

OMEGA R32 Floor Ceiling IDU

SUBMITTAL DATA

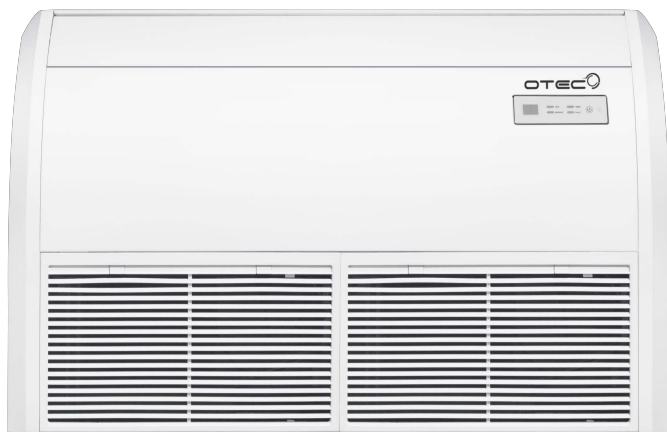
220V/1/50-60Hz 380V/3/50-60Hz

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 Floor Type

model			TEFC112J0T-LWL036	TEFC118J0T-LWL053	TEFC124J0T-LWL070	TEFC130J0T-LWL085
Indoor unit			TEFC112J0T-LWL036	TEFC118J0T-LWL053	TEFC124J0T-LWL070	TEFC130J0T-LWL085
Outdoor unit			TCHB112J0T-LSL036	TCHB118J0T-LSL053	TCHB124J0T-LSL070	TCHB130J0T-LTL085
Type			heating pump	heating pump	heating pump	heating pump
Control type			remote controller	remote controller	remote controller	remote controller
Declared cooling capacity	btu/h		12860(2040~16600)	18000(2115~19050)	24000(7500~25500)	30000 (7600~32000)
Declared heating capacity	btu/h		13640(2380~18450)	19800(2600~20820)	26900(7900~28500)	32000 (9200~33200)
Declared cooling capacity	W		3770(600~4860)	5300(620~5580)	7030(2200~7500)	8800 (2230~9380)
Declared heating capacity	W		4000(700~5400)	5800(760~6100)	7900(2320~8350)	9380 (2700~9730)
Pdesignc	W		3770	5300	7030	8800
SEER declared	W/W		6.1	6.3	6.2	6.2
Energy Class			A++	A++	A++	A++
Pdesignh Average	W		4000	4300	5500	7400
SCOP Average declared	W/W		4.00	4.00	4.0	4.0
Energy Class(Average)			A+	A+	A+	A+
Declare capacity(-10℃)	W		3650	3650	5400	6450
Back up heating capacity(-10℃)	W		350	650	100	950
Annual energy consumption	Cooling	kwh/a	284	294	402	510
	Average	kwh/a	1475	1505	1925	2510
Moisture removal	Liters/h		1.5	1.5	2.00	2.60
Indoor sound power(S/H/M/L/Mute)	dB(A)		59/54/52/49/45	59/54/52/49/45	64/61/57/53/50	63/61/58/55/50
Indoor sound power(Standard rating conditions)	dB(A)		54	54	61	61
Outdoor sound power(Standard rating conditions)	dB(A)		62	62	64	66
Indoor sound pressure(S/H/M/L/Mute)	dB(A)		49/44/42/39/35	49/44/42/39/35	54/51/47/43/40	53/51/48/45/40
Indoor sound pressure(Standard rating conditions)	dB(A)		44	44	51	51
Outdoor sound pressure(Standard rating conditions)	dB(A)		52	52	54	56
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
Power supply side			Outdoor	Outdoor	Outdoor	Outdoor
Voltage Range		V	176~265	176~265	176~265	176~265
Cooling Operating current	Indoor	A	0.6(0.2~1.0)	0.6(0.2~1.0)	0.85(0.2~1.0)	0.95(0.2-1.1)
	Outdoor	A	7.0(1.8~12.0)	7.0(1.8~12.0)	10.5(3.8~14)	12(3.8~15.4)
Heating Operating current	Indoor	A	0.6(0.2~1.0)	0.6(0.2~1.0)	0.85(0.2~1.0)	0.95(0.2-1.1)
	Outdoor	A	8.0(1.6~11)	8.0(1.6~11)	11(4.0~13)	12.5(4.0~14.4)
Cooling Power consumption	Indoor	W	70(20~110)	70(20~110)	100(20~135)	120(20-155)
	Outdoor	W	1100(395~2450)	1580(395~2740)	2400(710~3165)	2700(710~3445)
Heating Power consumption	Indoor	W	70(20~110)	70(20~110)	100(20~135)	120(20-155)
	Outdoor	W	1200(350~2150)	1780(350~2400)	2550(745~2965)	2850(745~3245)
Max. powercon sump		W	2850	2850	3300	3600
Max.current		A	13	13	15	16.5

1. Specifications

Refrigerating System						
Indoor fan motor	Indoor fan type		centrifugal fan	centrifugal fan	centrifugal fan	centrifugal fan
	Indoor air circulation Cooling/heating	m3/h	880/950	980/1050	1200/1350	1550/1700
	Speed S/H/M/L/Mute	rpm	1050/880/820/750/650	1050/880/820/750/650	1300/1150/1000/900/800	1300/1170/1050/950/800
Outdoor fan motor	Outdoor fan type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Outdoor air circulation	m3/h	2650	2650	3500	4000
	Speed	rpm	770	770	880	950
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/675/0.945tonnes
Compressor	Type		Rotary	Rotary	Rotary	Rotary
	MFG		GMCC	GMCC	SANYO	SANYO
Connections						
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*2.5mm ²
Expension device			Capillary +EXV	Capillary +EXV	Capillary +EXV	Capillary +EXV
Connecting Pipe	Gas	Inches	3/8"	3/8"	1/2"	5/8"
	Liquid	Inches	1/4"	1/4"	1/4"	3/8"
Others						
Application area		m ²	20-35	20-35	27~45	35-60
Max. refrigerant pipe length		m	30	30	30	30
Max. difference in level		m	15	15	15	15
Operation temperature range		°C	16-31	16-31	16-31	16-31
Ambient temperature range	Outdoor	°C	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24
	Indoor	°C	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	1055x675x235	1055x675x235	1055x675x235	1275x675x235
	Outdoor	mm	780x605x307	780x605x307	845x700x342	845x700x342
Net weight	Indoor	kg	24	24	26	30
	Outdoor	kg	30	30	40	41
Packing dimensions (W x H x D)	Indoor	mm	1130x748x305	1130x748x305	1130x748x305	1350x748x305
	Outdoor	mm	890x385x648	890x648x385	960x430x755	960x430x755
Gross weight	Indoor	kg	29	29	31	35
	Outdoor	kg	33	33	44	45

1. Specifications

3.1 Specifications Sheet

3.1.2 Floor Type

model			TEFC136J0T-LWL105	TEFC148J0T-LWL140	TEFC160J0T-LWL160
Indoor unit			TEFC136J0T-LWL105	TEFC148J0T-LWL140	TEFC160J0T-LWL160
Outdoor unit			TCHB136J0T-LTL105	TCHB148J0T-LTL140	TCHB160J7T-LTL160
Type			heating pump	heating pump	heating pump
Control type			remote controller	remote controller	remote controller
Declared cooling capacity		btu/h	36000(10500~42000)	48000(12000~52000)	55000(14000~57000)
Declared heating capacity		btu/h	40000(11200~46000)	55000(14000~58000)	62000(15000~67000)
Declared cooling capacity		W	10550(3080~12300)	14070(3520~15240)	16000(4100~16710)
Declared heating capacity		W	11720(3280~13500)	16120(4100~17000)	18170(4400~19640)
Pdesignc		W	10550	14000	16000
SEER declared		W/W	6.1	6.1	6.1
Energy Class			A++	A++	A++
Pdesignh Average		W	8500	11800	11900
SCOP Average declared		W/W	4.0	4.0	4.0
Energy Class(Average)			A+	A+	A+
Declare capacity(-10℃)		W	7200	9900	10840
Back up heating capacity(-10℃)		W	1300	1900	1060
Annual energy consumption	Cooling	kwh/a	605	820	931
	Average	kwh/a	3045	4450	4129
Moisture removal		Liters/h	3.60	4.80	5.40
Indoor sound power(S/H/M/L/Mute)		dB(A)	65/61/59/55/52	63/62/59/56/55	64/61/59/56/54
Indoor sound power(Standard rating conditions)		dB(A)	61	62	61
Outdoor sound power(Standard rating conditions)		dB(A)	67	70	68
Indoor sound pressure(S/H/M/L/Mute)		dB(A)	55/51/49/45/42	53/52/49/46/45	54/51/49/46/44
Indoor sound pressure(Standard rating conditions)		dB(A)	51	52	51
Outdoor sound pressure(Standard rating conditions)		dB(A)	57	60	58
Electrical Data					
Power supply			Indoor: 220-240V~/50-60Hz/1P Outdoor: 220-240V~/50-60Hz/1P	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	Outdoor
Voltage Range		V	176~265	Indoor: 176~265 Outdoor: 304~458	Indoor: 176~265 Outdoor: 304~458
Cooling Operating current	Indoor	A	0.8(0.3~0.9)	1.0 (0.6~1.4)	1.5 (0.6~1.8)
	Outdoor	A	15.0(0.9~20.1)	6.3(1.7~9.8)	9.2(1.9~11.0)
Heating Operating current	Indoor	A	0.8(0.3~0.9)	1.0 (0.6~1.4)	1.5 (0.6~1.8)
	Outdoor	A	15.3(1.3~16.1)	7.9(1.5~10.6)	9.1(1.7~11.0)
Cooling Power consumption	Indoor	W	170(60~190)	200(80~230)	210(80~240)
	Outdoor	W	3280(200~4410)	4690(920~6060)	6000(1020~6440)
Heating Power consumption	Indoor	W	170(60~190)	200(80~230)	210(80~240)
	Outdoor	W	3330(290~3510)	5190(800~6770)	5960(920~6950)
Max. powercon sump		W	4600	7000	7000
Max.current		A	21	12.0	12.0
Refrigerating System					

1. Specifications

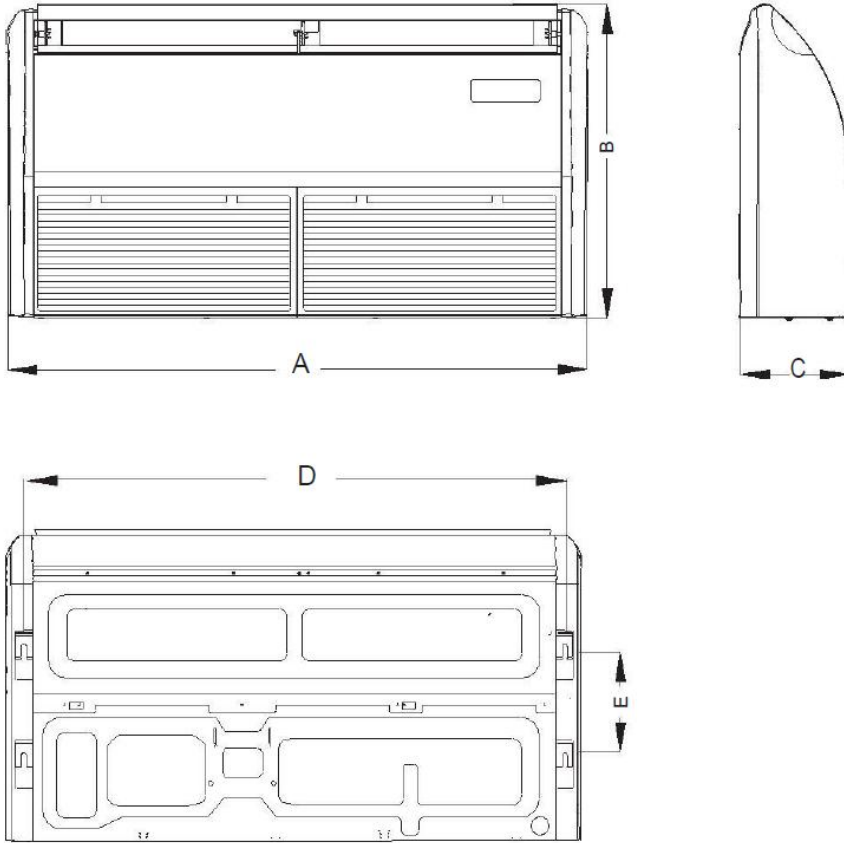
Indoor fan motor	Indoor fan type		centrifugal fan	centrifugal fan	centrifugal fan
	Indoor air circulation Cooling/heating	m3/h	1950/2000	2300/2300	2100/2300
	Speed S/H/M/L/Mute	rpm	1400/1200/1080/980/850	1280/1200/1100/1000/950	1320/1250/1150/1050/950
Outdoor fan motor	Outdoor fan type		Propeller fan	Propeller fan	Propeller fan
	Outdoor air circulation	m3/h	5000	5600	6000
	Speed	rpm	930	700	720
Refrigerating System					
Refrigerant type/Charge/GWP/CO2 equivalent			R32/2.10kg/675/1.418tonnes	R32/1.90kg/675/1.283tonnes	R32/2.60kg/675/1.755tonnes
Compressor	Type		Rotary	Rotary	Rotary
	MFG		GMCC	SANYO	HIGHLY
Connections					
Connecting Wiring	Core x Size		outdoor: 3*2.5mm ² ; outdoor to indoor: 3*1.5mm ² +3*0.75	Outdoor: 5*2.5mm ² outdoor to indoor: 3*1.0mm ² +3*0.75	Outdoor: 5*2.5mm ² outdoor to indoor: 3*1.0mm ² +3*0.75
Expansion device			Capillary +EXV	EXV	EXV
Connecting Pipe	Gas	Inches	5/8"	5/8"	5/8"
	Liquid	Inches	3/8"	3/8"	3/8"
Others					
Application area		m ²	39~71	50~95	55~105
Max. refrigerant pipe length		m	50	60	60
Max. difference in level		m	25	30	30
Operation temperature range		°C	16-31	16-31	16-31
Ambient temperature range	Outdoor	°C	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24
	Indoor	°C	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	1275x675x235	1635x675x235	1635x675x235
	Outdoor	mm	910x804x378	1010x858x436	1010x858x436
Net weight	Indoor	kg	30	38	38
	Outdoor	kg	55	77	83
Packing dimensions (W x H x D)	Indoor	mm	1350x748x305	1710x748x305	1710x748x305
	Outdoor	mm	1022x860x480	1135x970x530	1135x970x530
Gross weight	Indoor	kg	35	43	43
	Outdoor	kg	60	89	95

2-DIMENSIONAL DRAWINGS - (MM)

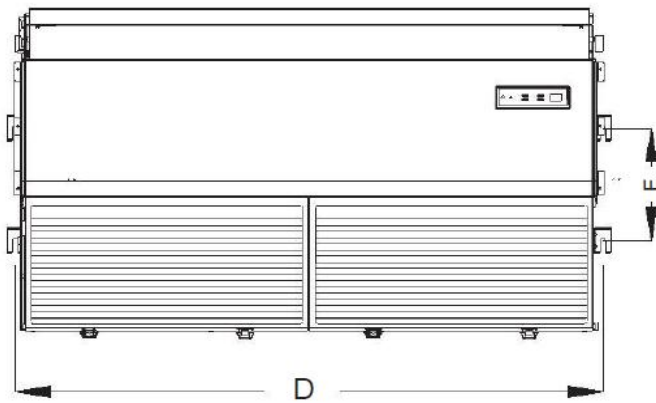
2 Dimensions

3.4 Product Dimensions

3.4.1 Ceiling & Floor Type

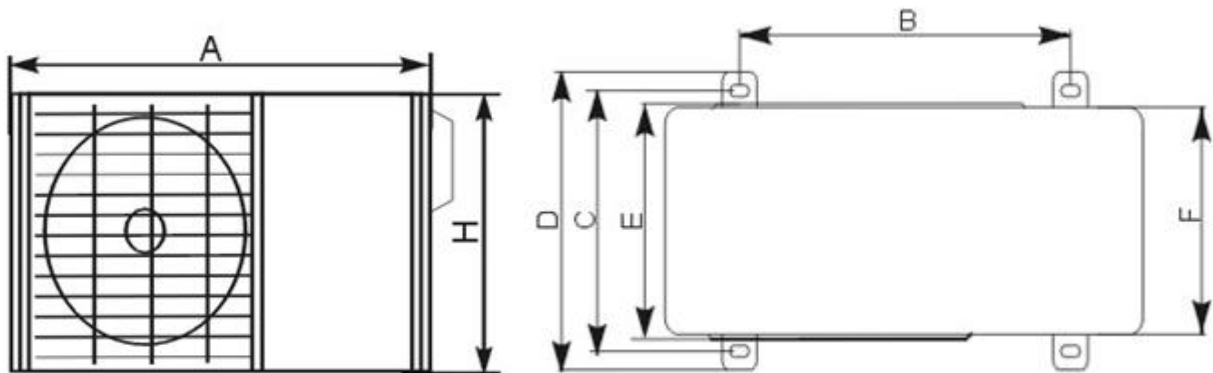


2-DIMENSIONAL DRAWINGS - (MM)



Capacity \ Dimension	A	B	C	D	E
TEFC112(118)J0T	1055	675	235	980	240
TEFC124J0T-LWL070	1055	675	235	980	240
TEFC130(136)J0T	1275	675	235	1200	240
TEFC148(160)J0T	1635	675	235	1560	240

3.4.2 Outdoor Units



MODE	A	B	C	D	E	F	H
TEFC112(118)J0T	780	516	314	350	321	307	605
TEFC124(130)J0T	845	574	348	375	358	342	700
TEFC136J0T-LWL105	910	607	390	421	387	375	804
TEFC148(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