

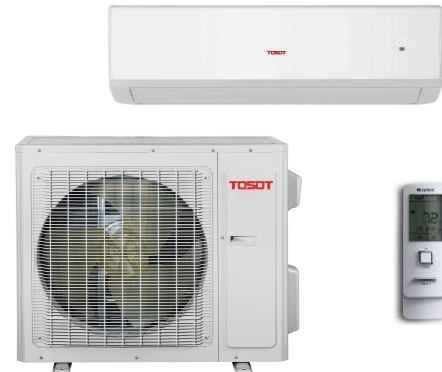


# SAPPHIRE



## SINGLE ZONE WALL MOUNTED HEAT PUMP SYSTEM

<b>TW09HQ3D6D</b>		
Indoor Unit		TW09HQ3D6DI
Outdoor Unit		TW09HQ3D6DO
<b>Performance</b>		
Cooling Rated Capacity	Btu/h	9,000
Cooling Cap. Range Min-Max	Btu/h	1,535~12,966
SEER/EER		38.0/16.7
Heating Rated Capacity(47°F)	Btu/h	9,000
Heating Rated Capacity(17°F)	Btu/h	5,600
Heating Cap. Range Min-Max	Btu/h	2,388~13,648
HSPF/COP		15.0/4.32
<b>Electrical</b>		
Voltage, Phase, Cycle	V-Ph-Hz	208/230-1-60
Voltage Range	V	187~253
MCA	A	9.0
MOP	A	15
Compressor RLA	A	6.9
Fan Motor FLA	A	0.28
Cooling Power Input	W	540
Heating Power Input	W	610
<b>Piping</b>		
Pipe Length Min-Max	ft	10~49
Piping Lift	ft	33
Liquid Line	in	1/4
Vapor Line	in	1/2
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	55.4
Pre-Charge Length	ft	25
Additional Charge	oz/ft	0.2
Refrigerant Control		EXV
ODU Sound Pressure	dB(A)	57
IDU Sound Pressure (Cooling Low/High)	dB(A)	19/46
IDU Sound Pressure (Heating Low/High)	dB(A)	19/46
IDU Airflow (Low/High)	cfm	206/424
Dehumidification	pts/hr	1.7



Job Name:		Date:	
Reference #:			
Signature:			

**TOSOT NORTH AMERICA**  
 930W 21ST STREET, CHICAGO IL 60608  
 TEL: +1(312)800-8455  
 EMAIL: SALES@TOSOT-NA.COM



# SAPPHIRE



## SINGLE ZONE WALL MOUNTED HEAT PUMP SYSTEM

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 Capable	Standard
Indoor Fan Type	Crossflow
Multi Fan Speeds	7 Speeds
Indoor Unit Display	Standard
Advance 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	8,175	6,540	8,428	6,742	8,871	7,097
5°F	8,804	7,043	9,076	7,261	9,657	7,643
14°F	10,061	8,049	10,372	8,298	10,918	8,735
23°F	10,690	8,552	11,021	8,817	11,601	9,281
32°F	11,319	9,055	11,669	9,335	12,283	9,827
41°F	11,948	9,558	12,317	9,854	12,966	10,372
50°F	12,451	9,961	12,836	10,269	13,512	10,809
59°F	12,721	10,177	13,115	10,492	13,805	11,044
68°F	12,828	10,263	13,225	10,580	13,921	11,137
77°F	12,765	10,212	13,160	10,528	13,853	11,082
86°F	12,702	10,162	13,095	10,476	13,784	11,028
95°F	12,577	10,061	12,966	10,372	13,648	10,918
104°F	12,074	9,659	12,447	9,958	13,102	10,482
113°F	11,696	9,357	12,058	9,646	12,693	10,154
122°F	11,516	9,213	11,872	9,498	12,497	9,998
129°F	10,313	8,250	10,632	8,505	11,191	8,953
<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	8,270	8,166	8,121	8,121	8,121	8,121
-13°F	9,253	9,150	9,104	9,104	9,104	9,104
-4°F	11,850	11,747	11,701	11,701	11,701	11,701
0°F	11,940	11,836	11,790	11,790	11,790	11,790
6°F	12,210	12,106	12,061	12,061	12,061	12,061
10°F	12,455	12,352	12,306	12,306	12,306	12,306
17°F	12,570	12,466	12,420	12,420	12,420	12,420
19°F	13,552	13,448	13,402	13,402	13,402	13,402
24°F	13,630	13,526	13,480	13,480	13,480	13,480
32°F	13,700	13,596	13,550	13,550	13,550	13,550
41°F	13,970	13,866	13,820	13,820	13,820	13,820
43°F	14,470	14,366	14,320	14,320	14,320	14,320
47°F	13,798	13,694	13,648	13,648	13,648	13,648
53°F	13,769	13,665	13,620	13,620	13,620	13,620
59°F	13,530	13,426	13,380	13,380	13,380	13,380
64°F	13,502	13,398	13,352	13,352	13,352	13,352
70°F	12,354	12,250	12,204	12,204	12,204	12,204
75°F	12,255	12,152	12,106	12,106	12,106	12,106
78°F	11,919	11,815	11,770	11,770	11,770	11,770

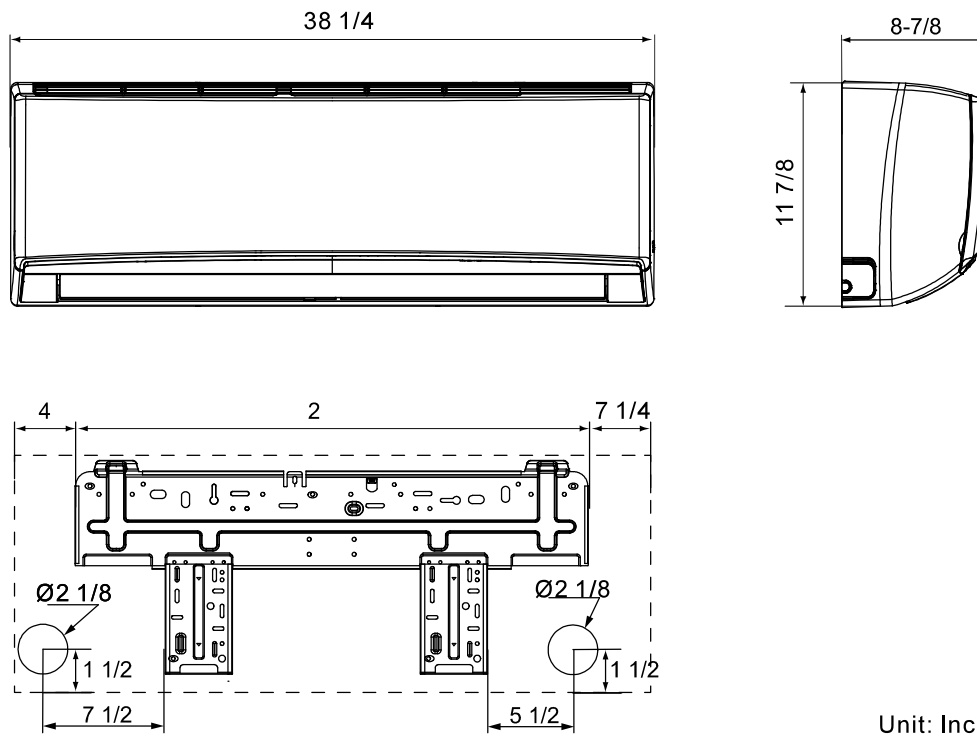
\* Maximum System Capacity

TC - Total Capacity(Btu/h)

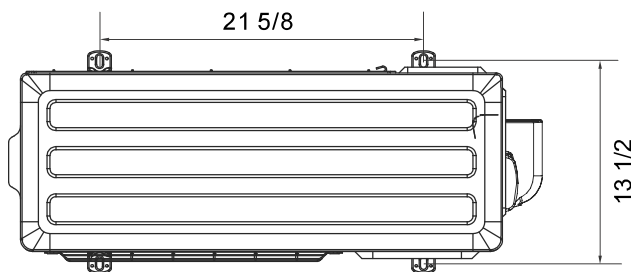
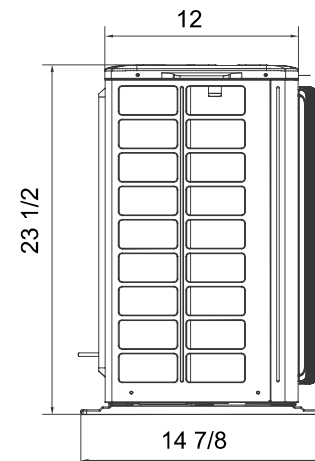
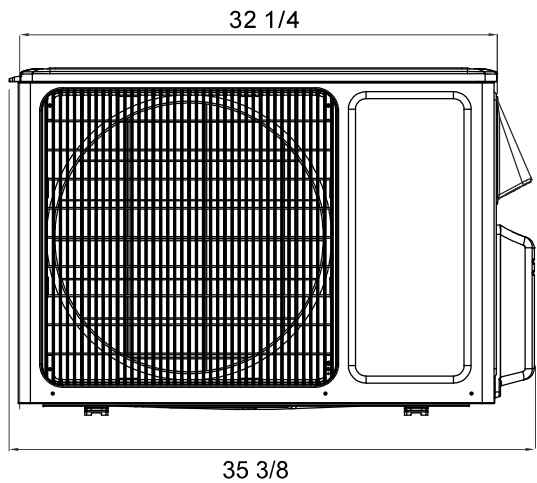
SHC - Sensible Capacity(Btu/h)



**INDOOR UNIT DIMENSIONS**



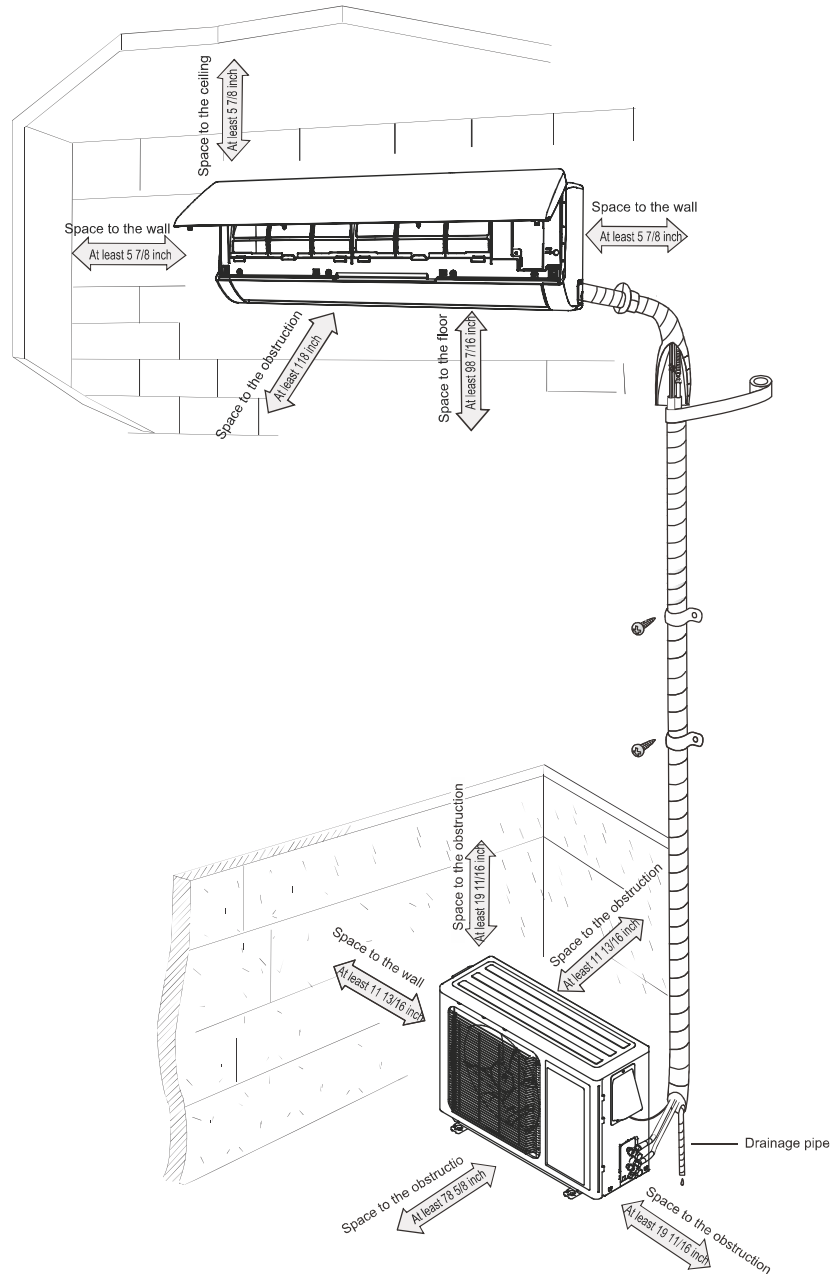
Unit: Inch

**OUTDOOR UNIT DIMENSIONS**

Unit: Inch



**INSTALLATION DIAGRAM**



**TOSOT NORTH AMERICA**  
930 W 21ST STREET, CHICAGO IL 60608  
TEL: +1(312)800-8455  
EMAIL: SALES@TOSOT-NA.COM