MULTI-ROOM DUCTLESS HEAT-PUMP SYSTEMS

24,000 BTU / H WALL MOUNTED HEAT- PUMP SYSTEM

SUBMITTAL DATA: TM24HX4O

Job Name	Location	Date		
Purchaser	Engineer			
Submitted To	For	☐ Reference	☐ Approval	☐ Construction
Unit Designation	Schedule No.			

AHRI CERTIFIED REF	
NON-DUCTED	211164240
DUCTED	211164245
MIX	211174357

Energy Star Unique ID	
NON-DUCTED	2409844
DUCTED	4515311
MIX	4517773

Operating Range	
Cooling	-22 ~ 118°F
	-30 ~ 48°C
Heating	-22 ~ 75°F
	-30 ~ 24°C



SYSTEM RATINGS	
Non-Ducted Indoor Units	
Rated Cooling Capacity(95°F)	23,200 BTUH
Cooling Capacity (min-max)	7,500~31,400 BTUH
SEER2 / EER2	21.0 / 12.5
Rated Heating Capacity(47°F)	24,000 BTUH
Heating Capacity (min-max)	7,500~28,800 BTUH
Low temperature heating(17°F / 5°F)	23,600 / 21,600 BTUH
COP @ 47°F / 5°F	3.91 / 2.10
HSPF 2(Region IV/V)	10.0 / 8.0
Ducted Indoor Units	
Rated Cooling Capacity(95°F)	23,200 BTUH
Cooling Capacity (min-max)	7,500~31,400 BTUH
SEER2 / EER2	16.0 / 11.0
Rated Heating Capacity(47°F)	24,000 BTUH
Heating Capacity (min-max)	7,500~28,800 BTUH
Low temperature heating(17°F/5°F)	23,000 / 23,000 BTUH
COP @ 47°F / 5°F	3.40 / 1.85
HSPF 2(Region IV/V)	8.1 / 7.2
Mixed Ducted and Non-Ducted Indoor Units	
Rated Cooling Capacity(95°F)	23,200 BTUH
Cooling Capacity (min-max)	7,500~31,400 BTUH
SEER2 / EER2	18.5 / 11.75
Rated Heating Capacity(47°F)	24,000 BTUH
Heating Capacity (min-max)	7,500~28,800 BTUH
Low temperature heating(17°F/5°F)	23,200 / 22,200 BTUH
COP @ 47°F / 5°F	3.63 / 1.80
HSPF 2(Region IV/V)	9.0 / 7.5

OUTDOOR UNIT DATA	
Compressor	
Type	Twin Rotary
RLA	12.1 A
Compressor Crankcase and Base Pan Heaters included	
Fan Motor	
Output Power	60 W
FLA	0.5 A
Air Flow (Max)	2,336 CFM
Sound Pressure Level	
Cooling / Heating	51 / 51 dB(A)
Dimensions & Weights	
Unit Dimensions (W x D x H)	38 x 26 x 15-3/4 in
Weight (Net/Gross)	115 / 125 LBS
Allowable Indoor Units Quantity	1 ~ 3
REFRIGERANT PIPING DATA	
Refrigerant	R410a / 84.7 oz
Additional Charge Per Line Length	0.20 oz/ft
Connection Method	Flared
Pre-charge Piping Length	98 ft
Max Total Piping Length	197 ft
Max Height Distance (IDU to IDU)	49 ft
Max Length to any IDU	66 ft
Max Height Distance (IDU to ODU)	49 ft

Power Supply			
Range	208/230 V, 1 Phase, 60 Hz	Interconnecting Cable Wire Size	14-4 AWG
		Rated Current (Cooling/Heating)	14.2 / 15.0 A
Voltage Range	187 - 253 V	MCA / MOCP	19.0 / 25.0 A
Main Power Wire Size	14-2 AWG	Suggested Breaker Size	25.0 A

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FEATURES & FUNCTION SUMMARY: TM24HX4O

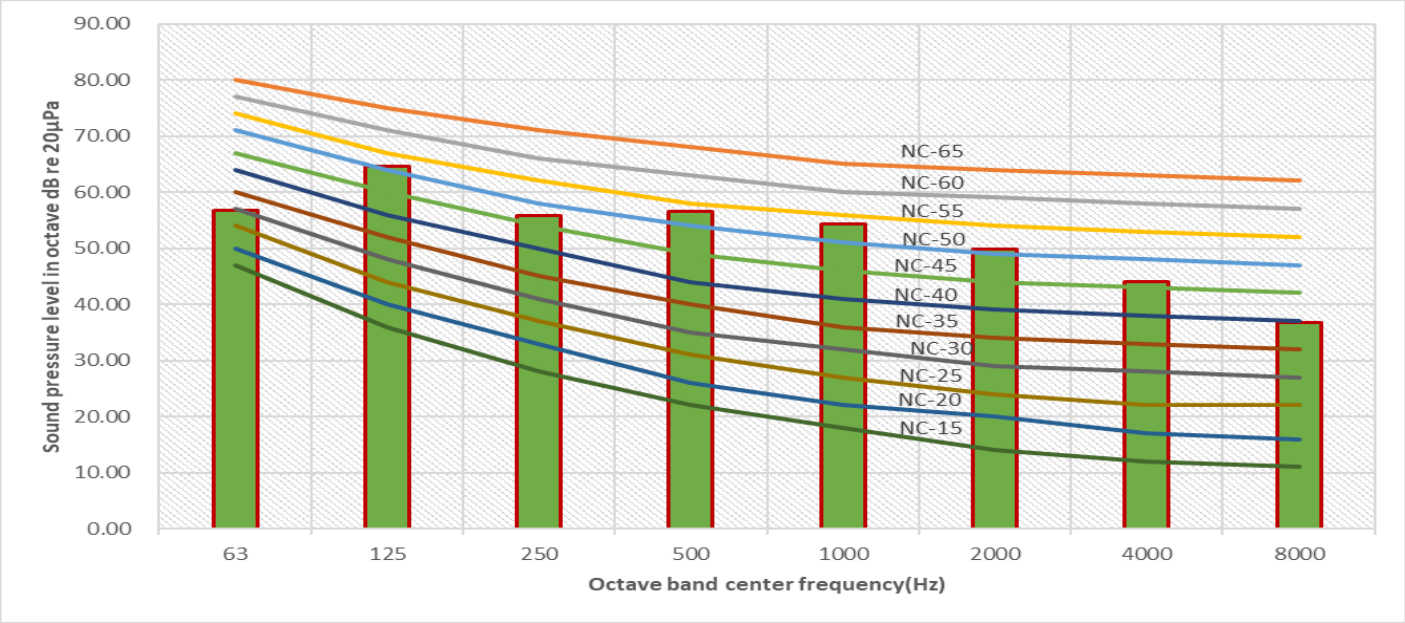
SYSTEM FEATURES	
Inverter Type	DC Inverter
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Compressor Type	Twin Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	YES
Compressor With Electric Heater	YES
Condenser Fan	Axial
Condenser Motor Type	DC
Condenser Motor Drive	Direct
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 (Until -22°F/-30°C)	YES
Wired Controller Interface	XE72-44/E, XE71-00/E
XE72-44/E WIRED CONTROLLER FUNCTIONS	
Wifi Function	YES
Room Setpoint Display	YES
Long Time Room Temp. Display	YES
Timer	YES
Sleep Mode	YES
Turbo Mode	YES
X-Fan Mode	YES
Child Lock	YES

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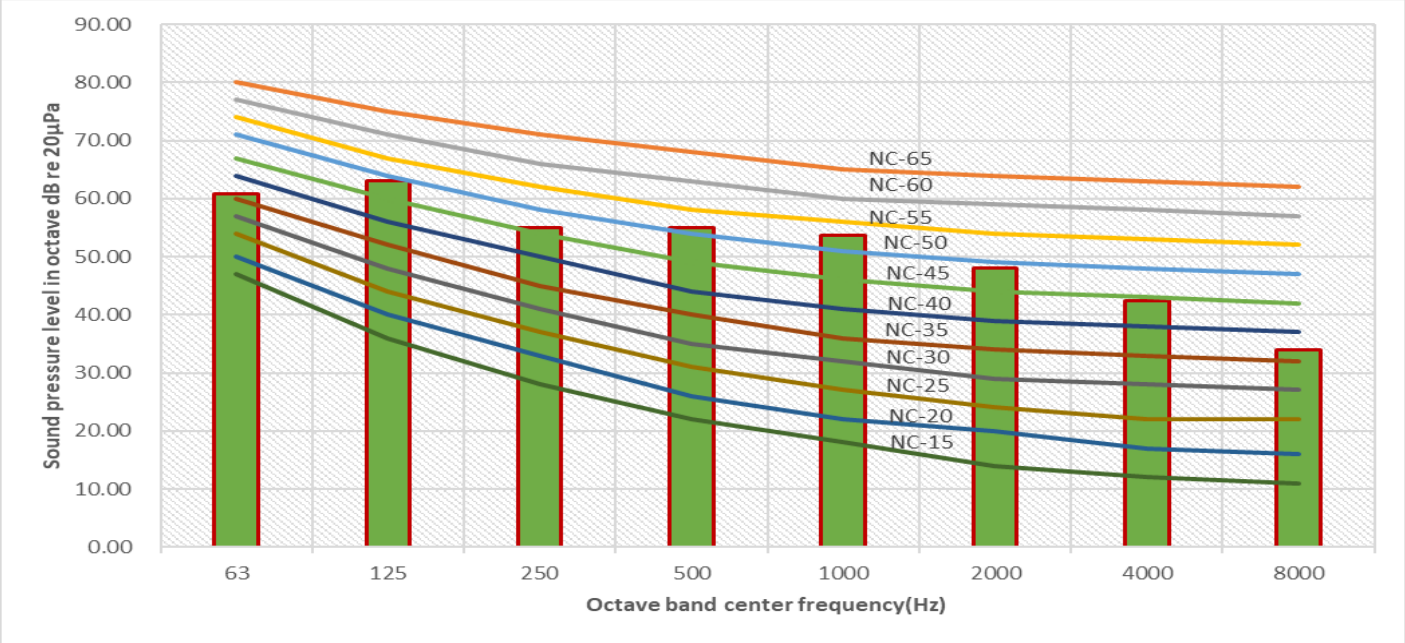
SOUND DATA: TM24HX4O

ACOUSTIC OCTAVE-BAND SOUND POWER DATA

Nominal Cooling



Nominal Heating



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INDOOR UNIT COMBINATION TABLE

IDU quantity	TM18HX4O	TM24HX4O	TM30HX4O	TM36HX4O	TM42HX4O
1	9	/	/	/	/
	12	12	/	/	/
	18	18	18	18	18
	24	24	24	24	24
2	07+07	07+07	/	/	/
	07+09	07+09	07+09	/	/
	07+12	07+12	07+12	/	/
	/	07+18	07+18	07+18	/
	/	07+24	07+24	07+24	07+24
	09+09	09+09	09+09	09+09	09+09
	09+12	09+12	09+12	09+12	09+12
	12+12	09+18	09+18	09+18	09+18
	/	/	09+24	09+24	09+24
	/	12+12	12+12	12+12	12+12
	/	12+18	12+18	12+18	12+18
	/	/	12+24	12+24	12+24
	/	/	/	18+24	18+24
	/	/	/	/	24+24
3	/	07+07+07	07+07+07	07+07+07	07+07+07
	/	07+07+09	07+07+09	07+07+09	07+07+09
	/	07+07+12	07+07+12	07+07+12	07+07+12
	/	/	07+07+18	07+07+18	07+07+18
	/	/	07+07+24	07+07+24	07+07+24
	/	07+09+09	07+09+09	07+09+09	07+09+09
	/	07+09+12	07+09+12	07+09+12	07+09+12
	/	/	07+09+18	07+09+18	07+09+18
	/	/	/	07+09+24	07+09+24
	/	/	/	07+12+24	07+12+24
	/	/	/	/	07+18+24
	/	09+09+09	09+09+09	09+09+09	09+09+09
	/	09+09+12	09+09+12	09+09+12	09+09+12
	/	/	09+09+18	09+09+18	09+09+18
	/	/	/	09+09+24	09+09+24
	/	/	09+12+12	09+12+12	09+12+12
	/	/	09+12+18	09+12+18	09+12+18
	/	/	/	09+12+24	09+12+24
	/	/	/	09+18+18	09+18+18
	/	/	/	/	09+18+24
	/	/	/	12+12+12	12+12+12
	/	/	/	12+12+18	12+12+18
	/	/	/	/	12+18+18
	/	/	/	/	18+18+18

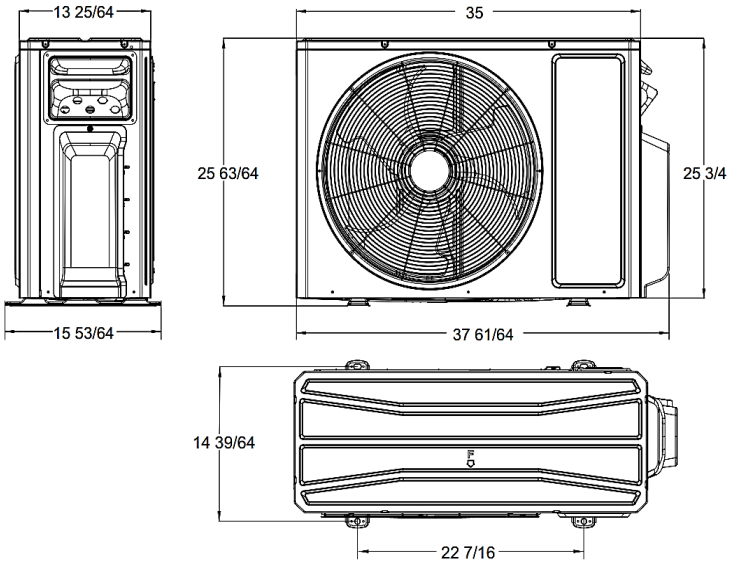
IDU quantity	TM18HX4O	TM24HX4O	TM30HX4O	TM36HX4O	TM42HX4O
4	/	/	07+07+07+07	07+07+07+07	07+07+07+07
	/	/	07+07+07+09	07+07+07+09	07+07+07+09
	/	/	07+07+07+12	07+07+07+12	07+07+07+12
	/	/	07+07+07+18	07+07+07+18	07+07+07+18
	/	/	07+07+07+24	07+07+07+24	07+07+07+24
	/	/	07+07+09+09	07+07+09+09	07+07+09+09
	/	/	07+07+09+12	07+07+09+12	07+07+09+12
	/	/	/	07+07+09+18	07+07+09+18
	/	/	/	/	07+07+09+24
	/	/	/	07+09+12+12	07+09+12+12
	/	/	/	07+09+12+18	07+09+12+18
	/	/	/	07+12+12+12	07+12+12+12
	/	/	/	/	07+12+12+18
	/	/	09+09+09+09	09+09+09+09	09+09+09+09
	/	/	09+09+09+12	09+09+09+12	09+09+09+12
	/	/	/	09+09+12+12	09+09+12+12
	/	/	/	09+12+12+12	09+12+12+12
	/	/	/	/	12+12+12+12
	/	/	/	/	12+12+12+18
5	/	/	/	/	07+07+07+07+07
	/	/	/	/	07+07+07+07+09
	/	/	/	/	07+07+07+07+12
	/	/	/	/	07+07+07+07+18
	/	/	/	/	07+07+07+07+24
	/	/	/	/	07+07+07+09+09
	/	/	/	/	07+07+07+09+12
	/	/	/	/	07+07+07+09+18
	/	/	/	/	07+07+07+09+24
	/	/	/	/	07+07+07+12+12
	/	/	/	/	07+07+07+12+18
	/	/	/	/	07+07+09+09+09
	/	/	/	/	07+07+09+09+12
	/	/	/	/	07+07+09+09+18
	/	/	/	/	07+07+09+12+12
	/	/	/	/	07+07+09+12+18
	/	/	/	/	07+07+12+12+12
	/	/	/	/	07+09+09+09+09
	/	/	/	/	07+09+09+09+12
	/	/	/	/	07+09+09+09+18
	/	/	/	/	07+09+09+12+12
	/	/	/	/	07+09+12+12+12
	/	/	/	/	09+09+09+09+09
	/	/	/	/	09+09+09+09+12
	/	/	/	/	09+09+09+09+18
	/	/	/	/	09+09+12+12+12

Note: ($\sum IDUs$Capacity ÷ODU capacity) range: 50%~150%, recommend range 50%~130%. When it exceeds the recommended range, leads to IDU poor performance when most IDUs turn on

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DIMENSIONAL SPECIFICATIONS: TM24HX4O



Suction/Gas Line Port Size

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

Liquid Line Port Size

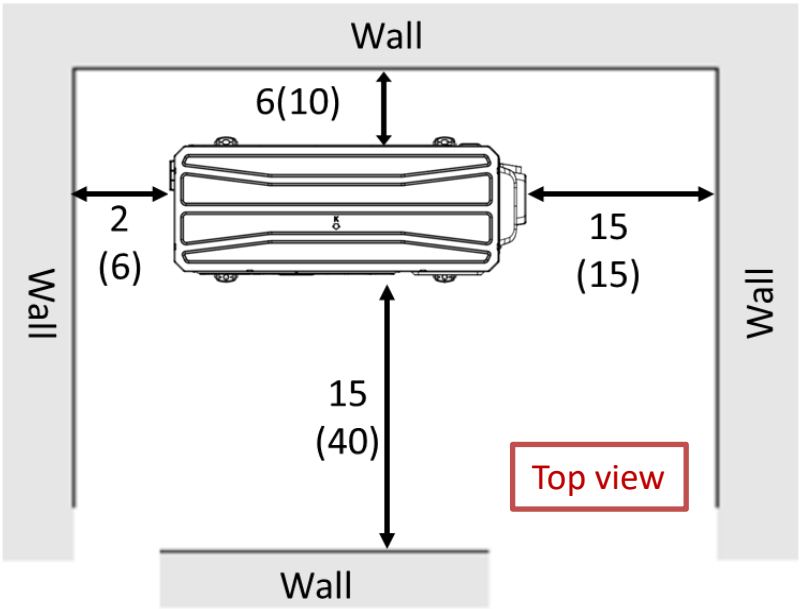
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared
Port C	1/4-in OD Flared

Factory Supplied Piping Adapters

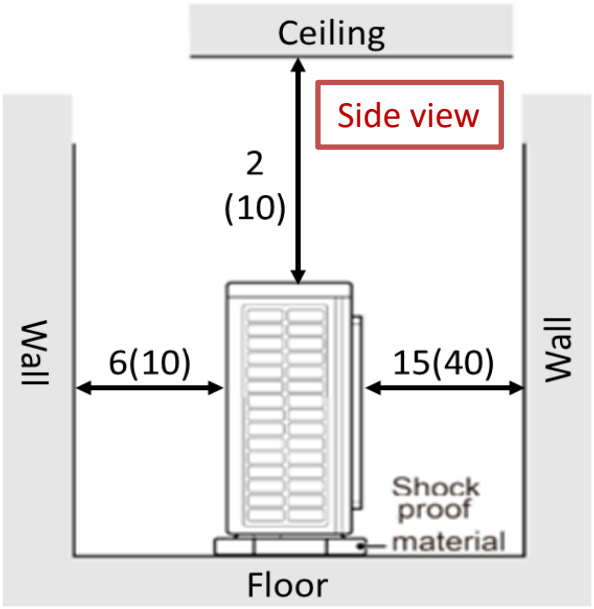
Adapter	P/N	Qty
3/8 (F) to 5/8 (M)	6654100009	2
3/8 (F) to 1/2 (M)	6654100013	3

MINIMUM SPACING REQUIREMENTS

Units: inch



The ceiling should be open



Either left or right side should be open

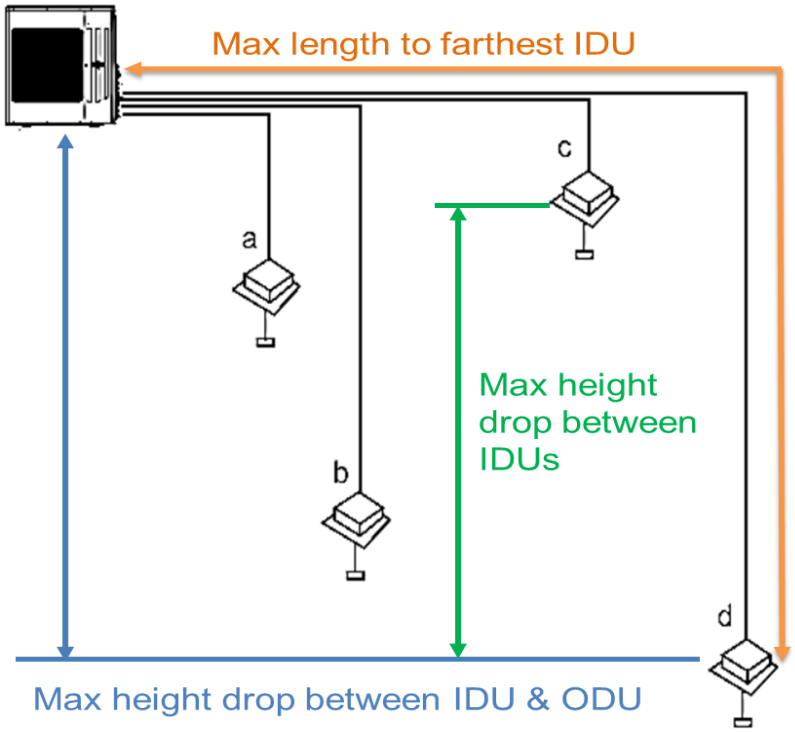
Note:

1. Apply the value in the brackets to achieve best performance
2. Wall height on air outlet side ≤ 50inch

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PIPING REQUIREMENT: TM24HX4O



1. The actual total piping length ≤ the free ref. charge length: No need to charge additional ref.
2. Exceeds the above value to charge 20g/m(0.2oz/ft)
3. Only count for liquid piping length

Unit m (feet) / TM**HX4O	18K	24K	30K	36K	42K
Total length	40 (131)	60 (197)	80 (263)	80 (263)	100 (328)
Length to farthest IDU	20 (66)	20 (66)	25 (82)	25 (82)	25 (82)
Max height drop between IDU & ODU	15 (49)	15 (49)	25 (82)	25 (82)	25 (82)
Max height drop between IDUs	15 (49)	15 (49)	25 (82)	25 (82)	25 (82)
Pre-charged ref. length	10 (33)	30 (98)	40 (131)	40 (131)	50 (164)

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