



MULTI-ROOM DUCTLESS HEAT-PUMP SYSTEMS

18000 BTU / H WALL MOUNTED HEAT- PUMP SYSTEM

SUBMITTAL DATA: TM18H40

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.	

**AHRI CERTIFIED REF
NO: 10064017 (NON-DUCTED) &
10064018 (DUCTED)**



SYSTEM RATINGS		OUTDOOR UNIT DATA	
Non-Ducted Indoor		Compressor	
Rated Cooling Capacity	18,000 BTUH	Type	DC Inverter Driven Rotary
Cooling Capacity (min-max)	7,000-21,000 BTUH	RLA	10.8 A
Rated Heating Capacity	19,000 BTUH	Compressor Crankcase and Base Pan Heaters included	
Heating Capacity (min-max)	8,530-22,600 BTUH	Fan Motor	
SEER/EER	22.0/12.5	Output Power	60 W
HSPF/COP	11.0/3.7	FLA	0.6 A
Ducted Indoor		Air Flow (Max)	1883 CFM
Rated Cooling Capacity	18,000 BUTH	Sound Pressure Level	
Cooling Capacity (min-max)	7,000-21,000 BUTH	Cooling	56 dB(A)
Rated Heating Capacity	19,000 BTUH	Heating	56 dB(A)
Heating Capacity (min-max)	8,530-22,600 BTUH	Dimensions & Weights	
SEER/EER	16.0/11.5	Unit Dimensions (LxHxD)	38.0 x 27.6 x 15.6 -in
HSPF/COP	8.5/3.1	Weight (Net/Shipping)	114.4/124.3 LBS
Operating Range		Min. Number of Indoor Units	1
Cooling (min-max)	0 ~ 118°F	Max. Number of Indoor Units	2
	-18 ~ 48°C	REFRIGERANT PIPING DATA	
Heating (min-max)	-5 ~ 75°F	Refrigerant Type	R410A
	-21 ~ 24°C	Refrigerant Charge	56.4 oz
Power Supply		Additional Charge Per Line Length	0.21-oz/ft
Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz	Connection Method	Flared
Voltage Range	187 - 253 V	Factory Charge for Total Line Length	33-ft
Main Power Wire Size	12-2 AWG	Total Refrigerant Pipe Length	65-ft
Interconnecting Cable Wire Size	14-4 AWG	Max Refrigerant Piping Length to any Indoor Unit	33-ft
MCA	16 A	Min Refrigerant Piping Length to any Indoor Unit	10-ft
MOCP/Breaker Size	25 A	Max Elevation between Indoor Units	33-ft
		Max Lift from Outdoor to Indoor Unit	33-ft
		Max Drop from Outdoor to Indoor Unit	33-ft

GENERAL FEATURES

- Dual Indoor Units (2-Port)
- EnergyStar Rated
- G10 DC Inverter Technology
- Quiet Operation - Both Indoor & Outdoor
- Acrylic Resin/Anti-Corrosion Coil Protection
- Intelligent Defrost
- Auto Restart on Power Outages
- Multi-point Diagnostics

TOSOT.COM





FEATURES & FUNCTION SUMMARY: TM18H40

SYSTEM FEATURES	
Inverter Type	G10
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Compressor Type	Inverter Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	YES
Compressor With Electric Heater	YES
Condenser Fan	Axial
Condenser Motor Type	DC
Condenser Motor Drive	Direct
Condenser Coil	Aluminum Fin/Copper Tube
Outdoor Fin Coating (Blue)	Acrylic Resin
Intelligent Defrosting	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Low Ambient Cooling	YES
XK19 Wired Controller Interface	YES
REMOTE CONTROLLER FUNCTIONS	See individual Indoor Unit Controllers Functions
<i>Not all Remote Controller functions are supported.</i>	
XK19 WIRED CONTROLLER FUNCTIONS ²	
On/Off	YES
Operating Mode	YES
Fan Speed	YES
Room Setpoint	YES
Model Numbers	YES
Timer Mode	YES
Sleep Mode	YES
Turbo Mode	YES
X-Fan Mode	YES
Privacy Lock	YES

Note: Some indoor models may not support specific system features or functions.

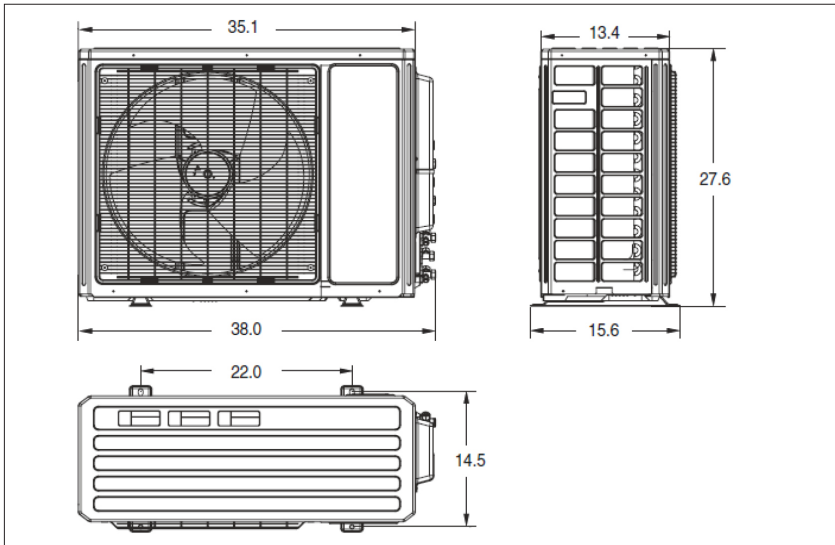
TOSOT

DIMENSIONAL SPECIFICATIONS: TM18H40

18,000 BTUH MODEL

Model # MULTI18HP230V1CO 18,000 BTUH 230V

Units: inch



Suction/Gas Line Port Size

Port A	3/8-in OD Flared
Port B	3/8-in OD Flared

Liquid Line Port Size

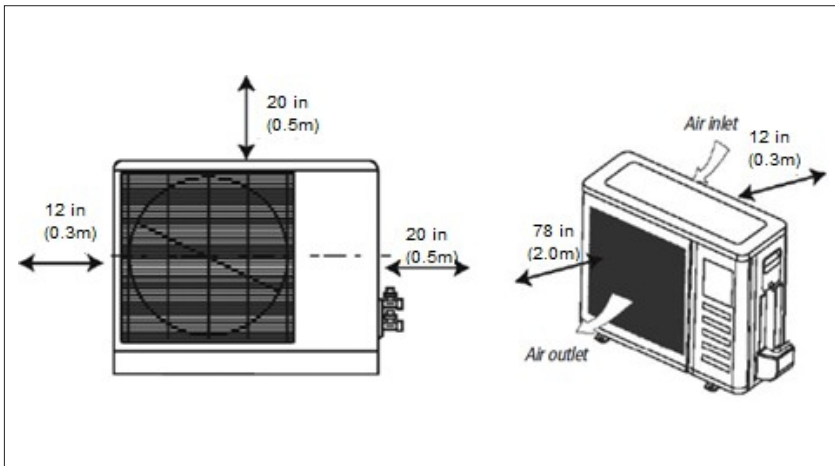
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared

Factory Supplied Piping Adapters

Adapter	P/N	Qty
3/8 (F) to 1/2 (M)	6643008	2

MINIMUM SPACING REQUIREMENTS

Units: inch



Notes:

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



OPERATIONAL PERFORMANCE SPECIFICATIONS: TM18H40

COOLING CAPACITY (BTUH)					
Indoor Units Combinations	Rated System Capacity (BtuH)	Indoor Unit A (BtuH)	Indoor Unit B (BtuH)	Indoor Unit C (BtuH)	Indoor Unit D (BtuH)
9K	18,000	9,000	NA	NA	NA
12K	21,000	12,000	NA	NA	NA
9K+9K	18,000	9,000	9,000	NA	NA
9K+12K	16,719	6,824	9,895	NA	NA
12K+12K	16,718	8,359	8,359	NA	NA

HEATING CAPACITY (BTUH)					
Indoor Units Combinations	Rated System Capacity (BtuH)	Indoor Unit A (BtuH)	Indoor Unit B (BtuH)	Indoor Unit C (BtuH)	Indoor Unit D (BtuH)
9K	19,000	9,000	NA	NA	NA
12K	19,000	11,874	NA	NA	NA
9K+9K	18,000	9,000	9,000	NA	NA
9K+12K	20,063	8,189	11,874	NA	NA
12K+12K	20,062	10,031	10,031	NA	NA

Capacity data is based on the following conditions :

Cooling Nominal Test Conditions	Heating Nominal Test Conditions
Indoor: 80°F DB/67°F WB	Indoor: 70°F DB/60°F WB
Outdoor: 95°F DB/75°F WB	Outdoor: 47°F DB/43°F W

EXTENDED RATINGS: TM18H40

COOLING PERFORMANCE

DB WB		Indoor Ambient Temperature											
		70°F (21°C)			75°F (24°C)			80°F (27°C)			90°F (32°C)		
		59°F (15°C)			63°F (17°C)			67°F (19°C)			73°F (23°C)		
		TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)
Outdoor Ambient Temperature (DB)	-4°F (-18°C)	10,850	8,510	700	12,230	9,600	740	12,930	10,140	770	14,570	11,430	820
	5°F (-15°C)	11,120	8,720	700	12,550	9,840	750	13,420	10,530	770	14,940	11,720	820
	14°F (-10°C)	11,480	9,010	720	12,950	10,160	760	13,690	10,740	790	15,430	12,100	850
	23°F (-5°C)	12,580	9,870	720	14,330	11,240	760	15,420	12,090	790	16,960	13,300	840
	32°F (0°C)	13,226	10,375	719	15,064	11,814	763	15,489	12,143	789	17,829	13,989	841
	41°F (5°C)	13,905	10,907	756	15,836	12,419	802	16,283	12,766	829	18,743	14,707	884
	50°F (10°C)	14,484	11,361	788	16,496	12,937	835	16,961	13,298	864	19,524	15,319	921
	59°F (15°C)	15,260	11,970	830	17,380	13,630	880	17,870	14,010	910	20,570	16,140	970
	68°F (20°C)	17,281	13,553	1,221	18,361	14,398	1,260	19,621	15,389	1,337	22,501	17,650	1,430
	77°F (25°C)	17,077	13,395	1,254	18,163	14,246	1,293	19,441	15,249	1,375	22,321	17,504	1,474
	86°F (30°C)	16,235	12,733	1,403	17,317	13,584	1,447	18,901	14,824	1,535	21,631	16,963	1,645
	95°F (35°C)	15,367	12,052	1,507	16,441	12,891	1,551	18,001	14,119	1,650	20,719	16,252	1,766
104°F (40°C)	14,623	11,469	1,557	15,691	12,307	1,606	17,533	13,754	1,705	19,975	15,662	1,826	
113°F (45°C)	13,873	10,879	1,590	14,941	11,718	1,639	16,789	13,164	1,744	19,225	15,079	1,865	
118°F (48°C)	13,501	10,587	1,606	14,401	11,292	1,656	16,201	12,709	1,760	18,541	14,544	1,881	

HEATING PERFORMANCE

DB WB		Indoor Ambient Temperature											
		70°F (21°C)			75°F (24°C)			80°F (27°C)			90°F (32°C)		
		59°F (15°C)			63°F (17°C)			67°F (19°C)			73°F (23°C)		
		TC (BtuH)	Input Power (watts)	COP	TC (BtuH)	Input Power (watts)	COP	TC (BtuH)	Input Power (watts)	COP	TC (BtuH)	Input Power (watts)	COP
Outdoor Ambient Temperature (DB)	-5°F (-21°C)	10,865	1,061	3.00	10,656	1,087	2.87	10,325	1,112	2.72	9,968	1,146	2.55
	0°F (-18°C)	11,121	1,095	2.98	10,800	1,117	2.83	10,598	1,158	2.68	10,319	1,185	2.55
	5°F (15°C)	11,428	1,119	2.99	11,099	1,142	2.85	10,891	1,184	2.69	10,606	1,212	2.56
	7°F (14°C)	11,736	1,144	3.01	11,397	1,167	2.86	11,184	1,210	2.71	10,893	1,238	2.58
	17°F (8°C)	12,597	1,193	3.09	12,229	1,217	2.94	11,997	1,262	2.78	11,683	1,291	2.65
	28°F (2°C)	14,230	1,271	3.28	13,856	1,297	3.13	13,458	1,345	2.93	13,298	1,376	2.83
	38°F (3°C)	17,693	1,463	3.54	17,319	1,492	3.40	16,927	1,548	3.20	16,761	1,583	3.10
	47°F (8°C)	19,997	1,522	3.85	19,392	1,553	3.66	19,006	1,610	3.46	18,483	1,647	3.29
	57°F (14°C)	20,657	1,551	3.90	20,033	1,583	3.71	19,635	1,641	3.50	19,089	1,679	3.33
	68°F (20°C)	21,490	1,600	3.93	20,840	1,640	3.72	20,430	1,700	3.52	19,860	1,740	3.34
	77°F (25°C)	21,990	1,640	3.93	21,330	1,680	3.72	20,900	1,740	3.52	20,320	1,780	3.34

LEGEND:	DB - Dry Bulb
	WB --- Wet Bulb
	TC --- Total Capacity (BtuH)
	SC --- Sensible Capacity (BtuH)
	Input Power---(Watts)
	COP---Coefficient Of Performance

* Maximum system capacity TC- Total Capacity (BtuH) COP- Coefficient of Performance