







# TOSOT

Submittal Data: <b>TW24HQ3D6D</b>		24,000 BTU/H Wall Mounted Heat- Pump System																																						
Job Name		Location	Date																																					
Purchaser		Engineer																																						
Submitted To		For <input type="checkbox"/> Reference <input type="checkbox"/> Approval <input type="checkbox"/> Construction																																						
Unit Designation		Schedule No.																																						
<b>GENERAL FEATURES</b> <ul style="list-style-type: none"> <li>- Variable Speed (Inverter) Two-Stage Compressor</li> <li>- Low Ambient Heating (down to -22° F)</li> <li>- Wi Fi Controls</li> <li>- 7 Indoor Fan Speeds</li> <li>- 4 Way Airflow Operation</li> <li>- Wireless Remote with LCD Display</li> <li>- Copper Tube/Aluminum Fins w/ Acrylic Resin Anti-Corrosion Coating on both ID and OD units</li> <li>- I-FEEL Function</li> <li>- 5 year Limited Parts Warranty, <b>7year limited compressor warranty</b></li> </ul> 																																								
<b>System Ratings</b>		<b>Indoor Unit Data</b>																																						
<b>Cooling</b> <table border="0"> <tr> <td>Rated Capacity</td> <td>22,000 BTU/H</td> </tr> <tr> <td>Capacity Range</td> <td>6,800 -30,700 BTU/H</td> </tr> <tr> <td>Power Input (Max)</td> <td>3,700 W</td> </tr> <tr> <td>SEER</td> <td>21.5</td> </tr> <tr> <td>EER</td> <td>13.0</td> </tr> </table>		Rated Capacity	22,000 BTU/H	Capacity Range	6,800 -30,700 BTU/H	Power Input (Max)	3,700 W	SEER	21.5	EER	13.0	<table border="0"> <tr> <td><b>Fan Motor</b></td> <td>Type</td> <td>Cross-flow</td> </tr> <tr> <td></td> <td>Output Power</td> <td>70 W</td> </tr> <tr> <td></td> <td>FLA</td> <td>0.38 A</td> </tr> <tr> <td><b>Airflow</b></td> <td>(Low/High)</td> <td>383/765 CFM</td> </tr> <tr> <td><b>Air Throw</b></td> <td>(Max)</td> <td>29.5 ft</td> </tr> <tr> <td><b>Sound Level</b></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Cooling (Low/High)</td> <td>34/59 dB(A)</td> </tr> <tr> <td></td> <td>Heating (Low/High)</td> <td>34/59 dB(A)</td> </tr> <tr> <td><b>Dehumidification</b></td> <td></td> <td>4.23 pt/hr</td> </tr> </table>		<b>Fan Motor</b>	Type	Cross-flow		Output Power	70 W		FLA	0.38 A	<b>Airflow</b>	(Low/High)	383/765 CFM	<b>Air Throw</b>	(Max)	29.5 ft	<b>Sound Level</b>				Cooling (Low/High)	34/59 dB(A)		Heating (Low/High)	34/59 dB(A)	<b>Dehumidification</b>		4.23 pt/hr
Rated Capacity	22,000 BTU/H																																							
Capacity Range	6,800 -30,700 BTU/H																																							
Power Input (Max)	3,700 W																																							
SEER	21.5																																							
EER	13.0																																							
<b>Fan Motor</b>	Type	Cross-flow																																						
	Output Power	70 W																																						
	FLA	0.38 A																																						
<b>Airflow</b>	(Low/High)	383/765 CFM																																						
<b>Air Throw</b>	(Max)	29.5 ft																																						
<b>Sound Level</b>																																								
	Cooling (Low/High)	34/59 dB(A)																																						
	Heating (Low/High)	34/59 dB(A)																																						
<b>Dehumidification</b>		4.23 pt/hr																																						
<b>Heating at 47° F</b> <table border="0"> <tr> <td>Rated Capacity</td> <td>24,000 BTU/H</td> </tr> <tr> <td>Capacity Range</td> <td>6,800 -32,000 BTU/H</td> </tr> <tr> <td>Power Input (Max)</td> <td>3,700 W</td> </tr> <tr> <td>HSPF</td> <td>12.0</td> </tr> <tr> <td>COP</td> <td>3.5</td> </tr> </table>		Rated Capacity	24,000 BTU/H	Capacity Range	6,800 -32,000 BTU/H	Power Input (Max)	3,700 W	HSPF	12.0	COP	3.5	<b>Outdoor Unit Data</b> <table border="0"> <tr> <td><b>Compressor</b></td> <td>Type</td> <td>DC Inverter Driven 2-Stage Rotary</td> </tr> <tr> <td></td> <td>RLA</td> <td>16 A</td> </tr> <tr> <td><b>Fan Motor</b></td> <td>Output Power</td> <td>90 W</td> </tr> <tr> <td></td> <td>RLA</td> <td>0.65 A</td> </tr> <tr> <td><b>Sound Level</b></td> <td></td> <td>59 dB(A)</td> </tr> </table>		<b>Compressor</b>	Type	DC Inverter Driven 2-Stage Rotary		RLA	16 A	<b>Fan Motor</b>	Output Power	90 W		RLA	0.65 A	<b>Sound Level</b>		59 dB(A)												
Rated Capacity	24,000 BTU/H																																							
Capacity Range	6,800 -32,000 BTU/H																																							
Power Input (Max)	3,700 W																																							
HSPF	12.0																																							
COP	3.5																																							
<b>Compressor</b>	Type	DC Inverter Driven 2-Stage Rotary																																						
	RLA	16 A																																						
<b>Fan Motor</b>	Output Power	90 W																																						
	RLA	0.65 A																																						
<b>Sound Level</b>		59 dB(A)																																						
<b>Heating at 17° F</b> <table border="0"> <tr> <td>Rated Capacity</td> <td>15,500 BTU/H</td> </tr> </table>		Rated Capacity	15,500 BTU/H	<b>Refrigerant Piping Data</b> <table border="0"> <tr> <td>Gas Pipe Size (OD)</td> <td>5/8-in</td> </tr> <tr> <td>Liquid Pipe Size (OD)</td> <td>1/4-in</td> </tr> <tr> <td>Connection Method</td> <td>Flared</td> </tr> <tr> <td>Factory Charge</td> <td>R410A/81.1 oz</td> </tr> <tr> <td>Additional Charge</td> <td>0.50 oz/ft</td> </tr> <tr> <td>Pre-Charge Length</td> <td>25-ft</td> </tr> <tr> <td>MAX Refrigerant Pipe Length</td> <td>164-ft</td> </tr> <tr> <td>MIN Refrigerant Pipe Length</td> <td>10-ft</td> </tr> <tr> <td>MAX Refrigerant Pipe Elevation</td> <td>98.4-ft</td> </tr> </table>		Gas Pipe Size (OD)	5/8-in	Liquid Pipe Size (OD)	1/4-in	Connection Method	Flared	Factory Charge	R410A/81.1 oz	Additional Charge	0.50 oz/ft	Pre-Charge Length	25-ft	MAX Refrigerant Pipe Length	164-ft	MIN Refrigerant Pipe Length	10-ft	MAX Refrigerant Pipe Elevation	98.4-ft																	
Rated Capacity	15,500 BTU/H																																							
Gas Pipe Size (OD)	5/8-in																																							
Liquid Pipe Size (OD)	1/4-in																																							
Connection Method	Flared																																							
Factory Charge	R410A/81.1 oz																																							
Additional Charge	0.50 oz/ft																																							
Pre-Charge Length	25-ft																																							
MAX Refrigerant Pipe Length	164-ft																																							
MIN Refrigerant Pipe Length	10-ft																																							
MAX Refrigerant Pipe Elevation	98.4-ft																																							
<b>Operating Range</b> <table border="0"> <tr> <td rowspan="2">Cooling</td> <td>(Max)</td> <td>129°F (54°C)</td> </tr> <tr> <td>(Min)</td> <td>0°F (-18°C)</td> </tr> <tr> <td rowspan="2">Heating</td> <td>(Max)</td> <td>75°F (24°C)</td> </tr> <tr> <td>(Min)</td> <td>-22°F (-30°C)</td> </tr> </table>		Cooling	(Max)	129°F (54°C)	(Min)	0°F (-18°C)	Heating	(Max)	75°F (24°C)	(Min)	-22°F (-30°C)																													
Cooling	(Max)		129°F (54°C)																																					
	(Min)	0°F (-18°C)																																						
Heating	(Max)	75°F (24°C)																																						
	(Min)	-22°F (-30°C)																																						
<b>Power Supply</b> <table border="0"> <tr> <td>Normal Operational Voltage</td> <td>208/230 V, 1 Phase, 60 Hz</td> </tr> <tr> <td>Voltage Range</td> <td>187 - 253 V</td> </tr> <tr> <td>Main Power Wire Size</td> <td>8-2 AWG</td> </tr> <tr> <td>Interconnecting Cable Wire Size</td> <td>14-4 AWG</td> </tr> <tr> <td>MCA</td> <td>22 A</td> </tr> <tr> <td>MOCP/Breaker Size</td> <td>35 A</td> </tr> </table>		Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz	Voltage Range	187 - 253 V	Main Power Wire Size	8-2 AWG	Interconnecting Cable Wire Size	14-4 AWG	MCA	22 A	MOCP/Breaker Size	35 A																											
Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz																																							
Voltage Range	187 - 253 V																																							
Main Power Wire Size	8-2 AWG																																							
Interconnecting Cable Wire Size	14-4 AWG																																							
MCA	22 A																																							
MOCP/Breaker Size	35 A																																							
																																								
																																								
																																								

<b>SYSTEM FEATURES</b>	
Inverter Type	G10
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	High Eff. Two Stage Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	YES
Compressor With Electric Heater	YES
Indoor & Outdoor Fin Coating	Acrylic Resin/Anti-Corrosion
Intelligent Defrosting	YES
Intelligent Preheating	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Wired Controller Interface	NO
Wi-Fi Interface Capable	YES
Indoor Fan Type	Crossflow
Multi Fan Speeds	7 Speeds
Indoor Unit Display	YES
Advance Filter	Optional (see Filter Kits)
Auxiliary Electrical Heater	NO
Ventilation (Outdoor Air)	NO

<b>REMOTE CONTROLLER FUNCTIONS</b>	
Auto Mode	YES
Auto Fan	YES
Auto Swing (Horizontal Auto Swing)	YES
Auto Swing (Vertical Auto Swing)	YES
Clock on Remote Controller	YES
Dry Mode	YES
Dry Anti-Mildew (X-Fan) Mode	YES
Energy Saving Mode	NO
Dirty Filter Alert	NO
I Feel Function	YES
Lock on Remote Controller	YES
Quiet Mode	YES
Room Temperature Display	NO
Sleep Mode	YES
4 Sleep Modes Options	YES
Timer Mode	YES
Turbo Mode	YES
Display On/Off Control	YES
Freeze Guard Mode	NO
Display On/Off Control	YES

**COOLING PERFORMANCE (BtuH)\***

Outdoor Ambient Temperature (DB) °F	Indoor Entering Air Temperatures					
	68F DB		73°F DB		80°F DB	
	57F WB		61°FWB		67°FWB	
	TC	SHC	TC	SHC	TC	SHC
0°F	13521	10599	14165	11104	15894	12459
5°F	14036	11008	14828	11625	16735	13125
14°F	14395	11291	15202	11922	17373	13623
23°F	15378	12063	16449	12902	18847	14782
32°F	18649	14626	19947	15643	21846	17129
41°F	21120	16565	22440	17597	23980	18808
50°F	20871	16371	22198	17411	23760	18637
59°F	20357	15963	21677	17003	23540	18466
68°F	19844	15562	21164	16602	23100	18117
77°F	19338	15168	20651	16193	22660	17775
86°F	18692	14661	19998	15682	21896	17176
95°F	18781	14730	20093	15755	22000	17255
104°F	17769	13936	19035	14930	21054	16515
113°F	16450	12902	17652	13846	19724	15473
122°F	14879	11668	16001	12544	17925	14055
129°F	13775	10803	14693	11522	16530	12967

**HEATING PERFORMANCE (BtuH)\***

Outdoor Ambient Temperature (DB)	Indoor Entering Air Temperatures					
	68°F DB		73°F DB		80°F DB	
	57°FWB		61°FWB		67°FWB	
	TC	SHC	TC	SHC	TC	SHC
-22°F	14194		13955		13699	
-13°F	18752		18437		18098	
-4°F	23362		22969		22547	
0°F	24013		23614		23161	
6°F	24233		23826		23379	
10°F	24726		24313		23851	
16°F	25215		24795		24313	
19°F	25697		25277		24782	
24°F	25909		25517		25080	
32°F	26103		25750		25356	
41°F	27424		27102		26723	
43°F	27972		27642		27276	
47°F	29278		28771		28191	
53°F	29568		29052		28472	
59°F	30248		29713		29115	
64°F	30891		30347		29740	
70°F	31470		30927		30302	
75°F	31914		31353		30728	
78°F	32360		31790		31156	

\* Maximum system capacity

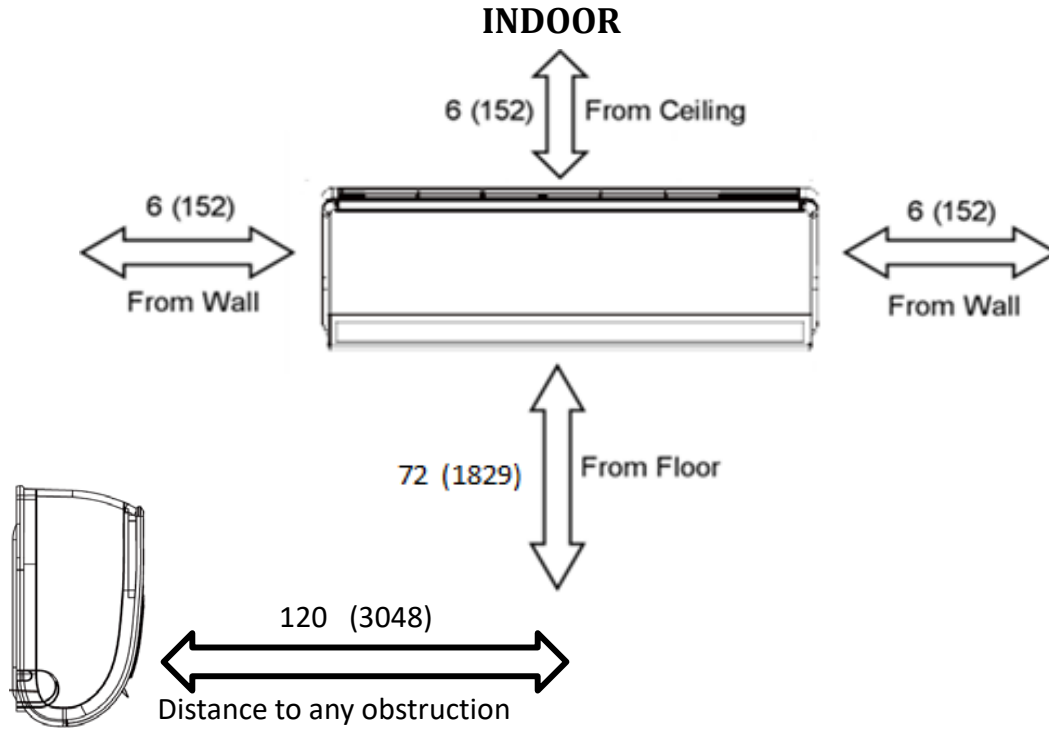
TC- Total Capacity ( BtuH)

SHC- Sensible Capacity (BtuH)

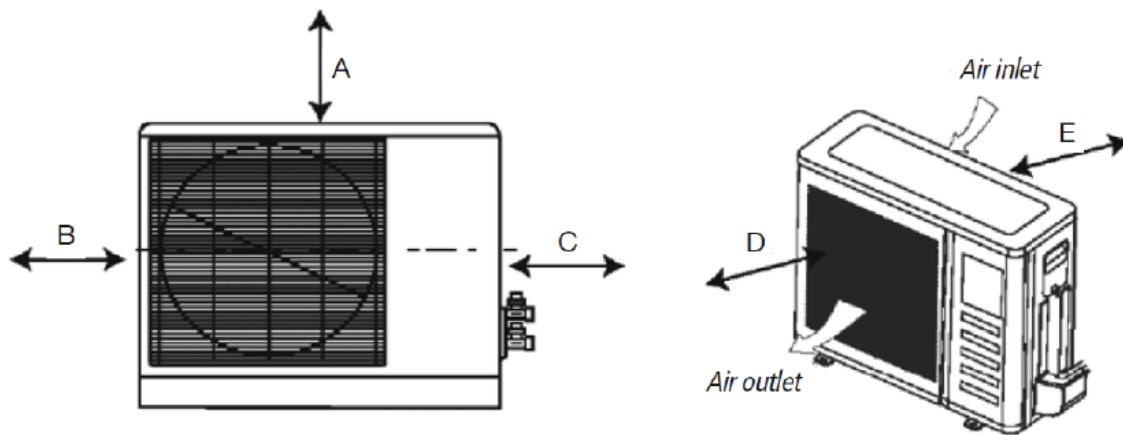
# DIMENSIONAL SPECIFICATIONS

## MINIMUM SPACING REQUIREMENTS

Units: inch (mm)



### Minimum Outdoor Clearances



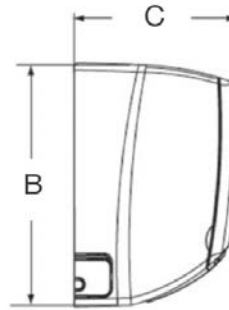
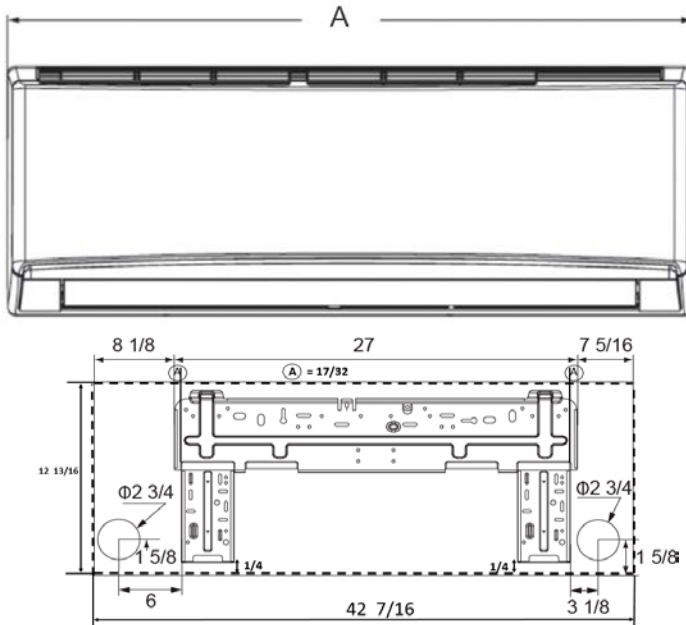
<i>Outdoor Unit</i>	<i>Minimum Distances in (mm)</i>
A	20 (500)
B	12 (305)
C	20 (500)
D	80 (2032)
E	12 (305)

## DIMENSIONAL SPECIFICATIONS

### INDOOR UNIT DIMENSIONS

Model No: TW24HQ3D6DI

Units: inch



Dimensions	
A	42.5
B	12.8
C	9.7

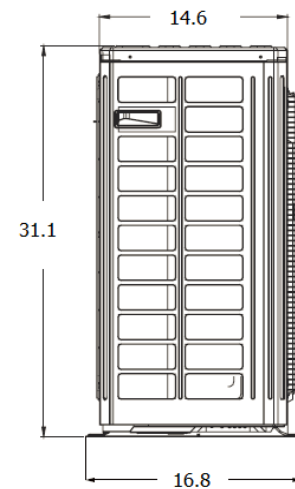
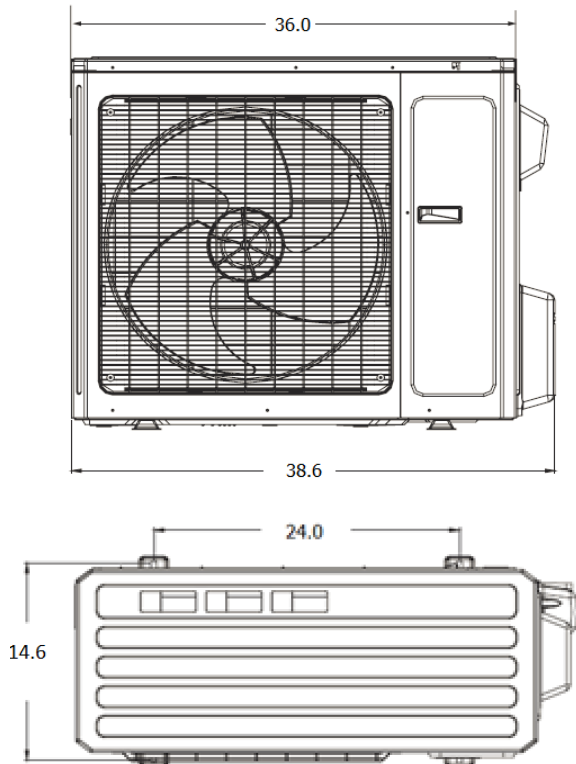
Weight (Net/Shipping) 35.3/41.9 LBS

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	5/8-in OD Flared
Drain Connector	5/8-in OD

### OUTDOOR UNIT DIMENSIONS

Model No: TW24HQ3D6DO

Units: inch



Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	5/8-in OD Flared

Weight (Net/Shipping) 147.7/158.8 LBS

**Notes**

1. Recommended Interconnecting Cable Type 14 AWG 4 Stranded Copper Conductors THHN 600V Wire
2. Power wiring cable size must comply with applicable national and local codes.
3. Test conditions are based on AHRI 210/240.

Specifications are subject to change without notice. Manufacturer reserves the right to discontinue or modify specifications or designs without notice or without incurring obligations. All rights reserved.