



Product Catalog

ProSpace™ C-Series Circular Cassette Indoor Unit Series

Models:

4MUS4518*10N0*
4MUS4524*10N0*
4MUS4530*10N0*
4MUS4536*10N0*
4MUS4542*10N0*
4MUS4548*10N0*





Introduction

Trane® C-Series ductless systems offer heating and cooling capacities ranging from 1.5 to 4 tons to precisely meet the requirements of indoor spaces while delivering high energy efficiency—up to 20 SEER. A variety of indoor fan coil unit options are available in both ceiling cassette and concealed designs, so your Trane ductless system can be perfectly tailored to the requirements of the space. Trane C-Series systems support pipe runs of up to 98 vertical ft (29.9 m), and up to 245 total ft (74.7 m). All C-Series systems are rated for cooling operation to 0°F (-17.8°C) and heating operation to -4°F (-20°C).

Suitable for a wide variety of applications, Trane C-Series systems can reliably deliver precise temperature control to maintain comfort, as well as ensure the reliability of heat-generating equipment like computer servers, making them perfect for applications like small remote facilities on larger campuses, data centers, machine rooms and more. Trane C-Series systems are also a perfect supplement to larger Trane VRF systems, with the same controls available to both systems.

Copyright

This document and the information in it are the property of Trane, and may not be used or reproduced in whole or in part without written permission. Trane reserves the right to revise this publication at any time, and to make changes to its content without obligation to notify any person of such revision or change.

Trademarks

All trademarks referenced in this document are the trademarks of their respective owners.



Table of Contents

- Features and Benefits..... 4
- Model Number Description 5
 - Indoor Unit Model Number Description..... 5
 - Outdoor Unit Model Number Description 5
- Mechanical Specifications 6
- Controls 7
 - Zone Controllers..... 7
 - Centralized Control Systems..... 7
 - Integrated System Management 7
 - Building Management System Gateways 7
 - Interface Modules..... 8
 - Sensors..... 8
 - Commissioning Utility Kits 8
- Product Specifications 9
- Product Capacity Tables 15
- Unit Dimensions..... 17
 - Indoor Unit Dimensions 17
 - Outdoor Unit Dimensions 21
- Electrical Wiring 24
 - Indoor Units 24
 - Outdoor Units 25
- Temperature and Air Flow 27
- Sound Pressure Levels 30
 - Indoor 30
 - Outdoor..... 32



Features and Benefits

The following is a list of standard features:

- 10 year parts and compressor warranty
- Low ambient cooling to 0°F (-17.8°C) (with baffle)
- Low ambient heating to -4°F (-20°C)
- Auto restart on power fail
- Factory installed condensate pump
- Night time quiet operation mode
- Return air filter standard
- Inverter compressor/condenser fan motor
- BLDC supply fan
- Low pressure cutoff

The following is a list of optional features:

- Low ambient wind baffle
- Wireless remote control
- Wired programmable controller
- Simple touch controller
- Refrigerant line set
- Condenser pad



Model Number Description

Indoor Unit Model Number Description

Digit 1 — Refrigerant

4 = R410A

Digit 2 — Product type

M = Mini-split indoor unit

Digit 3 — System type

U = C-Series universal match

Digit 4 — System type

S = Round cassette

Digit 5 — Standard model

4 = Standard model

Digit 6 — Connection type

5 = Flared

Digit 7, 8 — Nominal capacity (Btu/h x 1,000)

18 = 18,000 Btu/h

24 = 24,000 Btu/h

30 = 30,000 Btu/h

36 = 36,000 Btu/h

42 = 42,000 Btu/h

48 = 48,000 Btu/h

Digit 9 — Major development sequence

A = First development sequence

B = Second development sequence

Digit 11 — Reserved for future use

0 = Standard

Digit 12 — Miscellaneous digit

N = North America market (mini-split models)

Digit 13 — Reserved for future use

0 = Standard

Digit 14 — Minor design sequence

A = First design sequence

B = Second design sequence

Digit 15 — Service digit (not used for ordering)

A = First sequence

B = Second sequence

Outdoor Unit Model Number Description

Digit 1 — Refrigerant

4 = R410A

Digit 2 — Brand name

T = Trane

Digit 3 — System type

U = Universal match heat pump

Digit 4 — Configuration type

K = Outdoor unit

Digit 5 — Efficiency tier and/or special application

L = Low ambient cool

0 = Heat pump

Digit 6 — Series number

5 = Standard model

Digit 7, 8 — Nominal capacity (Btu/h x 1,000)

18 = 18,000 Btu/h

24 = 24,000 Btu/h

30 = 30,000 Btu/h

36 = 36,000 Btu/h

42 = 42,000 Btu/h

48 = 48,000 Btu/h

Digit 9 — Major development sequence

A = First development sequence

B = Second development sequence

C = Third development sequence

Digit 10 — Electric power supply characteristics

1 = 208-230/60/1

Digit 11 — Reserved for future use

0 = Not currently used

Digit 12 — Region of sale

N = North America (UL or ETL)

Digit 13 — Reserved for future use

0 = Not currently used

Digit 14 — Minor design sequence

A = First design sequence

B = Second development sequence

C = Third design sequence

D = Fourth design sequence

Digit 15 — Service digit (not used for ordering)

A = First sequence

B = Second sequence



Mechanical Specifications

The Trane™ 4MUS units are circular diffuser cassette style indoor units that can be exposed or recessed into the ceiling grid with an exposed ceiling grille. The unit electrical power is 208-230 volts, 1-phase, 60 hertz.

The indoor unit is factory-assembled, wired and run tested. Contained within the unit are all the factory wiring, piping, control circuit board, and fan motor. The unit has a self-diagnostic function, a 3-minute time delay mechanism, and an auto restart function.

The indoor supply fan consists of a turbo fan with a single direct-drive motor. The indoor fan is statically and dynamically balanced to run on a motor with permanently lubricated bearings. The indoor fan has high, medium, and low fan speeds. The fan speed is adjustable by an optional remote controller.

Air direction control is achieved by creating low pressure (Coanda effect) near the air outlet. The cassette modulates three booster fans to change the pressure and discharge air direction. Fixed or auto-swing control from 10° angle up to 60° angle is possible using a remote controller. Independent control is also possible from 10° angle up to 60° angle.

Cassettes using manual or motorized louvered vanes have inherent limitations and restrictive airflow designs. These restrictions create drafts and dead spots, resulting in occupant discomfort. Designs using manual or motorized louvers, and or 4-way cassettes that have been converted to rounded discharge are not accepted.

The circular cassette diffuser is designed for even air distribution in all directions without the use of manual or motorized louvered vanes. The diffuser is easily detachable and has an optional square-to-round trim for use when installed in an acoustical ceiling.

Diffuser and trim are available in standard factory white or optional black. Diffuser and associate trim pieces are easily customizable with field applied coatings.

The cabinet has a 4 inch knockout for providing ducted, pretreated, and filtered fresh air to the unit. If necessary, an external booster fan may be installed in the fresh air ductwork. An optional external set of dry contacts may be provided to control the booster fan.

Return air is filtered by means of a round, long-life washable permanent filter.

The indoor coil is constructed as follows:

- The indoor coil is made of nonferrous construction with slit fins on copper tubing.
- The tubing has inner grooves for high-efficiency heat exchange.
- All tube joints are brazed with phos-copper or silver alloy.
- The coils are pressure-tested at the factory.
- A condensate pan and drain are provided under the coil.
- The coil fins are coated with hydrophilic paints.
- The factory-installed condensate lift mechanism is able to raise drain water 29.5 inches water column above the condensate pan. The lift pump includes a check valve, and a factory-wired condensate float switch. The float switch disables and alarms the indoor unit in the event of condensate overflow.
- Both refrigerant lines to the indoor units are insulated.





These units use 18 AWG, 25pF/ft nominal, 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring is not be permitted.

These units use controls provided by Trane to perform functions necessary to operate the system.



Controls

Zone Controllers

Type	Figure	Model Number
Circular cassette wireless remote control <ul style="list-style-type: none"> • Mode: heat/cool/auto/off • Fan: auto/high/med/low • Service indicator Note: Requires the use of a duct signal receiver.		TVCREMOTE001T
Wireless control EcoAir <ul style="list-style-type: none"> • Mode: heat/cool/auto/off • Fan: auto/high/med/low • Occupancy/setback • Service indicator Simple touch wired control <ul style="list-style-type: none"> • Mode: heat/cool/auto/off • Fan: auto/high/med/low • Service indicator 	 	TVCTRLTECOAIR1A TVCTRLTWR0002T
Wired remote control <ul style="list-style-type: none"> • Mode: heat/cool/auto/off • Fan: auto/high/med/low • Programmable • Service indicator 		TVCTRLTWRWD02T

Centralized Control Systems

Type	Model Number
VRF touch screen control	TVCTRLTCMA300T

Integrated System Management

Type	Model Number
VRF enterprise management software	TVCTRLTSTP3P00
VRF power meter interface (PIM)	TVCTRLTIMB16A0

Building Management System Gateways

Type	Model Number
VRF system controller+BACnet® Note: This controller enables BACnet integration.	TVCTRLSCBB17A0



Interface Modules

Type	Model Number
VRF external contact interface module/auxiliary heat module	TVCTRLIMB14A0

Sensors

Type	Model Number
VRF external room temperature sensor	TVCTRLTRWTA000

Commissioning Utility Kits

Type	Model Number
VRF Technician Utilities Tool (TUT)	TVCTRLTIMC0300



Product Specifications

Table 1. Product specifications: 18, 24, 30 MBH models

Model Number		Indoor unit		4MUS4518**	4MUS4524**	4MUS4530**
		Outdoor unit		4TUK4518**	4TUK4524**	4TUK4530**
Mode				Heat pump	Heat pump	Heat pump
System	Capacity Nominal ¹	Cooling (Min/ Std/ Max)	Btu/h	5,000 / 18,000 / 21,000	7,000 / 24,000 / 27,000	9,300 / 30,000 / 35,000
		Heating	Btu/h	3,800 / 20,000 / 25,000	5,200 / 27,000 / 31,000	9,000 / 32,000 / 38,000
	Power Input (Nominal)	Cooling (Min/Std/ Max)	kW	0.35 / 1.58 / 2.30	0.46 / 2.16 / 2.50	0.70 / 2.89 / 4.00
		Heating (Min/Std/ Max)		0.26 / 1.60 / 2.70	0.38 / 2.47 / 3.50	0.65 / 3.06 / 5.50
	Current Input (Nominal)	Cooling	A	2.10 / 7.20 / 10.00	2.80 / 9.80 / 12.00	4.00 / 13.40 / 17.00
		Heating		1.70 / 7.40 / 12.00	2.50 / 11.60 / 14.50	3.40 / 14.40 / 21.80
	MCA		A	8.10	12.06	19.7
	MOP		A	15.00	20.00	30.00
	Energy efficiency	EER (Nominal cooling)	Btu/Wh	11.39	11.11	10.38
		COP (Nominal heating)	—	3.66	3.20	3.06
		Efficiency rating	—	SEER 20.1	SEER 20.5	SEER 19.2
	—		HSPF 10.0	HSPF 10.0	HSPF 9.9	
	Piping connections	Liquid pipe	inch	1/4	1/4	3/8
		Gas pipe	inch	1/2	5/8	5/8
		Installation limitation	ft	Max length: 98 Max height: 66	Max length: 164 Max height: 98	Max length: 164 Max height: 98
	Refrigerant	Type	—	R410A	R410A	R410A
		Factory charging	lbs	2.87	4.63	5.73



Product Specifications

Table 1. Product specifications: 18, 24, 30 MBH models (continued)

Model Number			Indoor unit			4MUS4518**	4MUS4524**	4MUS4530**
			Outdoor unit			4TUK4518**	4TUK4524**	4TUK4530**
Mode			Heat pump			Heat pump	Heat pump	
Indoor unit	Power supply				1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	
	Fan	Type	—		Turbo	Turbo	Turbo	
		Motor output			65 x 1	65 x 1	97 x 1	
		Air flow rate (high/mid/low)	CFM		646 / 547 / 480	646 / 547 / 480	904 / 741 / 632	
	Drain	Drain pipe	inch		1 ID	1 ID	1 ID	
	Sound	Pressure (high/mid/low)	dB(A)		35 / 32 / 29	36 / 33 / 29	38 / 35 / 31	
	External dimensions	Net weight	lbs		46.30	46.30	52.91	
		Shipping weight	lbs		55.12	55.12	62.83	
		Net dimensions (WXHxD)	inch		37-3/8 x 11-1/8 x 37-3/8	37-3/8 x 11-1/8 x 37-3/8	37-3/8 x 11-1/8 x 37-3/8	
		Shipping dimensions (WXHxD)	inch		39 x 13 x 39	39 x 13 x 39	39 x 13 x 39	
	Panel size	Panel model (ceiling type)	—		See note 5 below.	See note 5 below.	See note 5 below.	
		Panel net weight	lbs		7.94	7.94	7.94	
		Shipping weight	lbs		13.89	13.89	13.89	
		Net dimensions (WXHxD)	inch		39-3/8 x 2-5/8 x 39-3/8	39-3/8 x 2-5/8 x 39-3/8	39-3/8 x 2-5/8 x 39-3/8	
		Shipping dimensions	inch		43-1/8 x 3-3/8 x 42-5/8	43-1/8 x 3-3/8 x 42-5/8	43-1/8 x 3-3/8 x 42-5/8	
	Additional accessories	Drain pump (built in)	in /gal/ h		29.53 / 6.34	29.53 / 6.34	29.53 / 6.34	

Table 1. Product specifications: 18, 24, 30 MBH models (continued)

Model Number		Indoor unit		4MUS4518**	4MUS4524**	4MUS4530**
		Outdoor unit		4TUK4518**	4TUK4524**	4TUK4530**
Mode				Heat pump	Heat pump	Heat pump
Outdoor unit	Power supply			1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Compressor	Type	—	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model	—	UG4T150LNBEQ	UG4T200LNFE4	UG8T300LNBJU
		Output	kW	1.42	1.85	2.82
		Oil type		POE	POE	PVE
	Fan	Air flow rate (cooling)	CFM	1,549	2,189	2,219
	Sound	Pressure (cooling/heating)	dB(A)	48 / 48	50 / 50	50 / 52
	External dimensions	Net weight	lbs	99.21	142.20	154.32
		Shipping weight	lbs	105.82	153.22	163.14
		Net dimensions (WxHxD)	inch	34-5/8 x 25-1/8 x 12-1/4	37 x 39-3/8 x 13	37 x 39-3/8 x 13
		Shipping dimensions (WxHxD)	inch	40-3/8 x 28-3/4 x 16-1/4	39-1/4 x 43-1/4 x 16-3/4	39-1/4 x 43-1/4 x 16-3/4
	Operating temp	Cooling	°F	0.0 — 115.0	0.0 — 115.0	0.0 — 115.0
		Heating	°F	-4.0 — 75.2	-4.0 — 75.2	-4.0 — 75.2

Notes:

- Specifications may be subject to change without prior notice.
- Nominal capacity are based on 25 ft. of equivalent refrigerant piping with 0 ft. level difference.
 - Cooling:** Indoor temperature 80° F DB, 67° F W, Outdoor temperature 95° F DB, 75° F WB
 - Heating:** Indoor temperature 70° F DB, 60° F W, Outdoor temperature 47° F DB, 43° F WB
- Sound pressure was acquired in an anechoic room. Actual noise level may be different depending on installation requirements
- These products contain R410A which is fluorinated greenhouse gas.
- Optional ceiling panels (detailed specifications for other panels are available on dimensional drawing pages)
 - Square panel type: PNLNRDCASS001SA (white) PNLNRDCASS0B1SA (black)
 - Round panel type: PNLNRDCASS001RA (white) PNLNRDCASS0B1RA (black)
- Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.



Product Specifications

Table 2. Product specifications: 36, 42, 48 MBH models

Model Number		Indoor unit		4MUS4536**	4MUS4542**	4MUS4548**	
		Outdoor unit		4TUK4536**	4TUK4542**	4TUK4548**	
Mode				Heat pump	Heat pump	Heat pump	
System	Capacity Nominal ¹	Cooling (Min/ Std/ Max)	Btu/h	14,000 / 36,000 / 41,000	16,300 / 42,000 / 45,000	8,600 / 48,000 / 51,000	
		Heating	Btu/h	11,500 / 40,000 / 48,000	13,400 / 47,000 / 50,000	15,300 / 53,000 / 55,000	
	Power Input (Nominal)	Cooling (Min/Std/ Max)	kW	0.93 / 3.00 / 3.60	4.78 / 12.31 / 13.19	1.24 / 5.41 / 5.50	
		Heating (Min/Std/ Max)		0.72 / 3.45 / 5.00	3.93 / 13.77 / 14.65	0.96 / 5.12 / 5.70	
	Current Input (Nominal)	Cooling	A	4.80 / 13.90 / 17.00	1.08 / 4.20 / 4.60	6.40 / 23.80 / 24.00	
		Heating		3.70 / 16.10 / 23.00		5.00 / 23.50 / 28.00	
	MCA			A	22.08	22.08	22.08
	MOP			A	35.00	35.00	35.00
	Energy efficiency	EER (Nominal cooling)	Btu/Wh	12.00	10.00	8.87	
		COP (Nominal heating)	—	13.40	3.04	3.02	
		Efficiency rating	—	SEER 20.7	SEER 19.7	SEER 19.0	
	—		HSPF 9.7	HSPF 9.5	HSPF 9.5		
	Piping connections	Liquid pipe	inch	3/8	3/8	3/8	
		Gas pipe	inch	5/8	5/8	5/8	
		Installation limitation	ft	Max length: 246 Max height: 98	Max length: 246 Max height: 98	Max length: 246 Max height: 98	
	Refrigerant	Type	—	R410A	R410A	R410A	
		Factory charging	lbs	6.17	6.17	6.17	

Table 2. Product specifications: 36, 42, 48 MBH models (continued)

Model Number			Indoor unit			4MUS4536**	4MUS4542**	4MUS4548**
			Outdoor unit			4TUK4536**	4TUK4542**	4TUK4548**
Mode			Heat pump			Heat pump	Heat pump	
Indoor unit	Power supply				1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	
	Fan	Type	—		Turbo	Turbo	Turbo	
		Motor output			97 x 1	97 x 1	97 x 1	
		Air flow rate (high/mid/low)	CFM		1,179 / 943 / 710	1,218 / 981 / 745	1,257 / 1,024 / 822	
	Drain	Drain pipe	inch		1 ID	1 ID	1 ID	
	Sound	Pressure (high/mid/low)	dB(A)		43 / 38 / 32	44 / 39 / 34	45 / 40 / 35	
	External dimensions	Net weight	lbs		52.91	52.91	52.91	
		Shipping weight	lbs		62.83	62.83	62.83	
		Net dimensions (WxHxD)	inch		37-3/8 x 14-3/8 x 37-3/8	37-3/8 x 14-3/8 x 37-3/8	37-3/8 x 14-3/8 x 37-3/8	
		Shipping dimensions (WxHxD)	inch		39 x 16-3/8 x 39	39 x 16-3/8 x 39	39 x 16-3/8 x 39	
	Panel size	Panel model (ceiling type)	—		See note 5 below.	See note 5 below.	See note 5 below.	
		Panel net weight	lbs		7.94	7.94	7.94	
		Shipping weight	lbs		13.89	13.89	13.89	
		Net dimensions (WXHxD)	inch		39-3/8 x 2-5/8 x 39-3/8	39-3/8 x 2-5/8 x 39-3/8	39-3/8 x 2-5/8 x 39-3/8	
		Shipping dimensions	inch		43-1/8 x 3-3/8 x 42-5/8	43-1/8 x 3-3/8 x 42-5/8	43-1/8 x 3-3/8 x 42-5/8	
	Additional accessories	Drain pump (built in)	in /gal/ h		29.53 / 6.34	29.53 / 6.34	29.53 / 6.34	



Product Specifications

Table 2. Product specifications: 36, 42, 48 MBH models (continued)

Model Number		Indoor unit		4MUS4536**	4MUS4542**	4MUS4548**
		Outdoor unit		4TUK4536**	4TUK4542**	4TUK4548**
Mode				Heat pump	Heat pump	Heat pump
Outdoor unit	Power supply			1,2,208-230,60	1,2,208-230,60	1,2,208-230,60
	Compressor	Type	—	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
		Model	—	UG5T450FUEJX	UG5T450FUEJX	UG5T450FUEJX
		Output	kW	2.82	4.12	4.12
		Oil type		PVE	PVE	PVE
	Fan	Air flow rate (cooling)	CFM	3,039	3,039	3,039
	Sound	Pressure (cooling/heating)	dB(A)	49 / 51	51 / 53	53 / 55
	External dimensions	Net weight	lbs	194.01	194.01	194.01
		Shipping weight	lbs	216.05	216.05	216.05
		Net dimensions (WxHxD)	inch	37 x 47-6/8 x 13	37 x 47-6/8 x 13	37 x 39-3/8 x 13
		Shipping dimensions (WxHxD)	inch	39-1/4 x 54-5/8 x 16-3/4	39-1/4 x 43-1/4 x 16-3/4	39-1/4 x 43-1/4 x 16-3/4
	Operating temp	Cooling	°F	0.0 — 115.0	0.0 — 115.0	0.0 — 115.0
		Heating	°F	-4.0 — 75.2	-4.0 — 75.2	-4.0 — 75.2

Notes:

- Specifications may be subject to change without prior notice.
- Nominal capacity are based on 25 ft. of equivalent refrigerant piping with 0 ft. level difference.
 - Cooling:** Indoor temperature 80° F DB, 67° F W, Outdoor temperature 95° F DB, 75° F WB
 - Heating:** Indoor temperature 70° F DB, 60° F W, Outdoor temperature 47° F DB, 43° F WB
- Sound pressure was acquired in an anechoic room. Actual noise level may be different depending on installation requirements
- These products contain R410A which is fluorinated greenhouse gas.
- Optional ceiling panels (detailed specifications for other panels are available on dimensional drawing pages)
 - Square panel type: PNLRND CASS001SA (white) PNLRND CASS0B1SA (black)
 - Round panel type: PNLRND CASS001RA (white) PNLRND CASS0B1RA (black)
- Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.



Product Capacity Tables

Figure 1. Cooling capacity table: 4MUS4518 and 4TUK4518****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																							
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75					
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI			
MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	
0	20.0	16.0	0.65	20.5	16.4	0.67	21.0	16.8	0.68	21.5	17.2	0.70	21.7	17.4	0.71	21.9	17.5	0.71	22.2	17.7	0.72			
70	21.8	17.5	1.19	22.4	17.9	1.22	22.9	18.3	1.25	23.5	18.8	1.28	23.7	19.0	1.29	24.0	19.2	1.31	24.2	19.4	1.32			
95	16.7	13.4	1.47	17.1	13.7	1.51	17.6	14.1	1.54	18.0	14.4	1.58	18.2	14.5	1.60	18.4	14.7	1.61	18.5	14.8	1.63			
115	16.3	13.0	2.18	16.7	13.3	2.23	17.1	13.7	2.28	17.5	14.0	2.34	17.7	14.1	2.36	17.9	14.3	2.39	18.0	14.4	2.41			

Figure 2. Heating capacity table: 4MUS4518 and 4TUK4518****

TC : Total Capacity, PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	10.5	1.39	10.4	1.38	10.3	1.36	10.2	1.35	10.1	1.3	10.0	1.3
14.0	19.5	1.80	19.3	1.79	19.1	1.77	18.9	1.75	18.7	1.7	18.5	1.7
32.0	20.4	1.77	20.2	1.75	20.0	1.74	19.8	1.72	19.6	1.7	19.4	1.7
47.0	20.6	1.65	20.4	1.63	20.2	1.62	20.0	1.60	19.8	1.6	19.6	1.6
75.2	26.0	1.24	25.7	1.22	25.5	1.21	25.2	1.20	24.9	1.2	24.7	1.2

Figure 3. Cooling capacity table: 4MUS4524 and 4TUK4524****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																							
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75					
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI			
MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	
0	25.2	20.2	0.86	25.8	20.7	0.88	26.4	21.2	0.90	27.1	21.7	0.92	27.4	21.9	0.93	27.6	22.1	0.94	27.9	22.3	0.95			
70	25.9	20.7	2.00	26.5	21.2	2.05	27.2	21.7	2.10	27.8	22.3	2.15	28.1	22.5	2.17	28.4	22.7	2.19	28.7	22.9	2.22			
95	22.3	17.9	2.01	22.9	18.3	2.06	23.4	18.7	2.11	24.0	19.2	2.16	24.2	19.4	2.18	24.5	19.6	2.20	24.7	19.8	2.23			
115	21.5	17.2	2.77	22.1	17.6	2.84	22.6	18.1	2.91	23.2	18.5	2.98	23.4	18.7	3.01	23.6	18.9	3.04	23.9	19.1	3.07			

Figure 4. Heating capacity table: 4MUS4524 and 4TUK4524****

TC : Total Capacity PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	17.2	2.42	17.0	2.40	16.8	2.37	16.7	2.35	16.5	2.3	16.3	2.3
14.0	26.1	3.35	25.9	3.32	25.6	3.28	25.4	3.25	25.1	3.2	24.9	3.2
32.0	26.4	2.91	26.1	2.88	25.8	2.85	25.6	2.82	25.3	2.8	25.1	2.8
47.0	27.8	2.54	27.5	2.52	27.3	2.49	27.0	2.47	26.7	2.4	26.5	2.4
75.2	34.4	2.67	34.1	2.64	33.7	2.62	33.4	2.59	33.1	2.6	32.7	2.5

Figure 5. Cooling capacity table: 4MUS4530 and 4TUK4530****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																							
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75					
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI			
MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	MBH	MBH	kW	
0	32.8	26.2	1.79	33.6	26.9	1.83	34.4	27.5	1.87	35.3	28.2	1.92	35.6	28.5	1.94	36.0	28.8	1.96	36.3	29.1	1.98			
70	32.1	25.7	1.84	32.9	26.3	1.89	33.7	26.9	1.93	34.5	27.6	1.98	34.9	27.9	2.00	35.2	28.2	2.02	35.6	28.4	2.04			
95	27.9	22.3	2.69	28.6	22.9	2.75	29.3	23.4	2.82	30.0	24.0	2.89	30.3	24.2	2.92	30.6	24.5	2.95	30.9	24.7	2.98			
115	23.5	18.8	3.01	24.1	19.3	3.09	24.7	19.8	3.16	25.3	20.2	3.24	25.6	20.4	3.27	25.8	20.6	3.31	26.1	20.9	3.34			

Figure 6. Heating capacity table: 4MUS4530 and 4TUK4530****

TC : Total Capacity, PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
-4.0	21.4	3.07	21.2	3.04	21.0	3.01	20.8	2.98	20.6	3.0	20.4	2.9
14.0	34.2	4.48	33.9	4.44	33.5	4.39	33.2	4.35	32.9	4.3	32.5	4.3
32.0	34.1	3.59	33.8	3.55	33.4	3.51	33.1	3.48	32.8	3.4	32.4	3.4
47.0	33.0	3.15	32.6	3.12	32.3	3.09	32.0	3.06	31.7	3.0	31.4	3.0
75.2	44.0	3.03	43.5	3.00	43.1	2.97	42.7	2.94	42.3	2.9	41.8	2.9



Product Capacity Tables

Figure 7. Cooling capacity table: 4MUS4536 and 4TUK4536****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
0	36.0	28.8	2.31	36.9	29.5	2.36	37.8	30.2	2.42	38.7	31.0	2.48	39.1	31.3	2.50	39.5	31.6	2.53	39.9	31.9	2.56
70	35.7	28.6	2.40	36.6	29.3	2.46	37.5	30.0	2.52	38.4	30.7	2.58	38.8	31.0	2.61	39.2	31.3	2.63	39.6	31.7	2.66
95	33.5	26.8	2.79	34.3	27.4	2.86	35.1	28.1	2.93	36.0	28.8	3.00	36.4	29.1	3.03	36.7	29.4	3.06	37.1	29.7	3.09
115	24.7	19.8	2.93	25.3	20.3	3.00	25.9	20.8	3.07	26.6	21.3	3.15	26.8	21.5	3.18	27.1	21.7	3.21	27.4	21.9	3.25

Figure 8. Heating capacity table: 4MUS4536 and 4TUK4536****

TC : Total Capacity PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-4.0	27.5	4.38	27.2	4.34	27.0	4.29	26.7	4.25	26.4	4.2	26.2	4.2
14.0	38.9	4.82	38.6	4.77	38.2	4.73	37.8	4.68	37.4	4.6	37.0	4.6
32.0	40.4	4.34	40.0	4.29	39.6	4.25	39.2	4.21	38.8	4.2	38.4	4.1
47.0	41.2	3.55	40.8	3.52	40.4	3.48	40.0	3.45	39.6	3.4	39.2	3.4
75.2	49.2	3.11	48.8	3.08	48.3	3.05	47.8	3.02	47.3	3.0	46.8	3.0

Figure 9. Cooling capacity table: 4MUS4542 and 4TUK4542****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
0	41.9	33.5	2.96	43.0	34.4	3.03	44.0	35.2	3.10	45.1	36.1	3.18	45.6	36.4	3.21	46.0	36.8	3.24	46.5	37.2	3.28
70	41.0	32.8	3.11	42.0	33.6	3.19	43.0	34.4	3.27	44.1	35.3	3.35	44.5	35.6	3.38	45.0	36.0	3.42	45.4	36.3	3.45
95	39.0	31.2	3.90	40.0	32.0	4.00	41.0	32.8	4.10	42.0	33.6	4.20	42.4	33.9	4.24	42.8	34.3	4.28	43.3	34.6	4.33
115	27.8	22.2	3.82	28.5	22.8	3.92	29.2	23.3	4.01	29.9	23.9	4.11	30.2	24.1	4.15	30.5	24.4	4.19	30.8	24.6	4.23

Figure 10. Heating capacity table: 4MUS4542 and 4TUK4542****

TC : Total Capacity, PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-4.0	27.6	4.48	27.3	4.44	27.1	4.39	26.8	4.35	26.5	4.3	26.3	4.3
14.0	41.3	5.26	40.9	5.21	40.5	5.16	40.1	5.11	39.7	5.1	39.3	5.0
32.0	45.7	4.92	45.3	4.88	44.8	4.83	44.4	4.78	44.0	4.7	43.5	4.7
47.0	48.4	4.67	47.9	4.62	47.5	4.58	47.0	4.53	46.5	4.5	46.1	4.4
75.2	53.0	4.04	52.5	4.00	52.0	3.96	51.5	3.92	51.0	3.9	50.5	3.8

Figure 11. Cooling capacity table: 4MUS4548 and 4TUK4548****

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB / WB)																				
	68 / 57			72 / 61			77 / 64			80 / 67			82 / 70			86 / 72			90 / 75		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
0	48.8	39.0	3.24	50.0	40.0	3.31	51.2	41.0	3.40	52.5	42.0	3.48	53.0	42.4	3.51	53.6	42.8	3.55	54.1	43.3	3.59
70	47.8	38.2	3.32	49.0	39.2	3.40	50.2	40.1	3.48	51.4	41.1	3.57	51.9	41.5	3.61	52.4	41.9	3.64	53.0	42.4	3.68
95	44.6	35.7	5.03	45.7	36.6	5.15	46.8	37.5	5.28	48.0	38.4	5.41	48.5	38.8	5.46	49.0	39.2	5.52	49.5	39.6	5.57
115	35.5	28.4	4.38	36.3	29.1	4.49	37.2	29.8	4.60	38.2	30.5	4.71	38.5	30.8	4.76	38.9	31.1	4.80	39.3	31.4	4.85

Figure 12. Heating capacity table: 4MUS4548 and 4TUK4548****

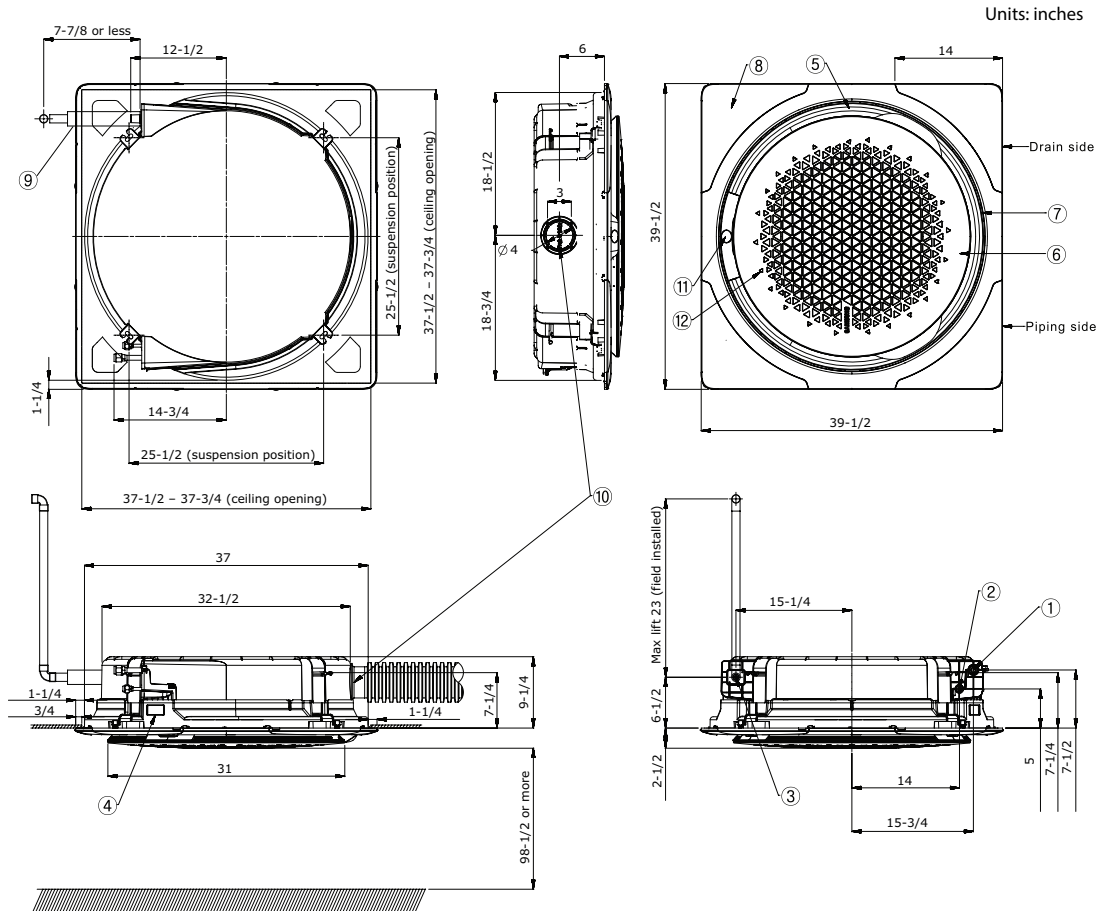
TC : Total Capacity PI: Power Input

Outdoor Temperature (°F, DB)	Indoor Temperature (°F, DB)											
	61		64		68		70		72		75	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
-4.0	27.9	4.68	27.6	4.63	27.4	4.59	27.1	4.54	26.8	4.5	26.6	4.4
14.0	41.3	5.12	40.9	5.07	40.5	5.02	40.1	4.97	39.7	4.9	39.3	4.9
32.0	45.8	5.29	45.4	5.23	44.9	5.18	44.5	5.13	44.1	5.1	43.6	5.0
47.0	54.6	5.28	54.1	5.22	53.5	5.17	53.0	5.12	52.5	5.1	51.9	5.0
75.2	57.5	4.88	56.9	4.84	56.4	4.79	55.8	4.74	55.2	4.7	54.7	4.6

Unit Dimensions

Indoor Unit Dimensions

Figure 13. Unit dimensions, ceiling type: 4MUS4518**, 4MUS4524**

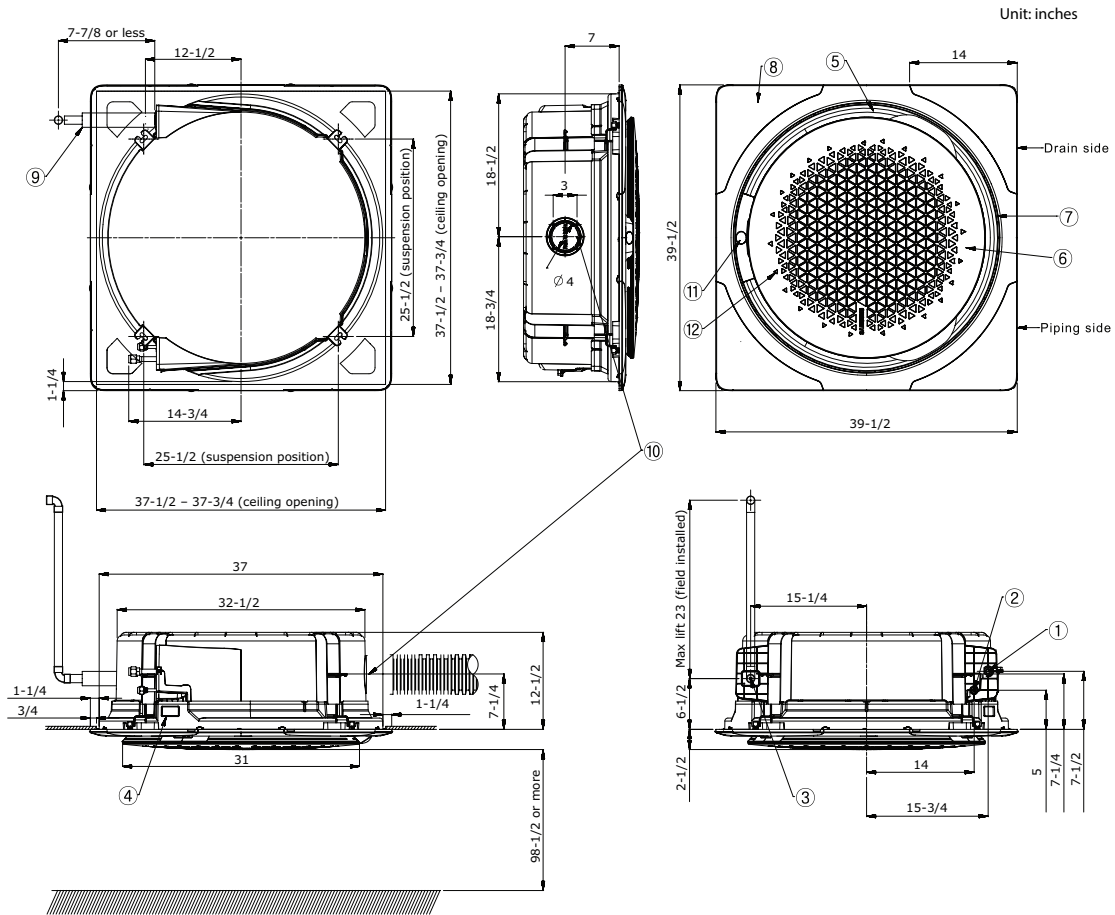


Note: Requires use of square cassette panel PNLRND CASS001S, ordered separately.

Legend:

- | | |
|---|------------------------------------|
| 1: Refrigerant gas pipe | 7: Suction rim for booster fan |
| 2: Refrigerant liquid pipe | 8: Cover panel |
| 3: Condensate drain | 9: Drain hose |
| 4: Power and communications wiring conduits | 10: Fresh air intake knockout hole |
| 5: Air discharge opening | 11: LED display |
| 6: Air suction grille | 12: Infrared receiver |

Figure 14. Unit dimensions, ceiling type: 4MUS4536, 4MUS4542**, and 4MUS4548****

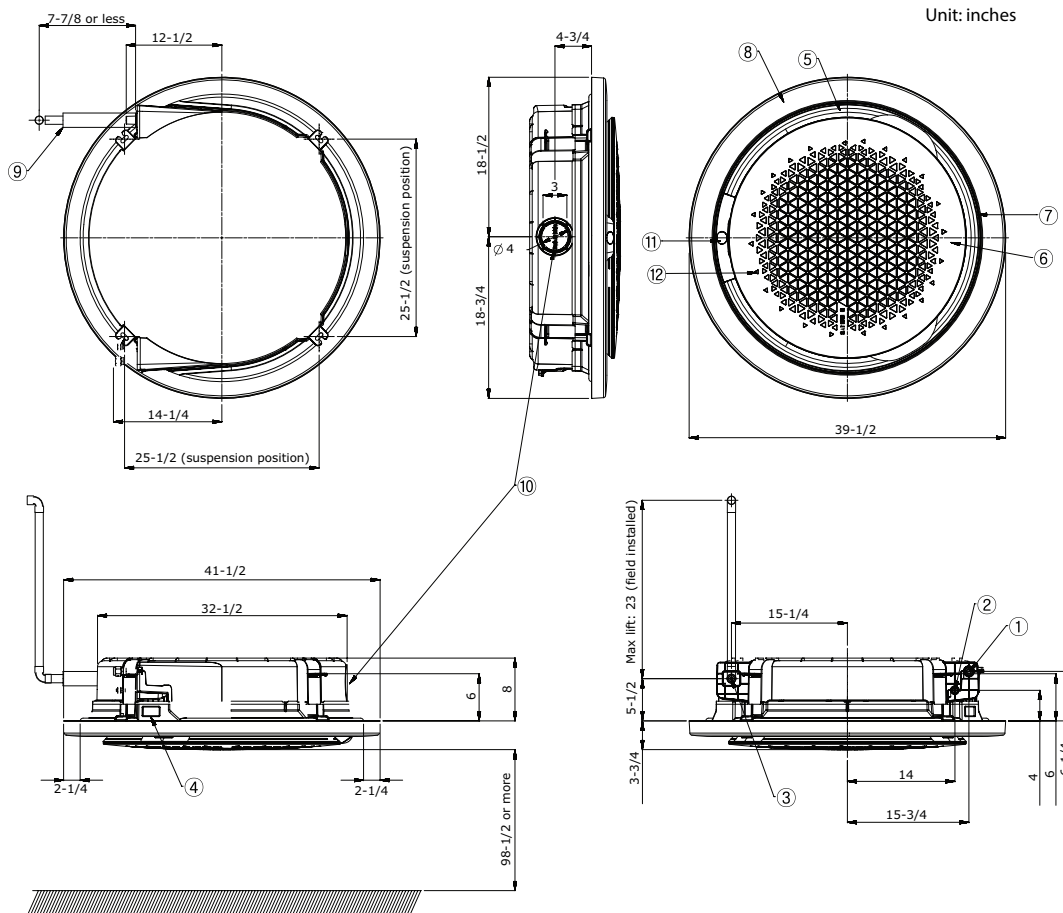


Note: Requires use of square cassette panel PNLRNDCASS001S, ordered separately.

Legend:

- | | |
|---|------------------------------------|
| 1: Refrigerant gas pipe | 7: Suction rim for booster fan |
| 2: Refrigerant liquid pipe | 8: Cover panel |
| 3: Condensate drain | 9: Drain hose |
| 4: Power and communications wiring conduits | 10: Fresh air intake knockout hole |
| 5: Air discharge opening | 11: LED display |
| 6: Air suction grille | 12: Infrared receiver |

Figure 15. Unit dimensions, open type: 4MUS4518** and 4MUS4524**

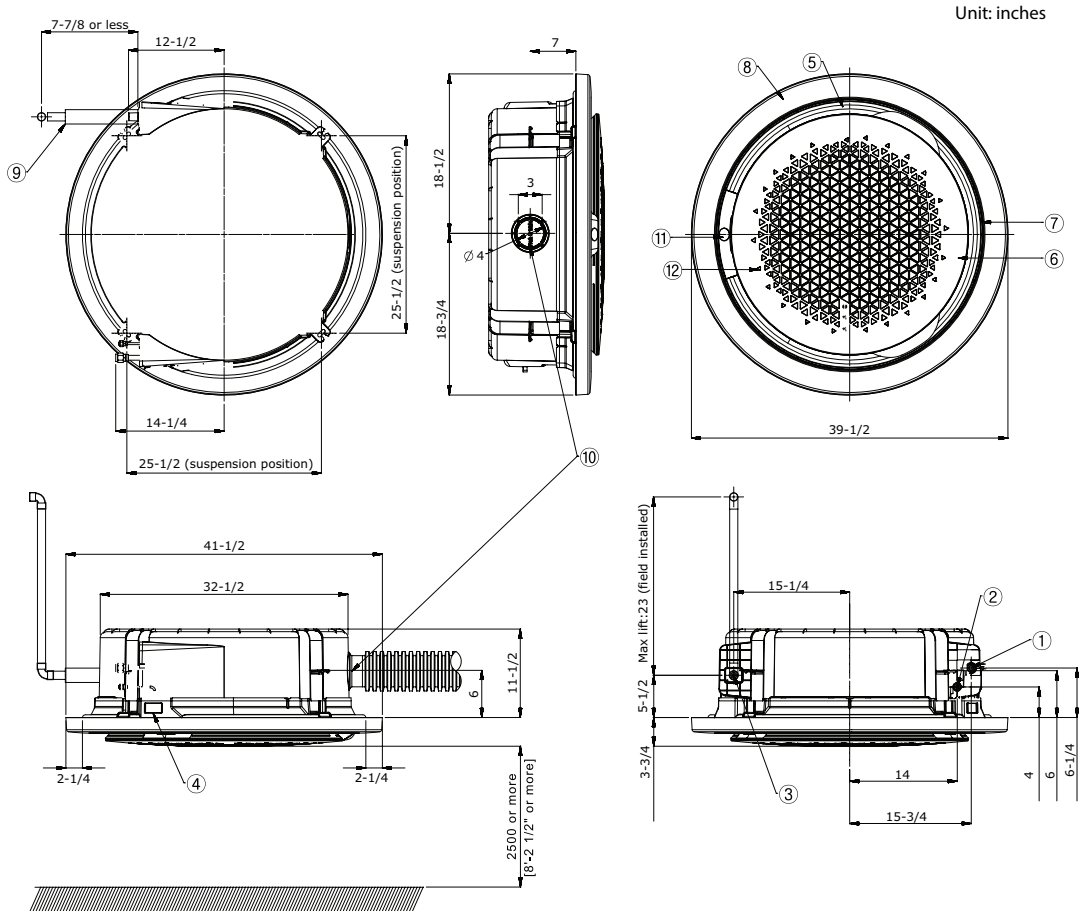


Note: Requires use of round cassette panel PNLRNDCASS001R, ordered separately.

Legend:

- | | |
|---|------------------------------------|
| 1: Refrigerant gas pipe | 7: Suction rim for booster fan |
| 2: Refrigerant liquid pipe | 8: Panel cover |
| 3: Condensate drain | 9: Drain hose |
| 4: Power and communications wiring conduits | 10: Fresh air intake knockout hole |
| 5: Air discharge opening | 11: LED display |
| 6: Air suction grille | 12: Infrared receiver |

Figure 16. Unit dimensions, open type: 4MUS4530**, 4MUS4536**, 4MUS4542** and 4MUS4548**



Note: Requires use of round cassette panel PNLRNDCASS001R, ordered separately.

Legend:

- | | |
|---|------------------------------------|
| 1: Refrigerant gas pipe | 7: Suction rim for booster fan |
| 2: Refrigerant liquid pipe | 8: Panel cover |
| 3: Condensate drain | 9: Drain hose |
| 4: Power and communications wiring conduits | 10: Fresh air intake knockout hole |
| 5: Air discharge opening | 11: LED display |
| 6: Air suction grille | 12: Infrared receiver |

Outdoor Unit Dimensions

Figure 17. Unit Dimensions: 18 MBH ODU

Unit: inches

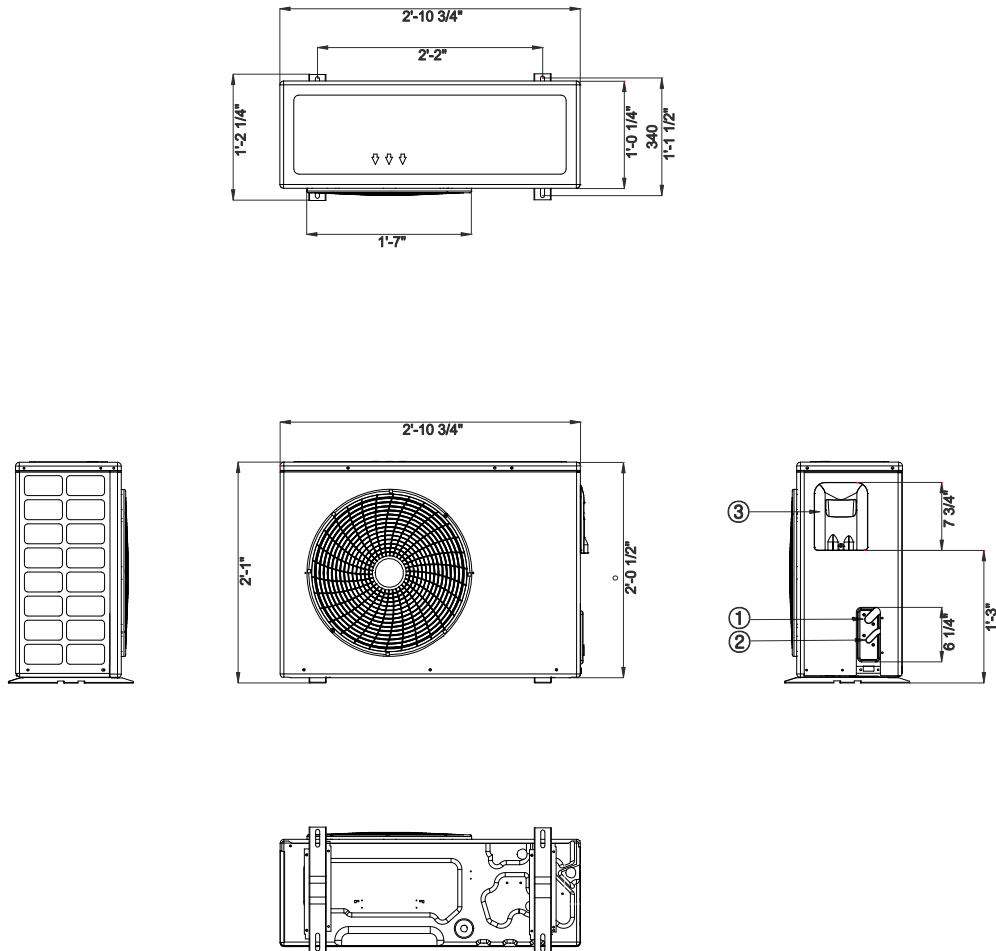


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Power & Comm. wiring conduits	9	
4		10	
5		11	
6		12	

Figure 18. Unit Dimensions: 24 and 30 MBH ODU

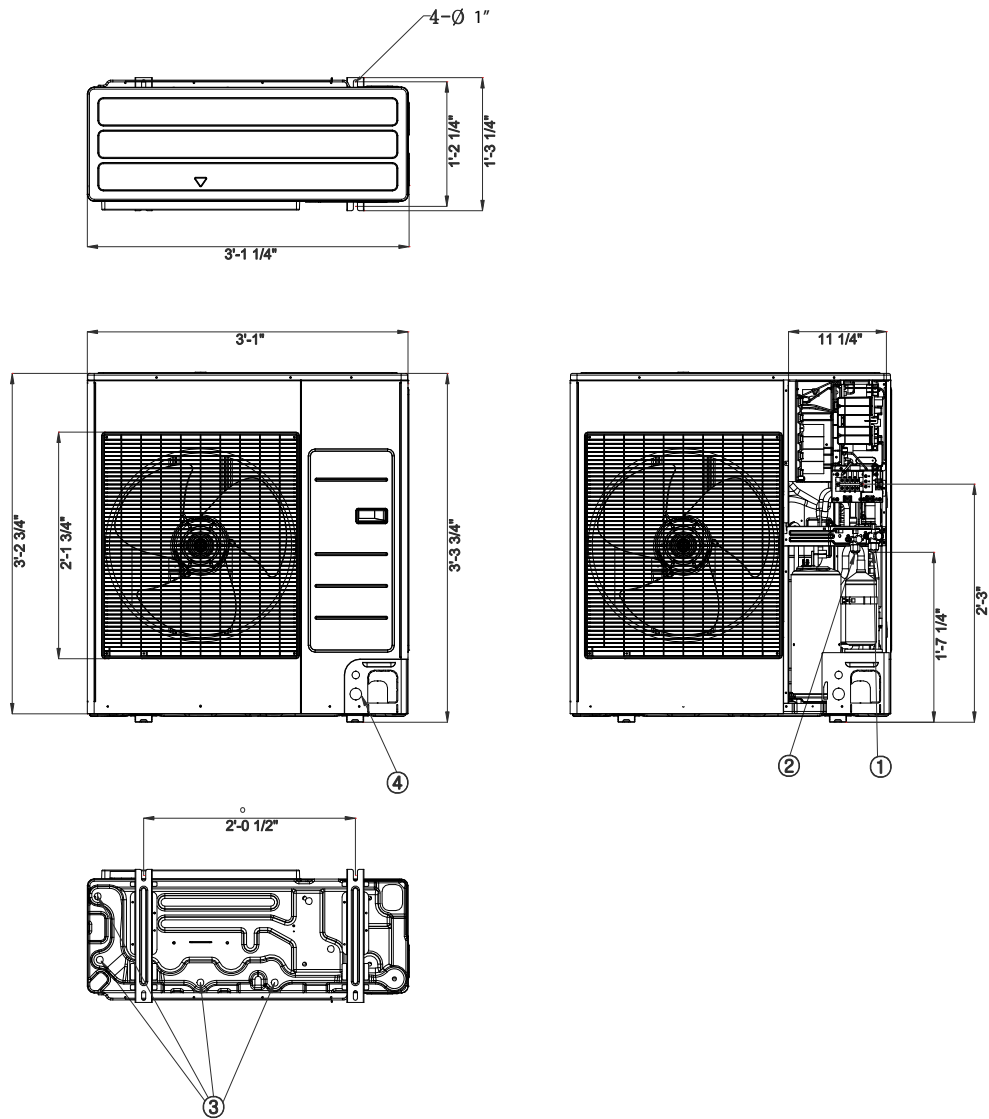


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

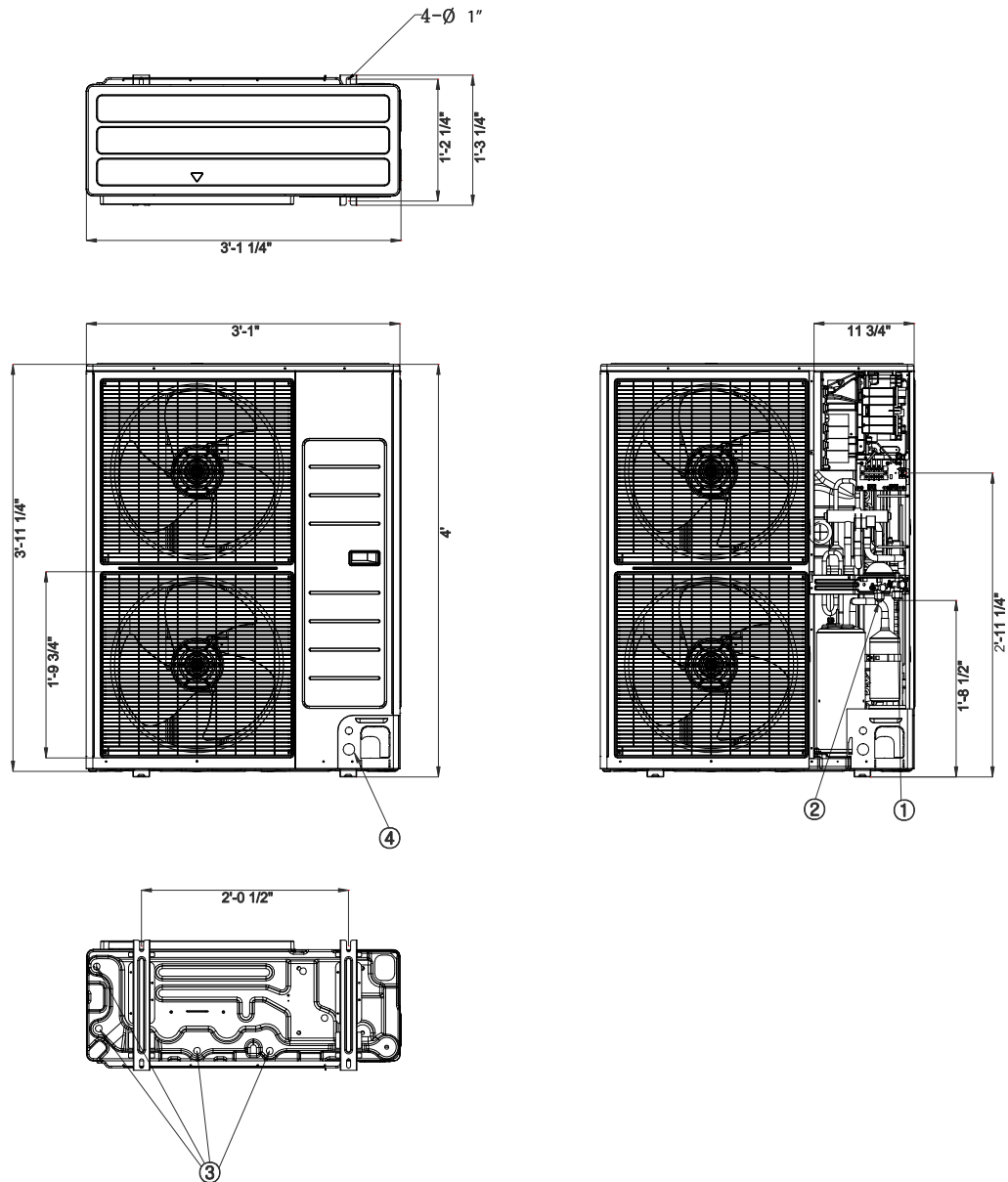
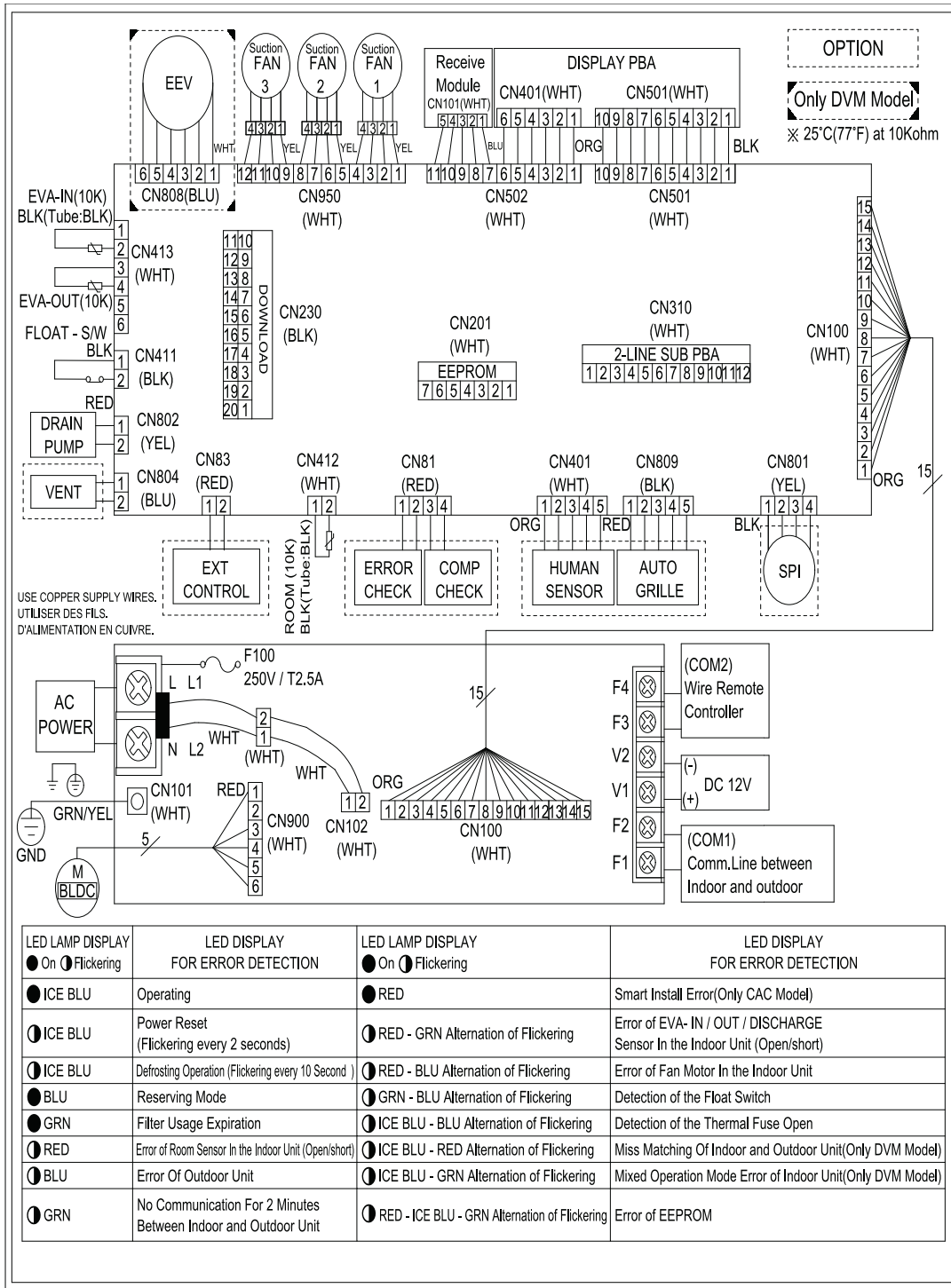
Figure 19. Unit Dimensions: 36, 42 and 48 MBH ODU


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Drain Hole	9	
4	Power & Comm. wiring conduits	10	
5		11	
6		12	

Electrical Wiring

Indoor Units



Outdoor Units

Figure 20. Electrical diagram: 4TUKL518** outdoor unit

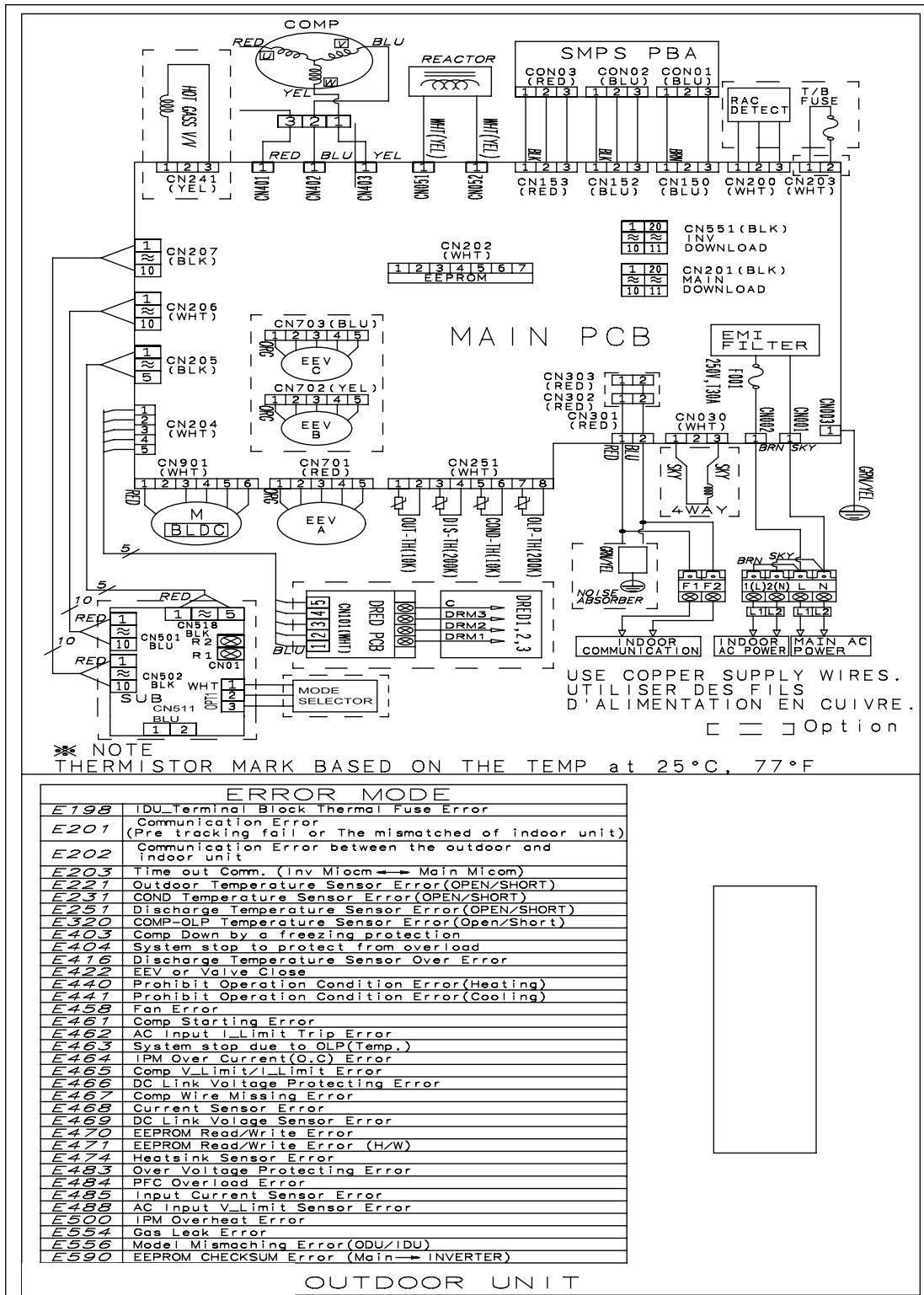
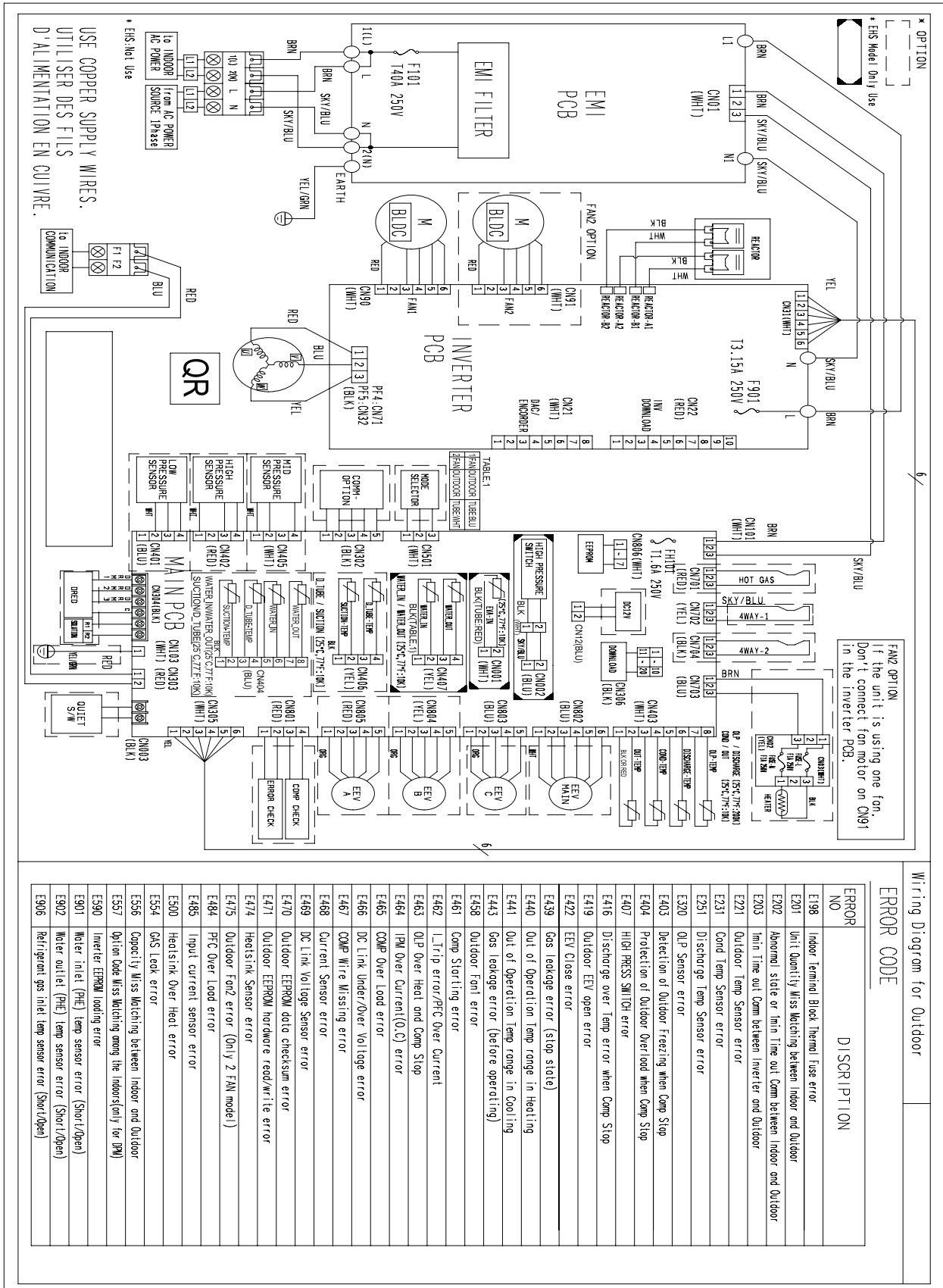


Figure 21. Electrical diagram: 4TUKL524, 4TUKL536**, 4TUKL542** and 4TUKL548** outdoor unit**




Temperature and Air Flow

Table 3. Temperature and air flow: 4MUS4518**

Figure 22. Cooling air velocity distribution: 4MUS4518**



Figure 23. Cooling temperature distribution: 4MUS4518**

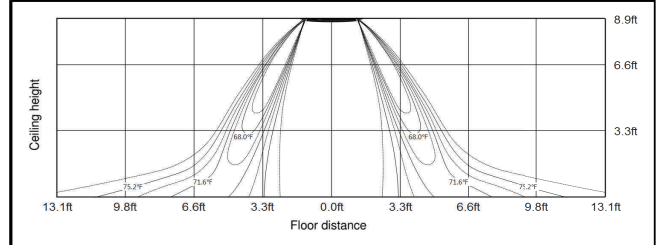


Figure 24. Heating air velocity distribution: 4MUS4518**

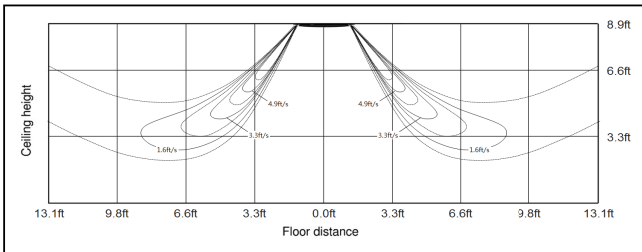


Figure 25. Heating temperature distribution: 4MUS4518**

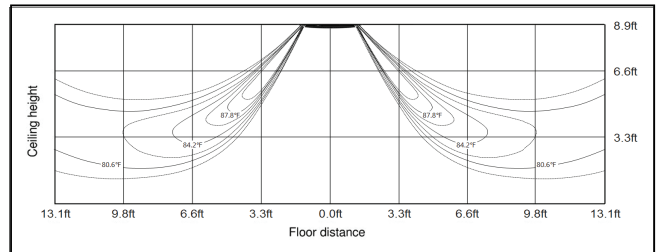


Table 4. Temperature and air flow: 4MUS4524**

Figure 26. Cooling air velocity distribution: 4MUS4524**

Discharge angle: 60°

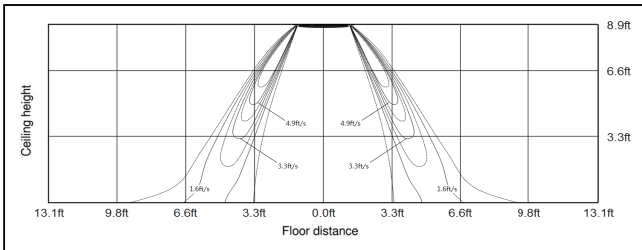


Figure 27. Cooling temperature distribution: 4MUS4524**

Discharge angle: 60°

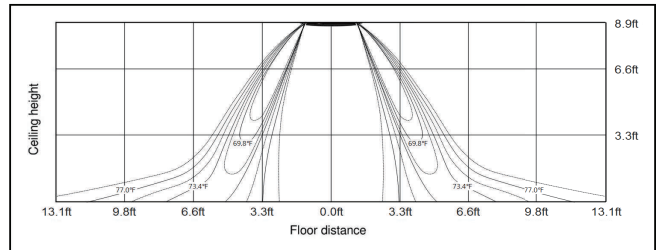


Figure 28. Heating air velocity distribution: 4MUS4524**

Discharge angle: 60°

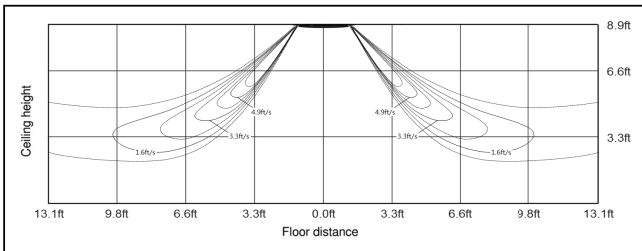


Figure 29. Heating temperature distribution: 4MUS4524**

Discharge angle: 60°

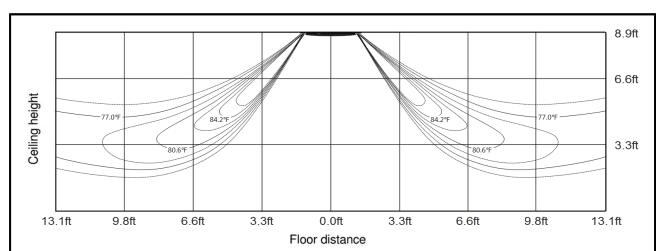


Table 5. Temperature and air flow: 4MUS4530**

Figure 30. Cooling air velocity distribution: 4MUS4530**

Discharge angle: 60°

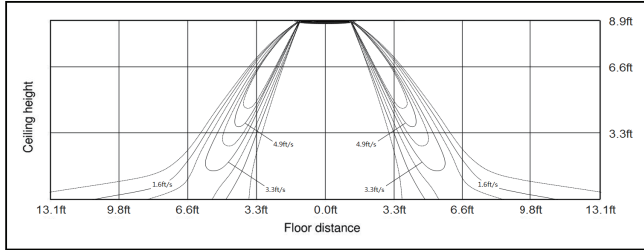


Figure 31. Cooling temperature distribution: 4MUS4530**

Discharge angle: 60°

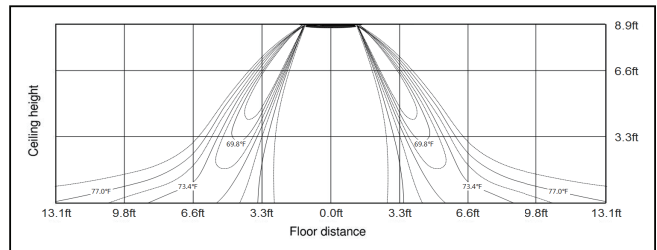


Figure 32. Heating air velocity distribution: 4MUS4530**

Discharge angle: 60°

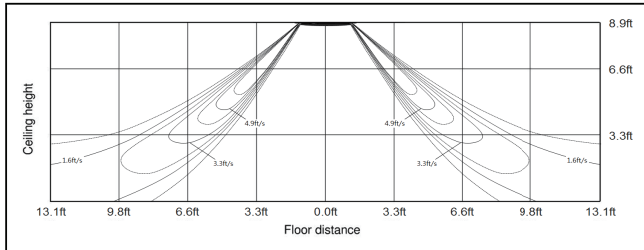


Figure 33. Heating temperature distribution: 4MUS4530**

Discharge angle: 60°

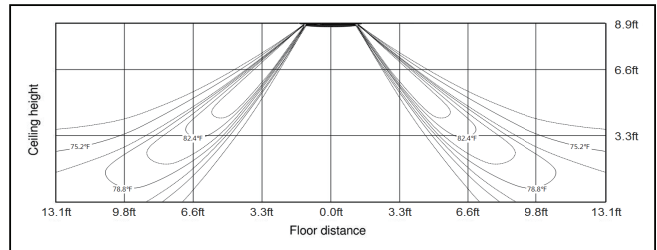


Table 6. Temperature and air flow: 4MUS4536**

Figure 34. Cooling air velocity distribution: 4MUS4536**

Discharge angle: 60°

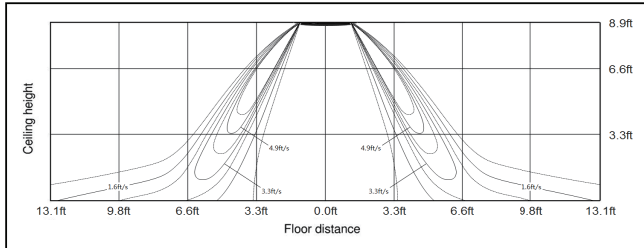


Figure 35. Cooling temperature distribution: 4MUS4536**

Discharge angle: 60°

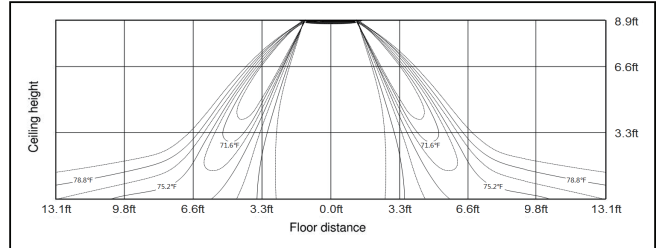


Figure 36. Heating air velocity distribution: 4MUS4536**

Discharge angle: 60°

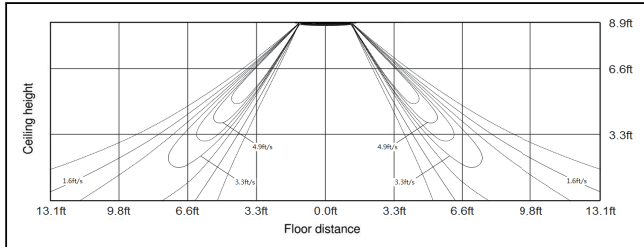


Figure 37. Heating temperature distribution: 4MUS4536**

Discharge angle: 60°

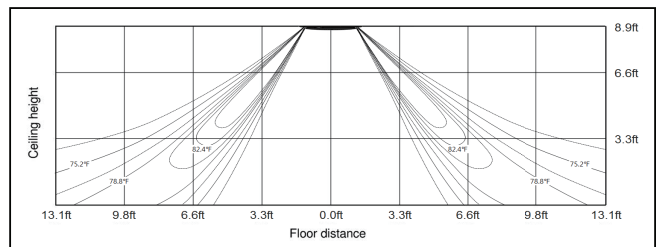


Table 7. Temperature and air flow: 4MUS4542**

Figure 38. Cooling air velocity distribution: 4MUS4542**

Discharge angle : 60°

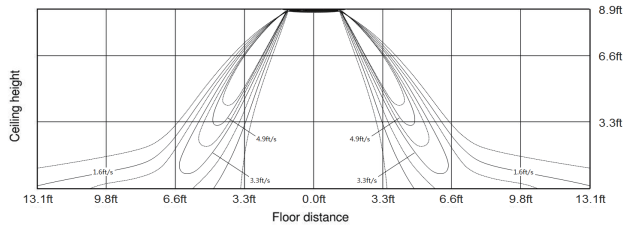


Figure 39. Cooling temperature distribution: 4MUS4542**

Discharge angle : 60°

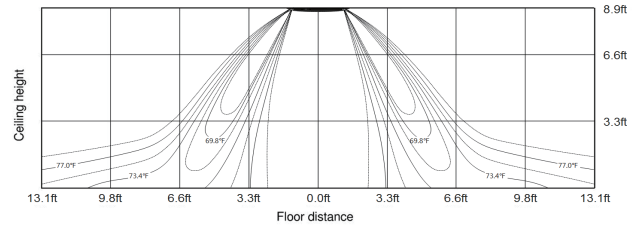


Figure 40. Heating air velocity distribution: 4MUS4542**

Discharge angle : 60°

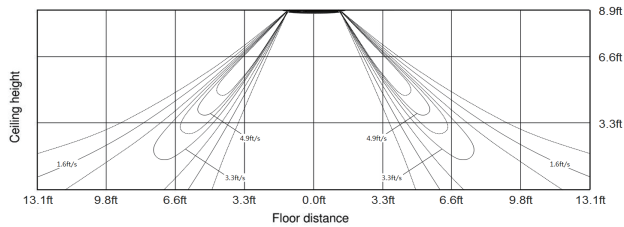


Figure 41. Heating temperature distribution: 4MUS4542**

Discharge angle : 60°

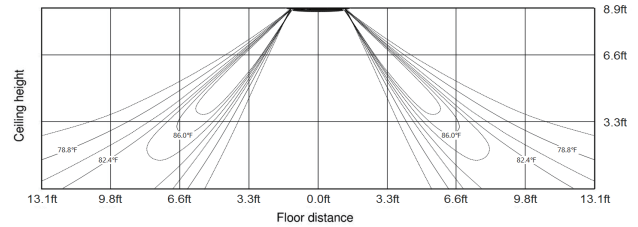


Table 8. Temperature and air flow: 4MUS4548**

Figure 42. Cooling air velocity distribution: 4MUS4548**

Discharge angle : 60°

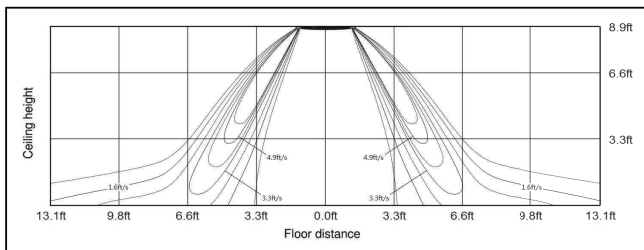


Figure 43. Cooling temperature distribution: 4MUS4548**

Discharge angle : 60°

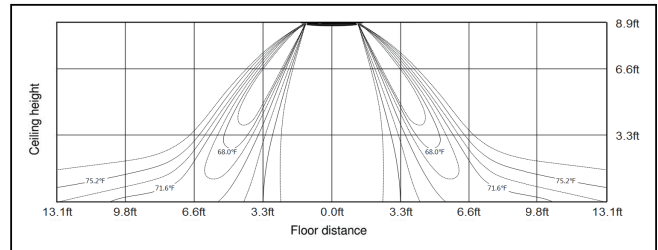


Figure 44. Heating air velocity distribution: 4MUS4548**

Discharge angle : 60°

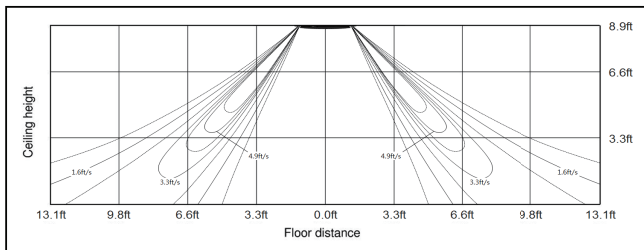
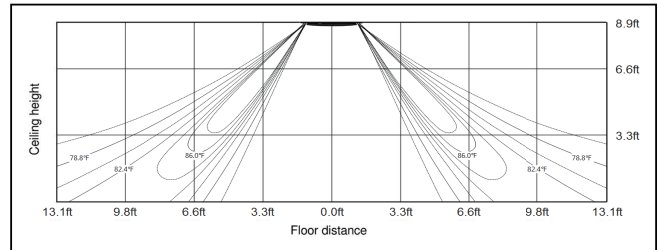


Figure 45. Heating temperature distribution: 4MUS4548**

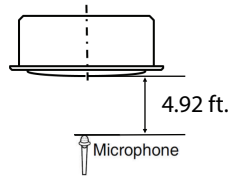
Discharge angle : 60°





Sound Pressure Levels

Indoor NC Curve



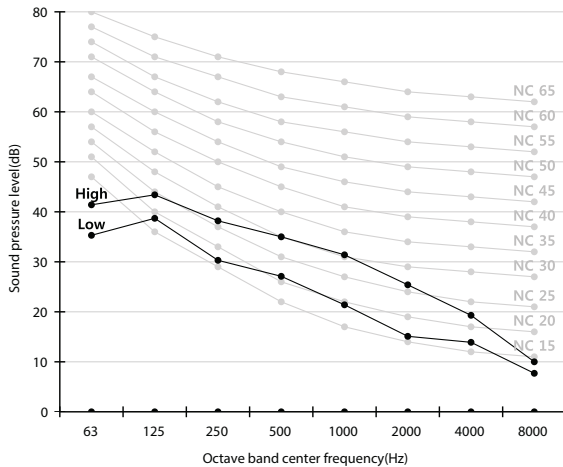
Unit: dB(A)

Model	High	Low
4MUS4518** (ODU: 4TUK4518**)	35	29
4MUS4524** (ODU: 4TUK4524**)	36	29
4MUS4530** (ODU: 4TUK4530**)	38	31
4MUS4536** (ODU: 4TUK4536**)	43	32
4MUS4542** (ODU: 4TUK4542**)	44	34
4MUS4548** (ODU: 4TUK4548**)	45	35

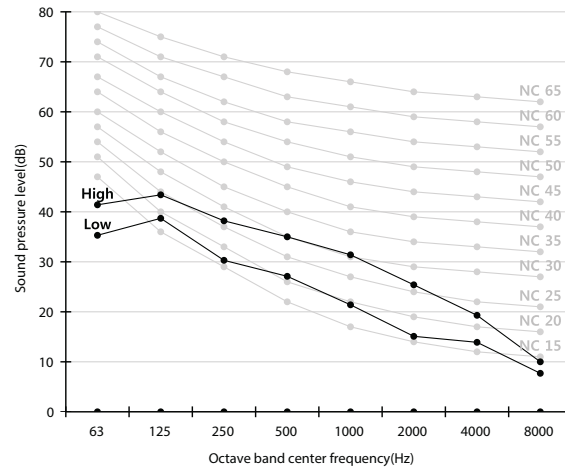
Notes:

- Specifications may be subject to change without prior notice.
- These operation values were obtained in an anechoic room.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.
- Operation sound level may differ depending on operation and ambient conditions.

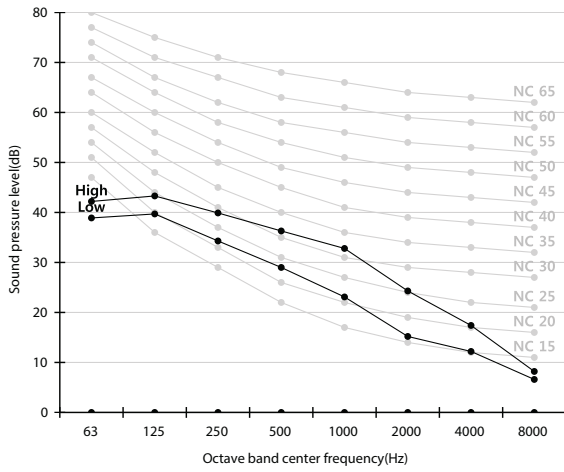
4MUS4518 (ODU: 4TUK4518**)**



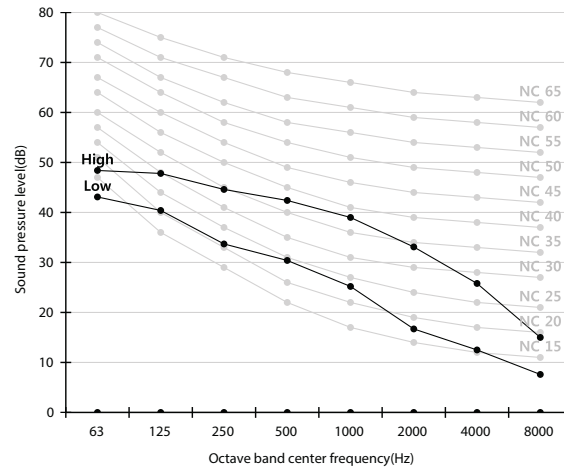
4MUS4524 (ODU: 4TUK4524**)**



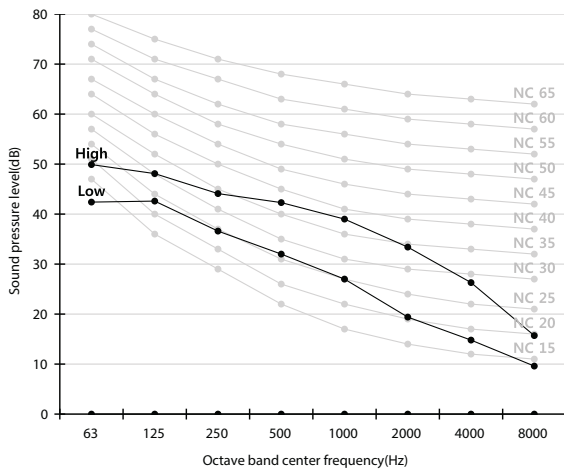
4MUS4530 (ODU: 4TUK4530**)**



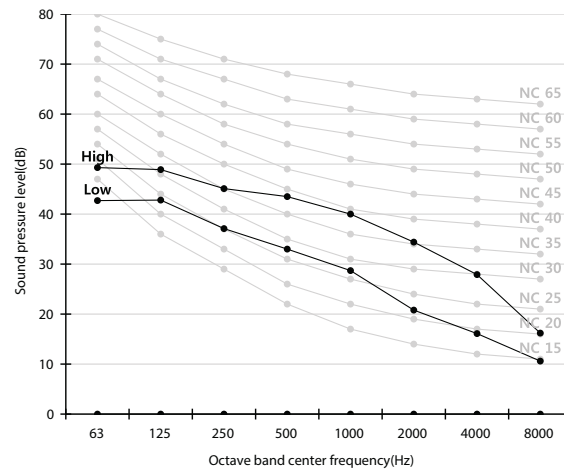
4MUS4536 (ODU: 4TUK4530**)**



4MUS4542 (ODU: 4TUK4542**)**



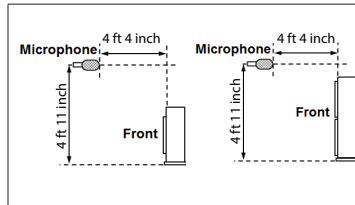
4MUS4548 (ODU: 4TUK4548**)**





Sound Pressure Levels

Outdoor NC Curve

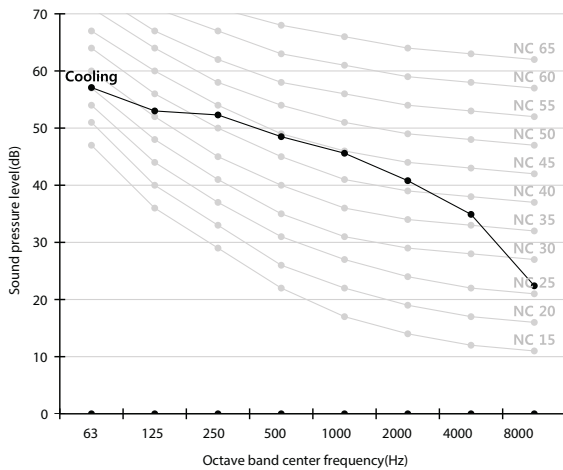


Unit: dB(A)	
Model	Cooling
4TUK4518** (IDU: 4MUS4518**)	48
4TUK4524** (IDU: 4MUS4524**)	50
4TUK4530** (IDU: 4MUS4530**)	50
4TUK4536** (IDU: 4MUS4536**)	49
4TUK4542** (IDU: 4MUS4542**)	51
4TUK4548** (IDU: 4MUS4548**)	53

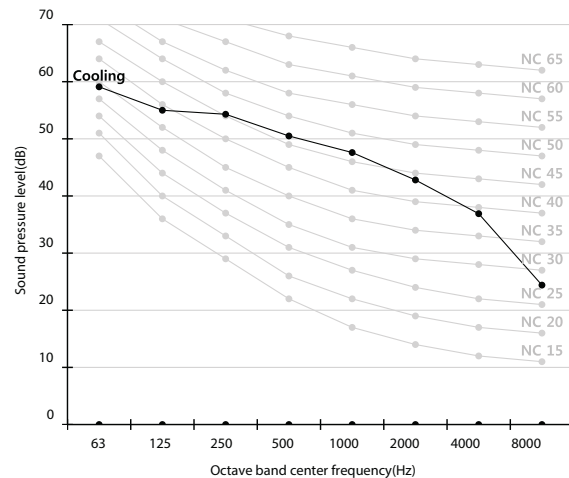
Notes:

- Specifications may be subject to change without prior notice.
- These operation values were obtained in an anechoic room.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.
- Sound pressure level may differ depending on operation condition.

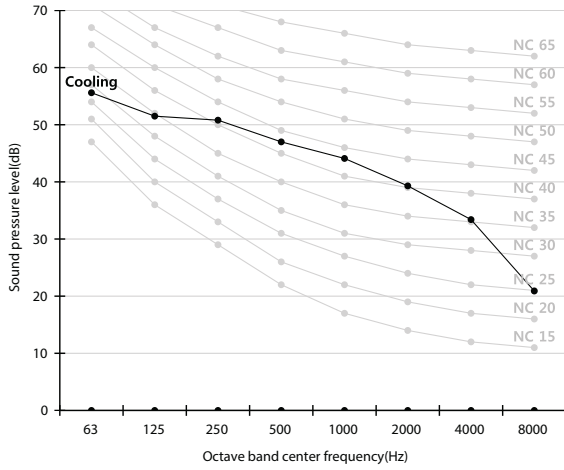
4TUK4518** (IDU: 4MUS4518**)



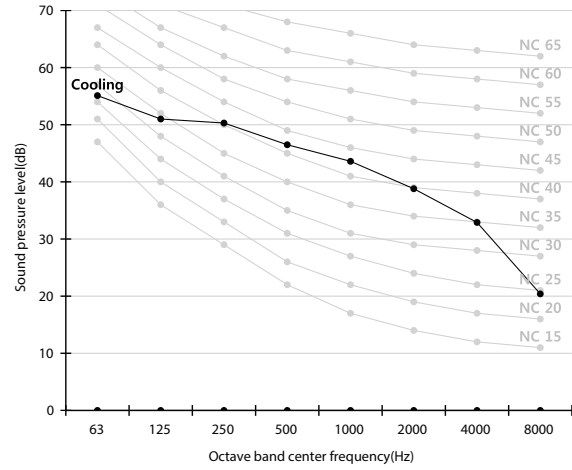
4TUK4524** (IDU: 4MUS4524**)



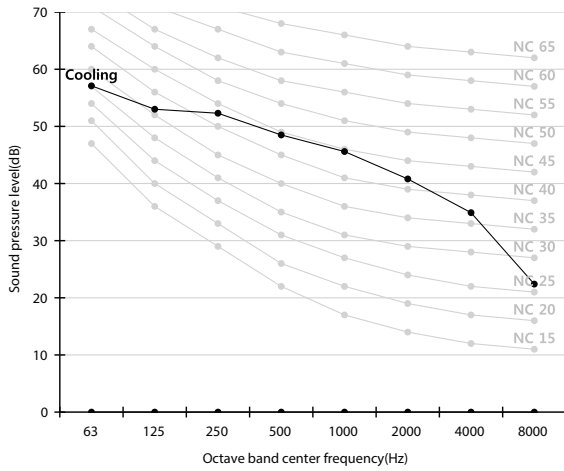
4TUK4530 (IDU: 4MUS4530**)**



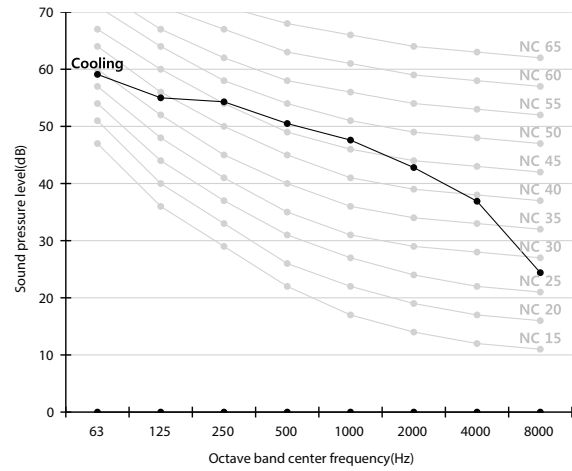
4TUK4536 (IDU: 4MUS4536**)**



4TUK4542 (IDU: 4MUS4542**)**



4TUK4548 (IDU: 4MUS4548**)**





Notes



Ingersoll Rand (NYSE: IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands – including Club Car®, Ingersoll Rand®, Thermo King® and Trane® – work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a global business committed to a world of sustainable progress and enduring results.



ingersollrand.com

Ingersoll Rand has a policy of continuous product and product data improvements and reserves the right to change design and specifications without notice.
We are committed to using environmentally conscious print practices.