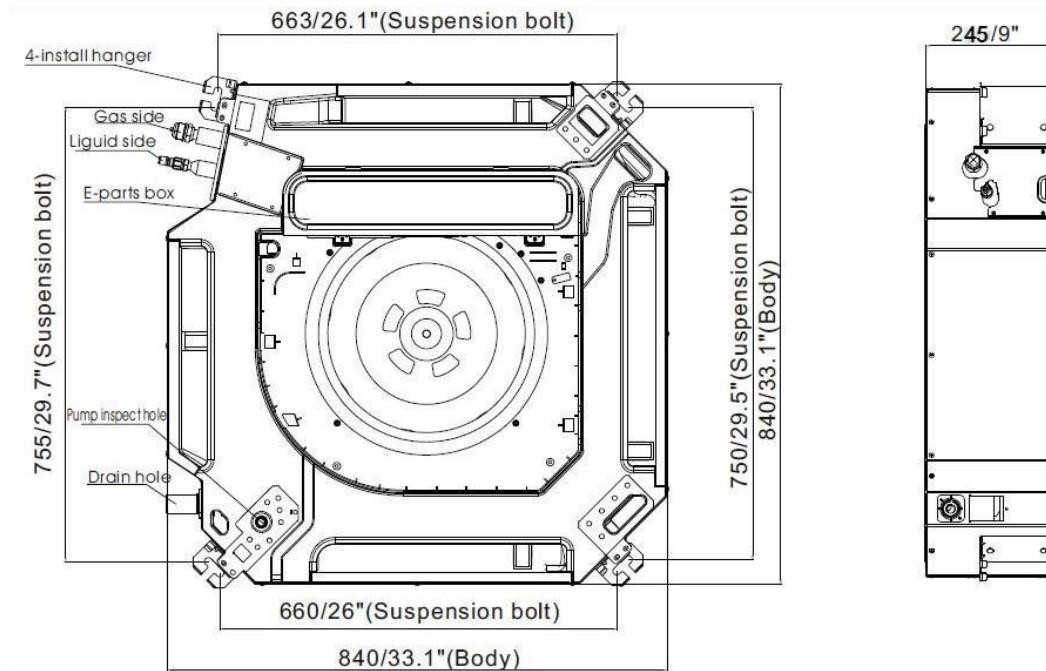
3.4 Product Dimensions

3.4.1 Cassette Type

TECM112J0T-LWL036 (Body dimension: 580X255X580)

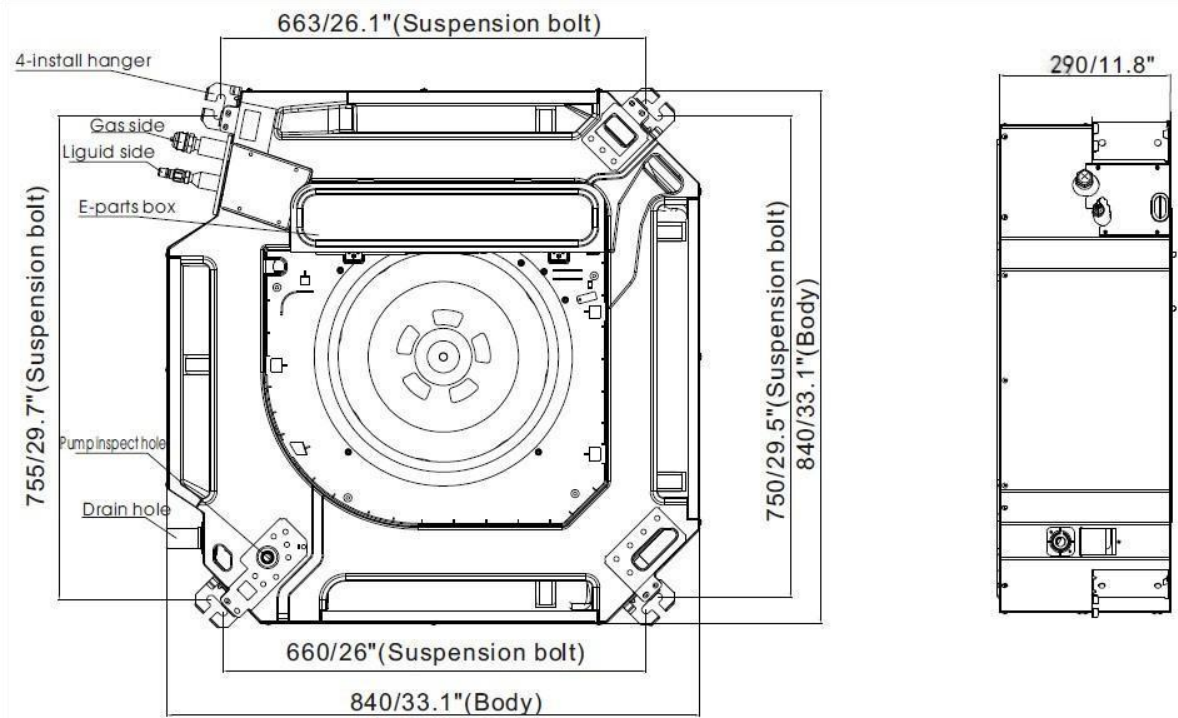


TECR118(124,130)J0T (Body dimension: 840X245X840)

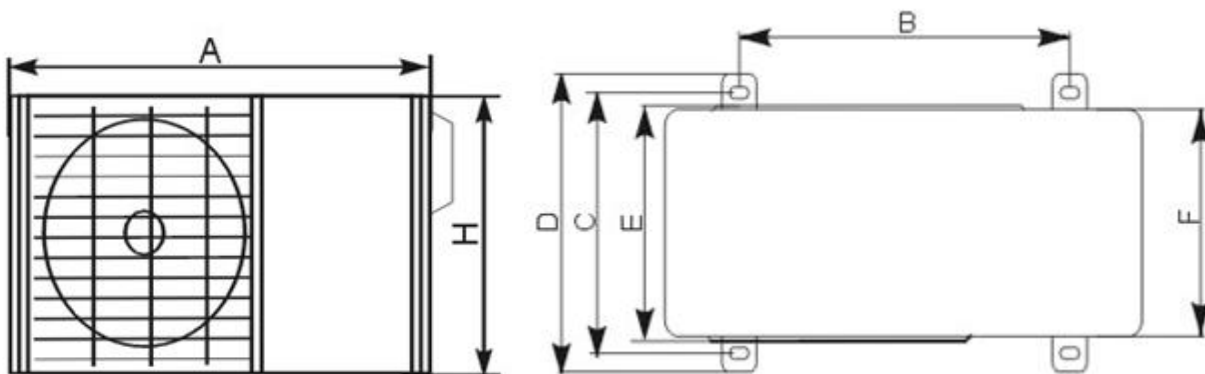


2-DIMENSIONAL DRAWINGS - (MM)

TECR136(148,160)J0T (Body dimension: 840X290X840)



3.4.2 Outdoor Units



MODE	A	B	C	D	E	F	H
TCHB112J0T-LSL036	780	516	314	350	321	307	605
TCHB118(124,130)J0T	845	574	348	375	358	342	700
TCHB136J0T-LWL105	910	607	390	421	387	375	804
TCHB148(160)J0T	1010	660	462	494	440	436	858

Appendix

APPENDIX

Appendix 1 The Comparison Table of Celsius-Fahrenheit Temperature

Fahrenheit display temperature (°F)	Fahrenheit(°F)	Celsius(°C)	Fahrenheit display temperature (°F)	Fahrenheit(°F)	Celsius(°C)	Fahrenheit display temperature (°F)	Fahrenheit(°F)	Celsius(°C)
61	60.8	16	69/70	69.8	21	78/79	78.8	26
62/63	62.6	17	71/72	71.6	22	80/81	80.6	27
64/65	64.4	18	73/74	73.4	23	82/83	82.4	28
66/67	66.2	19	75/76	75.2	24	84/85	84.2	29
68	68	20	77	77	25	86	86	30

Appendix 2 Temperature Sensor Resistance Value Table (°C--K)

°C	K Ohm	°C	K Ohm	°C	K Ohm	°C	K Ohm
-20	115.266	20	12.6431	60	2.35774	100	0.62973
-19	108.146	21	12.0561	61	2.27249	101	0.61148
-18	101.517	22	11.5000	62	2.19073	102	0.59386
-17	96.3423	23	10.9731	63	2.11241	103	0.57683
-16	89.5865	24	10.4736	64	2.03732	104	0.56038
-15	84.2190	25	10.0000	65	1.96532	105	0.54448
-14	79.3110	26	9.55074	66	1.89627	106	0.52912
-13	74.5360	27	9.12445	67	1.83003	107	0.51426
-12	70.1698	28	8.71983	68	1.76647	108	0.49989
-11	66.0898	29	8.33566	69	1.70547	109	0.48600
-10	62.2756	30	7.97078	70	1.64691	110	0.47256
-9	58.7079	31	7.62411	71	1.59068	111	0.45957
-8	56.3694	32	7.29464	72	1.53668	112	0.44699
-7	52.2438	33	6.98142	73	1.48481	113	0.43482
-6	49.3161	34	6.68355	74	1.43498	114	0.42304
-5	46.5725	35	6.40021	75	1.38703	115	0.41164
-4	44.0000	36	6.13059	76	1.34105	116	0.40060
-3	41.5878	37	5.87359	77	1.29078	117	0.38991
-2	39.8239	38	5.62961	78	1.25423	118	0.37956
-1	37.1988	39	5.39689	79	1.21330	119	0.36954
0	35.2024	40	5.17519	80	1.17393	120	0.35982
1	33.3269	41	4.96392	81	1.13604	121	0.35042
2	31.5635	42	4.76253	82	1.09958	122	0.3413