

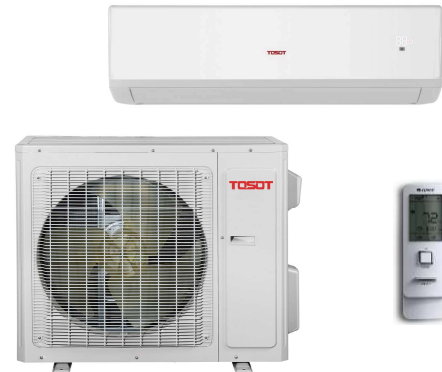


# SAPPHIRE



## SINGLE ZONE WALL MOUNTED HEAT PUMP SYSTEM

<b>TW18HQ3D6D</b>		
Indoor Unit		TW18HQ3D6DI
Outdoor Unit		TW18HQ3D6DO
<b>Performance</b>		
Cooling Rated Capacity	Btu/h	18,000
Cooling Cap. Range Min-Max	Btu/h	4,094~21,837
SEER/EER		24.5/13.5
Heating Rated Capacity(47°F)	Btu/h	18,000
Heating Rated Capacity(17°F)	Btu/h	14,200
Heating Cap. Range Min-Max	Btu/h	4,094~24,566
HSPF/COP		12.0/3.5
<b>Electrical</b>		
Voltage, Phase, Cycle	V-Ph-Hz	208/230-1-60
Voltage Range	V	187~253
MCA	A	22.0
MOP	A	30
Compressor RLA	A	15.5
Fan Motor FLA	A	0.65
Cooling Power Input	W	1,330
Heating Power Input	W	1,500
<b>Piping</b>		
Pipe Length Min-Max	ft	10~131
Piping Lift	ft	66
Liquid Line	in	1/4
Vapor Line	in	5/8
Connection Type		Flare



<b>Operating Range</b>		
Cooling Outdoor DB	°F	0~129
Heating Outdoor DB	°F	-22~75
<b>System Data</b>		
Compressor Type		DC Inverter Driven 2 Stage Rotary
Refrigerant Type		R410A
Pre-Charge	oz	70.6
Pre-Charge Length	ft	25
Additional Charge	oz/ft	0.5
Refrigerant Control		EXV
ODU Sound Pressure	dB(A)	59
IDU Sound Pressure (Cooling Low/High)	dB(A)	34/51
IDU Sound Pressure (Heating Low/High)	dB(A)	34/51
IDU Airflow (Low/High)	cfm	353/736
Dehumidification	pts/hr	3.8



Job Name:		Date:	
Reference #:			
Signature:			

**TOSOT NORTH AMERICA**  
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Features	
Inverter Type	G10
Ultra Low Frequency Torque Control	Standard
Power Factor Correction	Standard
Compressor Type	High Eff. Two Stage Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	Standard
Compressor With Electric Heater	Standard
Indoor & Outdoor Fin Coating	Acrylic Resin/ Anti-Corrosion
Intelligent Defrosting	Standard
Intelligent Preheating	Standard
Low Voltage Startup	Standard
Memory/Power Failure Recovery	Standard
Self Diagnosis	Standard
Wired Controller Interface	Not Available
Wi-Fi Interface - Standard	Standard
Indoor Fan Type	Crossflow
Multi Fan Speeds	7 Speeds
Indoor Unit Display	Standard
Indoor Air Quality Filter	Optional
Auxiliary Electrical Heater	Not Available
Ventilation (Outdoor Air)	Not Available

Remote Controller Functions	
Auto Mode	Standard
Auto Fan	Standard
Auto Swing - Horizontal	Standard
Auto Swing - Vertical	Standard
Clock on Remote Controller	Standard
Dry Mode	Standard
Dry Anti-Mildew (X-Fan) Mode	Standard
Energy Saving Mode	Not Available
Dirty Filter Alert	Not Available
Fan Speed Control (7 Speeds)	Standard
I Feel Function	Standard
PrivacyLock on Remote Controller	Standard
Quiet Mode	Standard
Room Temperature Display	Not Available
Sleep Mode	Standard
4 Sleep Modes Options	Standard
Timer Mode	Standard
Turbo Mode	Standard
Display On/Off Control	Standard
Freeze Guard Mode	Standard
Power Failure Mode	Standard

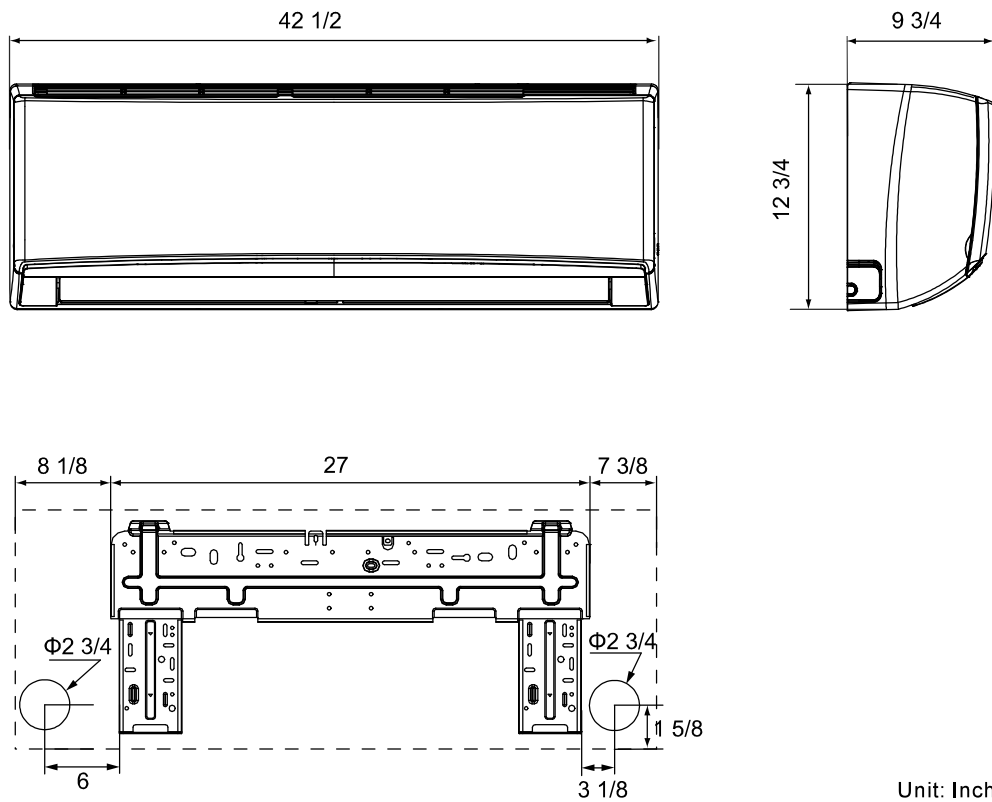


<b>COOLING PERFORMANCE*</b>						
Outdoor Ambient DB	Indoor Entering Air Temperatures					
	68°F DB		73°F DB		80°F DB	
	57°F WB		61°F WB		67°F WB	
	TC	SHC	TC	SHC	TC	SHC
0°F	8,866	6,585	9,288	7,023	10,609	8,187
5°F	10,366	8,085	10,788	8,523	12,109	9,687
14°F	11,804	9,207	12,500	9,875	13,834	11,067
23°F	12,749	9,944	13,851	10,942	15,671	12,537
32°F	13,249	10,334	14,339	11,328	16,276	13,021
41°F	13,902	10,843	14,927	11,792	16,608	13,287
50°F	14,873	11,601	15,848	12,520	17,182	13,746
59°F	15,755	12,289	16,905	13,355	17,643	14,115
68°F	16,239	12,667	17,382	13,732	18,241	14,593
77°F	16,904	13,185	18,104	14,302	19,025	15,220
86°F	16,449	12,830	17,708	13,990	18,645	14,916
95°F	15,825	12,343	17,269	13,642	18,196	14,557
104°F	15,503	12,093	17,139	13,540	18,083	14,467
113°F	15,121	11,794	14,707	11,619	17,988	14,390
122°F	14,958	11,667	15,259	12,054	17,133	13,706
129°F	14,103	10,812	14,404	11,199	16,278	12,851
<b>HEATING PERFORMANCE*</b>						
Outdoor Ambient DB	Indoor Ambient Temperature					
	68°F DB		73°F DB		80°F DB	
	57°F WB		61°F WB		67°F WB	
	TC	TC	TC	TC	TC	TC
-22°F	10,048	9,645	9,339			
-13°F	13,482	13,079	12,773			
-4°F	17,398	16,995	16,689			
0°F	18,239	17,836	17,530			
6°F	20,634	20,167	19,693			
10°F	21,509	21,007	20,700			
17°F	23,470	23,168	22,861			
19°F	24,225	23,930	23,562			
24°F	24,337	24,035	23,928			
32°F	24,600	24,298	24,092			
41°F	24,908	24,590	22,183			
43°F	25,072	24,770	24,463			
47°F	24,315	24,012	23,806			
53°F	23,502	23,199	22,993			
59°F	22,792	22,510	22,333			
64°F	21,673	21,470	21,164			
70°F	20,433	20,190	19,964			
75°F	19,229	18,977	18,770			
78°F	18,674	18,239	17,937			

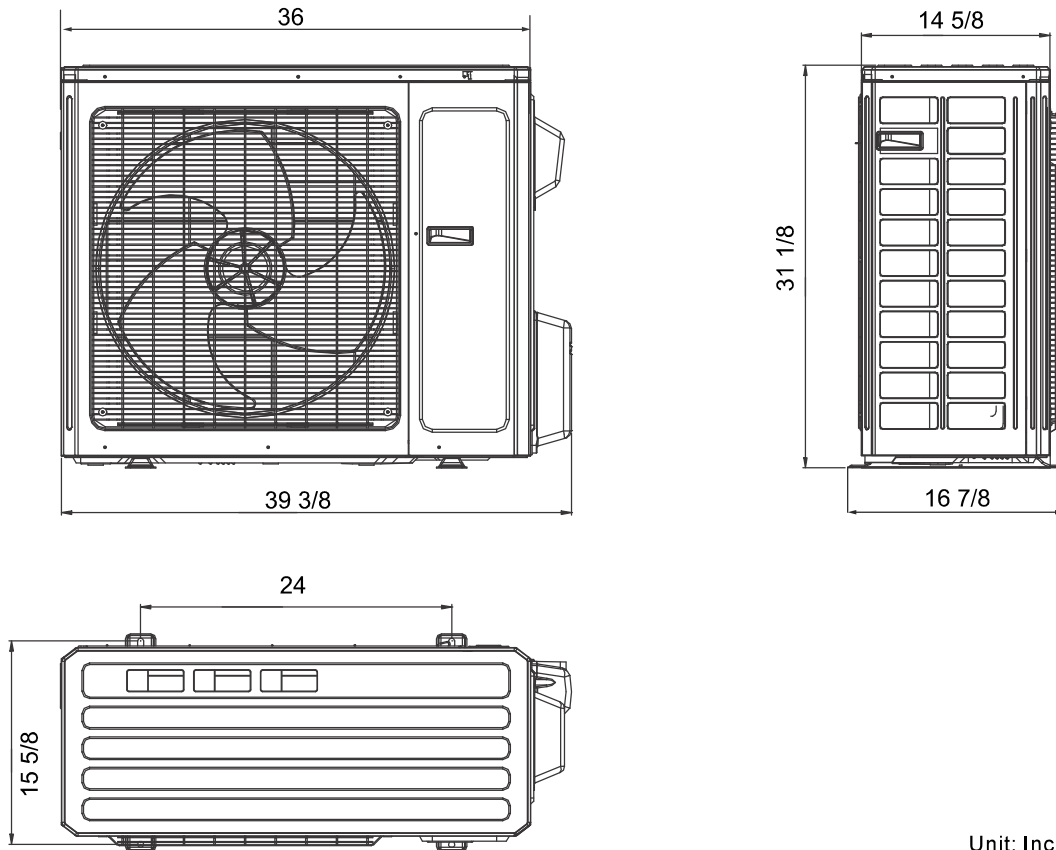
\* Maximum System Capacity  
 TC - Total Capacity(Btu/h)  
 SHC - Sensible Capacity(Btu/h)



**INDOOR UNIT DIMENSIONS**



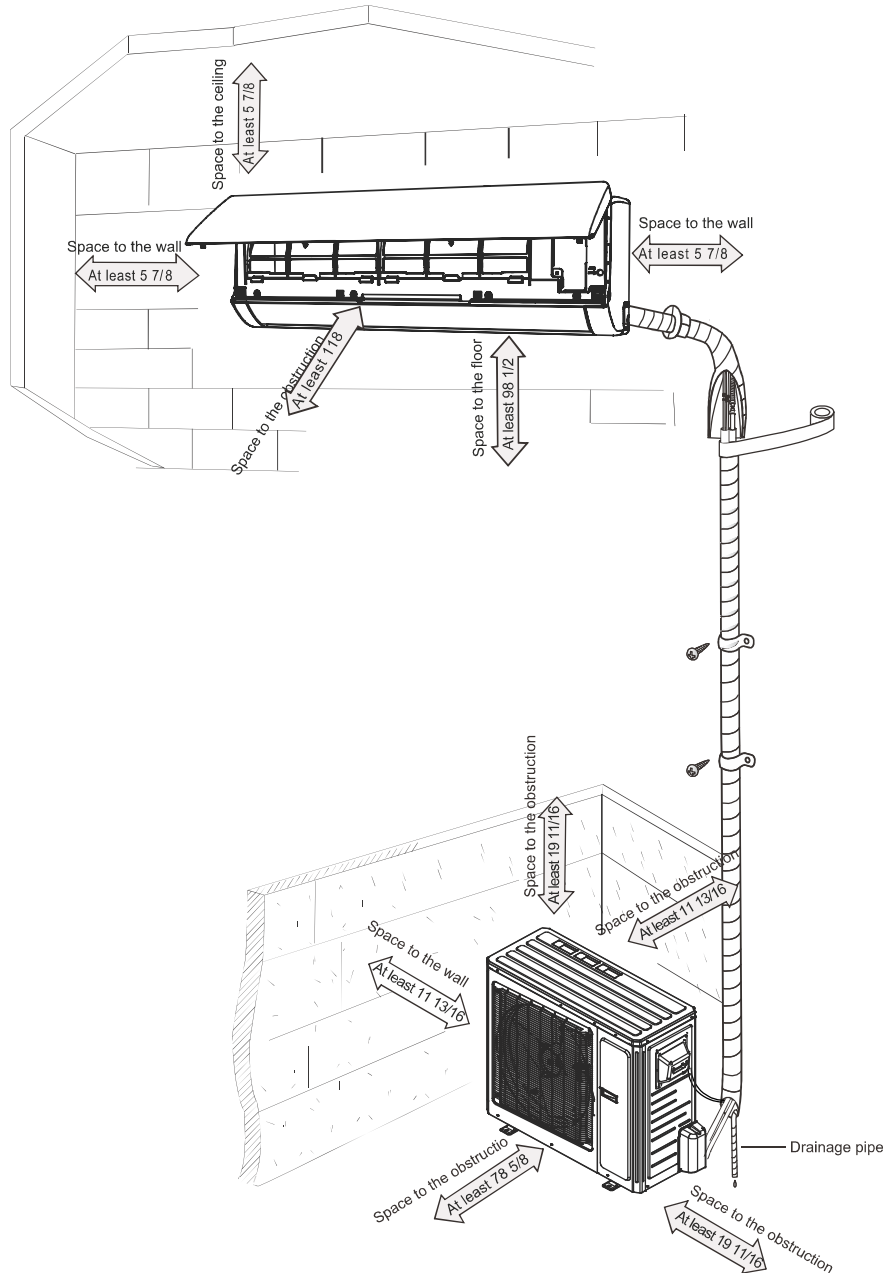
Unit: Inch

**OUTDOOR UNIT DIMENSIONS**

Unit: Inch



**INSTALLATION DIAGRAM**



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