

Summary

Filename LxT_Data.093
 Serial Number 3897
 Model SoundTrack LxT@
 Firmware Version 2.206
 User Kristina Phung
 Location Vandenberg Village, CA
 Job Description 8147 Oak Hills Estates
 Note
 Measurement Description
 Start 2016/04/19 9:42:04
 Stop 2016/04/19 10:12:05
 Duration 0:30:01.1
 Run Time 0:30:01.1
 Pause 0:00:00.0
 Pre Calibration 2016/04/19 9:37:58
 Post Calibration None
 Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
 Peak Weight A Weighting
 Detector Slow
 Preamp PRMLxT1
 Microphone Correction Off
 Integration Method Linear
 Overload 145.3 dB
 Under Range Peak **101.4** 98.4 103.4 dB
 Under Range Limit **37.7** 35.7 43.7 dB
 Noise Floor 24.7 25.3 32.8 dB

Results

LAeq 54.3 dB
 LAE 86.9 dB
 EA 53.947 µPa²h
 EA8 862.625 µPa²h
 EA40 4.313 mPa²h
 LApeak (max) 2016/04/19 10:09:23 **88.7** dB
 LASmax 2016/04/19 10:02:52 66.3 dB
 LASmin 2016/04/19 9:45:19 **32.7** dB
 SEA -99.9 dB

LAS > 85.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LAS > 115.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 135.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 137.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 140.0 dB (Exceedence Counts / Duration) 0 0.0 s

LCeq 67.1 dB
 LAeq 54.3 dB
 LCeq - LAeq 12.8 dB
 LAleq 55.5 dB
 LAeq 54.3 dB
 LAleq - LAeq 1.2 dB
 # Overloads 0
 Overload Duration 0.0 s

Dose Settings

Dose Name OSHA-1 OSHA-2
 Exch. Rate 5 5 dB
 Threshold 90 80 dB
 Criterion Level 90 90 dB
 Criterion Duration 8 8 h

Results

Dose -99.9 -99.9 %
 Projected Dose -99.9 -99.9 %
 TWA (Projected) -99.9 -99.9 dB
 TWA (t) -99.9 -99.9 dB
 Lep (t) 42.3 42.3 dB

Statistics

LAS5.00 60.5 dB
 LAS10.00 58.4 dB
 LAS33.30 54.7 dB
 LAS50.00 44.4 dB
 LAS66.60 39.2 dB
 LAS90.00 **35.6** dB

Calibration History

Preamp Date dB re. 1V/Pa
 PRMLxT1 2016/04/19 9:37:23 -51.4
 PRMLxT1 2016/02/16 16:53:44 -51.4
 PRMLxT1 2016/02/16 16:34:17 -51.3
 PRMLxT1 2016/02/16 16:03:47 -51.4
 PRMLxT1 2016/02/16 15:30:13 -51.4
 PRMLxT1 2016/02/16 14:36:01 -51.5
 PRMLxT1 2016/02/16 14:04:08 -51.4
 PRMLxT1 2016/02/16 13:31:01 -51.4
 PRMLxT1 2016/02/16 13:10:26 -51.5
 PRMLxT1 2016/02/16 11:30:45 -51.4
 PRMLxT1 2016/02/16 10:55:50 -51.5

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 Serial Number 3897
 Model SoundTrack LxT@
 Firmware Version 2.206
 User Kristina Phung
 Location Vandenberg Village, CA
 Job Description 8147 Oak Hills Estates
 Note
 Measurement Description
 Start 2016/04/19 10:56:06
 Stop 2016/04/19 11:26:07
 Duration 0:30:01.4
 Run Time 0:29:42.9
 Pause 0:00:18.5
 Pre Calibration 2016/04/19 10:52:48
 Post Calibration None
 Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
 Peak Weight A Weighting
 Detector Slow
 Preamp PRMLxT1
 Microphone Correction Off
 Integration Method Linear
 Overload 145.2 dB

	A	C	Z
Under Range Peak	101.3	98.3	103.3 dB
Under Range Limit	37.6	35.6	43.6 dB
Noise Floor	24.7	25.3	32.8 dB

Results

LAeq 51.5 dB
 LAE 84.0 dB
 EA 27.787 µPa²h
 EA8 448.852 µPa²h
 EA40 2.244 mPa²h
 LApeak (max) 2016/04/19 11:03:32 115.8 dB
 LASmax 2016/04/19 11:03:32 80.7 dB
 LASmin 2016/04/19 11:08:06 32.1 dB
 SEA -99.9 dB

LAS > 85.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LAS > 115.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 135.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 137.0 dB (Exceedence Counts / Duration) 0 0.0 s
 LApeak > 140.0 dB (Exceedence Counts / Duration) 0 0.0 s

LCeq 61.2 dB
 LAeq 51.5 dB
 LCeq - LAeq 9.8 dB
 LAleq 62.7 dB
 LAeq 51.5 dB
 LAleq - LAeq 11.2 dB
 # Overloads 0
 Overload Duration 0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exch. Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.9	0.00 %
Projected Dose	-99.9	0.00 %
TWA (Projected)	-99.9	14.6 dB
TWA (t)	-99.9	-5.5 dB
Lep (t)	39.4	39.4 dB

Statistics

LAS5.00 53.2 dB
 LAS10.00 47.3 dB
 LAS33.30 39.7 dB
 LAS50.00 37.7 dB
 LAS66.60 36.1 dB
 LAS90.00 33.9 dB

Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1	2016/04/19 10:52:30	-51.3
PRMLxT1	2016/04/19 10:13:15	-51.4
PRMLxT1	2016/04/19 9:37:23	-51.4
PRMLxT1	2016/02/16 16:53:44	-51.4
PRMLxT1	2016/02/16 16:34:17	-51.3
PRMLxT1	2016/02/16 16:03:47	-51.4
PRMLxT1	2016/02/16 15:30:13	-51.4
PRMLxT1	2016/02/16 14:36:01	-51.5
PRMLxT1	2016/02/16 14:04:08	-51.4
PRMLxT1	2016/02/16 13:31:01	-51.4
PRMLxT1	2016/02/16 13:10:26	-51.5

**25HHA4
Performance™ Series Heat Pump
with Puron® Refrigerant
1 – 1/2 to 5 Nominal Tons**



Product Data



Performance
SERIES

Carrier Heat Pumps with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 25HHA4 has been designed utilizing Carrier's Puron refrigerant. This environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Energy Efficiency

- 14 - 15 SEER/11.5 - 12.5 EER/8.2 - 8.5 HSPF
(Based on tested combinations)

Sound

- Levels as low as 69 dBA

Design Features

- Small footprint
- WeatherArmor™ cabinet
 - All steel cabinet construction
 - Mesh coil guard

Reliability, Quality and Toughness

- Scroll compressor
- Factory-supplied filter drier
- High pressure switch
- Low pressure switch
- Accumulator
- Line lengths up to 250' (76.2 m)
- Low ambient operation
(down to -20°F/-28.9°C with low ambient accessories)

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	5											
		H	H	A	4	1	8	A	0	0	3	0
Product Series	Product Family	Product Type	Major Series	SEER	Cooling Capacity	Variations	Open	Open	Voltage	Minor Series		
25=HP	H = HP	H = Horizontal Discharge		4 = 14 SEER		A=Standard	0=Not Defined	0=Not Defined	3=208/230-1 5=208/230-3 6=460/3	0, 1, 2...		



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

PHYSICAL DATA

UNIT SIZE – SERIES	18–30	24–30	30–30	36–30, 50, 60	48–30, 50, 60	60–30, 50, 60
COMPRESSOR TYPE	Scroll					
REFRIGERANT	Puron® (R-410A)					
Control	TXV (Puron Hard Shutoff)					
Charge lb (kg)	6.72 (3.05)	7.67 (3.48)	12.07 (5.47)	12.32 (5.59)	10.95 (4.97)	11.82 (5.36)
COND FAN	Propeller Type, Direct Drive					
Air Discharge	Horizontal					
Air Qty (CFM)	1285	1285	2615	2615	2785	2785
Motor HP	1/12	1/12	1/4	1/4	1/4	1/4
Motor RPM	800	800	800	800	800	800
COND COIL						
Face Area (Sq ft)	5.8	7.3	12.1	12.1	14.1	14.1
Fins per In.	20	20	20	20	20	20
Rows	2	2	2	2	2	2
Circuits	3	3	6	5	6	6
VALVE CONNECT. (In. ID)						
Vapor	5/8	3/4	3/4	7/8	7/8	7/8
Liquid	3/8					
REFRIGERANT TUBES* (In. OD)						
Rated Vapor*	5/8	3/4	3/4	7/8	7/8	1 1/8
Max Liquid Line†	3/8					

* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.
Note: See unit Installation Instruction for proper installation.

† See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

ELECTRICAL DATA

UNIT SIZE – voltage, series	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
18–30	208/230/1	253	197	48.0	9.0	0.50	11.8	20
24–30				58.3	12.8	0.50	16.5	25
30–30				64.0	12.8	1.20	17.2	30
36–30				77.0	14.2	1.20	19.0	30
48–30				117.0	21.8	1.45	28.8	50
60–30				144.2	25.5	1.45	33.4	50
36–50	208/230/3	253	197	71.0	9.3	1.20	12.8	20
48–50				83.1	13.7	1.45	18.6	30
60–50				110.0	17.1	1.45	22.9	40
36–60	460/3	506	414	38.0	5.6	0.60	7.6	15
48–60				41.0	6.2	0.80	8.6	15
60–60				52.0	7.8	0.80	10.6	15

LEGEND:

FLA – Full Load Amps

HACR – Heating, Air Conditioning, Refrigeration

LRA – Locked Rotor Amps

NEC – National Electrical Code

RLA – Rated Load Amps (compressor)

* Permissible limits of the voltage range at which the unit will operate satisfactorily

** Time-Delay fuse.

Complies with 2007 requirements of ASHRAE Standards 90.1

A-WEIGHTED SOUND POWER (dBA)

Unit Size	Standard Rating (dBA)	Typical Octave Band Spectrum (dBA, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	70	53.5	59.5	61.5	65.5	59.5	55.5	46.0
24	69	53.0	63.0	63.0	62.5	59.0	54.0	50.5
30	72	58.0	61.0	64.0	66.5	64.0	63.5	57.0
36	71	60.5	60.5	64.0	65.5	64.0	62.0	56.5
48	73	60.0	59.0	65.0	68.0	64.0	61.0	55.5
60	74	70.0	62.0	65.0	66.0	64.5	64.0	57.5

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

A-WEIGHTED SOUND POWER (dBA) WITH ACCESSORY SOUND SHIELD

Unit Size	Standard Rating (dBA)	Typical Octave Band Spectrum (dBA, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	N/A	–	–	–	–	–	–	–
24	N/A	–	–	–	–	–	–	–
30	71	57.5	61.0	63.5	65.5	63.0	63.5	57.0
36	70	59.5	60.5	63.0	64.5	63.0	61.5	56.0
48	72	56.5	59.5	63.5	67.5	64.0	60.5	55.0
60	72	62.0	60.5	64.5	65.0	64.0	63.5	54.5

NOTES:

Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

Accessory sound shield will not accommodate unit sizes 18 and 24.

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

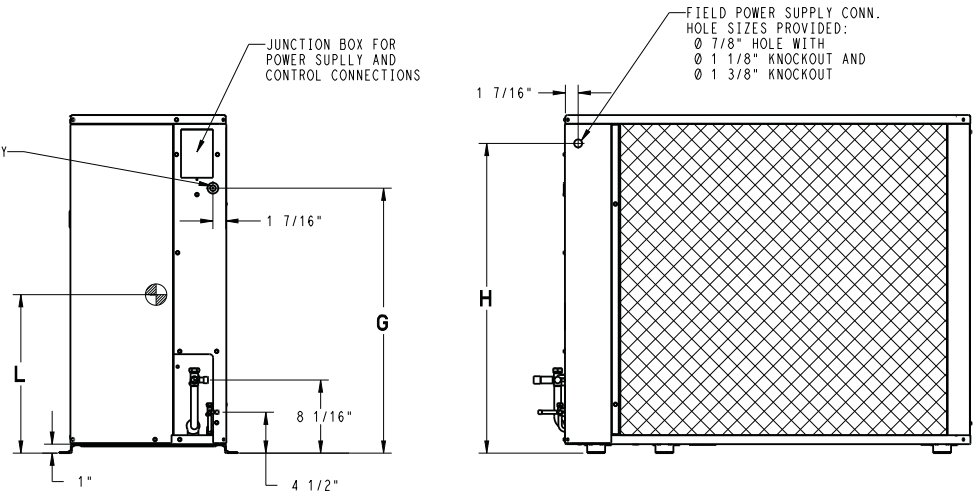
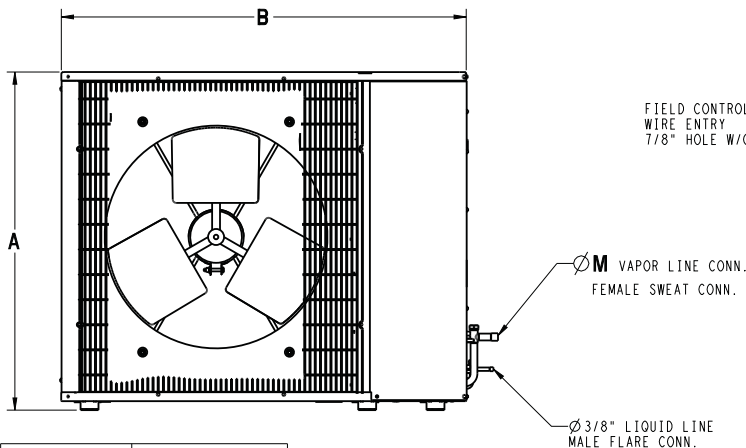
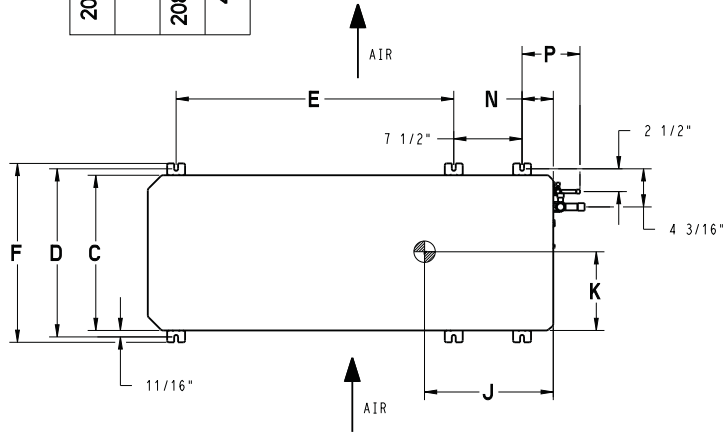
UNIT SIZE – SERIES	REQUIRED SUBCOOLING ° F (° C)
18	12 (6.7)
24	14 (7.8)
30	11 (6.1)
36	14 (7.8)
48	11 (6.1)
60	12 (6.7)

DIMENSIONS - ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	H	J	K	L	M	N	P	OPERATING WEIGHT(lbs)	SHIPPING WEIGHT(lbs)	SHIPPING DIMENSIONS (L x W x H)
25HHA418	0	X	0	0	0	25 1/8"	36 15/16"	14 9/16"	16"	23 7/16"	17 3/16"	17 1/8"	22 1/16"	13"	6 5/8"	11 1/4"	5/8"	2 7/8"	4 15/16"	150	170	42 15/16" X 18" X 28 1/8"
25HHA424	0	X	0	0	0	31 1/8"	36 15/16"	14 9/16"	16"	23 7/16"	17 3/16"	23 1/8"	28 1/16"	14"	6 3/4"	11 5/8"	3/4"	2 7/8"	4 15/16"	161	181	42 15/16" X 18" X 34 1/8"
25HHA430	0	X	0	0	0	37 1/8"	44 1/2"	17 1/16"	18 7/16"	30 1/2"	19 5/8"	29 1/8"	34 1/16"	13 11/16"	8 1/8"	15 7/8"	3/4"	3 3/8"	5 1/2"	196	226	50 1/2" X 20 1/2" X 40 1/8"
25HHA436	0	X	0	X	X	37 1/8"	44 1/2"	17 1/16"	18 7/16"	30 1/2"	19 5/8"	29 1/8"	34 1/16"	13 11/16"	8 1/8"	15 7/8"	7/8"	3 3/8"	5 1/2"	197	227	50 1/2" X 20 1/2" X 40 1/8"
25HHA448	0	X	0	X	X	43 1/8"	44 1/2"	17 1/16"	18 7/16"	30 1/2"	19 5/8"	35 1/8"	40 1/16"	14 1/2"	8 1/2"	18 7/8"	7/8"	3 3/8"	5 1/2"	246	276	50 1/2" X 20 1/2" X 46 1/8"
25HHA460	0	X	0	X	X	43 1/8"	44 1/2"	17 1/16"	18 7/16"	30 1/2"	19 5/8"	35 1/8"	40 1/16"	14 1/2"	8 1/2"	18 7/8"	7/8"	3 3/8"	5 1/2"	258	288	50 1/2" X 20 1/2" X 46 1/8"

208-230-160	230-160	208/230-360	460-360
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X = YES
O = NO



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24	23" X 42"
30, 36, 48, 60	24" X 50"

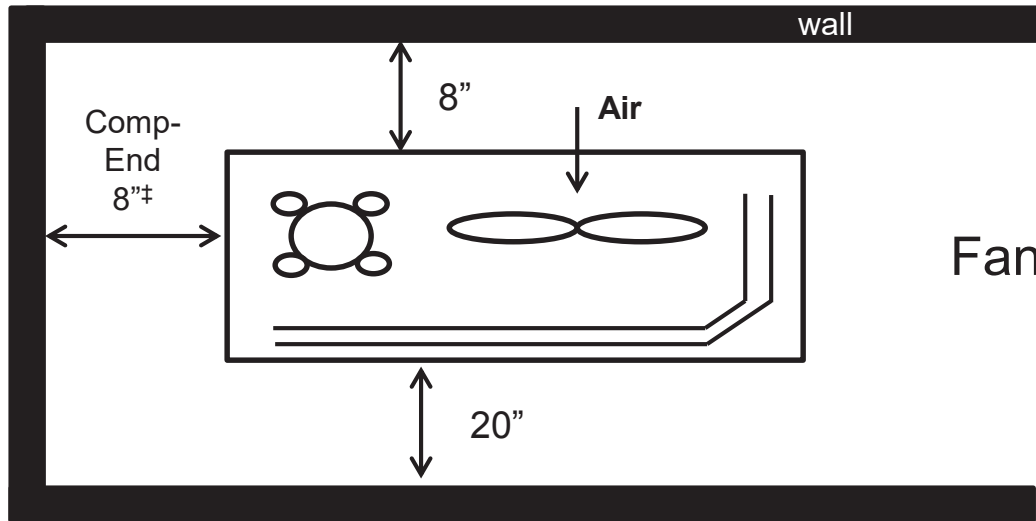
- CLEARANCE REQUIREMENTS: SINGLE UNIT APPLICATIONS: WITH COIL FACING WALL: ALLOW 6 IN. MINIMUM CLEARANCE ON COIL SIDE AND COIL END AND 20 IN. MINIMUM CLEARANCE ON FAN SIDE. WITH FAN FACING WALL: ALLOW 8 IN. MINIMUM CLEARANCE ON FAN SIDE AND 6 IN. ON COIL END AND 20 IN. MINIMUM CLEARANCE ON COIL SIDE. MULTI-UNIT APPLICATIONS: ALLOW 24 IN. MINIMUM CLEARANCE BETWEEN FAN AND COIL SIDES OF MULTIPLE UNITS. ARRANGE UNITS SO DISCHARGE OF ONE DOES NOT ENTER INLET OF ANOTHER. WHEN TWO UNITS ARE INSTALLED END TO END WITH THE COIL ENDS FACING EACH OTHER ALLOW 12 IN. MINIMUM CLEARANCE BETWEEN UNITS. COMPRESSOR END SERVICE CLEARANCE: ALLOW 24 IN. MINIMUM CLEARANCE ON COMPRESSOR END WHEN UNITS ARE STACKED OR THERE IS LESS THAN 40 IN. OF CLEARANCE ABOVE THE TOP OF THE UNIT. IF THERE IS 40 IN. CLEARANCE ABOVE UNIT AND THE TOP PANEL IS ACCESSIBLE FOR REMOVAL ALLOW 8 IN. MINIMUM CLEARANCE ON COMPRESSOR END FOR SERVICE.

IMPORTANT: WHEN INSTALLING SINGLE OR MULTIPLE UNITS IN AN ALCOVE, ROOF WELL, OR PARTIALLY ENCLOSED AREA, ENSURE THERE IS ADEQUATE VENTILATION TO PREVENT RECIRCULATION OF DISCHARGE AIR.
- MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 55°F, MAX. 125°F.
- SERIES DESIGNATION IS THE 13TH POSITION OF THE UNIT MODEL NUMBER.
- CENTER OF GRAVITY
- ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

CLEARANCE - WALLS

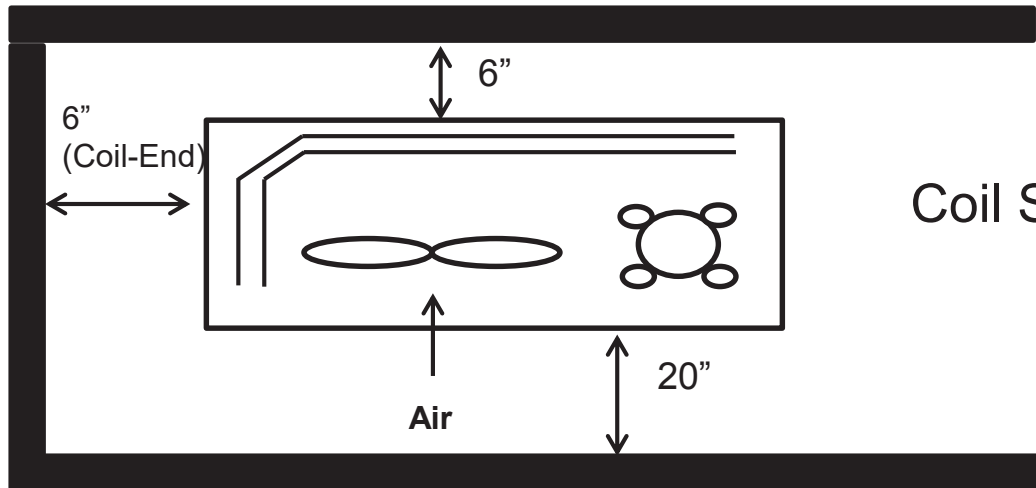
hello tomorrow

expect the unexpected



Fan Side Closest to Wall

‡ If there is 40" clearance above unit and the top panel is accessible for removal allow 8" minimum clearance on compressor end for service; otherwise minimum clearance on compressor end is 24".



Coil Side Closest to Wall



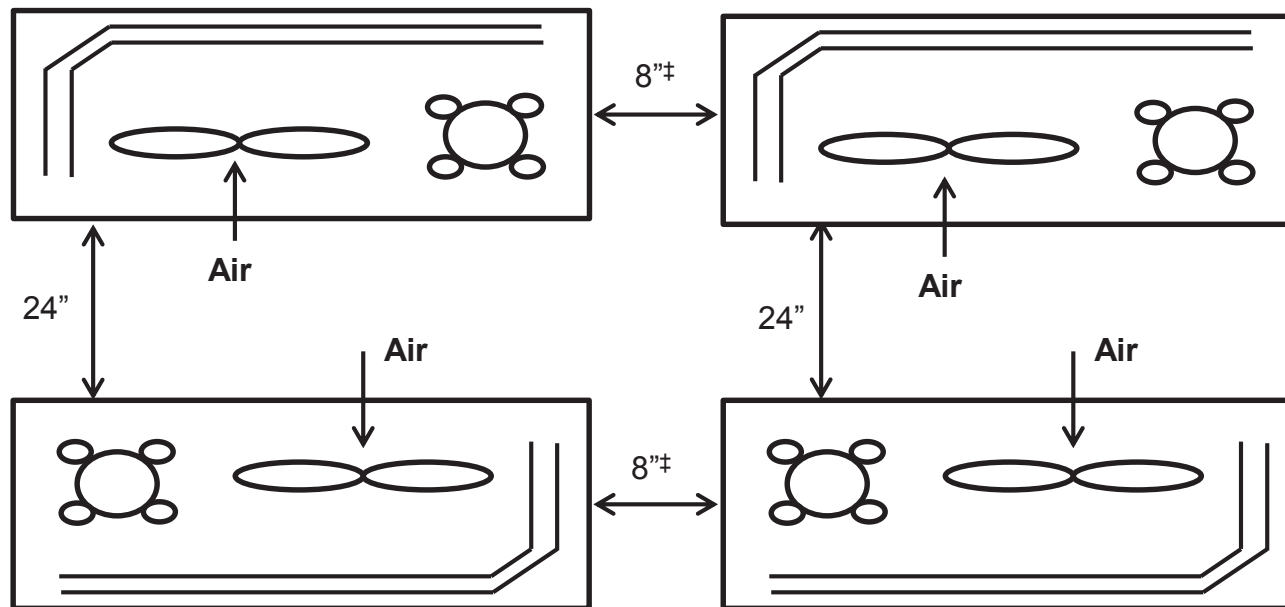
turn to the experts



CLEARANCE - MULTIPLE UNITS **hello tomorrow**

expect the unexpected

Orientation: Fan Sides Facing Other Unit

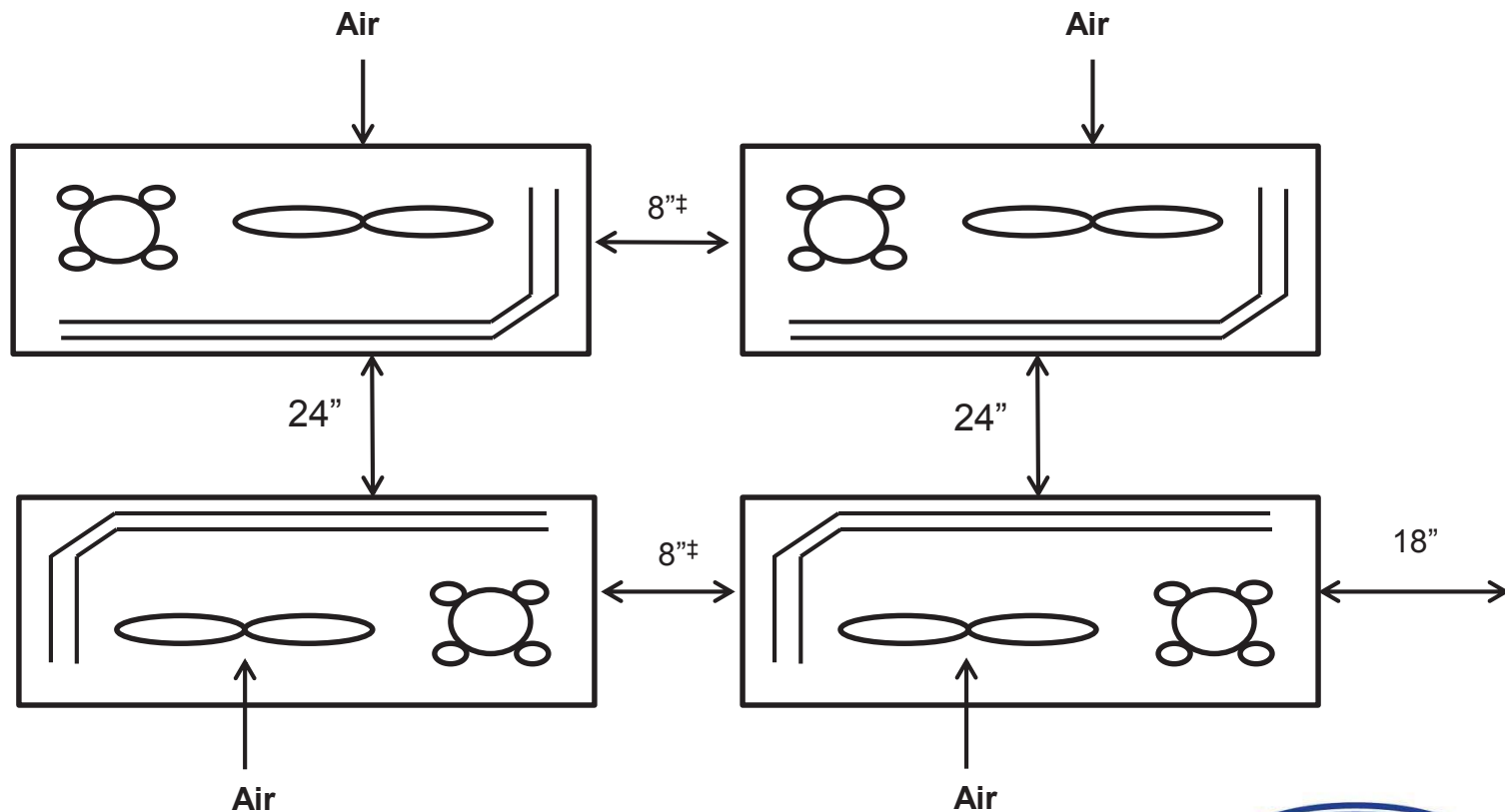


‡ If there is 40" clearance above unit and the top panel is accessible for removal allow 8" minimum clearance on compressor end for service; otherwise minimum clearance on compressor end is 24".

CLEARANCE - MULTIPLE UNITS **hello tomorrow**

expect the unexpected

Orientation: Coil Sides Facing Other Unit



‡ If there is 40" clearance above unit and the top panel is accessible for removal allow 8" minimum clearance on compressor end for service; otherwise minimum clearance on compressor end is 24".

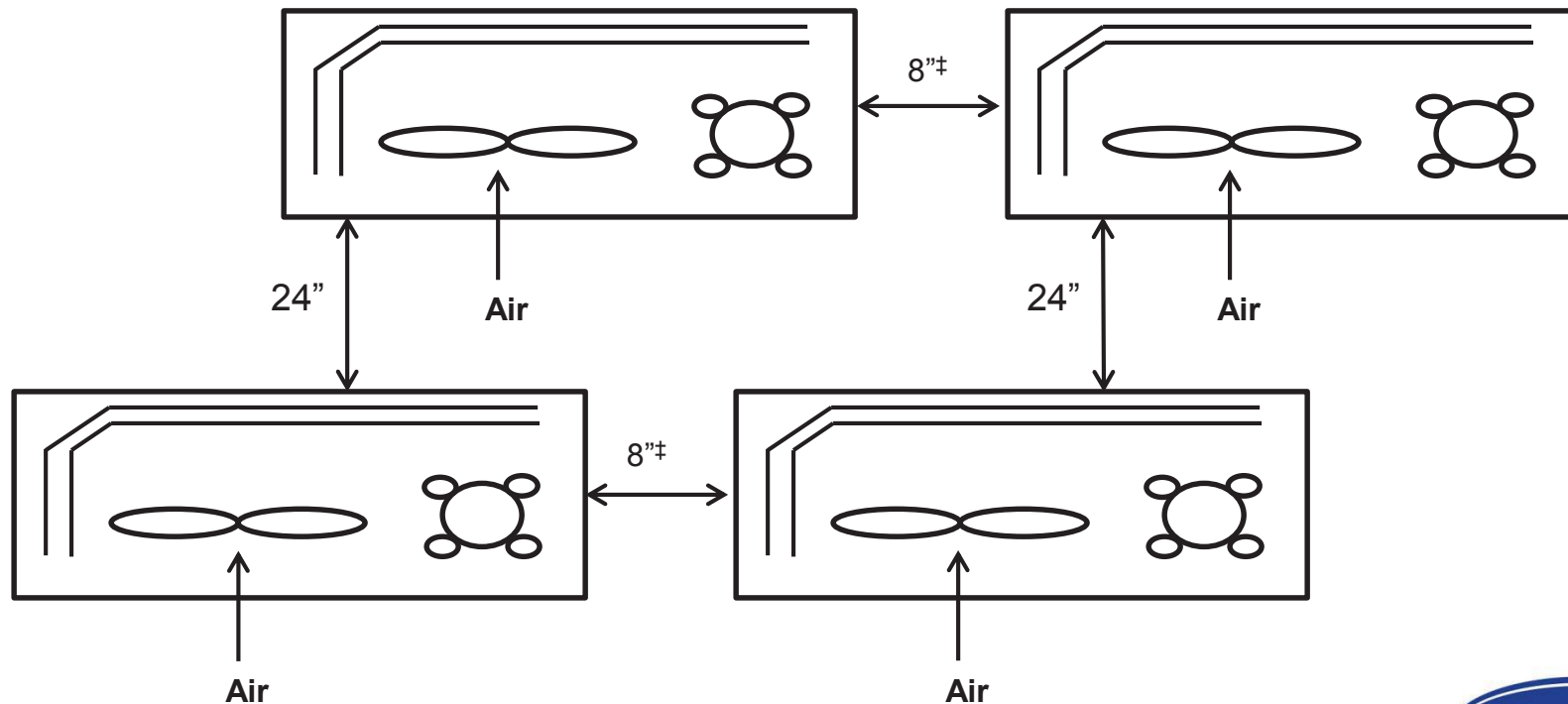


CLEARANCE - MULTIPLE UNITS **hello tomorrow**

expect the unexpected

Orientation: Coil Side Facing Fan Side of Other Unit

Arrange units so discharge of one does not enter inlet of another



‡ If there is 40" clearance above unit and the top panel is accessible for removal allow 8" minimum clearance on compressor end for service; otherwise minimum clearance on compressor end is 24".