DC INVERTER ROOFTOP
Ultra Heat
Fully Electric HEAT PUMP

60,000 BTU / ROOFTOP HEAT PUMP SYSTEM

SUBMITTAL DATA: TK-H05TC/NhA-D(U)

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

AHRI CERTIFIED REF	**218471412**
ENERGY STAR No.	**4624790**

Operating Range	
Cooling	23 ~ 123°F -5 ~ 52°C
Heating	-22 ~ 75°F -30 ~ 24°C





Standard XE7C-23/H

Performance			
Cooling Capacity@95F	Rated	BTU/hr	56,000
	Range	BTU/hr	14,000~58,800
Heating Capacity@47F	Rated	BTU/hr	57,000
	Range	BTU/hr	14,250~62,700
Heating Capacity@17F		BTU/hr	34,000
Heating Capacity@5F		BTU/hr	51,000
EER2 / SEER2		-	11.2 / 18.0
COP / HSPF2 (Region IV)		-	3.40 / 8.3
Sound Pressure Level		dB(A)	68
Electrical			
Power Supply		V/Ph/Hz	208~230/1/60
MCA / MOCP		A	39.1 / 45.0
RS485 Standard Thermostat Wire Size			AWG 18/2
Compressor			
Type x Quantity			Inverter Rotary EVI x 1
RLA		A	23.0
Outdoor Fan			
Fan Type x Quantity			Axial x 1
FLA		A	4.9
Indoor Fan			
Fan Type x Quantity		-	Centrifugal x 1
Air Flow Volume (H/M/L)		CFM	1,600 / 1,200 / 1,100
External Static Pressure(STD/MAX)		inWG	0.5 / 0.8
FLA		A	5.4
Air Filter		Material	Aluminium
Air Filter Size (LxWxH/ QTY)			29-5/16“ x 13-1/4“ x 5/8” / 1piece
Refrigerant System			
R32 Pre-charged Amount		oz	205
Dimension/Weight			
Unit Dimensions (W x D x H)		Inch	44×44×49-1/4
Net / Gross Weight		Lbs	629 / 650
Other			
Throttling Method			Electronic expansion valve
Drainage Pipe		inch	3/4 (NPT)

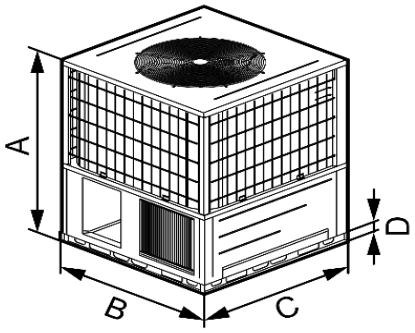
GENERAL FEATURES

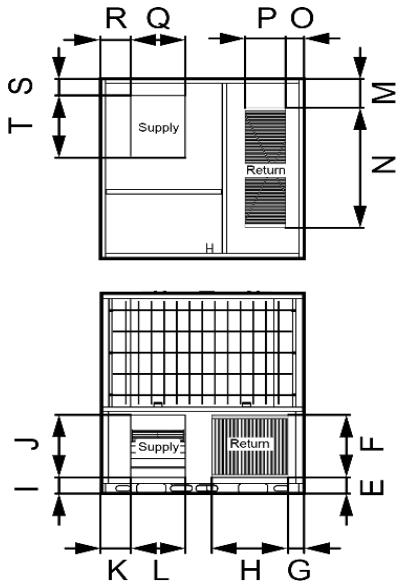
- ❑ High Efficiency DC Inverter Technology
- ❑ Full Heat Pump, No Gas needed
- ❑ Compatible with 24V thermostat
- ❑ Inverter Rotary Compressor

TOSOT.COM

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Unit Dimensions

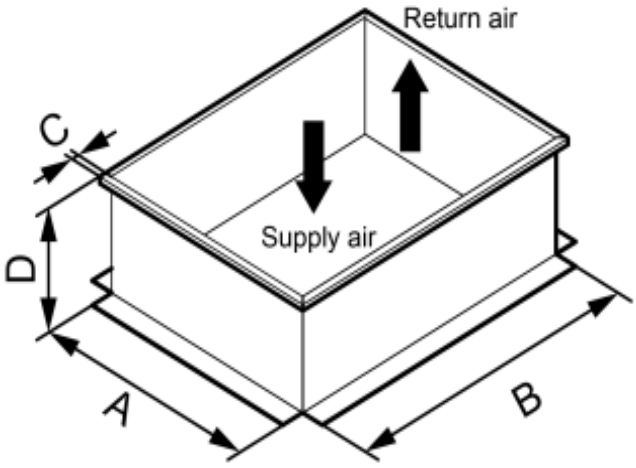


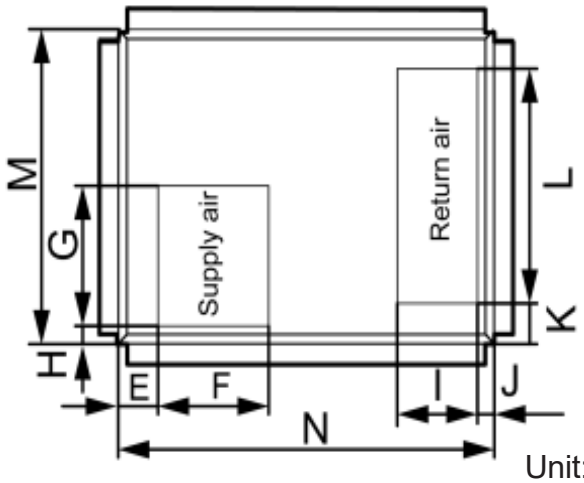


Unit: inch(mm)

Unit Size							
A	B	C			D		
49−1/4 (1250)	44 (1120)	44 (1120)			2−1/2 (65)		
Side Air Vents							
E	Size of air return		G	I	Size of Air Supply		K
	F	H			J	L	
4 (110)	15−3/8 (390)	16−1/2 (420)	3−3/8 (87)	4(101)	15−3/8 (390)	11−3/4 (300)	6−1/2 (166)
Bottom Air Vents							
M	Size of air return		O	R	Size of Air Supply		S
	N	P			Q	T	
7-7/8 (109)	28 (711)	9 (228)	3−3/4 (96)	6−1/2 (166)	11−3/4 (300)	15−3/8 (390)	4 (103)

Curb Dimension





Unit: inch(mm)

A	B	C	D	E	F	G	H	I	J	K	L	M	N
37-5/8 (956)	38-7/16 (976)	1 (25)	14 (356)	4-11/16 (119.5)	11-13/16 (300)	15-3/8 (390)	2-3/16 (56)	8-3/4 (223)	2-3/16 (56)	5-1/4 (133)	29-1/2 (750)	39-5/8 (1006)	40-3/8 (1026)

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Fan Performance Data

External Static pressure: in. W.C.									
Node	**0**	**0.1**	**0.2**	**0.3**	**0.4**	**0.5**	**0.6**	**0.7**	**0.8**
Speed 1	/	/	/	/	/	/	/	/	/
Speed 2	/	/	/	/	/	/	/	/	/
Speed 3	/	/	/	/	/	/	/	/	/
Speed 4	1850	/	/	/	/	/	/	/	/
Speed 5	—	1780	/	/	/	/	/	/	/
Speed 6	—	1870	/	/	/	/	/	/	/
Speed 7	—	—	1830	/	/	/	/	/	/
Speed 8	—	—	1870	/	/	/	/	/	/
Speed 9	—	—	—	1860	/	/	/	/	/
Speed 10	—	—	—	—	1900	/	/	/	/
Speed 11	—	—	—	—	—	1880	1790	/	/
Speed 12	—	—	—	—	—	1980	1880	1804	1730
Speed 13	—	—	—	—	—	2030	1930	1854	1780

1. "/" denotes that the static pressure is out of range, air volume drop may affect the performance and reliability. Prohibition of use
2. "—" denotes that the air volume is out of range, may lead to over-load and unstable operation of the fan motor. Prohibition of use
3. The bold-line frame "▭" indicates that electric heater is allowed

Fan Speed Setting

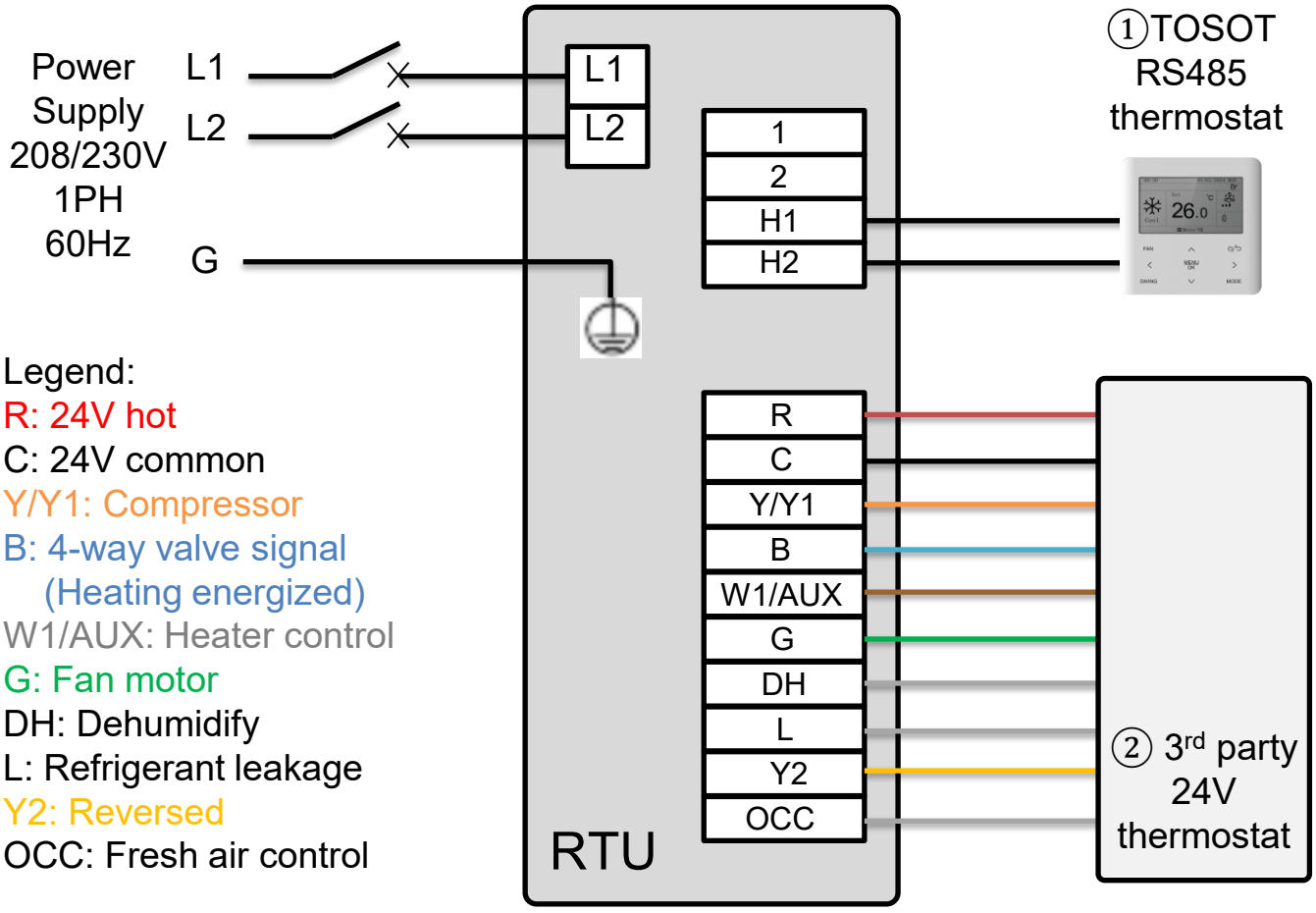
ESP Level	1	2	3	4	5	6	7	8	9
Super	/	/	/	Speed 8	Speed 9	Speed 10	Speed 11	Speed 12	Speed 13
High	/	/	/	Speed 6	Speed 7	Speed 8	Speed 9	Speed 10	Speed 11
Middle	/	/	/	Speed 5	Speed 6	Speed 7	Speed 8	Speed 9	Speed 10
Low	/	/	/	Speed 4	Speed 5	Speed 6	Speed 7	Speed 8	Speed 9

Adjust the ESP level via the dip switch on the PCB

R32 INVERTER Intertek AHRI CERTIFIED

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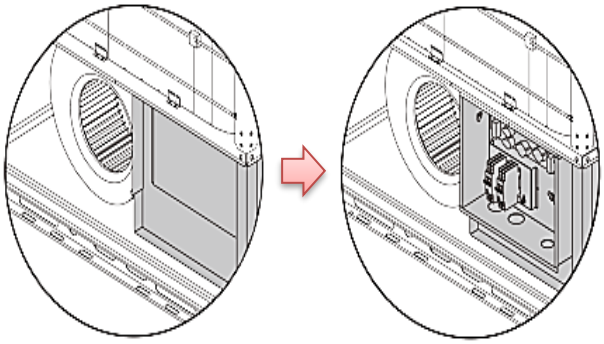
Wiring Diagram



Legend:
R: 24V hot
C: 24V common
Y/Y1: Compressor
B: 4-way valve signal
(Heating energized)
W1/AUX: Heater control
G: Fan motor
DH: Dehumidify
L: Refrigerant leakage
Y2: Reversed
OCC: Fresh air control

Note: Choose either ① or ② to control the system

Optional Heater-kit



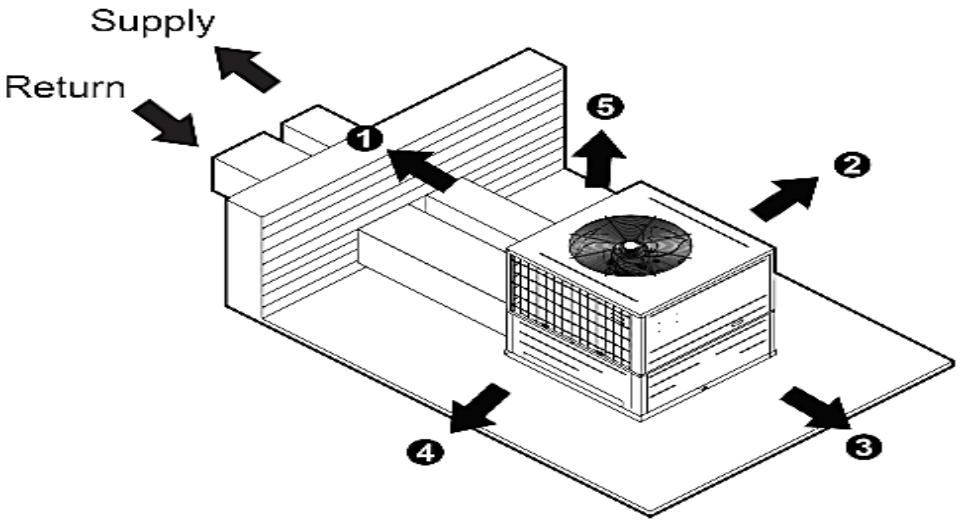
No.	Heater-kit model	Code	Description	Applicable to rooftop (ton)
1	LY Q-08-A	320004060202	Circuit breaker, 5kW heat strip	2.0/3.0/4.0/5.0
2	LY Q-08-C	320004060200	Circuit breaker, 10kW heat strip	2.0/3.0/4.0/5.0
3	LY Q-08-D	320004060201	Circuit breaker, 15kW heat strip	4.0/5.0
4	LYQ-08-E	320004060204	Circuit breaker, 20kW heat strip	4.0/5.0

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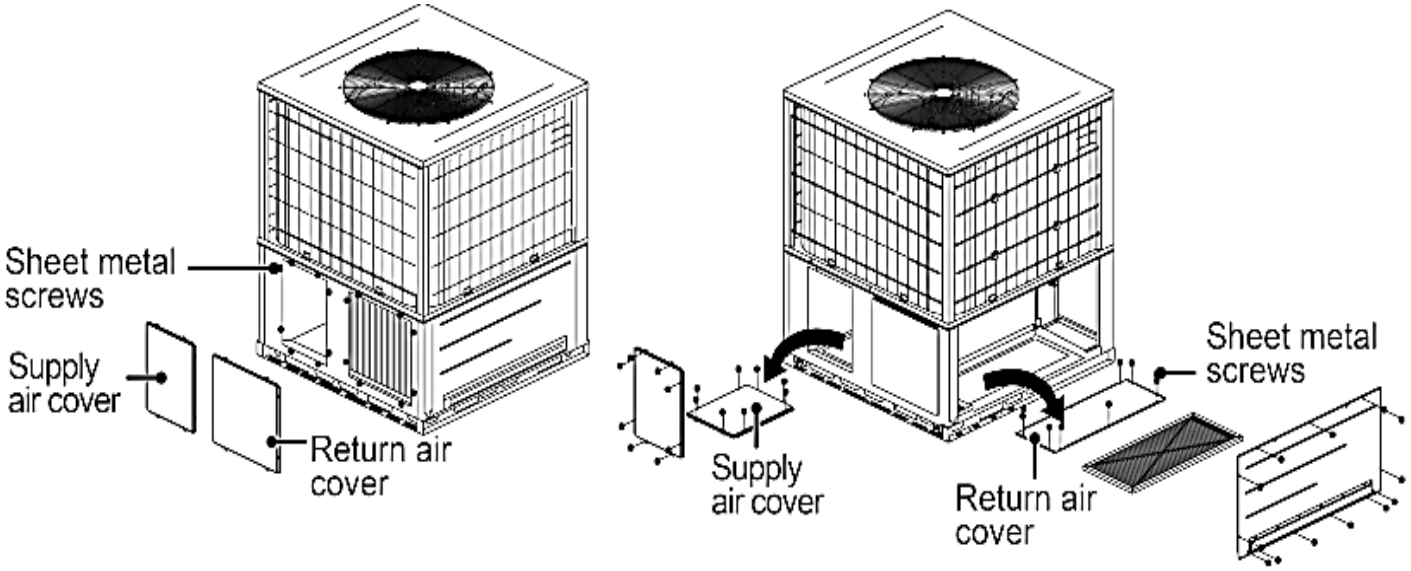
Installation Clearance

Unit: inch(mm)

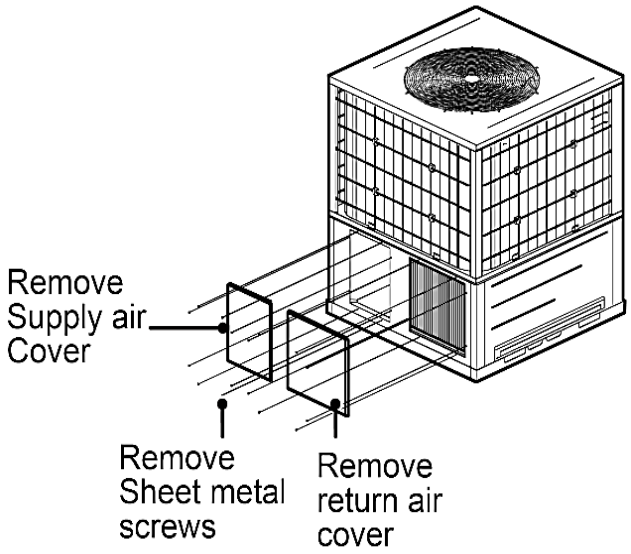
Clearance	Limit
①	24
②	8
③	20
④	24
⑤	60



Vertical Ductwork Installation



Horizontal Ductwork Installation



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