

# OMEGA R32 Ducted IDU

## SUBMITTAL DATA

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

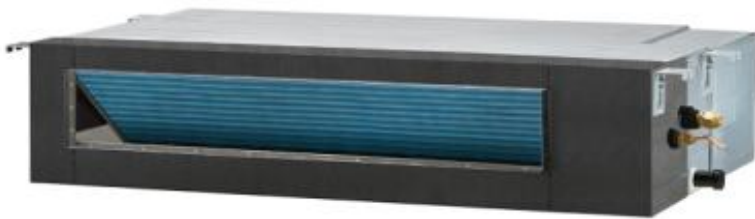
Job: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Schedule No.: \_\_\_\_\_  
 System Designation: \_\_\_\_\_

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

## 3.1.1 Duct Type

model			TELP112J0T-LCL036	TELP118J0T-LCL053	TELP124J0T-LCL070	TEMP130J0T-LCL085
Indoor unit			TELP112J0T-LCL036	TELP118J0T-LCL053	TELP124J0T-LCL070	TEMP130J0T-LCL085
Outdoor unit			TCHB112J0T-LSL036	TCHB118J0T-LSL053	TCHB124J0T-LSL070	TCHB130J0T-LTL085
Type			heating pump	heating pump	heating pump	heating pump
Control type			wire controller	wire controller	wire controller	wire 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	4800	6450
Back up heating capacity(-10℃)	W		350	650	700	950
Annual energy consumption	Cooling	kwh/a	284	294	402	530
	Average	kwh/a	1475	1505	1925	2540
Moisture removal	Liters /h		1.5	1.5	2.00	2.60
Indoor sound power(S/H/M/L/Mute)	dB(A)		53/51/49/47/45	53/51/49/47/45	58/55/53/48/46	57/55/54/50/48
Indoor sound power(Standard rating conditions)	dB(A)		51	51	55	55
Outdoor sound power(Standard rating conditions)	dB(A)		62	62	64	66
Indoor sound pressure(S/H/M/L/Mute)	dB(A)		43/41/39/37/35	43/41/39/37/35	48/45/43/38/36	47/45/44/40/38
Indoor sound pressure(Standard rating conditions)	dB(A)		41	41	45	45
Outdoor sound pressure(Standard rating conditions)	dB(A)		52	52	54	56
Electrical Data						
Power supply			Indoor: 220-240V~/50Hz/1P Outdoor: 220-240V~/50Hz/1P	Indoor: 220-240V~/50Hz/1P Outdoor: 220-240V~/50Hz/1P	Indoor: 220-240V~/50Hz/1P Outdoor: 220-240V~/50Hz/1P	Indoor: 220-240V~/50Hz/1P Outdoor: 220-240V~/50Hz/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)	1.3(0.2~1.4)	1.4(0.2~1.6)
	Outdoor	A	7.6(1.8~12.0)	7.6(1.8~12.0)	9.2(3.8~13.6)	10.7(3.8~14.9)
Heating Operating current	Indoor	A	0.6(0.2~1.0)	0.6(0.2~1.0)	1.3(0.2~1.4)	1.4(0.2~1.6)
	Outdoor	A	8.0(1.6~11)	8.0(1.6~11)	10.2(4.0~12.6)	11.7(4.0~13.9)
Cooling Power consumption	Indoor	W	70(20~110)	70(20~110)	150(20~165)	170(20~185)
	Outdoor	W	1160(395~2450)	1680(395~2740)	2290(710~3135)	2590(710~3415)
Heating Power consumption	Indoor	W	70(20~110)	70(20~110)	150(20~165)	170(20~185)
	Outdoor	W	1230(350~2150)	1820(350~2400)	2420(745~2935)	2720(745~3215)
Max. powercon sump		W	2850	2850	3300	3600

## 1. Specifications

Max.current		A	13	13	15	16.5
Indoor fan motor	Indoor fan type		centrifugal fan	centrifugal fan	centrifugal fan	centrifugal fan
	Indoor air circulation	m3/h	700/800	800/900	1350/1550	1600/1800
	Cooling/heating Speed S/H/M/L/ Mute	rpm	1220/1160/1070/950/850	1220/1160/1070/950/850	1050/900/800/700/660	1050/1000/950/850/770
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
External Static Pressure(Rated )		Pa	25	25	25	37
External Static Pressure(Range )		Pa	0-60	0-60	0-80	0-120
Connections						
Connecting Wiring	Core x Size		outdoor: 3*2.5mm <sup>2</sup> ; outdoor to indoor: 5*1.5mm <sup>2</sup>	outdoor: 3*2.5mm <sup>2</sup> ; outdoor to indoor: 5*1.5mm <sup>2</sup>	outdoor: 3*2.5mm <sup>2</sup> ; outdoor to indoor: 5*1.5mm <sup>2</sup>	outdoor: 3*2.5mm <sup>2</sup> ; outdoor to indoor: 5*2.5mm <sup>2</sup>
Expansion 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 <sup>2</sup>	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	920×210×570	920×570×210	920×570×270	1140×710×270
	Outdoor	mm	780×605×307	780×605×307	845×700×342	845×700×342
Net weight	Indoor	kg	24	24	26	36
	Outdoor	kg	30	30	40	41
Packing dimensions (W x H x D)	Indoor	mm	1120x690x281	1120x690x281	1120x690x341	1341×830×341
	Outdoor	mm	890×385×648	890×648×385	960×430×755	960×430×755
Gross weight	Indoor	kg	28	28	31	41
	Outdoor	kg	33	33	44	45

## 1. Specifications

model			TEMP136J0T-LCL105	TEMP148J0T-LCL140	TEMP160J0T-LCL160
Indoor unit			TEMP136J0T-LCL105	TEMP148J0T-LCL140	TEMP160J0T-LCL160
Outdoor unit			TCHB136J0T-LTL105	TCHB148J0T-LTL140	TCHB160J7T-LTL160
Type			heating pump	heating pump	heating pump
Control type			wire controller	wire controller	wire controller
Declared cooling capacity	btu/h		36000(10500~42000)	48000(12000~53000)	55000(14000~59000)
Declared heating capacity	btu/h		40000(11200~46000)	55000(14000~62000)	62000(15000~70000)
Declared cooling capacity	W		10550(3080~12300)	14070(3520~15530)	16000((4100~17290)
Declared heating capacity	W		11720(3280~13500)	16120(4100~18170)	18170(4400~20520)
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		4.3	4.0	4.0
Energy Class(Average)			A+	A+	A+
Declare capacity(-10℃)	W		7650	8800	10290
Back up heating capacity(-10℃)	W		850	3000	1610
Annual energy consumption	Cooling	kwh/a	605	800	949
	Average	kwh/a	2625	4200	4235
Moisture removal	Liters/h		3.60	4.80	5.40
Indoor sound power(S/H/M/L/Mute)	dB(A)		62/59/57/55/54	63/61/59/57/55	63/62/60/58/56
Indoor sound power(Standard rating conditions)	dB(A)		59	61	62
Outdoor sound power(Standard rating conditions)	dB(A)		67	70	68
Indoor sound pressure(S/H/M/L/Mute)	dB(A)		52/49/47/45/44	53/51/49/47/45	53/52/50/48/46
Indoor sound pressure(Standard rating conditions)	dB(A)		49	51	52
Outdoor sound pressure(Standard rating conditions)	dB(A)		57	60	58
Electrical Data					
Power supply			Indoor: 220-240V~/50Hz/1P Outdoor: 220-240V~/50Hz/1P	Indoor: 220-240V~/50Hz/1P Outdoor: 380~415V~/50Hz/3P	Indoor: 220-240V~/50Hz/1P Outdoor: 380~415V/50Hz/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	1.1(0.4~1.3)	1.2 (0.5~1.6)	1.9(0.6~2.2)
	Outdoor	A	15.1(0.8~19.7)	7.2(1.7~10.4)	9.3(2.0~11.0)
Heating Operating current	Indoor	A	1.1(0.4~1.3)	1.2(0.5~1.6)	1.9(0.6~2.2)
	Outdoor	A	15.1(1.2~16.1)	7.3(1.5~10.4)	9.1(1.7~11.0)
Cooling Power consumption	Indoor	W	250(80~280)	340(70~450)	400(60~590)
	Outdoor	W	3300(170~4320)	4760(890~6060)	6060(1090~6510)
Heating Power consumption	Indoor	W	250(80~280)	340(70~450)	400(60~590)
	Outdoor	W	3300(270~3520)	4760(810~6550)	6250(880~6950)
Max. powercon sump		W	4600	7000	7000
Max.current		A	21	12.0	12.0
Indoor fan motor	Indoor fan type		centrifugal fan	centrifugal fan	centrifugal fan
	Indoor air circulation Cooling/heating	m3/h	1900/2000	2300/2300	2300/2500

## 1. Specifications

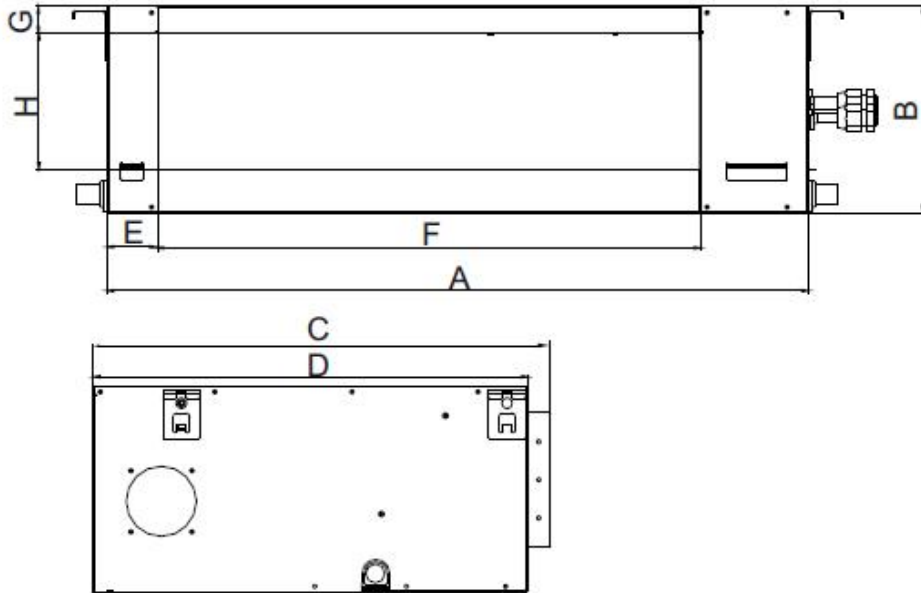
	Speed S/H/M/L/M ute	rpm	1200/1050/1000/950/850	1300/1200/1100/1050/1000	1350/1270/1190/1110/1030
Outdoor fan motor	Outdoor fan type		Propeller fan	Propeller fan	Propeller fan
	Outdoor air circulation	m3/h	5000	5600	6000
	Speed	rpm	930	700	720
Refrigerating System					
Refrigerant type/Charge/GWP/CO2 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
External Static Pressure(Rated )		Pa	37	50	50
External Static Pressure(Range )		Pa	0-120	0-120	0-120
Connections					
Connecting Wiring	Core x Size		outdoor: 3*2.5mm <sup>2</sup> ; outdoor to indoor: 3*1.5mm <sup>2</sup> +3*0.75	Outdoor: 5*2.5mm <sup>2</sup> outdoor to indoor: 3*1.0mm <sup>2</sup> +3*0.75	Outdoor: 5*2.5mm <sup>2</sup> outdoor to indoor: 3*1.0mm <sup>2</sup> +3*0.75
Expension 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 <sup>2</sup>	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		℃	16-31	16-31	16-31
Ambient temperature range	Outdoor	℃	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24	Cooling:-15-58/Heating:-25-24
	Indoor	℃	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	1140×710×270	1400×720×250	1400×720×250
	Outdoor	mm	910×804×378	1010×858×436	1010×858×436
Net weight	Indoor	kg	36	38	38
	Outdoor	kg	55	77	83
Packing dimensions (W x H x D)	Indoor	mm	1341×830×341	1632×827×298	1632×827×298
	Outdoor	mm	1022×860×480	1135×970×530	1135×970×530
Gross weight	Indoor	kg	41	43	43
	Outdoor	kg	60	89	95

2-DIMENSIONAL DRAWINGS - (MM)

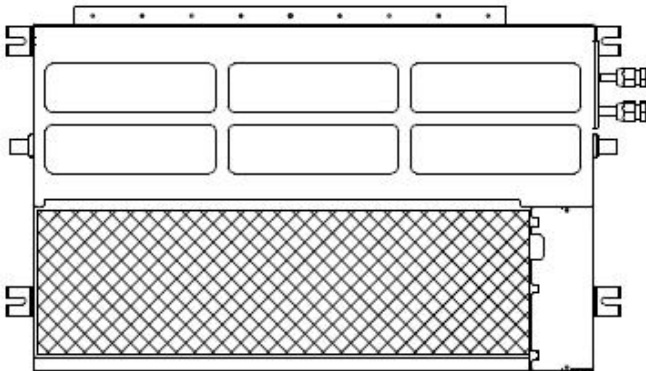
2 Dimensions

3.6.1 Duct Type

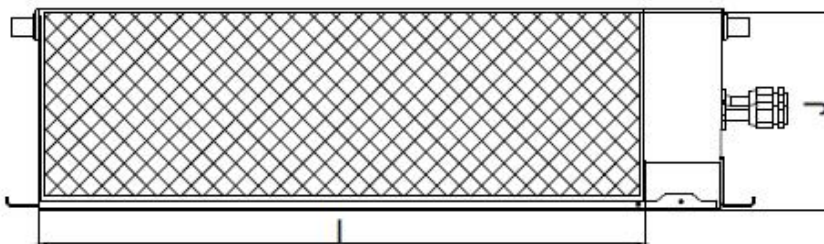
The positioning of ceiling hole, indoor unit and hanging screw bolts.



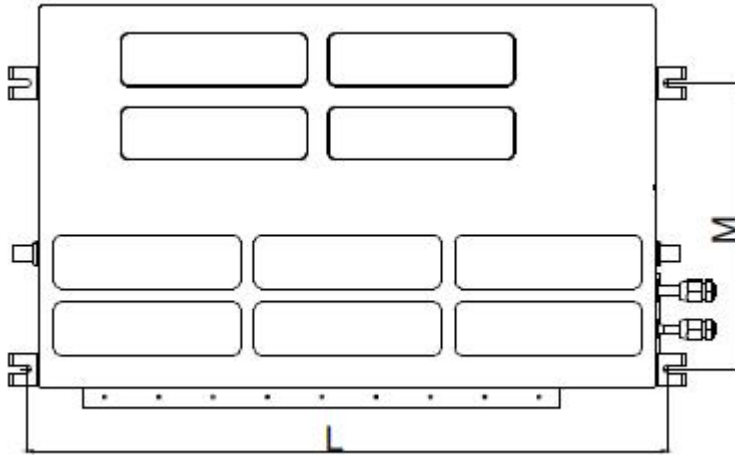
Position size of descensional ventilation opening



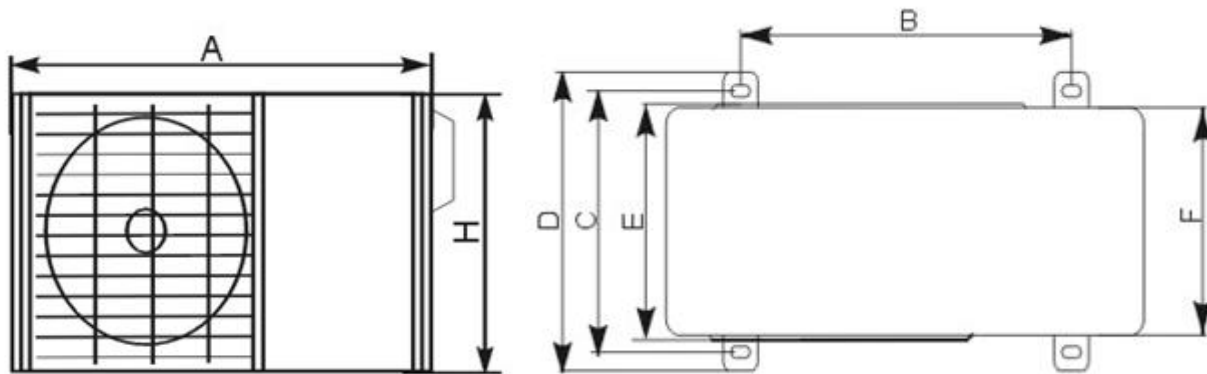
Air inlet size



Size of mounted hook

**2-DIMENSIONAL DRAWINGS - (MM)**


Dimension Capacity	Outline dimension				Air outlet opening size				Air inlet opening size			Size of mounted lug	
	A	B	C	D	E	F	G	H	I	J	K	L	M
TELP112(118)J0T	920	2100	635	570	65	713	35	119	815	197	36	958	427
TELP124J0T-LCL070	920	2700	635	570	65	713	35	179	815	260	36	958	427
TEMP130(136)J0T	1140	270	775	710	65	933	37	175	1034	260	36	1178	541
TEMP148(160)J0T	1400	250	720	700	150	1350	15	170	1300	220	20	1440	650

**3.6.4 Outdoor Units**


MODE	A	B	C	D	E	F	H
TCHB112(118)J0T	780	516	314	350	321	307	605
TCHB124(130)J0T	845	574	348	375	358	342	700
TCHB136J0T-LTL105	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