83-AHU-4 SPECIFICATIONS

Performance Climate Changer
Quantity 1
Job Comments

Unit level options — Module Position: 0

Actual airflow	14700 cfm	Inlet and casing - 500 Hz	76 dB
Unit elevation	0.00 ft	Inlet and casing - 1K Hz	69 dB
Unit size	30	Inlet and casing - 2K Hz	68 dB
Integral base frame	2.5in. integral base frame	Inlet and casing - 4K Hz	63 dB
UL listed unit	UL listed unit	Inlet and casing - 8K Hz	60 dB
High voltage location	Left	Ducted inlet - 63 Hz	93 dB
Length	70.500 in	Ducted inlet - 125 Hz	82 dB
Width	93.500 in	Ducted inlet - 250 Hz	80 dB
Installed weight	2221.6 lb	Ducted inlet - 500 Hz	75 dB
Rigging weight	2107.1 lb	Ducted inlet - 1K Hz	68 dB
Single or front discharge - 63 Hz	93 dB	Ducted inlet - 2K Hz	68 dB
Single or front discharge - 125 Hz	88 dB	Ducted inlet - 4K Hz	62 dB
Single or front discharge - 250 Hz	89 dB	Ducted inlet - 8K Hz	57 dB
Single or front discharge - 500 Hz	82 dB	Casing - 63 Hz	86 dB
Single or front discharge - 1K Hz	80 dB	Casing - 125 Hz	77 dB
Single or front discharge - 2K Hz	75 dB	Casing - 250 Hz	70 dB
Single or front discharge - 4K Hz	70 dB	Casing - 500 Hz	72 dB
Single or front discharge - 8K Hz	66 dB	Casing - 1K Hz	70 dB
Inlet and casing - 63 Hz	93 dB	Casing - 2K Hz	54 dB
Inlet and casing - 125 Hz	84 dB	Casing - 4K Hz	38 dB
Inlet and casing - 250 Hz	80 dB	Casing - 8K Hz	44 dB

Controls and VFD/starter — Module Position: 0

Factory controls package	No factory mount	LCD screen and keypad	No LCD
Automatic Selection	No auto selection	Design Sequence	A
Controller mounting	No mount	Prepackaged solution option used	MP common configuration not used
Controller type	No controller	Total number of control points	0 control points

Warranty — Module Position: 0

Warranty section	Std. warranty only

Filter section — Module Position: 1

Section type	Filter	Filter area	56.67 sq ft
Unit size	30	Filter face velocity	259 ft/min
Filter type	Angled filter	Filter pressure drop	0.559 in H2O
Filter frame	2in. filter frame	Filter section pressure drop	0.559 in H2O
Access door location	Left	Section length	24.500 in
Primary filter type 1	Pleated media - MERV 8	Section width	93.500 in
Design sequence	B	Section height	61.500 in
Filter airflow	14700 cfm	Section weight	449.0 lb
Filter condition	Mid-life		

EQUIPMENT TO BE TRANE OR APPROVED EQUAL

Performance Climate Changer

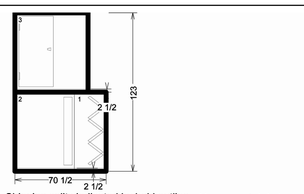
Coil section — Module Position: 2

Coil se [2]-1			
Section type	Vertical coil	Fluid type	Water
Unit size	30	Coil fluid percentage	100.00 %
Section size	Large	Target valve pressure drop	4.00 psig
Access door location	Left	Coil type	UW
Coil application	Cooling coil	Rows	4 rows
Changeover coil	No	Fin type	Delta flo H (Hi efficient)
System type	Chilled water	Fin material	Aluminum fins
Coil supply/cabinet side	Left	Tube diameter	1/2in. tube diameter (12.7 mm)
Coil casing	Galvanized	Tube matl/wall thickness	.016" (0.406mm) copper tubes
Coil height	Unit coil height	Corrosion resistant coating	None
Drain pan	Galvanized	Coil face velocity	492 ft/min
Drain connection location	Left	Air pressure drop	0.489 in H2O
Design sequence	B	J trap dimension	1.825 in
Apply ARI ranges	Apply ARI ranges	H trap dimension	3.649 in
Coil performance airflow	14700 cfm	Leaving fluid temperature	55.00 F
Coil elevation	0.00 ft	Fluid pressure drop	8.80 ft H2O
Entering dry bulb	80.00 F	Fluid volume	13.69 gal
Entering wet bulb	67.00 F	Fluid velocity	4.04 ft/s
Leaving dry bulb	57.50 F	Coil face area	29.90 sq ft
Leaving wet bulb	56.53 F	Coil rigging weight	308.1 lb
Sensible capacity	364.59 MBh	Coil installed weight	422.6 lb
Total capacity	484.85 MBh	Coil section pressure drop	0.489 in H2O
Fin spacing	123 Per Foot	Section length	46.000 in
Entering fluid temperature	45.00 F	Section height	61.500 in
Fluid temperature rise	10.00 F	Section width	93.500 in
Standard fluid flow rate	96.63 gpm	Section weight	830.6 lb
Coil fouling factor	0.00000 hr-sq ft-deg F/Btu		

Fan section — Module Position: 3

Fan sec [3]-1			
Section type	Fan	Section weight	942.0 lb
Fan application	Supply fan	Static pressure origin	Program calculated
Unit size	30	Single or front discharge - 63 Hz	93 dB
Inlet location	Bottom inlet	Single or front discharge - 125 Hz	88 dB
Fan orientation	Top-front discharge	Single or front discharge - 250 Hz	89 dB
Fan discharge	Top front	Single or front discharge - 500 Hz	82 dB
Access door location	Right	Single or front discharge - 1K Hz	80 dB
Bottom damper protective grate	No protective grate	Single or front discharge - 2K Hz	75 dB
Design sequence	D	Single or front discharge - 4K Hz	70 dB
Motor horsepower per fan	20 hp	Single or front discharge - 8K Hz	66 dB
Motor class	NEMA premium compliant ODP	Inlet and casing - 63 Hz	93 dB
Motor voltage	460/3	Inlet and casing - 125 Hz	84 dB
Cycle	60 cycles/sec	Inlet and casing - 250 Hz	80 dB
Drive service factor	1.5 fixed drive	Inlet and casing - 500 Hz	76 dB
Motor RPM	1800	Inlet and casing - 1K Hz	69 dB
Fan airflow	14700 cfm	Inlet and casing - 2K Hz	68 dB
Overall ESP	3.202 in H2O	Inlet and casing - 4K Hz	63 dB
Unit entering ESP	1.601 in H2O	Inlet and casing - 8K Hz	60 dB
Unit discharge ESP	1.601 in H2O	Ducted inlet - 63 Hz	93 dB
Elevation	0.00 ft	Ducted inlet - 125 Hz	82 dB
Minimum temperature	40.00 F	Ducted inlet - 250 Hz	80 dB
Design temperature	70.00 F	Ducted inlet - 500 Hz	75 dB
Total static pressure override	4.250 in H2O	Ducted inlet - 1K Hz	68 dB
Fan size and type	25in. diameter AF, class 1	Ducted inlet - 2K Hz	68 dB
Total brake horsepower	15.614 hp	Ducted inlet - 4K Hz	62 dB
Total brake horsepower at min temp	16.552 hp	Ducted inlet - 8K Hz	57 dB
Total static pressure	4.250 in H2O	Casing - 63 Hz	86 dB
Speed	1462 rpm	Casing - 125 Hz	77 dB
Outlet area	6.95 sq ft	Casing - 250 Hz	70 dB
Fan outlet velocity	2117 ft/min	Casing - 500 Hz	72 dB
Fan module pressure drop	4.250 in H2O	Casing - 1K Hz	70 dB
Fan discharge loss pressure drop	0.000 in H2O	Casing - 2K Hz	54 dB
Section height	61.500 in	Casing - 4K Hz	38 dB
Section length	56.500 in	Casing - 8K Hz	44 dB
Section width	93.500 in		

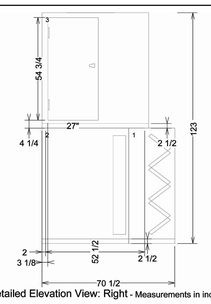
83-AHU-4 DETAILS



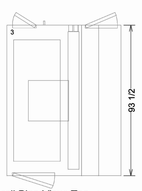
Overall Elevation View: Right - Shipping splits indicated by bold outline. - Measurements in inches

Pos #	Module	Length	Weight
1	Filter section	24 1/2	449.00
2	Coil section	46	830.60
3	Fan section	56 1/2	942.00

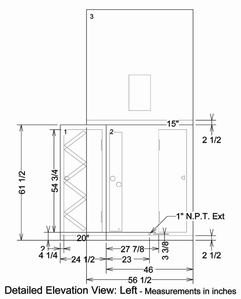
Installed Unit Weight 2221.60 lbs



Detailed Elevation View: Right - Measurements in inches



Basic Overall Plan View: Top - Measurements in inches



Detailed Elevation View: Left - Measurements in inches

83-AHU-4 - HVAC DETAILS AND SPECIFICATIONS - BUILDING 83

N.T.S.

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Approved:	Approved:					Project No.: 619-10-445
Approved:	Approved:	Safety Officer	Building Number: 83	Checked: RDW	Drawn: TSC	DRAWING NO.: 83M3.3
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