

# Air-Cooled Self-Contained Units D-Series, Horizontal and Vertical



## Revision Notes

The following revisions were completed in this version of the document.

AFFECTED PAGES	DESCRIPTION	DATE IMPLEMENTED
4	Updated options for Digits 10 and 14 and their notes in the DSH Nomenclature	March 2020
4, 5	Updated notes for DSH and DSV Nomenclature	March 2020
11	Revised the <i>DSH Physical Data</i> table to update the Gross and Net Cooling Capacities for DSH096C–120C and Net Cooling Airflow for DSH120C	April 2020
39	Revised the <i>DSV Physical Data</i> table to update the Gross Cooling Capacity for DSV120C–300C; Net Cooling Capacity for DSV144C–300C; EER for DSV096C and DSV240C; and IEER for DSV096C and DSV144C–300C	April 2020
16,17	Revised the <i>DSH Physical Data table</i> for DSH096C–120C	July 2020
41 – 46	Revised the <i>DSV Physical Data table</i> for DSH096C, DSV144C–300C	July 2020
4	Updated DSH and DSV Nomenclature	November 2020

### Listings/Certifications



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# Nomenclature

## HORIZONTAL UNIT



1, 2	3	4, 5, 6	7	8	9	10	11	12	13	14	15	16	17
DS	H	120	C	2	S	1	P	A	A	1	A	0	A

<b>Product Category</b> DS = Integral Air-Cooled Packaged A/C, R-410A													<b>Customization</b> 0 = None S = Special Quote
<b>Product Identifier</b> H = Horizontal, Ceiling Mounted													<b>Heating Options</b> 0 = None
<b>Nominal Capacity</b> 024 = 2 TON 036 = 3 TON 048 = 4 TON 060 = 5 TON 096 = 8 TON 120 = 10 TON													<b>Refrigerant Circuit Options</b> A = None B = Hot Gas Bypass
<b>Design Series</b> C = Current													<b>Outdoor Fan Options</b> 1 = Standard 2 = High Static 3 = Standard with Low Ambient Control VFD <sup>3</sup> 4 = High Static with Low Ambient Control VFD <sup>3</sup>
<b>Voltage</b> 2 = 208/230-60-3 4 = 460-60-3 5 = 575-60-3													<b>Outdoor Airside Options</b> A = Standard Airside Coil C = Corrosion Protective Coating D = Stainless Steel Drain Pan F = Coated Coil w/ S-S Drain Pan
<b>Control Options</b> S = Smart Equipment (SE) Microprocessor Controls N = SEC w/ BACnet®													<b>Indoor Airside Options</b> A = Standard Airside Coil C = Corrosion Protective Coating D = Stainless Steel Drain Pan F = Coated Coil w/ Stainless Steel Drain Pan
<b>Indoor Fan Options</b> 1 = Standard <sup>1</sup> 2 = High Static <sup>1</sup> 3 = Standard with VFD (VAV) <sup>2</sup> 4 = High Static with VFD (VAV) <sup>2</sup> 5 = Intellispeed™ Discrete Speeds (VFD Std Static) <sup>2</sup> 6 = Intellispeed™ Discrete Speeds(VFD Hi Static) <sup>2</sup>													<b>Cabinet Configuration</b> P = Single Packaged (Standard) S = Factory Split (Charged R-410A) N = Factory Split (Nitrogen Charge Only)

1. VFD on evaporator motor is not available on DSH024-060.  
 2. VFD on evaporator motor is standard on DSH096-120.  
 3. VFD on condenser motor is not available on DSH024-060; VFD on condenser motor is not available in 575V.

**VERTICAL UNIT**



1, 2	3	4, 5, 6	7	8	9	10	11	12	13	14	15	16	17
<b>DS</b>	<b>V</b>	<b>120</b>	<b>C</b>	<b>2</b>	<b>S</b>	<b>1</b>	<b>H</b>	<b>A</b>	<b>A</b>	<b>1</b>	<b>A</b>	<b>0</b>	<b>A</b>

**Product Category**  
DS = Integral Air-Cooled Packaged A/C, R-410A

**Product Identifier**  
V = Vertical, Free Standing

**Nominal Capacity**  
060 = 5 TON  
096 = 8 TON  
120 = 10 TON  
144 = 12 TON  
180 = 15 TON  
240 = 20 TON  
300 = 25 TON

**Design Series**  
C = Current

**Voltage**  
2 = 208/230-60-3  
4 = 460-60-3  
5 = 575-60-3

**Control Options**  
S = SMART Equipment Controls  
N = SMART Equipment Controls w/ BACnet

**ID Motor**  
1 = Std <sup>1</sup>  
2 = High Static <sup>1</sup>  
3 = Std with VFD (VAV) <sup>2</sup>  
4 = High Static with VFD (VAV) <sup>2</sup>  
5 = Intellispeed™ Discrete Speeds (VFD Std Static) <sup>2</sup>  
6 = Intellispeed™ Discrete Speeds (VFD Hi Static) <sup>2</sup>

**Customization**  
0 = None  
S = Special Quote

**Heating Options**  
0 = None

**Refrigerant Circuit Options**  
A = None  
B = Hot Gas Bypass

**Condenser Motor Options**  
1 = Std. Motor & Drive  
2 = High Static Drive  
3 = Std Motor & Drive w/ Low Ambient Control VFD <sup>3</sup>  
4 = High Static Drive w/ Low Ambient Control VFD <sup>3</sup>

**Outdoor Airside Options**  
A = Std Airside Coil  
C = Corrosion Protective Coating

**Indoor Airside Options**  
A = Std Airside Coil  
C = Corrosion Protective Coating  
D = Stainless Steel Drain Pan  
F = Coated Coil w/ S-S Drain Pan

**Supply Air Discharge Configuration**  
V = Top Vertical  
H = Front Horizontal  
G = Top Vertical Supply/Front Return Air  
F = Rear Horizontal Supply/Front Return Air

1. Option is only available for DSV060.  
2. VFD on evaporator motor is standard on DSV096–300.  
3. VFD on condenser motor is not available in 575V.

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## ***Introduction***

### **Indoor packaged solutions for convenient floor-by-floor installation.**

The D-Series Self-Contained Horizontal and Vertical Indoor Air-Conditioning packages from Skymark offer a complete line of unit options for high-rise and single-story building applications.

Skymark's compact, low profile indoor design protects against potential vandalism and weathering and eliminates the need for any unsightly exterior equipment. The compact dimensions allow for easy installation through doorways, hallways and elevators.

Floor-by-floor installation provides independent zone and temperature control, eliminating many of the complications encountered with rooftop equipment. Renovation and restoration projects are simplified where roof load, cooling tower, and construction restrictions can present installation problems.

The D-Series Air-Cooled Self-Contained design by Skymark features high efficiency, quality engineering and dependable operation.

# Product Overview

## REFRIGERANT

R-410A

## SIZES

2 – 25 Tons (7.03 – 87.9 kW)

## MODELS

DSH (Horizontal) 2-10 Tons

DSV (Vertical) 5-25 Tons

## FEATURES

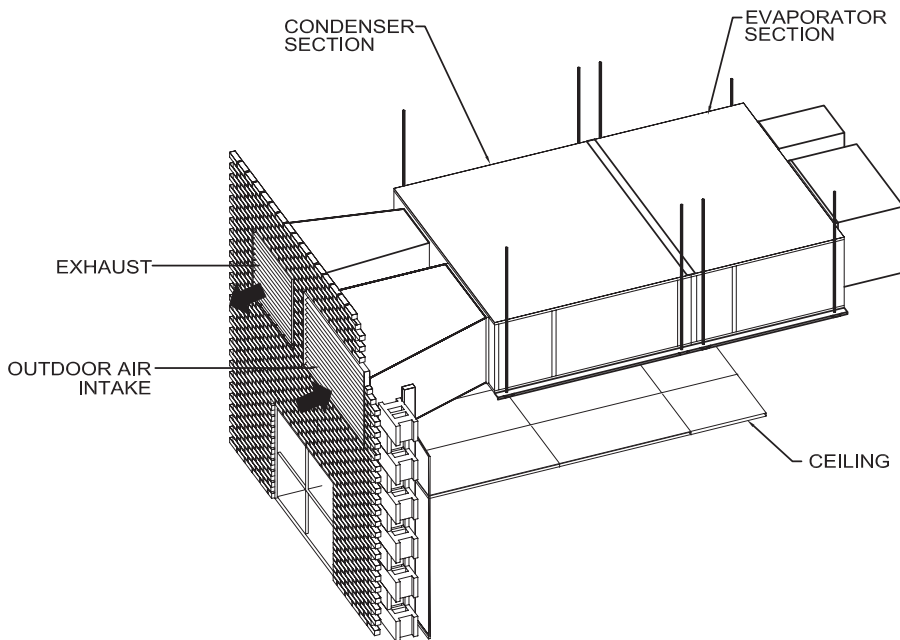
- Ideal for the renovation/retrofit of interior spaces, in both high-rise and low-rise buildings
- Preserves aesthetics of building exterior; the necessity for unsightly exterior equipment is eliminated
- Equipment is protected from extreme weather conditions and vandalism
- Floor-by-floor, or zone-by-zone, installation allows independent metering / temperature control
- Convenient indoor access for all service needs
- Unit casings are constructed of heavy gauge galvanized steel. Cabinet interiors are lined with 1/2 inch thick, 2 lb. density, acoustic insulation
- Separate evaporator and condensing unit modules, allowing field separation if required for ease of ingress/handling in building corridors or elevators.
- Belt driven centrifugal blowers, with adjustable pulleys, are employed for both evaporator and condenser air movement; field adjustment of external static pressure capability to suit a wide range of installation requirements
- High efficiency Scroll compressors
- Each refrigerant circuit complete with schraeder access fittings, sight glass/moisture indicator, filter drier, and thermal expansion valve with external equalizer
- Refrigerant circuit isolation valves, with service ports, allow installation of units as a split evaporator/condensing unit system (DSH models only)
- Dual independent compressor circuits on 8, 10, 12, 15, 20, and 25 ton models
- Microprocessor control with LED status indicator for quick field diagnostics
- Units 8 tons and larger are supplied with factory installed Variable Frequency Drives (VFDs) configured for discrete speed or variable air volume applications.



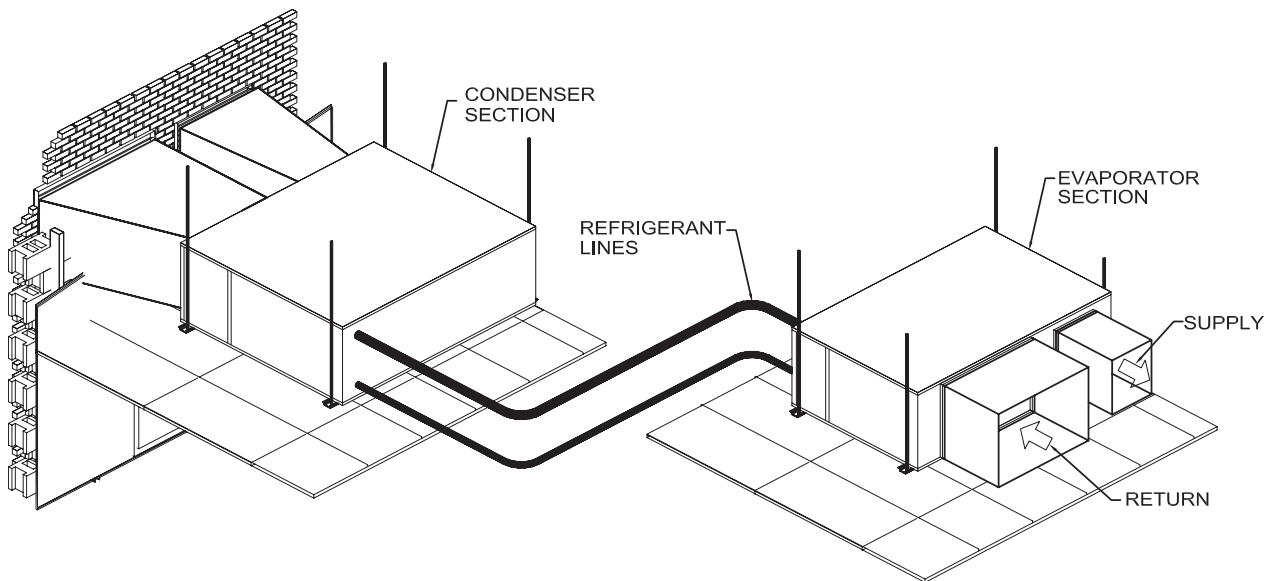
# Horizontal Application & Installation

## 2-5 TON UNIT

Ductable Ceiling Air Conditioner  
Packaged Installation



Ductable Ceiling Air Conditioner  
Split Installation

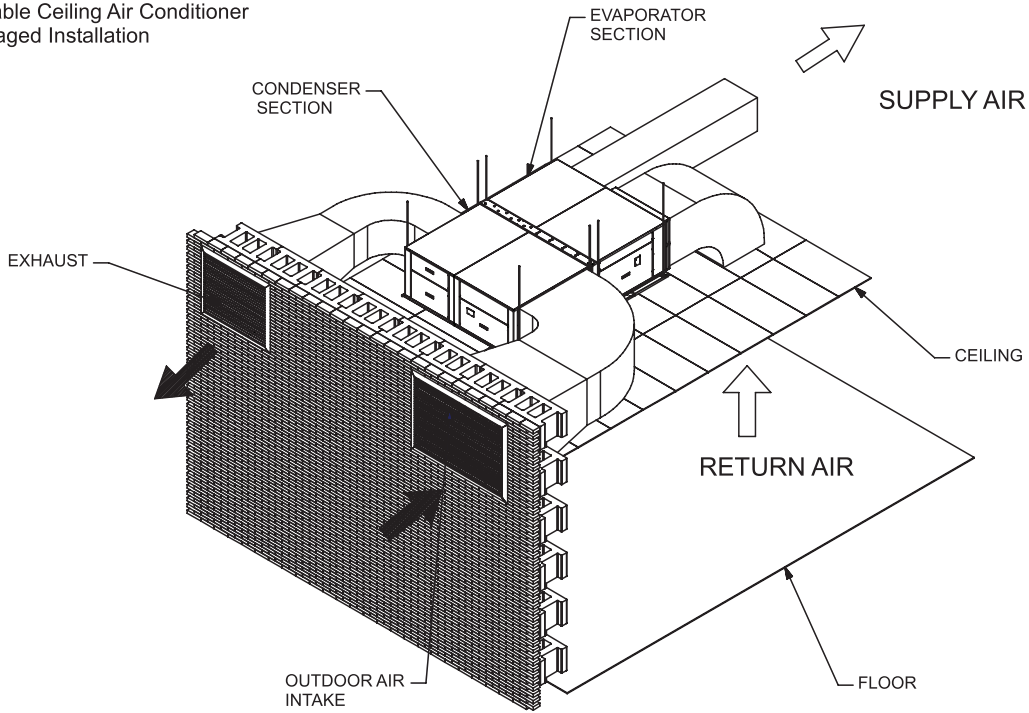


# Horizontal Application & Installation (Cont'd)

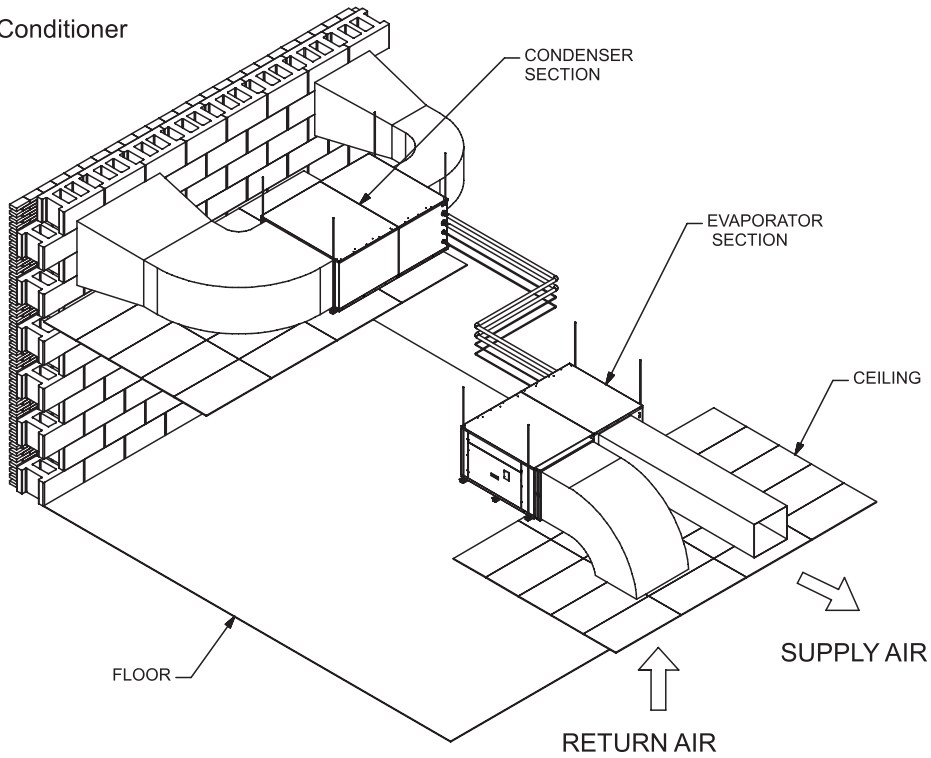
## 8-10 TON UNIT

### HORIZONTAL

Ductable Ceiling Air Conditioner  
Packaged Installation



Ductable Ceiling Air Conditioner  
Split Installation



# DSH Physical Data

**TABLE 1 - HORIZONTAL AIR-COOLED - DSH SERIES R-410A**

MODEL	DSH024C	DSH036C	DSH048C	DSH060C	DSH096C	DSH120C	
Nominal Cooling (Tons)	2	3	4	5	8	10	
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	
<b>COOLING PERFORMANCE</b>							
Gross Cooling Capacity (Btu/h)	26,800	40,400	50,500	61,600	96,800	124,000	
Net Cooling Capacity, 3PH (Btu/h)	24,500	36,500	47,000	58,000	93,000	116,000	
Design Airflow (CFM)	800	1,200	1,600	2,000	3,200	4,000	
Net Cooling Airflow (CFM)	660	940	1,360	1,700	2,800	3,100	
SEER <sup>2</sup>	14.2	14	14.2	14	~	~	
EER <sup>3</sup>	~	~	~	~	11.2	11.2	
IEER <sup>3</sup>	~	~	~	~	12.9	12.9	
Compressor - Qty/Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll	2/Scroll	2/Scroll	
<b>EVAPORATOR COIL</b>							
Type	Enhanced Copper Tubes, Enhanced Aluminum Fins						
Dimension - Height x Width (in)	25x34	25x34	28x40	28x40	31x52	31x60	
Face Area (sq ft)	5.90	5.90	7.78	7.78	11.20	12.92	
Rows/FPI	3/12	4/16	4/16	4/16	4/14	5/14	
Filters - Quantity/Size (in)	2/25x14x2	2/25x14x2	2/25x16x2	2/25x16x2	4/20x16x2	4/20x16x2	
<b>CONDENSER COIL</b>							
Type	Enhanced Copper Tubes, Enhanced Aluminum Fins						
Dimension - Height x Width (in)	25x41	25x41	28x46.5	28x46.5	30x78	30x96	
Face Area (sq ft)	7.12	7.12	9.04	9.04	16.25	20.00	
Rows/FPI	4/16	4/16	5/16	5/16	3/16	4/13	
<b>EVAPORATOR FAN</b>							
Type	Centrifugal, Forward Curved						
Qty - Diameter x Width (in)	1-10x8	1-10x8	1-12x9	1-12x9	1-15x15	1-18x13	
Drive	Adjustable Belt						
Motor HP (Oversized)	0.5	0.75	0.75 (1)	1 (1.5)	1.5 (2)	3	
<b>CONDENSER FAN</b>							
Type	Centrifugal, Forward Curved						
Qty - Diameter x Width (in)	1-12x11	1-12x11	1-15x11	1-15x11	1-18x18	2-15x11	
Drive	Adjustable Belt						
Motor HP (Oversized)	0.5	0.75	1.5	1.5	3	3 (5)	
Dimensions	Height (in)	26.5	26.5	29.5	29.5	32.0	33.5
	Width (in)	56.0	56.0	64.0	64.0	80.0	84.0
	Depth (in)	78.0	78.0	86.0	86.0	112.0	132.0
Weight	Operating (lbs)	675	680	955	995	1,470	1,940
	Shipping (lbs)	715	720	1,015	1,065	1,560	2,120

**NOTES:**

- Cooling performance is rated at 95.0°F ambient, 80.0°F entering dry bulb, 67.0°F wet bulb, and CFM listed. Gross capacity does not include the effect of fan motor heat.
- Rated and certified in accordance with ANSI/AHRI Standard 210/240.
- Rated and certified in accordance with ANSI/AHRI Standard 340/360.

# DSH Performance Data

TABLE 2 - DSH024C PERFORMANCE DATA

DSH024C		SCFM	600			700			800			900			1000			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	85°F	EDB																
		EWB																
	57°F	TC	22.0	22.3	23.4	23.5	24.4	24.9	23.9	25.2	26.6	24.8	26.2	27.7	25.6	27.1	28.7	
		SC	20.1	22.3	23.4	22.9	24.4	24.9	23.9	25.2	26.6	24.8	26.2	27.7	25.6	27.1	28.7	
		kW	1.45	1.45	1.46	1.46	1.46	1.47	1.43	1.45	1.47	1.45	1.47	1.49	1.46	1.48	1.51	
	62°F	TC	24.2	24.1	24.1	25.8	25.1	25.1	25.7	25.7	26.5	26.3	26.2	27.7	26.7	26.8	28.7	
		SC	17.2	19.9	22.6	19.6	21.5	24.6	20.2	24.2	26.5	21.7	25.9	27.7	22.9	26.8	28.7	
		kW	1.47	1.47	1.46	1.48	1.48	1.47	1.46	1.46	1.47	1.48	1.47	1.49	1.48	1.48	1.51	
	67°F	TC	26.4	26.5	26.5	28.2	27.5	27.5	28.2	28.2	28.1	28.8	28.8	28.7	29.4	29.2	29.1	
		SC	14.4	17.2	19.8	15.8	18.3	21.3	16.3	19.7	23.7	17.0	21.7	25.6	18.0	22.5	27.2	
		kW	1.50	1.50	1.49	1.52	1.51	1.51	1.50	1.50	1.50	1.52	1.51	1.51	1.53	1.52	1.52	
	72°F	TC	28.9	29.0	29.0	31.0	30.1	30.1	30.9	30.7	30.6	31.3	31.5	31.3	31.9	31.9	31.9	
		SC	11.7	14.2	16.9	12.2	15.1	18.0	12.2	16.0	19.9	12.5	16.8	21.1	12.9	17.5	22.2	
		kW	1.54	1.54	1.53	1.58	1.56	1.56	1.56	1.56	1.55	1.58	1.58	1.57	1.59	1.59	1.59	
	95°F	57°F	TC	20.9	21.4	22.6	21.6	22.7	24.0	22.8	24.2	25.6	23.8	25.2	26.6	24.6	26.0	27.5
			SC	19.5	21.4	22.6	21.2	22.7	24.0	22.8	24.2	25.6	23.8	25.2	26.6	24.6	26.0	27.5
			kW	1.63	1.63	1.64	1.64	1.64	1.66	1.64	1.66	1.68	1.66	1.67	1.70	1.67	1.69	1.71
		62°F	TC	22.9	23.0	22.8	23.8	23.8	23.7	24.5	24.5	25.6	25.1	24.8	26.6	25.5	25.9	27.5
			SC	16.7	19.5	22.2	18.0	21.1	23.7	19.8	23.7	25.6	20.9	24.8	26.6	22.4	25.9	27.5
			kW	1.65	1.65	1.64	1.66	1.66	1.66	1.67	1.67	1.68	1.68	1.67	1.70	1.68	1.69	1.72
		67°F	TC	25.2	25.1	25.1	26.1	25.9	26.0	26.8	26.8	26.7	27.4	27.4	27.3	27.9	27.8	27.8
			SC	13.9	16.6	19.3	14.7	17.8	21.0	15.7	19.6	23.3	16.6	20.6	25.2	17.4	21.7	26.6
			kW	1.68	1.68	1.68	1.69	1.69	1.69	1.71	1.71	1.71	1.72	1.72	1.71	1.73	1.73	1.73
		72°F	TC	27.4	27.6	27.5	28.4	28.4	28.5	29.4	29.5	29.3	30.0	30.0	30.0	30.4	30.5	30.4
SC			11.1	13.7	16.3	11.4	14.4	17.6	11.6	15.5	19.4	12.0	16.3	20.2	12.3	16.8	21.7	
kW			1.72	1.72	1.72	1.74	1.74	1.74	1.77	1.76	1.76	1.78	1.78	1.78	1.79	1.79	1.79	
105°F	57°F	TC	19.3	20.2	21.4	20.0	21.4	22.7	21.8	23.1	24.5	22.6	24.1	25.5	23.3	24.8	26.4	
		SC	18.6	20.2	21.4	20.0	21.4	22.7	21.8	23.1	24.5	22.6	24.1	25.5	23.3	24.8	26.4	
		kW	1.87	1.87	1.89	1.88	1.89	1.90	1.89	1.91	1.93	1.90	1.93	1.95	1.91	1.94	1.97	
	62°F	TC	21.3	21.4	21.3	22.1	22.1	22.6	23.2	23.2	24.5	23.6	24.1	25.5	24.2	24.8	26.5	
		SC	15.9	18.7	21.3	17.1	20.3	22.6	19.4	23.1	24.5	20.7	24.1	25.5	22.0	24.8	26.5	
		kW	1.89	1.89	1.89	1.90	1.90	1.90	1.92	1.91	1.93	1.92	1.93	1.95	1.93	1.94	1.97	
	67°F	TC	23.5	23.5	23.5	24.3	24.4	24.3	25.4	25.5	25.5	26.0	25.9	26.0	26.3	26.4	26.4	
		SC	13.1	15.9	18.5	13.9	17.1	20.3	15.4	19.1	22.6	16.1	20.3	24.4	16.9	21.5	26.0	
		kW	1.92	1.92	1.92	1.94	1.94	1.93	1.95	1.95	1.95	1.97	1.96	1.96	1.98	1.97	1.97	
	72°F	TC	25.8	25.8	25.8	26.5	26.7	26.6	28.0	27.9	27.8	28.5	28.5	28.4	28.8	28.8	28.9	
		SC	10.3	12.9	15.6	10.7	13.7	16.8	11.1	14.9	18.7	11.5	15.7	20.0	11.8	16.6	21.1	
		kW	1.96	1.96	1.96	1.98	1.98	1.98	2.01	2.01	2.01	2.03	2.03	2.02	2.04	2.04	2.04	
115°F	57°F	TC	18.2	19.3	20.4	19.2	20.3	21.6	20.7	21.9	23.3	21.5	22.8	24.3	22.1	23.7	25.1	
		SC	18.2	19.3	20.4	19.2	20.3	21.6	20.7	21.9	23.3	21.5	22.8	24.3	22.1	23.7	25.1	
		kW	2.14	2.15	2.16	2.15	2.16	2.18	2.16	2.18	2.21	2.18	2.20	2.23	2.19	2.22	2.24	
	62°F	TC	20.1	20.2	20.3	20.8	20.7	21.6	21.8	22.0	23.3	22.1	22.9	24.2	22.6	23.6	25.0	
		SC	15.4	18.1	20.3	16.5	19.6	21.6	18.6	22.0	23.3	19.9	22.9	24.2	21.0	23.6	25.0	
		kW	2.16	2.16	2.16	2.17	2.17	2.17	2.18	2.18	2.21	2.19	2.20	2.22	2.20	2.21	2.24	
	67°F	TC	22.2	22.1	22.1	22.8	22.8	22.8	23.9	23.8	23.9	24.3	24.3	24.4	24.8	24.7	24.7	
		SC	12.5	15.2	18.0	13.3	16.5	19.6	14.6	18.3	22.2	15.3	19.7	23.8	16.3	20.7	24.7	
		kW	2.19	2.19	2.19	2.21	2.20	2.20	2.22	2.22	2.22	2.24	2.23	2.23	2.24	2.24	2.24	
	72°F	TC	24.2	24.2	24.3	25.1	25.1	25.1	26.4	26.3	26.2	26.8	26.9	26.7	27.1	27.1	27.0	
		SC	9.7	12.3	15.0	10.1	13.2	16.3	10.8	14.4	18.1	10.9	15.1	19.2	11.2	15.8	20.5	
		kW	2.24	2.23	2.23	2.25	2.25	2.25	2.29	2.28	2.28	2.30	2.30	2.29	2.31	2.31	2.30	

**NOTE:**

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

TABLE 3 - DSH036C PERFORMANCE DATA

DSH036C		SCFM	800			1000			1200			1400			1600			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	31.8	32.4	34.3	34.1	35.8	37.9	36.1	38.2	40.5	37.8	40.1	42.4	39.5	41.9	44.4
			SC	29.1	32.4	34.3	33.7	35.8	37.9	36.1	38.2	40.5	37.8	40.1	42.4	39.5	41.9	44.4
			kW	2.11	2.12	2.13	2.13	2.15	2.17	2.15	2.17	2.20	2.17	2.19	2.22	2.20	2.23	2.26
		62°F	TC	34.8	34.9	34.8	37.3	37.2	38.0	38.6	30.9	40.5	39.5	39.4	42.4	40.7	41.8	44.5
			SC	25.1	28.9	33.3	28.7	33.8	38.0	31.1	37.5	40.5	33.8	39.4	42.4	37.0	41.8	44.5
			kW	2.14	2.14	2.14	2.16	2.16	2.17	2.18	2.18	2.20	2.19	2.19	2.22	2.22	2.23	2.26
		67°F	TC	38.2	38.3	38.3	40.7	40.6	40.6	41.9	42.0	42.0	42.8	43.0	43.0	44.1	44.1	44.1
			SC	21.0	25.1	28.9	23.2	28.3	33.6	24.8	30.9	37.2	26.4	33.5	40.8	28.3	36.0	44.1
			kW	2.18	2.18	2.17	2.21	2.20	2.20	2.22	2.22	2.22	2.23	2.23	2.23	2.26	2.26	2.26
		72°F	TC	41.7	41.8	41.8	44.4	44.6	44.4	45.7	45.6	45.8	46.7	46.9	46.7	48.0	44.1	47.9
			SC	16.5	20.2	24.6	17.2	22.7	27.5	18.3	24.1	30.6	18.7	25.7	32.9	19.6	36.0	35.8
			kW	2.22	2.22	2.22	2.25	2.25	2.25	2.27	2.27	2.27	2.27	2.29	2.29	2.28	2.32	2.26
	95°F	57°F	TC	30.5	31.4	33.2	32.6	34.8	36.9	34.9	36.9	39.2	36.4	38.7	41.1	38.0	40.3	42.5
			SC	28.4	31.4	33.2	32.6	34.8	36.9	34.9	36.9	39.2	36.4	38.7	41.1	26.0	40.3	42.5
			kW	2.40	2.41	2.42	2.42	2.44	2.46	2.44	2.46	2.48	2.46	2.48	2.51	2.52	2.50	2.53
		62°F	TC	33.6	33.6	33.5	35.8	35.8	36.7	36.9	37.0	39.2	37.9	38.6	41.1	38.7	40.3	42.6
			SC	24.4	28.5	32.6	27.7	33.3	36.7	30.7	36.8	39.2	33.6	38.6	41.1	36.0	40.3	42.6
			kW	2.43	2.43	2.43	2.45	2.45	2.46	2.47	2.47	2.48	2.48	2.48	2.51	2.49	2.50	2.53
		67°F	TC	36.8	36.9	33.5	39.1	39.1	39.1	40.6	40.4	40.4	41.3	41.4	41.3	42.1	42.1	42.0
			SC	20.1	24.3	32.6	22.3	27.7	32.6	24.5	30.1	36.8	25.9	33.0	40.4	27.4	35.3	42.0
			kW	2.47	2.47	2.43	2.49	2.50	2.49	2.51	2.51	2.50	2.52	2.52	2.51	2.54	2.53	2.53
		72°F	TC	40.2	40.5	40.6	42.7	42.6	42.8	43.9	44.0	44.0	45.0	44.9	45.0	45.7	45.6	45.6
SC			16.2	19.9	24.0	16.8	21.7	27.2	17.5	23.6	29.9	18.2	25.3	32.3	18.8	26.5	35.0	
kW			2.51	2.51	2.51	2.54	2.54	2.54	2.57	2.56	2.56	2.58	2.57	2.57	2.59	2.58	2.59	
105°F	57°F	TC	28.7	29.9	31.6	31.0	33.0	34.9	32.9	35.1	37.1	34.4	36.6	38.9	35.6	38.0	40.4	
		SC	27.5	29.9	31.6	31.0	33.0	34.9	32.9	35.1	37.1	34.4	36.6	38.9	35.6	38.0	40.4	
		kW	2.80	2.81	2.83	2.82	2.85	2.87	2.85	2.88	2.91	2.87	2.90	2.94	2.89	2.93	2.96	
	62°F	TC	31.5	31.6	31.5	33.4	33.5	34.9	34.7	34.5	37.1	35.4	36.5	38.8	35.9	38.1	40.2	
		SC	23.4	27.6	31.5	26.8	32.0	34.9	29.6	34.5	37.1	32.6	36.5	38.8	34.7	38.1	40.2	
		kW	2.84	2.83	2.83	2.86	2.86	2.87	2.88	2.87	2.91	2.90	2.90	2.94	2.90	2.93	2.96	
	67°F	TC	34.8	34.7	34.7	36.6	36.7	36.7	38.0	37.9	37.7	38.5	38.7	38.4	39.3	39.1	40.3	
		SC	19.1	23.3	27.3	21.2	26.6	31.8	23.4	29.4	36.1	24.6	31.6	38.4	26.2	34.2	40.3	
		kW	2.89	2.88	2.88	2.91	2.91	2.91	2.93	2.93	2.92	2.94	2.94	2.93	2.96	2.95	2.97	
	72°F	TC	37.8	38.0	37.9	40.0	40.0	40.2	41.1	40.7	41.1	42.2	42.0	42.1	42.9	42.6	42.8	
		SC	14.9	19.0	23.0	15.7	20.8	26.1	16.4	22.6	28.9	17.2	24.5	31.6	17.4	25.8	34.0	
		kW	2.94	2.93	2.93	2.97	2.97	2.97	2.99	2.99	2.99	3.01	3.00	3.00	3.03	3.02	3.01	
115°F	57°F	TC	26.8	28.5	30.2	29.5	31.2	33.2	31.1	33.1	35.0	32.6	34.6	36.8	33.7	35.9	38.2	
		SC	26.7	28.5	30.2	29.5	31.2	33.2	31.1	33.1	35.0	32.6	34.6	36.8	33.7	35.9	38.2	
		kW	3.16	3.18	3.20	3.20	3.22	3.25	3.22	3.25	3.28	3.24	3.28	3.31	3.26	3.30	3.34	
	62°F	TC	29.6	29.7	30.1	31.2	31.3	33.1	32.4	33.1	35.2	32.8	34.6	37.0	33.4	35.9	38.1	
		SC	22.5	26.4	30.1	25.8	30.8	33.1	28.7	33.1	35.2	31.5	34.6	37.0	33.4	35.9	38.1	
		kW	3.20	3.20	3.20	3.22	3.22	3.25	3.24	3.25	3.28	3.25	3.28	3.32	3.26	3.30	3.34	
	67°F	TC	32.5	32.7	32.5	34.3	34.5	34.4	35.4	35.3	35.4	36.2	36.0	35.9	36.9	36.6	38.2	
		SC	18.3	22.5	26.7	20.6	25.8	30.7	22.3	28.3	34.7	24.0	30.9	35.9	25.3	33.4	38.2	
		kW	3.25	3.25	3.24	3.27	3.27	3.27	3.29	3.29	3.29	3.31	3.30	3.30	3.32	3.31	3.34	
	72°F	TC	35.7	35.7	35.8	37.7	37.6	37.3	38.5	38.8	38.7	39.5	39.4	39.3	39.9	39.8	39.9	
		SC	14.1	18.1	22.1	14.9	20.2	25.4	15.6	21.5	28.1	16.2	23.4	30.8	16.7	24.9	32.9	
		kW	3.30	3.30	3.30	3.34	3.33	3.33	3.36	3.36	3.35	3.37	3.37	3.36	3.38	3.38	3.37	

NOTE:

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

# DSH Performance Data (Cont'd)

TABLE 4 - DSH048C PERFORMANCE DATA

DSH048C		SCFM	1200			1400			1600			1800			2000			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	41.6	43.6	45.9	43.4	45.9	48.3	45.4	48.0	50.4	46.8	49.3	52.0	48.2	50.8	53.5
			SC	41.3	43.6	45.9	43.4	45.9	48.3	45.4	48.0	50.4	46.8	49.3	52.0	48.2	50.8	53.5
			kW	2.78	2.79	2.80	2.79	2.80	2.82	2.80	2.82	2.84	2.82	2.83	2.85	2.83	2.84	2.86
		62°F	TC	45.3	45.2	45.7	46.5	46.7	48.3	47.8	47.7	50.2	48.9	49.2	52.0	49.3	50.8	53.4
			SC	34.4	40.9	45.7	37.6	44.4	48.3	39.8	47.7	50.2	42.4	49.2	52.0	45.2	50.8	53.4
			kW	2.80	2.80	2.80	2.82	2.82	2.82	2.83	2.82	2.84	2.84	2.83	2.85	2.84	2.85	2.86
		67°F	TC	49.5	49.3	49.1	51.1	50.8	50.5	52.3	52.0	51.8	53.0	52.7	52.6	53.7	53.4	53.4
			SC	27.9	33.9	40.0	29.5	36.6	43.6	31.2	39.4	47.1	32.7	41.7	50.5	34.2	44.1	53.4
			kW	2.84	2.84	2.83	2.86	2.85	2.84	2.87	2.86	2.85	2.88	2.87	2.86	2.88	2.88	2.86
		72°F	TC	54.1	53.6	53.5	55.5	55.1	54.9	56.7	56.3	56.1	57.9	57.4	56.8	58.8	58.3	58.0
			SC	20.7	27.2	33.2	22.1	28.7	35.8	22.7	30.5	38.3	23.2	32.2	40.6	24.0	33.5	43.1
			kW	2.88	2.87	2.86	2.90	2.88	2.87	2.92	2.89	2.88	2.93	2.91	2.89	2.93	2.91	2.90
	95°F	57°F	TC	40.6	42.7	44.7	42.5	44.9	47.2	44.2	46.7	49.2	45.6	48.1	50.7	46.9	49.7	52.0
			SC	40.5	42.7	44.7	42.5	44.9	47.2	44.2	46.7	49.2	45.6	48.1	50.7	46.9	49.7	52.0
			kW	3.13	3.14	3.16	3.14	3.16	3.17	3.16	3.18	3.19	3.17	3.19	3.21	3.18	3.21	3.22
		62°F	TC	44.1	44.1	44.6	45.3	45.3	47.0	46.6	46.4	48.9	47.9	48.1	50.4	47.8	49.5	52.2
			SC	33.7	40.3	44.6	36.5	43.6	47.0	39.2	46.4	48.9	42.6	48.1	50.4	44.5	49.5	52.2
			kW	3.16	3.16	3.15	3.18	3.17	3.17	3.18	3.18	3.19	3.23	3.19	3.20	3.20	3.20	3.22
		67°F	TC	48.0	48.0	47.6	49.3	49.3	48.9	50.8	50.5	50.1	51.6	51.0	51.1	52.6	51.8	51.3
			SC	27.0	33.2	39.3	29.0	35.9	42.5	30.9	38.9	46.4	32.3	41.1	49.6	34.0	43.5	51.3
			kW	3.20	3.19	3.18	3.21	3.21	3.20	3.24	3.22	3.21	3.25	3.22	3.22	3.28	3.23	3.22
		72°F	TC	52.7	52.0	51.9	53.9	53.5	53.1	55.2	54.6	54.2	56.1	55.8	55.4	57.3	56.6	56.1
SC			20.7	26.5	32.4	21.3	28.4	35.4	21.8	29.8	37.4	22.9	31.3	40.0	23.1	33.1	42.2	
kW			3.26	3.23	3.22	3.27	3.24	3.23	3.28	3.25	3.24	3.31	3.28	3.26	3.32	3.30	3.26	
105°F	57°F	TC	40.0	41.9	43.9	41.8	44.1	46.1	43.5	45.7	48.2	44.7	47.0	49.5	46.0	48.6	50.9	
		SC	40.0	41.9	43.9	41.8	44.1	46.1	43.5	45.7	48.2	44.7	47.0	49.5	46.0	48.6	50.9	
		kW	3.57	3.58	3.60	3.59	3.60	3.61	3.61	3.63	3.65	3.62	3.64	3.65	3.64	3.65	3.68	
	62°F	TC	43.5	43.1	43.8	44.6	44.4	46.3	45.6	45.7	48.1	46.0	47.0	49.6	46.9	48.6	51.1	
		SC	33.6	39.3	43.8	36.2	42.9	46.3	38.8	45.7	48.1	41.1	47.0	49.6	43.9	48.6	51.1	
		kW	3.62	3.60	3.59	3.63	3.62	3.62	3.64	3.63	3.64	3.65	3.64	3.65	3.66	3.65	3.67	
	67°F	TC	47.0	47.0	46.7	48.3	48.2	48.1	49.2	49.2	48.9	50.2	50.0	49.7	51.0	50.5	50.4	
		SC	26.4	32.8	38.5	28.2	35.6	42.4	30.1	37.9	45.9	31.6	40.5	49.1	33.1	43.0	50.4	
		kW	3.66	3.65	3.64	3.67	3.67	3.64	3.69	3.68	3.66	3.70	3.70	3.67	3.72	3.70	3.68	
	72°F	TC	51.4	50.8	50.8	52.3	52.3	52.1	53.6	53.6	52.8	54.6	54.3	53.8	55.3	54.5	54.3	
		SC	20.1	26.2	31.6	20.9	27.7	35.1	21.5	29.7	37.3	22.7	31.0	39.5	23.2	32.2	42.0	
		kW	3.72	3.70	3.69	3.73	3.72	3.70	3.76	3.74	3.72	3.78	3.74	3.73	3.79	3.75	3.73	
115°F	57°F	TC	39.3	41.2	43.2	41.2	43.1	45.5	42.5	44.8	47.2	43.9	46.4	48.6	45.2	47.6	50.1	
		SC	39.3	41.2	43.2	41.2	43.1	45.5	42.5	44.8	47.2	43.9	46.4	48.6	45.2	47.6	50.1	
		kW	4.50	4.52	4.54	4.52	4.54	4.56	4.54	4.57	4.58	4.56	4.58	4.61	4.58	4.60	4.62	
	62°F	TC	42.4	42.3	43.1	43.6	43.3	45.4	44.4	44.8	47.2	45.2	46.4	48.5	45.7	47.6	49.8	
		SC	33.0	39.1	43.1	35.9	42.5	45.4	38.8	44.8	47.2	41.1	46.4	48.5	43.4	47.6	49.8	
		kW	4.55	4.53	4.52	4.56	4.55	4.55	4.58	4.57	4.58	4.59	4.59	4.61	4.60	4.59	4.62	
	67°F	TC	46.0	46.0	45.9	47.1	47.0	47.0	48.2	48.1	47.8	48.9	48.5	48.5	49.6	49.4	49.5	
		SC	26.5	32.3	38.6	28.2	35.0	42.1	29.7	37.3	44.9	31.5	40.1	48.3	33.0	42.5	49.5	
		kW	4.60	4.59	4.58	4.62	4.61	4.58	4.64	4.61	4.59	4.65	4.62	4.60	4.66	4.63	4.61	
	72°F	TC	49.8	49.7	49.3	51.5	51.0	50.8	52.3	52.3	51.6	53.2	52.6	52.6	54.1	53.7	53.0	
		SC	19.5	25.7	31.4	20.5	27.2	34.0	21.1	29.0	37.1	21.7	30.4	39.7	22.6	31.9	41.6	
		kW	4.65	4.63	4.62	4.66	4.65	4.64	4.70	4.67	4.65	4.71	4.68	4.67	4.74	4.69	4.68	

**NOTE:**

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

TABLE 5 - DSH060C PERFORMANCE DATA

DSH060C		SCFM	1600			1800			2000			2200			2400			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	51.7	54.3	57.1	53.9	56.7	59.6	55.3	58.4	61.4	56.8	60.1	63.1	58.2	61.5	64.6
			SC	51.7	54.3	57.1	53.9	56.7	59.6	55.3	58.4	61.4	56.8	60.1	63.1	58.2	61.5	64.6
			kW	3.44	3.45	3.48	3.46	3.48	3.50	3.48	3.49	3.52	3.50	3.52	3.52	3.54	3.51	3.53
		62°F	TC	56.4	56.1	57.4	57.4	57.4	59.4	58.5	58.1	61.4	59.5	59.0	63.1	60.0	61.4	64.6
			SC	43.4	51.1	57.4	46.1	54.7	59.4	48.6	58.1	61.4	50.7	59.0	63.1	53.2	61.4	64.6
			kW	3.49	3.47	3.48	3.51	3.50	3.50	3.52	3.51	3.52	3.53	3.52	3.55	3.54	3.55	3.56
		67°F	TC	61.4	61.2	61.1	63.0	62.4	62.3	63.6	63.4	63.0	64.5	64.4	64.1	65.4	65.0	64.8
			SC	34.1	42.7	50.3	36.5	45.1	53.4	38.4	47.3	57.0	39.9	49.8	59.9	41.2	52.0	63.2
			kW	3.56	3.55	3.53	3.58	3.56	3.54	3.59	3.57	3.55	3.60	3.59	3.56	3.61	3.60	3.57
		72°F	TC	66.7	66.3	66.5	68.3	67.7	67.7	69.3	69.0	68.6	70.0	70.2	69.7	70.6	71.0	70.3
			SC	26.4	33.8	41.8	27.2	34.9	44.3	27.9	37.2	46.4	28.7	38.6	48.2	29.3	39.8	50.9
			kW	3.62	3.61	3.61	3.64	3.63	3.62	3.65	3.65	3.63	3.67	3.66	3.65	3.68	3.66	3.66
	95°F	57°F	TC	50.6	53.7	55.9	52.6	55.5	57.9	54.3	57.2	59.7	55.8	58.6	61.4	56.7	59.7	63.0
			SC	50.6	53.7	55.9	52.6	55.5	57.9	54.3	57.2	59.7	55.8	58.6	61.4	56.7	59.7	63.0
			kW	3.87	3.92	3.93	3.90	3.93	3.96	3.93	3.96	3.98	3.94	3.99	4.00	3.96	4.00	4.03
		62°F	TC	55.1	54.8	55.9	56.3	56.0	57.8	57.4	56.8	60.0	58.0	57.6	61.3	58.4	59.9	62.7
			SC	42.6	51.0	55.9	45.2	54.0	57.8	48.0	56.8	60.0	50.2	57.6	61.3	52.4	59.9	62.7
			kW	3.93	3.93	3.93	3.95	3.95	3.96	3.99	3.96	3.99	3.98	3.97	4.00	3.98	4.00	4.03
		67°F	TC	59.8	59.6	59.0	61.0	61.1	60.1	61.8	61.6	61.4	63.2	62.5	62.0	63.7	63.7	62.7
			SC	34.7	42.0	49.4	36.3	44.4	53.0	37.3	46.6	56.2	39.4	48.8	59.2	40.8	51.5	62.7
			kW	4.01	4.00	3.98	4.04	4.02	4.00	4.05	4.03	4.02	4.08	4.04	4.02	4.09	4.08	4.03
		72°F	TC	65.0	64.4	64.2	66.3	66.0	66.1	67.4	67.4	67.0	68.5	67.8	67.6	68.8	69.0	68.5
			SC	25.7	33.0	41.0	26.5	34.5	43.3	27.4	36.7	45.7	28.0	38.2	47.8	28.5	39.6	50.4
			kW	4.07	4.07	4.05	4.12	4.09	4.09	4.13	4.12	4.09	4.15	4.12	4.10	4.16	4.15	4.12
	105°F	57°F	TC	49.4	52.5	54.7	51.7	54.3	56.8	53.2	56.0	58.7	54.4	57.1	60.3	55.7	58.8	61.8
			SC	49.4	52.5	54.7	51.7	54.3	56.8	53.2	56.0	58.7	54.4	57.1	60.3	55.7	58.8	61.8
			kW	4.38	4.43	4.47	4.43	4.46	4.50	4.46	4.49	4.53	4.48	4.51	4.55	4.50	4.55	4.58
		62°F	TC	53.6	53.6	54.6	54.9	54.5	56.7	56.1	55.6	58.7	56.6	57.3	60.3	57.3	58.6	61.6
			SC	42.1	49.7	54.6	44.6	53.6	56.7	47.3	55.6	58.7	49.2	57.3	60.3	52.2	58.6	61.6
			kW	4.47	4.45	4.47	4.49	4.47	4.50	4.52	4.48	4.52	4.53	4.51	4.55	4.54	4.54	4.57
		67°F	TC	58.6	58.1	57.8	59.5	59.2	59.1	60.3	60.1	59.6	61.5	61.0	60.6	62.1	61.7	61.1
			SC	33.2	41.3	48.9	35.7	43.8	52.3	36.6	46.4	55.8	38.1	48.5	58.7	40.1	50.7	61.1
			kW	4.56	4.53	4.52	4.59	4.55	4.54	4.61	4.57	4.55	4.63	4.60	4.57	4.64	4.62	4.57
		72°F	TC	63.3	63.1	62.9	64.9	64.2	64.4	65.8	65.2	65.1	66.4	66.2	66.0	67.2	66.8	66.8
			SC	26.1	32.6	40.3	26.1	34.2	42.5	26.8	35.6	45.0	27.4	37.0	47.5	28.0	38.6	49.7
			kW	4.65	4.62	4.61	4.68	4.65	4.64	4.70	4.66	4.64	4.72	4.69	4.67	4.73	4.71	4.69
	115°F	57°F	TC	49.2	51.6	54.1	50.7	53.4	56.0	52.4	55.1	57.6	53.7	56.2	59.1	54.8	57.5	60.3
			SC	49.2	51.6	54.1	50.7	53.4	56.0	52.4	55.1	57.6	53.7	56.2	59.1	54.8	57.5	60.3
			kW	4.95	4.99	5.03	4.97	5.02	5.07	5.01	5.05	5.10	5.04	5.08	5.13	5.06	5.11	5.15
		62°F	TC	52.8	52.6	54.3	54.0	53.6	55.9	54.5	54.6	57.7	55.6	56.1	59.0	56.0	57.5	60.4
			SC	41.9	49.6	54.3	44.1	53.1	55.9	47.5	54.6	57.7	49.2	56.1	59.0	51.4	57.5	60.4
			kW	5.03	5.01	5.04	5.05	5.03	5.07	5.08	5.04	5.10	5.08	5.08	5.12	5.09	5.11	5.15
		67°F	TC	57.4	56.9	56.6	58.4	57.9	57.7	59.4	58.8	58.4	60.0	59.8	59.4	60.9	60.4	59.8
			SC	33.6	40.8	48.8	34.8	43.3	51.6	36.7	45.7	55.0	37.8	48.2	57.9	39.3	49.9	59.8
			kW	5.12	5.09	5.09	5.14	5.12	5.11	5.16	5.14	5.12	5.17	5.16	5.14	5.19	5.18	5.14
		72°F	TC	61.8	61.6	61.1	63.0	62.7	62.7	64.1	63.8	63.5	64.9	64.9	64.2	66.1	65.4	65.1
SC			24.5	31.9	40.0	25.5	33.9	42.6	26.3	35.5	44.4	26.9	36.8	47.0	27.7	38.3	49.0	
kW			5.20	5.19	5.17	5.24	5.21	5.20	5.26	5.23	5.21	5.28	5.26	5.23	5.30	5.27	5.25	

NOTE:

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

# DSH Performance Data (Cont'd)

TABLE 6 - DSH096C PERFORMANCE DATA

DSH096C		SCFM	2400			2800			3200			3600			4000			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	81.3	84.9	89.5	84.4	89.2	94.3	87.8	92.9	98.1	90.6	96	101.5	93	98.6	104.3
SC			80.9	84.9	89.5	84.4	89.2	94.3	87.8	92.9	98.1	90.6	96	101.5	93	98.6	104.3	
kW			6.8	6.8	6.8	6.8	6.8	6.9	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7	
62°F		TC	89	89.1	89.6	91.4	91.4	94.4	93.4	93.4	98.3	94.9	96.1	101.5	96	98.6	104.3	
		SC	69.3	81	89.6	74.4	87.8	94.4	79.2	93.4	98.3	83.8	96.1	101.5	88.3	98.6	104.3	
		kW	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7	6.9	6.9	7	
67°F		TC	97	97	97.1	99.6	99.7	99.8	101.6	101.7	101.6	103.1	103.2	103.2	104.3	104.4	104.8	
		SC	57.4	69.1	80.8	60.7	74.2	87.6	63.8	79	94.1	66.7	83.5	100.3	69.4	87.9	104.8	
		kW	6.9	6.9	6.9	6.9	6.9	6.9	7	7	7	7	7	7	7	7	7	
72°F		TC	105.6	105.6	105.6	108.1	108.2	108.4	110.2	110.3	110.4	111.7	111.8	112	112.9	113.1	113.3	
		SC	45.4	57.1	68.8	46.8	60.4	73.9	48.2	63.4	78.7	49.4	66.3	83.2	50.5	69	87.5	
		kW	7	7	7	7	7	7	7.1	7	7	7.1	7.1	7.1	7.1	7.1	7.1	
95°F		57°F	TC	77.5	81.7	86.3	81.1	85.9	90.7	84.3	89.3	94.4	86.9	92.1	97.4	89.1	94.5	100.1
			SC	77.5	81.7	86.3	81.1	85.9	90.7	84.3	89.3	94.4	86.9	92.1	97.4	89.1	94.5	100.1
			kW	7.5	7.5	7.5	7.5	7.5	7.6	7.5	7.6	7.6	7.6	7.6	7.7	7.6	7.6	7.7
		62°F	TC	84.9	84.9	86.3	87.1	87.1	90.7	88.8	89.3	94.5	90.2	92.2	97.5	91.2	94.5	100.1
			SC	67.4	79	86.3	72.4	85.9	90.7	77.2	89.3	94.5	81.7	92.2	97.5	86.2	94.5	100.1
			kW	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.6	7.7
		67°F	TC	92.6	92.6	92.6	94.9	95.1	95.1	96.7	96.8	96.8	98.1	98.2	98.2	99.2	99.3	100.2
			SC	55.5	67.2	78.9	58.7	72.3	85.6	61.7	77	92.2	64.7	81.5	98.2	67.3	85.9	100.2
			kW	7.6	7.6	7.6	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
		72°F	TC	100.7	100.8	100.9	103.1	103.2	103.3	105	105.1	105.2	106.3	106.4	106.5	107.4	107.6	107.8
			SC	43.5	55.3	67	44.9	58.4	72	46.2	61.5	76.7	47.4	64.3	81.2	48.5	67	85.4
			kW	7.7	7.7	7.7	44.9	7.7	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8
105°F	57°F	TC	73.9	78.3	82.7	77.5	82.2	86.9	80.4	85.3	90.3	82.8	88	93.2	85	90.2	95.6	
		SC	73.9	78.3	82.7	77.5	82.2	86.9	80.4	85.3	90.3	82.8	88	93.2	85	90.2	95.6	
		kW	8.3	8.3	8.4	8.3	8.4	8.4	8.3	8.4	8.4	8.4	8.4	8.5	8.4	8.4	8.5	
	62°F	TC	80.5	80.4	82.8	82.5	82.5	86.9	84	85.4	90.3	85.3	88	93.2	86.2	90.2	95.6	
		SC	65.3	76.9	82.8	70.3	82.5	86.9	75	85.4	90.3	79.7	88	93.2	84.3	90.2	95.6	
		kW	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.4	8.5	
	67°F	TC	87.7	87.8	87.9	90	90.1	90	91.5	91.6	91.7	92.8	92.8	93.4	93.8	93.8	95.7	
		SC	53.5	65.1	76.8	56.7	70.2	83.6	59.7	74.9	90.2	62.5	79.3	93.4	65.2	83.7	95.7	
		kW	8.4	8.4	8.4	8.5	8.4	8.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	
	72°F	TC	95.7	95.7	95.8	97.7	97.6	98	99.3	99.5	99.6	100.5	100.7	100.9	101.5	101.9	101.9	
		SC	41.6	53.3	65	42.9	56.3	70	44.2	59.4	74.6	45.4	62.2	79	46.4	65	83.4	
		kW	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.5	8.6	8.6	8.6	8.6	8.6	8.6	
115°F	57°F	TC	70.4	74.6	78.8	73.7	78.2	82.8	76.3	81.1	85.9	100.9	83.5	88.6	80.5	85.6	90.8	
		SC	70.4	74.6	78.8	73.7	78.2	82.8	76.3	81.1	85.9	79	83.5	88.6	80.5	85.6	90.8	
		kW	9.2	9.3	9.3	9.2	9.3	9.3	9.3	9.3	9.4	8.6	9.3	9.4	9.3	9.4	9.4	
	62°F	TC	75.8	75.7	78.9	77.6	78.2	82.8	78.9	81.2	86	80	83.6	88.6	81	85.6	90.8	
		SC	63.2	74.9	78.9	68.1	78.2	82.8	72.9	81.2	86	77.6	83.6	88.6	81	85.6	90.8	
		kW	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.3	9.3	9.4	9.3	9.4	9.4	
	67°F	TC	82.7	82.8	82.8	84.7	84.8	84.7	86	86.1	86.4	87.2	87.2	88.7	88.1	88	90.9	
		SC	51.3	63.1	74.7	54.6	68.1	81.4	57.5	72.7	86.4	60.3	77.1	88.7	63	81.6	90.9	
		kW	9.4	9.3	9.3	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	
	72°F	TC	90.2	90.3	90.3	92	92.2	92.2	93.4	93.6	93.7	94.5	94.7	94.8	95.4	95.7	95.7	
		SC	39.5	51.2	62.9	40.9	54.4	67.8	42.1	57.3	72.4	43.2	60.1	76.9	44.3	62.7	81.2	
		kW	9.4	9.4	9.4	9.5	9.4	9.4	9.5	9.5	9.4	9.5	9.5	9.5	9.5	9.5	9.5	

**NOTE:**

TC: Total Gross Capacity (MBh)  
 SC: Sensible Capacity (MBh)  
 kW = Compressor Power + Outdoor Fan Power + Control Power



TABLE 7 - DSH120C PERFORMANCE DATA

DSH120C		SCFM	2800			3200			3600			4000			4400			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	102.5	106.7	112.4	105.9	112	118.1	110.1	116.5	123.1	113.8	120.5	127.3	116.9	123.9	131
			SC	101.2	106.7	112.4	105.9	112	118.1	110.1	116.5	123.1	113.8	120.5	127.3	116.9	123.9	131
			kW	8.2	8.2	8.3	8.2	8.3	8.4	8.3	8.4	8.4	8.3	8.4	8.5	8.4	8.4	8.5
		62°F	TC	112.1	111.9	112.6	115.3	115.1	118.2	117.8	117.9	123.3	119.9	120.5	127.4	116.9	124	131.1
			SC	87.3	101.8	112.6	93	109.3	118.2	98.7	116.8	123.3	104.2	120.5	127.4	116.9	124	131.1
			kW	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.4	8.5
		67°F	TC	122.5	122.5	122.4	125.9	125.9	125.8	128.7	128.6	128.4	130.9	130.8	130.6	132.6	132.5	132.5
			SC	72.8	87.1	101.4	76.6	93	109.2	80.1	98.6	116.8	83.4	103.9	124.1	86.5	109	131.1
			kW	8.4	8.4	8.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.5
		72°F	TC	133.8	133.7	133.7	137.4	137.4	137.2	140.1	140.1	140	142.3	142.4	142.2	144	144.1	144.1
			SC	58.2	72.6	86.8	59.7	76.1	92.6	61.1	79.4	97.9	62.5	82.7	103.1	63.8	85.9	107.9
			kW	8.6	8.6	8.6	8.6	8.6	8.6	8.7	8.6	8.6	8.7	8.7	8.7	8.7	8.7	8.7
	95°F	57°F	TC	97.9	102.7	108.4	101.8	107.8	113.8	105.7	112	118.4	109.2	115.7	122.3	112.1	118.9	125.8
			SC	97.9	102.7	108.4	101.8	107.8	113.8	105.7	112	118.4	109.2	115.7	122.3	112.1	118.9	125.8
			kW	9	9	9.1	9	9.1	9.2	9.1	9.2	9.2	9.1	9.2	9.3	9.2	9.3	9.3
		62°F	TC	106.9	106.8	108.5	109.8	109.7	113.8	112.1	112.5	118.4	114	115.8	122.4	115.5	118.9	125.9
			SC	85	99.3	108.5	90.6	106.9	113.8	96.3	112.5	118.4	101.7	115.8	122.4	107	118.9	125.9
			kW	9.1	9.1	9.1	9.1	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.3	9.2	9.3	9.3
		67°F	TC	116.9	116.9	116.7	120.2	120	119.9	122.5	122.4	122.2	124.5	124.4	124.2	126.1	125.9	126.2
			SC	70.4	84.6	99.1	74.3	90.4	106.8	77.8	96.1	114.3	81	101.5	121.7	84	106.7	126.2
			kW	9.2	9.2	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.3	9.3	9.4	9.4	9.4
		72°F	TC	127.7	127.7	127.6	131	130.9	130.8	133.4	133.4	133.2	135.5	135.5	135.3	137	137.1	136.9
			SC	55.9	70.3	84.5	57.4	73.9	90.2	58.6	77	95.7	60.1	80.4	100.6	61.3	83.4	105.6
			kW	9.4	9.4	9.4	9.4	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	105°F	57°F	TC	93.1	98.5	104	97.4	103.2	109.1	101.1	107.2	113.4	104.2	110.6	117.1	107	113.6	120.3
			SC	93.1	98.5	104	97.4	103.2	109.1	101.1	107.2	113.4	104.2	110.6	117.1	107	113.6	120.3
			kW	9.9	9.9	10	9.9	10	10.1	10	10.1	10.1	10	10.1	10.2	10.1	10.2	10.3
		62°F	TC	101.4	101.3	104.1	104	104.3	109.2	106.1	107.2	113.4	107.7	110.7	117.1	109.1	113.6	120.3
			SC	82.5	96.7	104.1	88.2	104	109.2	93.8	107.2	113.4	99.2	110.7	117.1	104.7	113.6	120.3
			kW	10	10	10	10	10	10.1	10.1	10.1	10.2	10.1	10.1	10.2	10.1	10.2	10.3
		67°F	TC	111	111	110.7	113.8	113.8	113.5	116	115.9	115.7	117.8	117.7	117.9	119.2	119.2	120.4
			SC	67.9	82.1	96.7	71.7	87.9	104.3	75.3	93.5	111.8	78.6	98.9	117.9	81.7	103.9	120.4
			kW	10.1	10.1	10.1	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.3	10.3	10.3
		72°F	TC	121.3	121.2	121.2	124.2	124.1	124	126.4	126.4	126.2	128.2	128.2	128	129.6	129.6	129.5
			SC	53.5	67.8	82	54.9	71.4	87.7	56.1	74.6	93.2	57.4	77.9	98.3	58.7	80.9	103.2
			kW	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.3	10.4	10.4	10.4	10.4	10.4	10.4
	115°F	57°F	TC	88.8	94	99.3	92.8	98.4	104	96.1	102	108	99	105.2	111.4	101.5	107.9	114.4
			SC	88.8	94	99.3	92.8	98.4	104	96.1	102	108	99	105.2	111.4	101.5	107.9	114.4
			kW	10.8	10.9	11	10.9	11	11.1	11	11	11.1	11	11.1	11.2	11	11.1	11.2
		62°F	TC	95.5	95.7	99.4	97.8	98.4	104.1	99.7	102.1	108	101.2	105.2	111.5	102.6	108	114.4
			SC	80.1	93.8	99.4	85.8	98.4	104.1	91.2	102.1	108	96.6	105.2	111.5	101.7	108	114.4
			kW	11	10.9	11	11	11	11.1	11	11	11.1	11	11.1	11.2	11.1	11.1	11.2
		67°F	TC	104.8	104.7	104.5	107.3	107.1	106.9	109.2	109	109.2	110.7	110.6	111.6	112	111.8	114.5
			SC	65.2	79.7	94.1	69	85.5	101.8	72.5	91	108.7	75.9	96.4	111.6	79.1	101.4	114.5
			kW	11.1	11.1	11.1	11.1	11.1	11.1	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
		72°F	TC	114.4	114.4	114.4	117	116.9	116.9	119	118.9	118.8	120.6	120.5	120.3	121.9	121.8	121.6
SC			50.9	65.1	79.4	52.4	68.8	85.1	53.6	72.2	90.5	54.9	75.3	95.8	56	78.2	100.8	
kW			11.3	11.2	11.2	11.3	11.3	11.3	11.4	11.3	11.3	11.4	11.4	11.3	11.4	11.4	11.4	

NOTE:

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

# DSH Fan Performance Data

TABLE 8 - EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - INCHES W.C. <sup>1</sup>																	
		0.0	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0					
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
DSH024C	600	318	0.03	426	0.04	520	0.06	604	0.08	679	0.10	810	0.14	923	0.19	-	-	-	-
	700	371	0.04	466	0.06	550	0.08	628	0.10	699	0.13	826	0.18	937	0.23	-	-	-	-
	800	423	0.06	508	0.08	585	0.10	656	0.13	723	0.15	844	0.20	-	-	-	-	-	-
	900	476	0.09	552	0.11	622	0.14	688	0.16	751	0.19	866	0.24	-	-	-	-	-	-
	1000	529	0.11	598	0.14	662	0.18	723	0.20	781	0.23	891	0.29	-	-	-	-	-	-
	800	453	0.06	534	0.09	609	0.11	679	0.14	744	0.16	866	0.21	969	0.26	1065	0.33	-	-
	1000	566	0.13	633	0.16	695	0.19	755	0.21	812	0.24	917	0.30	1016	0.38	-	-	-	-
	1200	680	0.23	735	0.26	789	0.29	840	0.33	890	0.36	983	0.43	1074	0.50	-	-	-	-
	1400	792	0.36	841	0.40	887	0.44	932	0.48	977	0.51	1061	0.59	-	-	-	-	-	-
	1600	906	0.54	948	0.58	990	0.63	1030	0.66	1069	0.71	-	-	-	-	-	-	-	-
DSH036C	1200	381	0.11	451	0.14	511	0.16	569	0.20	620	0.24	717	0.30	803	0.36	882	0.44	954	0.51
	1400	447	0.18	506	0.21	561	0.24	612	0.28	660	0.31	750	0.39	831	0.46	906	0.55	977	0.64
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	624	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
DSH048C	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
DSH060C	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
DSH096C	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
DSH120C	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
	2200	699	0.66	739	0.71	776	0.78	813	0.83	847	0.89	914	1.00	978	1.11	1039	1.23	1098	1.34
	2400	765	0.86	800	0.93	835	0.99	868	1.04	901	1.10	964	1.23	1024	1.35	1082	1.48	-	-
	1600	511	0.25	562	0.30	612	0.34	658	0.38	703	0.43	786	0.50	863	0.59	935	0.68	1002	0.78
	1800	575	0.36	620	0.41	666	0.45	708	0.50	749	0.55	826	0.64	898	0.74	967	0.84	1031	0.94
	2000	637	0.50	680	0.55	720	0.60	759	0.65	797	0.70	869	0.80	937	0.91	1001	1.01	1063	1.13
High Static Drive (Field Supplied) <sup>2</sup>	2800	361	0.31	400	0.36	436	0.42	471	0.48	504	0.53	566	0.66	623	0.78	676	0.91	725	1.05
	3200	420	0.47	453	0.54	486	0.60	517	0.67	548	0.73	604	0.87	657	1.01	706	1.15	753	1.30
	3600	464	0.66	494	0.73	524	0.79	552	0.87	580	0.94	633	1.09	683	1.24	730	1.40	775	1.56
	4000	513	0.89	541	0.97	568	1.05	594	1.13	619	1.21	668	1.37	715	1.54	759	1.71	802	1.88
	4400	566	1.20	591	1.29	616	1.37	640	1.46	664	1.54	709	1.72	753	1.90	795	2.08	835	2.27
	2800	361	0.31	400	0.36	436	0.42	471	0.48	504	0.53	566	0.66	623	0.78	676	0.91	725	1.05
	3200	420	0.47	453	0.54	486	0.60	517	0.67	548	0.73	604	0.87	657	1.01	706	1.15	753	1.30
	3600	464	0.66	494	0.73	524	0.79	552	0.87	580	0.94	633	1.09	683	1.24	730	1.40	775	1.56
	4000	513	0.89	541	0.97	568	1.05	594	1.13	619	1.21	668	1.37	715	1.54	759	1.71	802	1.88
	4400	566	1.20	591	1.29	616	1.37	640	1.46	664	1.54	709	1.72	753	1.90	795	2.08	835	2.27

# DSH Electrical Data

**TABLE 9 - CONDENSER FAN PERFORMANCE**

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - INCHES W.C.													
		0.0		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH024C	1600	461	0.16	573	0.23	675	0.31	767	0.39	849	0.48	~	~	~	~
DSH036C	2100	542	0.31	631	0.40	717	0.49	799	0.58	875	0.68	~	~	~	~
DSH048C	2400	503	0.40	577	0.50	645	0.60	708	0.71	767	0.82	822	0.93	875	1.05
DSH060C	2800	567	0.60	632	0.71	694	0.83	751	0.95	806	1.08	858	1.21	907	1.33
DSH096C	6100	516	1.53	572	1.79	623	2.06	672	2.33	718	2.60	762	2.88	805	3.16
DSH120C	6400	691	1.98	747	2.24	800	2.52	850	2.80	898	3.08	945	3.36	990	3.66

Standard Factory Drive

High-Static Drive

**TABLE 10 - STANDARD EVAPORATOR MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COMPRESSOR #2			EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP		
		QTY	RLA	LRA	QTY	RLA	LRA	HP	FLA	HP	FLA				
DSH024C2	208-230/3/60	1	@	7.7	55.4					0.50	1.6	0.50	1.6	12.83	20
DSH036C2	208-230/3/60	1	@	10.4	73.0					0.75	2.1	0.75	2.1	17.20	25
DSH036C4	460/3/60	1	@	5.8	38.0					0.75	1.0	0.75	1.0	9.25	15
DSH036C5	575/3/60	1	@	3.8	36.5					0.75	0.9	0.75	0.9	6.49	15
DSH048C2	208-230/3/60	1	@	13.8	83.1					0.75	2.1	1.50	4.4	23.75	35
DSH048C4	460/3/60	1	@	6.2	41.0					0.75	1.0	1.50	2.2	10.95	15
DSH048C5	575/3/60	1	@	4.9	33.0					0.75	0.9	1.50	1.8	8.80	15
DSH060C2	208-230/3/60	1	@	15.9	110.0					1.00	3.1	1.50	4.4	27.38	40
DSH060C4	460/3/60	1	@	7.1	52.0					1.00	1.5	1.50	2.2	12.58	15
DSH060C5	575/3/60	1	@	5.1	39.5					1.00	1.2	1.50	1.8	9.38	15
DSH096C2	208-230/3/60	1	@	14.0	83.1	1	@	13.8	83.1	1.50	4.4	3.00	8.5	44.20	50
DSH096C4	460/3/60	1	@	6.4	41.0	1	@	6.2	41.0	1.50	2.2	3.00	4.2	20.60	25
DSH096C5	575/3/60	1	@	4.6	33.0	1	@	4.9	33.0	1.50	1.8	3.00	3.4	15.85	20
DSH120C2	208-230/3/60	2	@	16.2	110.0					3.00	8.5	3.00	8.5	53.45	60
DSH120C4	460/3/60	2	@	7.6	52.0					3.00	4.2	3.00	4.2	25.50	30
DSH120C5	575/3/60	2	@	5.3	38.9					3.00	3.4	3.00	3.4	18.73	20

**TABLE 11 - OVERSIZED EVAPORATOR MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COMPRESSOR #2			EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP		
		QTY	RLA	LRA	QTY	RLA	LRA	HP	FLA	HP	FLA				
DSH048C2	208-230/3/60	1	@	13.8	83.1					1.00	3.1	1.50	4.4	24.75	35
DSH048C4	460/3/60	1	@	6.2	41.0					1.00	1.5	1.50	2.2	11.45	15
DSH048C5	575/3/60	1	@	4.9	33.0					1.00	1.2	1.50	1.8	9.13	15
DSH060C2	208-230/3/60	1	@	15.9	110.0					1.50	4.4	1.50	4.5	28.78	40
DSH060C4	460/3/60	1	@	7.1	52.0					1.50	2.2	1.50	2.2	13.28	20
DSH060C5	575/3/60	1	@	5.1	39.5					1.50	1.8	1.50	1.8	10.73	15
DSH096C2	208-230/3/60	1	@	14.0	83.1	1	@	13.8	83.1	2.00	5.8	3.00	8.5	45.60	50
DSH096C4	460/3/60	1	@	6.4	41.0	1	@	6.2	41.0	2.00	2.9	3.00	4.2	21.30	25
DSH096C5	575/3/60	1	@	4.6	33.0	1	@	4.9	33.0	2.00	2.3	3.00	3.4	16.35	20

## DSH Electrical Data (Cont'd)

**TABLE 12 - OVERSIZED CONDENSER MOTOR**

MODEL #	VOLTAGE	COMPRESSOR 1			EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH120C2	208-230/3/60	2	@	16.2	110.0	3.00	8.5	5.00	14.0	58.95	70
DSH120C4	460/3/60	2	@	7.6	52.0	3.00	4.2	5.00	6.6	27.90	35
DSH120C5	575/3/60	2	@	5.3	38.9	3.00	3.4	5.00	5.3	20.63	25

**NOTE:**

Oversized condenser motors do not utilize compressor #2.

**TABLE 13 - EVAPORATOR SECTION ONLY – STANDARD MOTOR**

MODEL #	VOLTAGE	EVAP FAN		MCA	MAX FUSE / CCT. BKR. AMP
		HP	FLA		
DSH024C2	208-230/3/60	0.50	1.6	2.00	15
DSH036C2	208-230/3/60	0.75	2.1	2.63	15
DSH036C4	460/3/60	0.75	1.0	1.25	15
DSH036C5	575/3/60	0.75	0.9	1.09	15
DSH048C2	208-230/3/60	0.75	2.1	2.63	15
DSH048C4	460/3/60	0.75	1.0	1.25	15
DSH048C5	575/3/60	0.75	0.9	1.09	15
DSH060C2	208-230/3/60	1.00	3.1	3.88	15
DSH060C4	460/3/60	1.00	1.5	1.88	15
DSH060C5	575/3/60	1.00	1.2	1.50	15
DSH096C2	208-230/3/60	1.50	4.5	5.63	15
DSH096C4	460/3/60	1.50	2.2	2.75	15
DSH096C5	575/3/60	1.50	1.8	2.25	15
DSH120C2	208-230/3/60	3.00	8.5	10.63	15
DSH120C4	460/3/60	3.00	4.2	5.25	15
DSH120C5	575/3/60	3.00	3.4	4.25	15

**TABLE 14 - EVAPORATOR SECTION ONLY – OVERSIZED EVAPORATOR MOTOR**

MODEL #	VOLTAGE	EVAP FAN		MCA	MAX FUSE / CCT. BKR. AMP
		HP	FLA		
DSH048C2	208-230/3/60	1.00	3.1	3.88	15
DSH048C4	460/3/60	1.00	1.5	1.88	15
DSH048C5	575/3/60	1.00	1.2	1.50	15
DSH060C2	208-230/3/60	1.50	4.5	5.63	15
DSH060C4	460/3/60	1.50	2.2	2.75	15
DSH060C5	575/3/60	1.50	1.8	2.25	15
DSH096C2	208-230/3/60	2.00	5.8	7.25	15
DSH096C4	460/3/60	2.00	2.9	3.63	15
DSH096C5	575/3/60	2.00	2.3	2.88	15

**TABLE 15 - CONDENSER SECTION ONLY – STANDARD MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COMPRESSOR #2			COND FAN		MCA	MAX FUSE / CKT. BKR. AMP		
		QTY	RLA	LRA	QTY	RLA	LRA	HP	FLA				
DSH024C2	208-230/3/60	1	@	7.7	55.4					11.23	15		
DSH036C2	208-230/3/60	1	@	10.4	73.0					15.10	25		
DSH036C4	460/3/60	1	@	5.8	38.0					8.25	15		
DSH036C5	575/3/60	1	@	3.8	36.5					5.62	15		
DSH048C2	208-230/3/60	1	@	13.8	83.1					21.75	35		
DSH048C4	460/3/60	1	@	6.2	41.0					9.95	15		
DSH048C5	575/3/60	1	@	4.9	33.0					7.93	15		
DSH060C2	208-230/3/60	1	@	15.9	110.0					24.38	40		
DSH060C4	460/3/60	1	@	7.1	52.0					11.08	15		
DSH060C5	575/3/60	1	@	5.1	39.5					8.18	15		
DSH096C2	208-230/3/60	1	@	14.0	83.1	1	@	13.8	83.1	3.00	8.5	39.80	50
DSH096C4	460/3/60	1	@	6.4	41.0	1	@	6.2	41.0	3.00	4.2	18.40	20
DSH096C5	575/3/60	1	@	4.6	33.0	1	@	4.9	33.0	3.00	3.4	14.05	15
DSH120C2	208-230/3/60	2	@	16.2	110.0					3.00	8.5	44.95	60
DSH120C4	460/3/60	2	@	7.6	52.0					3.00	4.2	21.30	25
DSH120C5	575/3/60	2	@	5.3	38.9					3.00	3.4	15.33	20

**TABLE 16 - CONDENSER SECTION ONLY – OVERSIZED CONDENSER MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COND FAN		MCA	MAX FUSE / CCT. BKR. AMP	
		QTY	RLA	LRA	HP	FLA			
DSH120C2	208-230/3/60	2	@	16.2	110.0	5.00	14.0	50.45	60
DSH120C4	460/3/60	2	@	7.6	52.0	5.00	6.6	23.70	30
DSH120C5	575/3/60	2	@	5.3	38.9	5.00	5.3	17.23	20

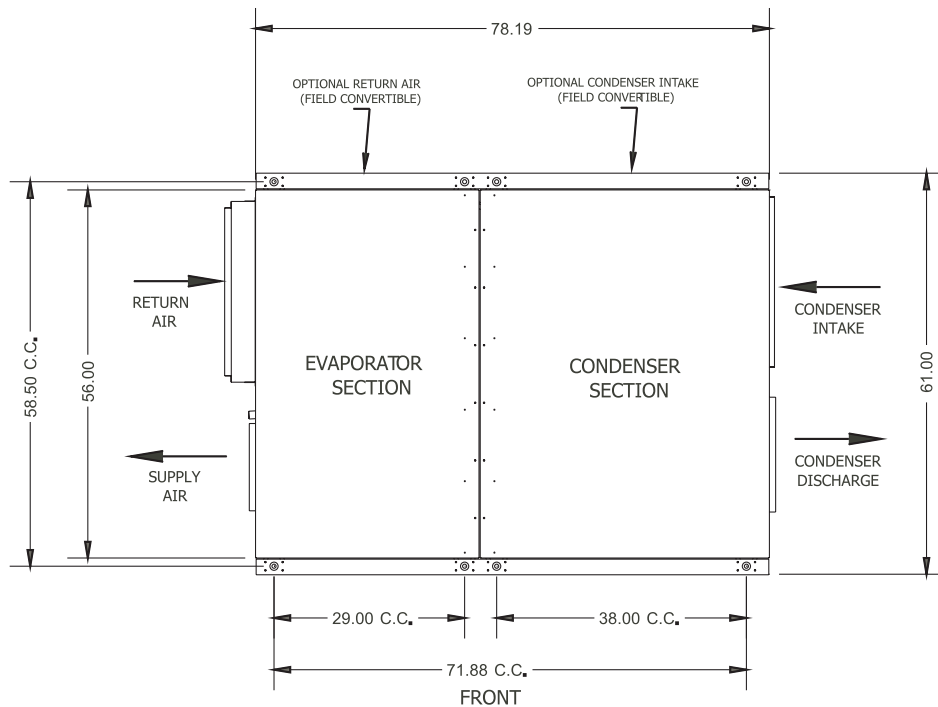
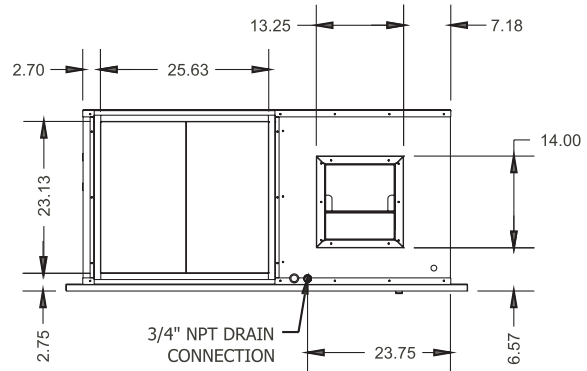
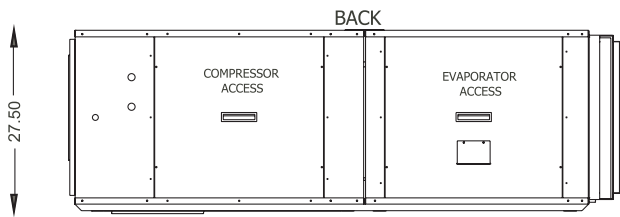
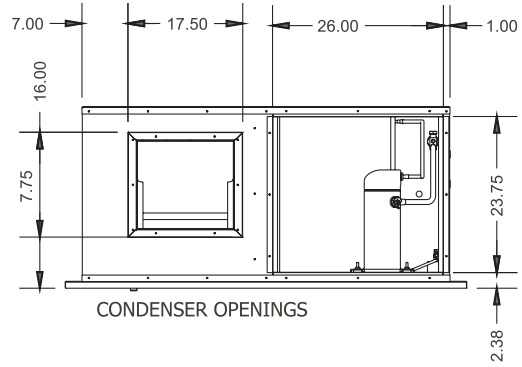
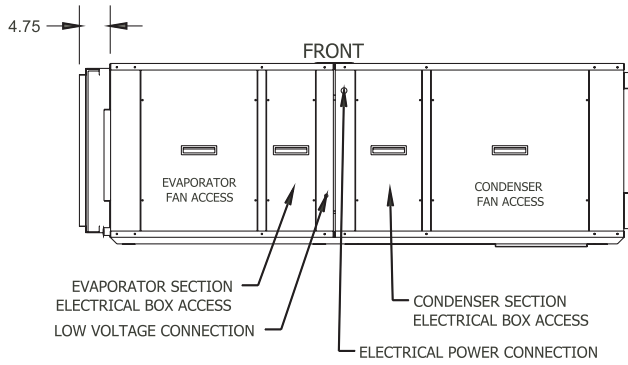
**NOTE:**

Oversized condenser motors do not utilize compressor #2.

# DSH Dimensional Data

## DSH024C & DSH036C

### 2-3 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA

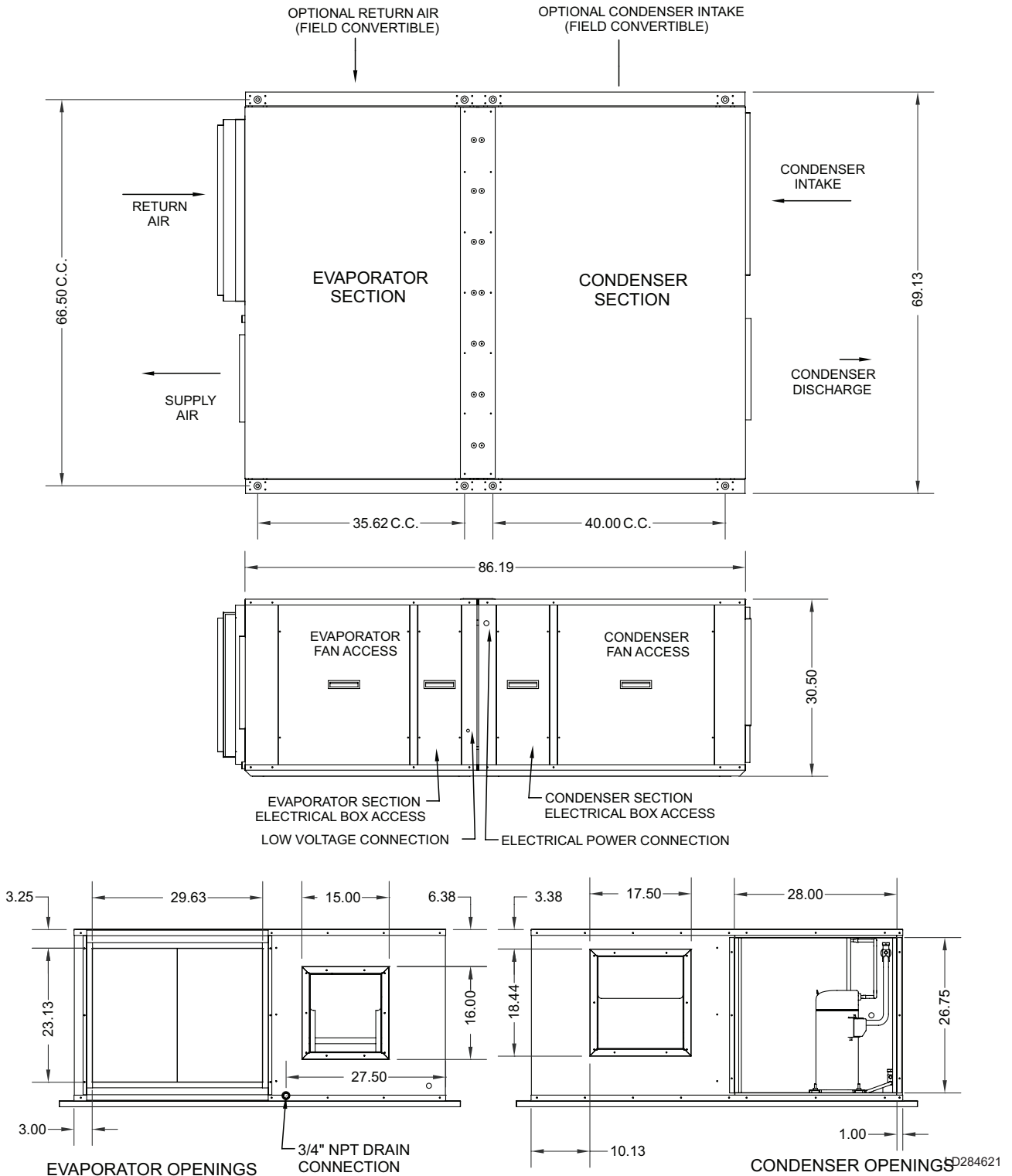


LD28461

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

### DSH048C & DSH060C

#### 4-5 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA

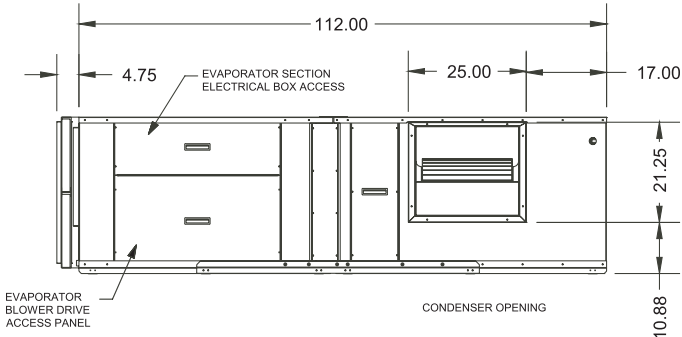


Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

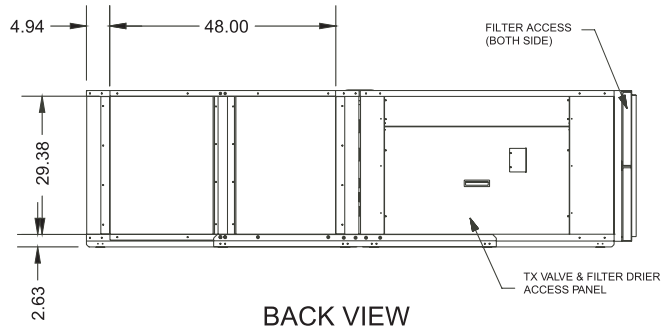
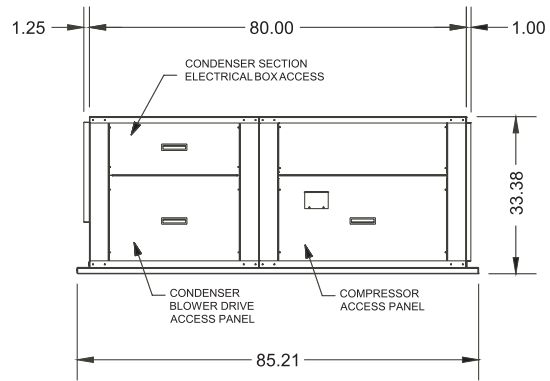
# DSH Dimensional Data (Cont'd)

## DSH096C

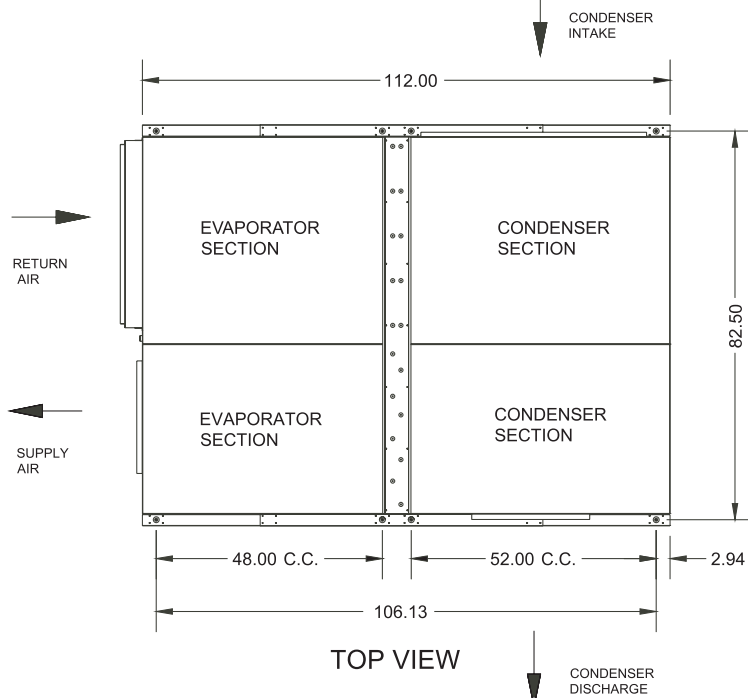
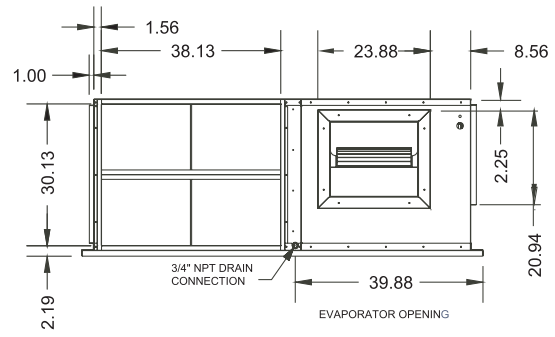
### 8 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA



FRONT VIEW



BACK VIEW



TOP VIEW

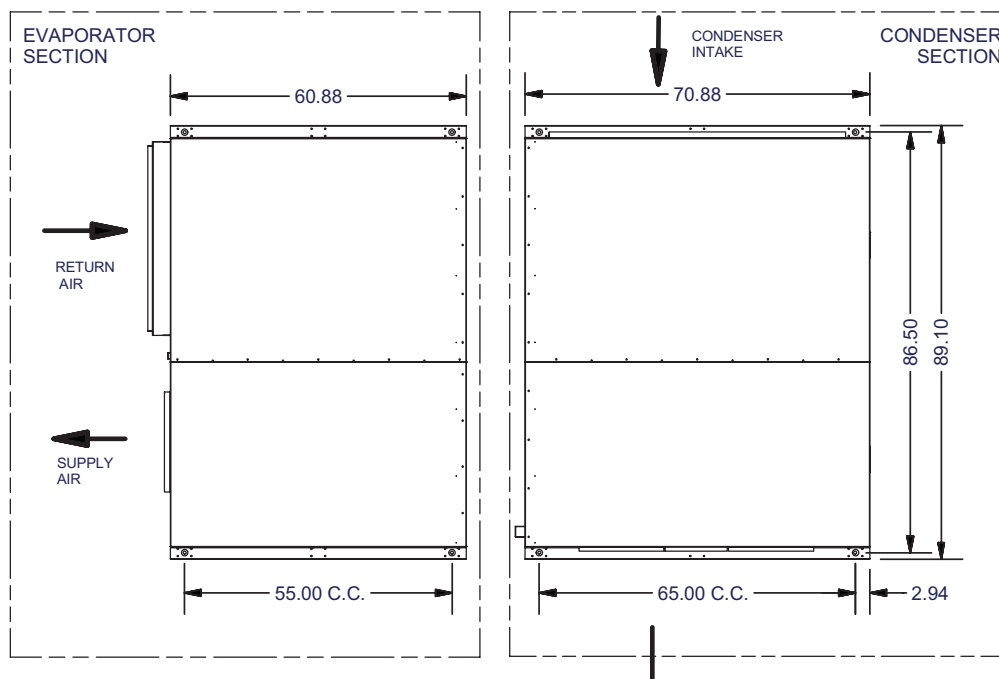
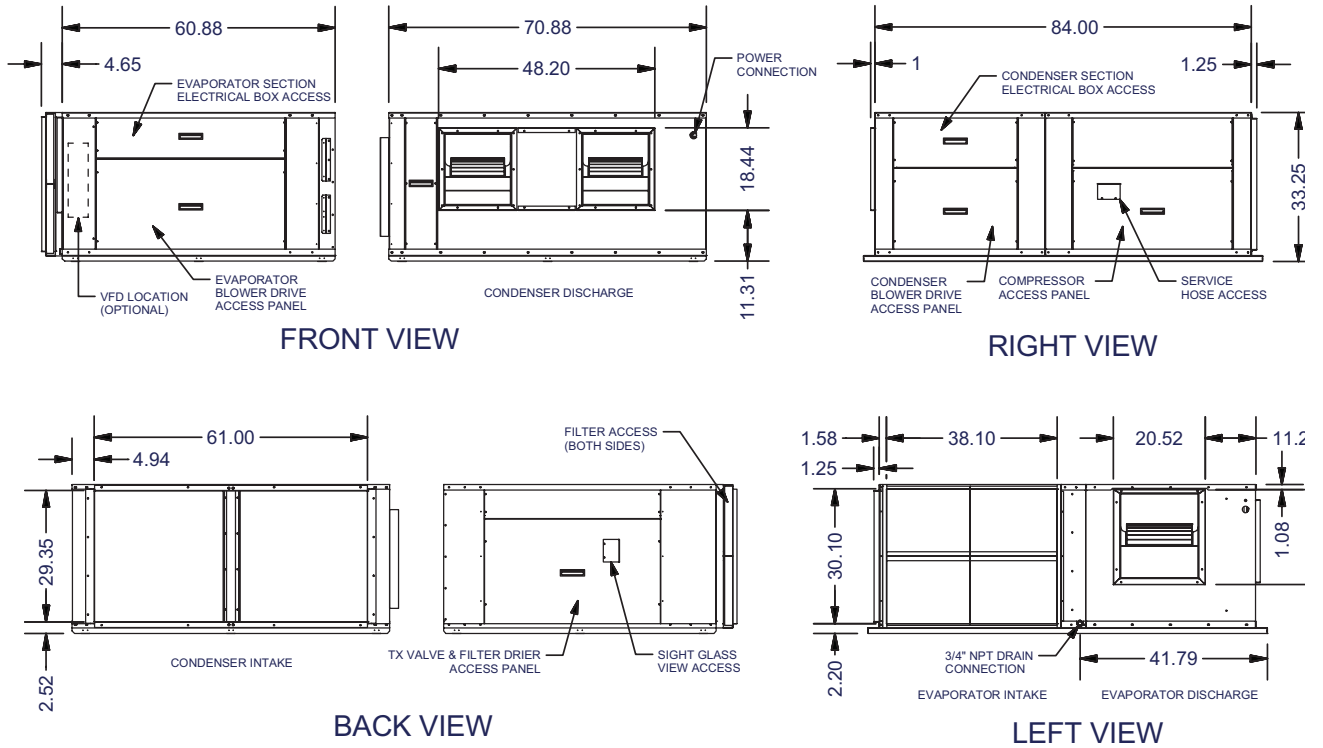
LD28463

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# DSH120C

## 10 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA

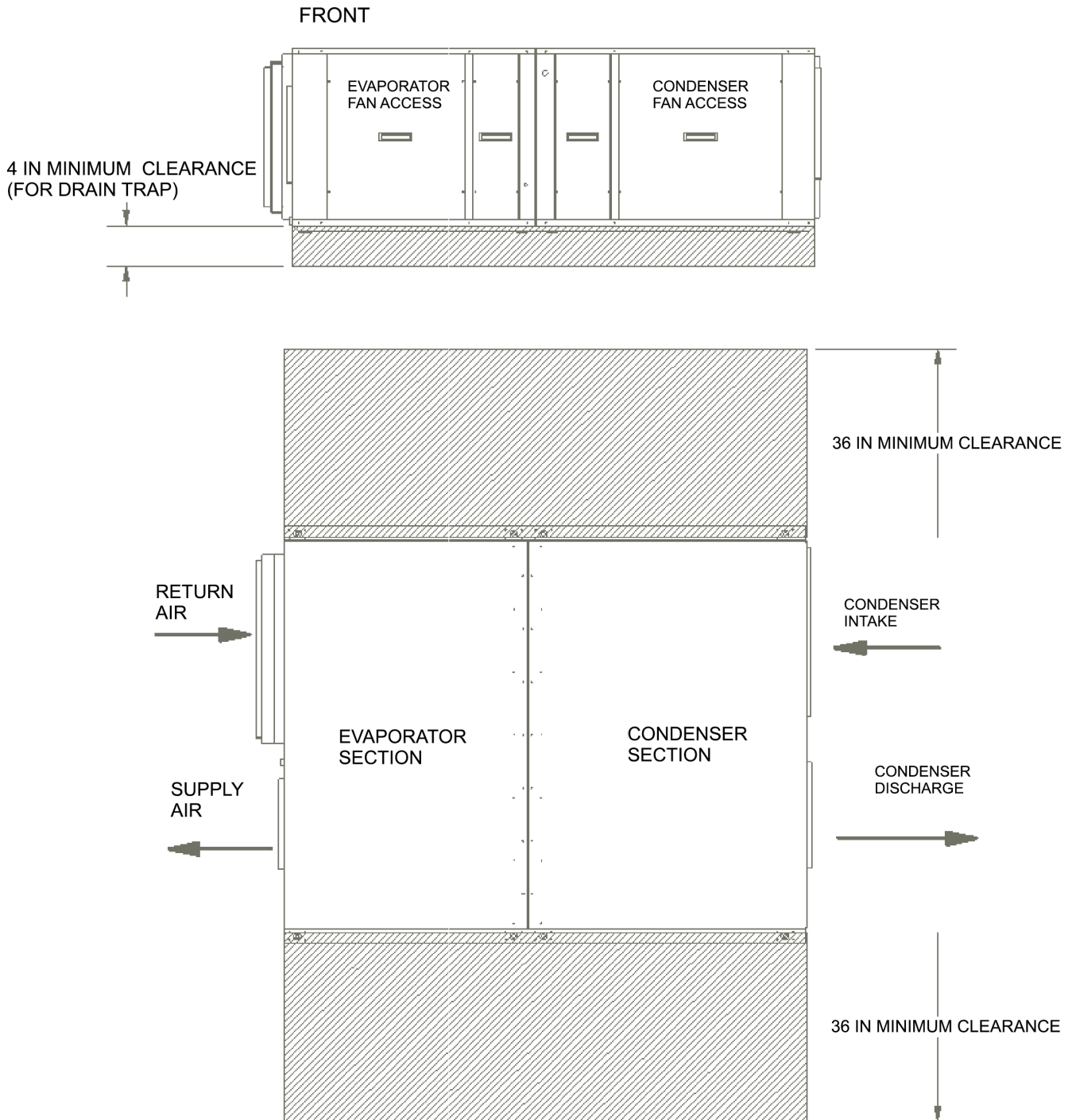


LD20049

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSH Typical Service Clearances

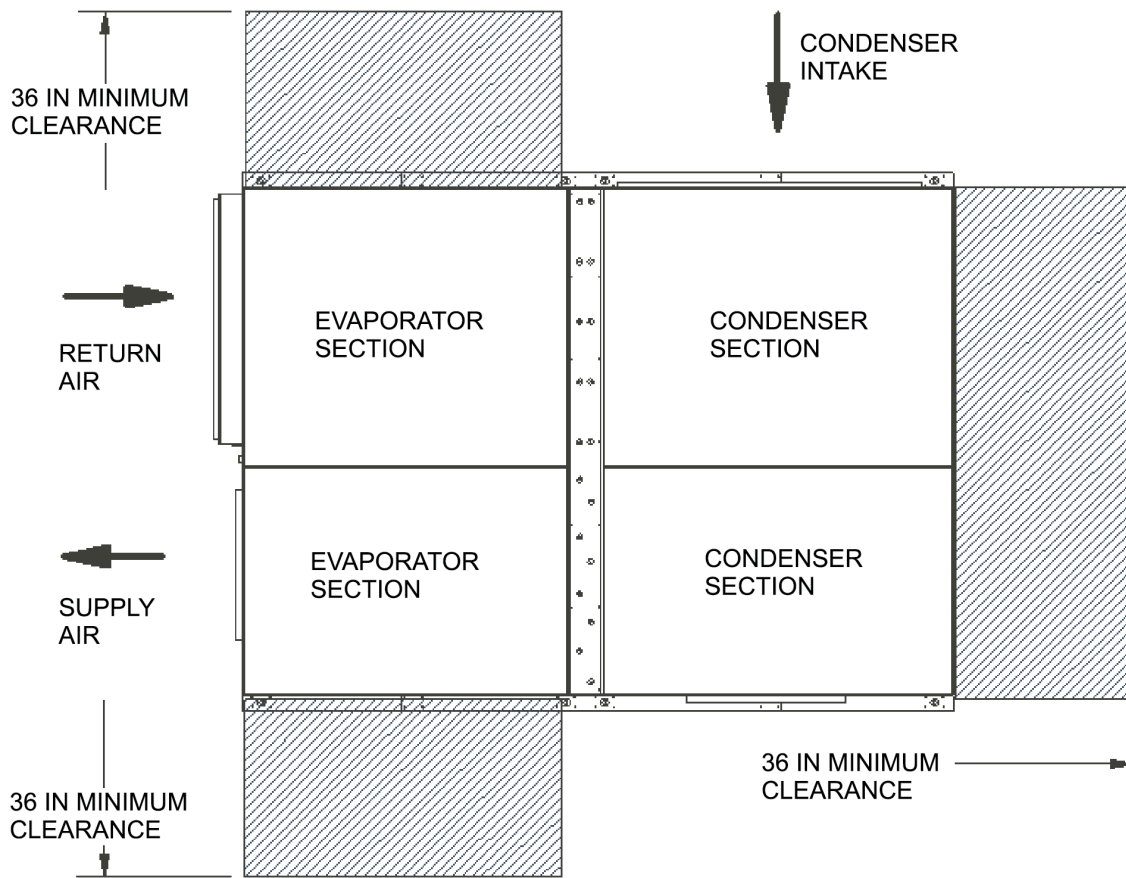
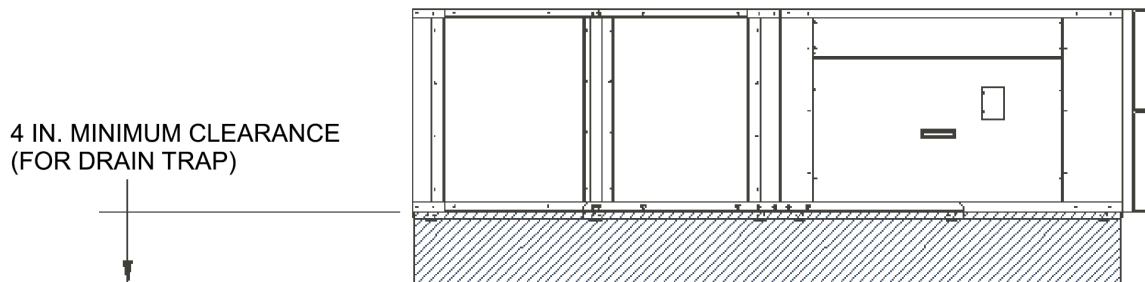
2-5 TON HORIZONTAL A/C UNIT  
SERVICE CLEARANCES\*



LD28464

8 & 10 TON HORIZONTAL A/C UNIT  
SERVICE CLEARANCES\*

BACK VIEW



TOP VIEW

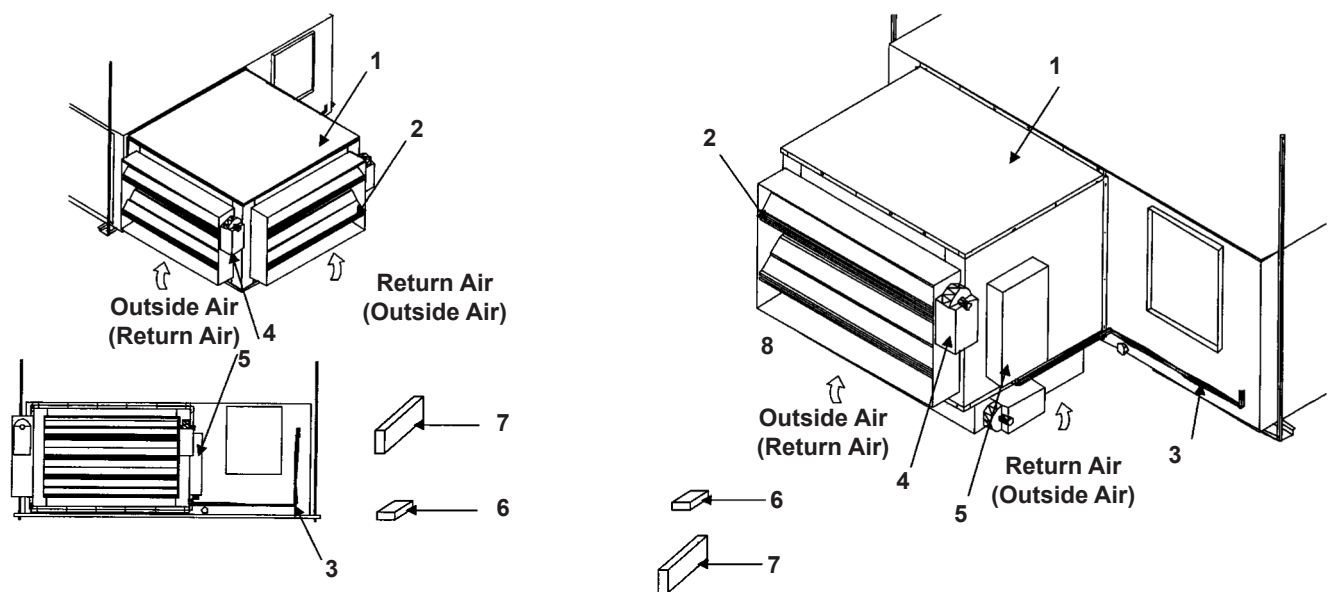
\*Unit ships factory split (field assembled unit shown).

## DSH Airside Economizer

Airside economizers are designed to meet current building and legislated codes for indoor ventilation. In addition to improving indoor air quality, economizers provide substantial energy savings by utilizing cool outside air instead of mechanical cooling whenever outside conditions permit.

The outlet or discharge of the airside economizer is fitted to the return air inlet of the packaged air conditioning unit. The two inlets to the economizer are fitted to the return air and outside air ductwork. Opposed blade dampers located in each inlet modulate the incoming air streams as they enter the mixing box. The outside air damper can be maintained at a predetermined position. In this way the buildings ventilation requirements can be met at all times.

### HORIZONTAL DSH ECONOMIZER

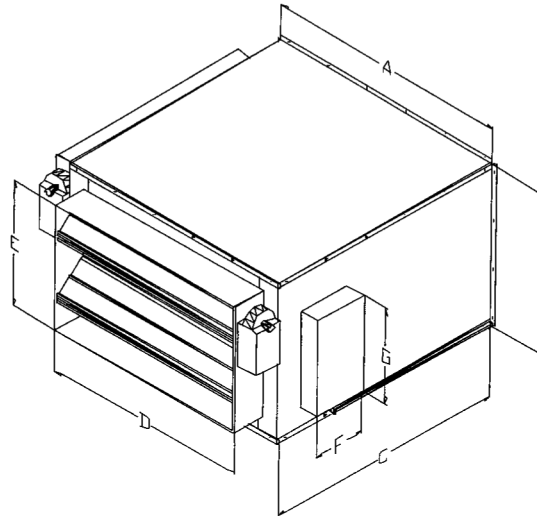


All economizers are shipped complete with:

1. Heavy gauge galvanized cabinet, fully insulated.
2. Opposed blade, ultra low leakage damper sections.
3. One step jack/plug wiring assembly.
4. Skymark M9200 series spring return damper actuators.
5. Skymark SMART Equipment Economizer Controller SE-ECO1001 with protective cabinet.
6. Enthalpy sensor.
7. Discharge sensor.
8. Return air/outside configuration is field convertible.

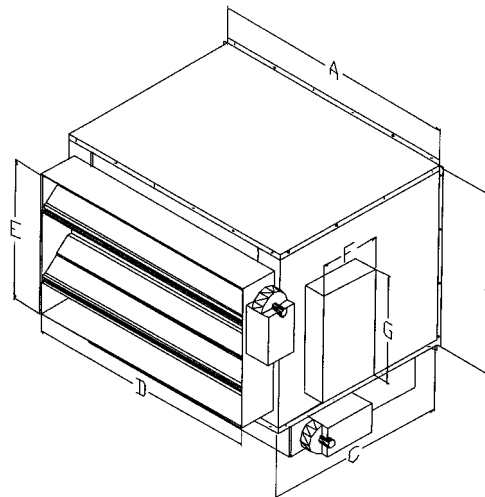
**NOTE:** Additional field support required.

## HORIZONTAL DSH ECONOMIZER STANDARD SIDE & FRONT DAMPER ARRANGEMENT



HORIZONTAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIMENSION			DAMPER DIMENSION		CONTROL MODULE	
		A	B	C	D	E	F	G
DSH024C/036C	HASE-036C-SF	26.06	23.32	23.44	17.00	14.00	11.75	9.20
DSH048C/060C	HASE-060C-SF	29.68	23.44	30.44	24.00	14.00	11.75	9.20
DSH096C/120C	HASE-100C-SF	33.63	25.25	33.63	28.00	19.50	11.75	9.20

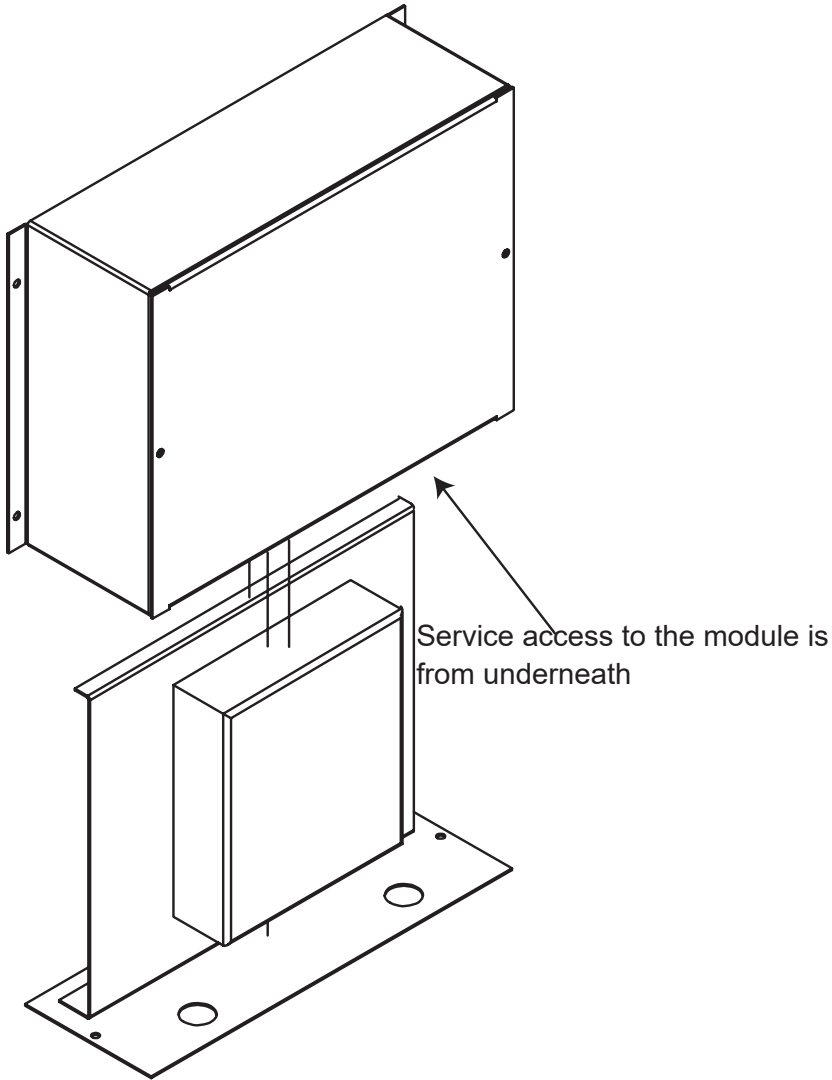
## OPTIONAL BOTTOM & FRONT DAMPER ARRANGEMENT



HORIZONTAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIMENSION			DAMPER DIMENSION		CONTROL MODULE	
		A	B	C	D	E	F	G
DSH024C/036C	HASE-036C-BF	26.06	23.32	23.44	17.00	14.00	11.75	9.20
DSH048C/060C	HASE-060C-BF	29.68	23.44	30.44	24.00	14.00	11.75	9.20
DSH096C/120C	HASE-100C-BF	33.63	25.25	33.63	28.00	19.50	11.75	9.20

## DSH Airside Economizer (Cont'd)

### SERVICE ACCESS FOR DSH AIRSIDE ECONOMIZER MODULE



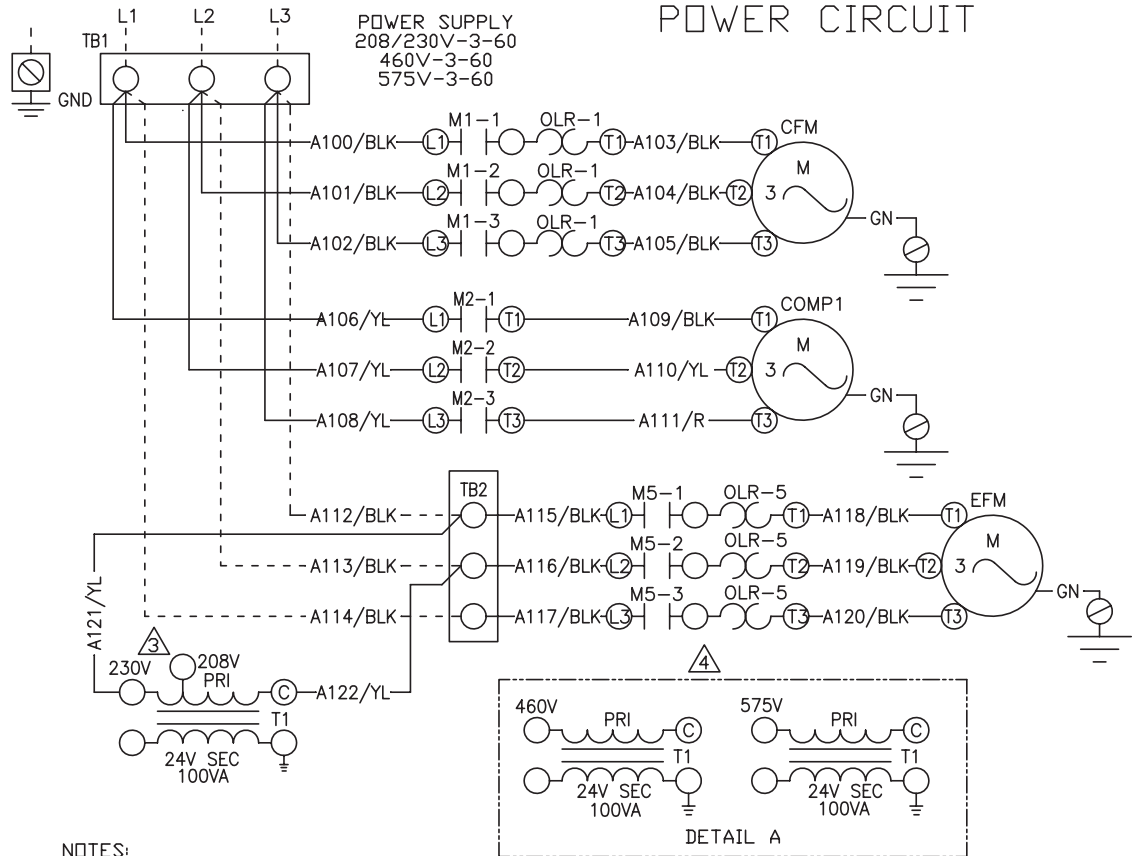
LD29119

# DSH Wiring Diagrams

A      B      C      D      E      F      G      H

## ELEMENTARY DIAGRAM

### DSH024/036/048/060C HORIZONTAL A/C UNIT 208/230/460/575-3-60

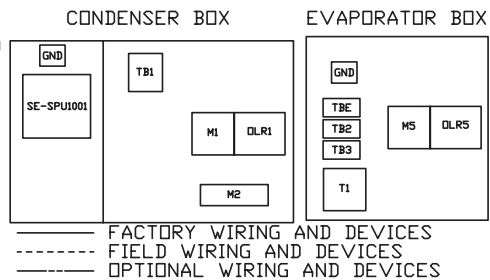


NOTES:

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
- ⚠️ FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A117 TO 208 VOLT TERMINAL ON T1. SIMILARLY FOR 460 AND 575 VOLT SEE DETAIL A.
- ⚠️ 460-575V NOT AVAILABLE ON DSH024C UNIT

LEGENDS:

- SE-SPU1001 1 STAGE SMART EQUIPMENT CONTROL BOARD
- SE-SPU1011 1 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
- TB1 LINE VOLTAGE TERMINAL BLOCK
- TB2 EVAPORATOR BOX TERMINAL BLOCK
- TB3 VFD BYPASS TERMINAL BLOCK
- TBE ASE TERMINAL BLOCK
- CFM CONDENSER FAN MOTOR
- EFM EVAPORATOR FAN MOTOR
- COMP1 COMPRESSOR
- T1 TRANSFORMER
- GND GROUND



**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**

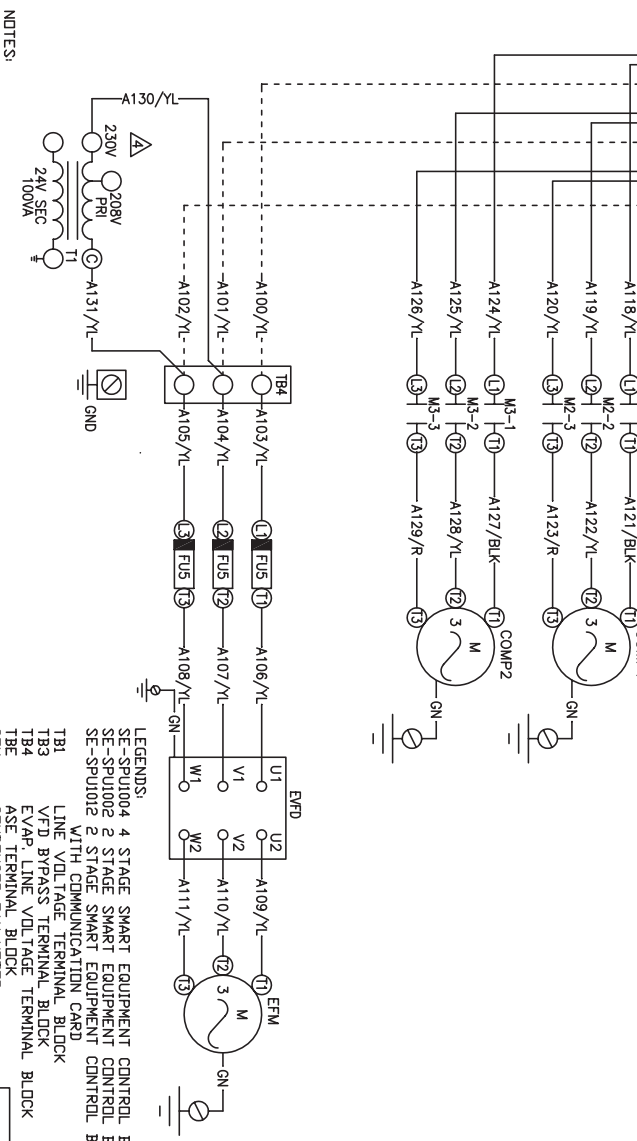
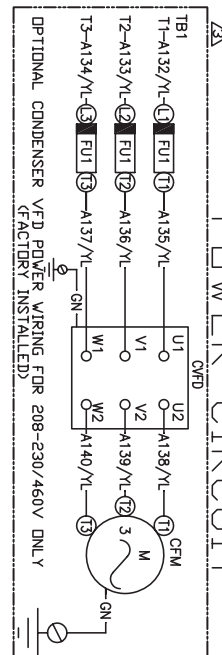
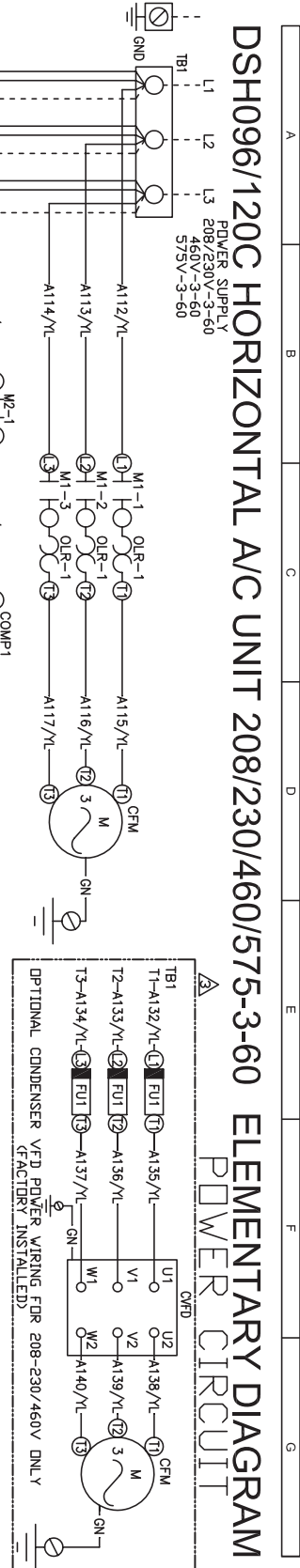
**STK-2008C      REV 1      SHT 10F1**

# DSH Wiring Diagrams (Cont'd)

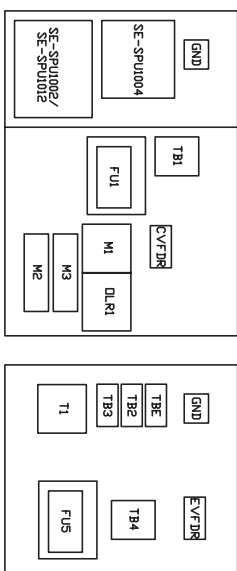
## DSH096/120C HORIZONTAL A/C UNIT 208/230/460/575-3-60 ELEMENTARY DIAGRAM

### POWER SUPPLY

208/230V-3-60  
460V-3-60  
575V-3-60



- LEGENDS:**
- SE-SPU1004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD BYPASS TERMINAL BLOCK
  - ASE TERMINAL BLOCK
  - CONDENSER FAN MOTOR
  - EVAPORATOR FAN MOTOR
  - COMPRESSOR 1
  - COMPRESSOR 2
  - TRANSFORMER
  - GND GROUND
  - CND FAN MOTOR FUSE
  - CND VFD BYPASS FUSE
  - EVAP FAN MOTOR FUSE
  - CND FAN MOTOR CONTACTOR
  - COMP 1 CONTACTOR
  - CND VFD BYPASS CONTACTOR
  - CND MOTOR OVERLOAD
  - DLR1 COND FAN VFD
  - DLR2 EVAP FAN VFD
  - EVPDR EVAP VFD RELAY
  - EVDLDR COND VFD RELAY



- NOTES:**
- ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  - CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE HAZARDOUS AND DANGEROUS OPERATION. IF ANY OF THE WIRING AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPAIRED WITH TYPE 105 DIELECTRIC, 600 VOLT WIRE OR EQUIVALENT CLEARLY RE-NUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.

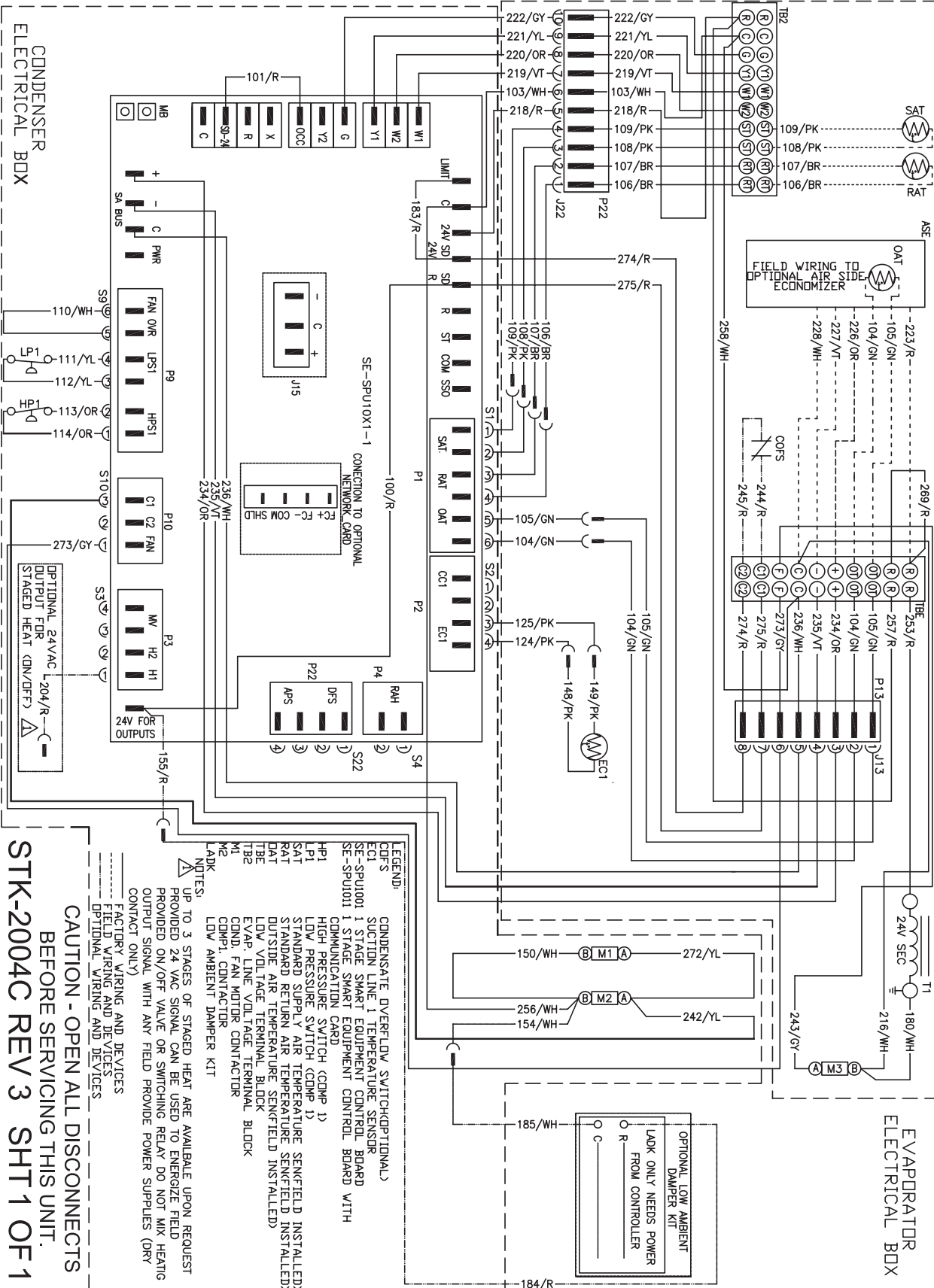
- CAUTION:** VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDLED BY VFD.
- FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A130 TO 208 VOLT TERMINAL ON T1. SIMILARLY FOR 460 AND 575 VOLT SEE DETAIL A

**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**

**STK-2002C REV 2 SHT 1 OF 1**



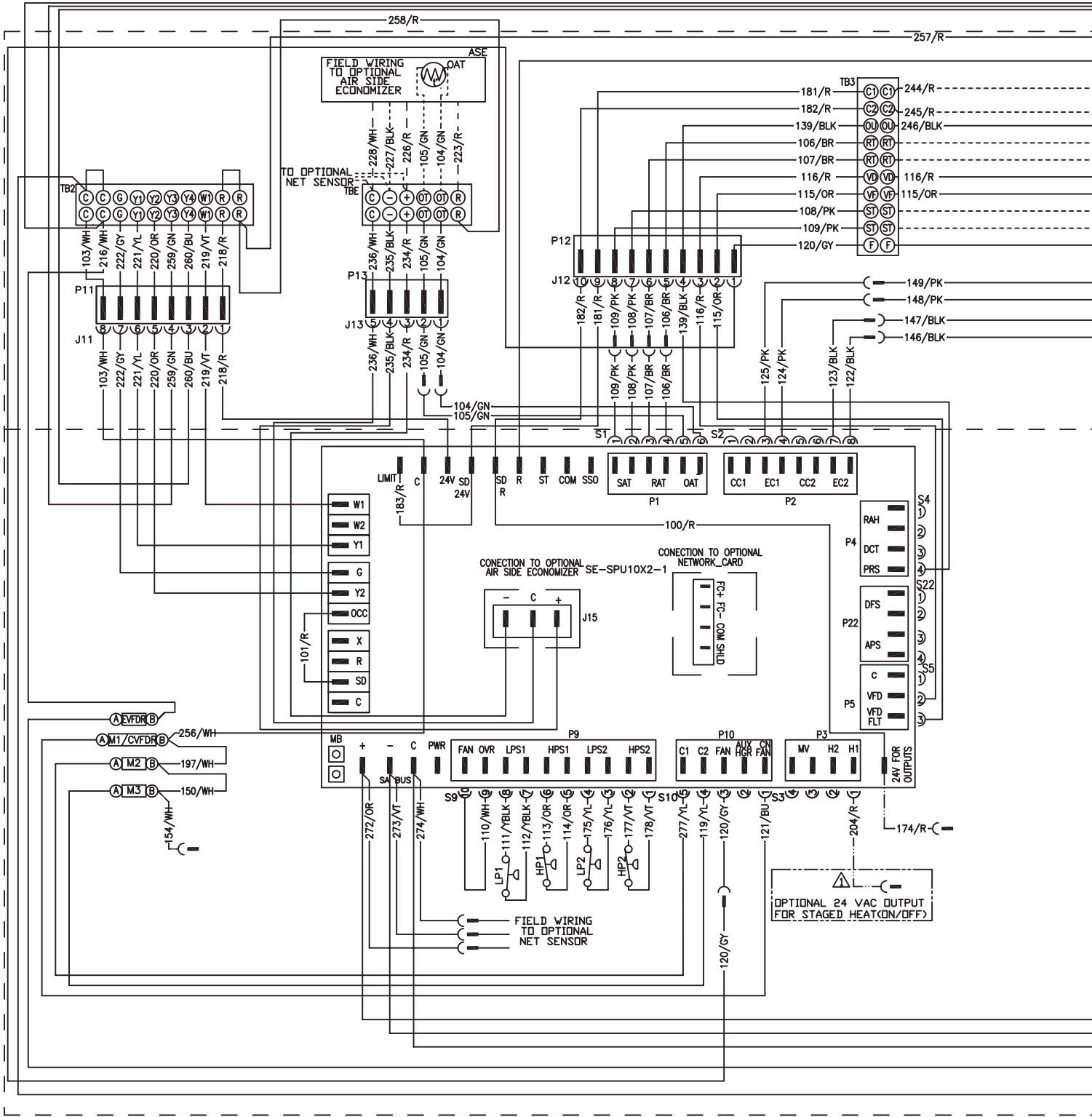
# DSH024-060C HORIZONTAL A/C UNIT 208/230/460/575-3-60 ELEMENTARY DIAGRAM



LD28623

# DSH Wiring Diagrams (Cont'd)

## DSH120 HORIZONTAL A/C UNIT CONTROL WIRING

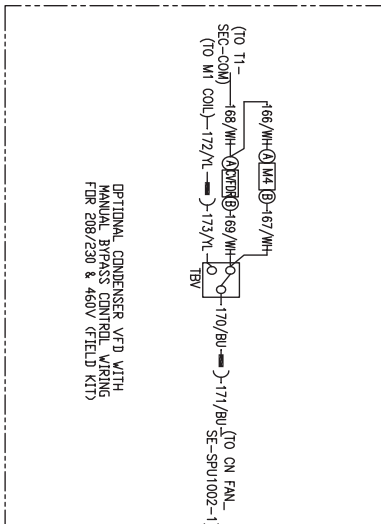
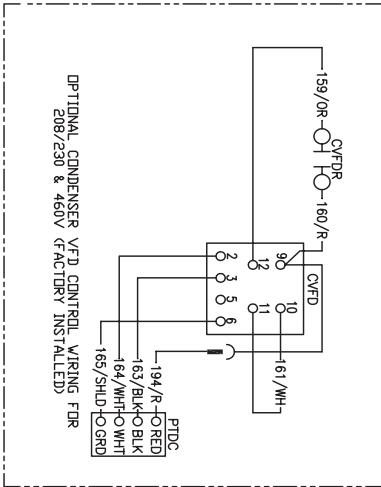
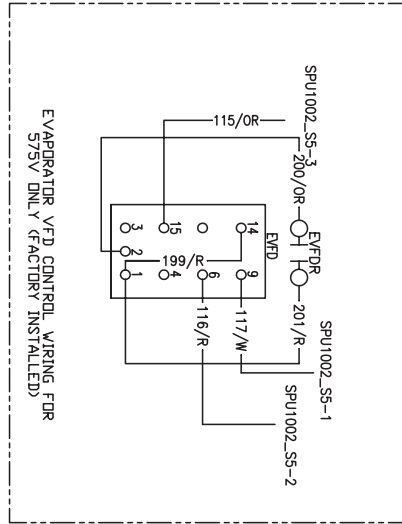
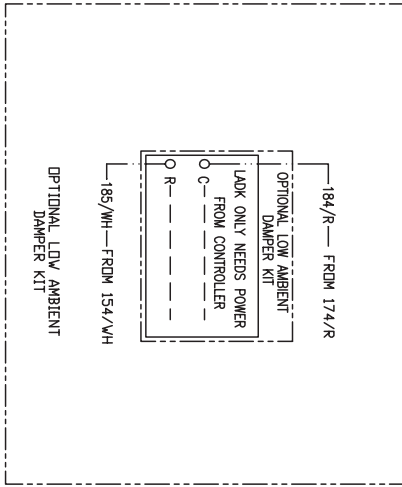




# DSH Wiring Diagrams (Cont'd)

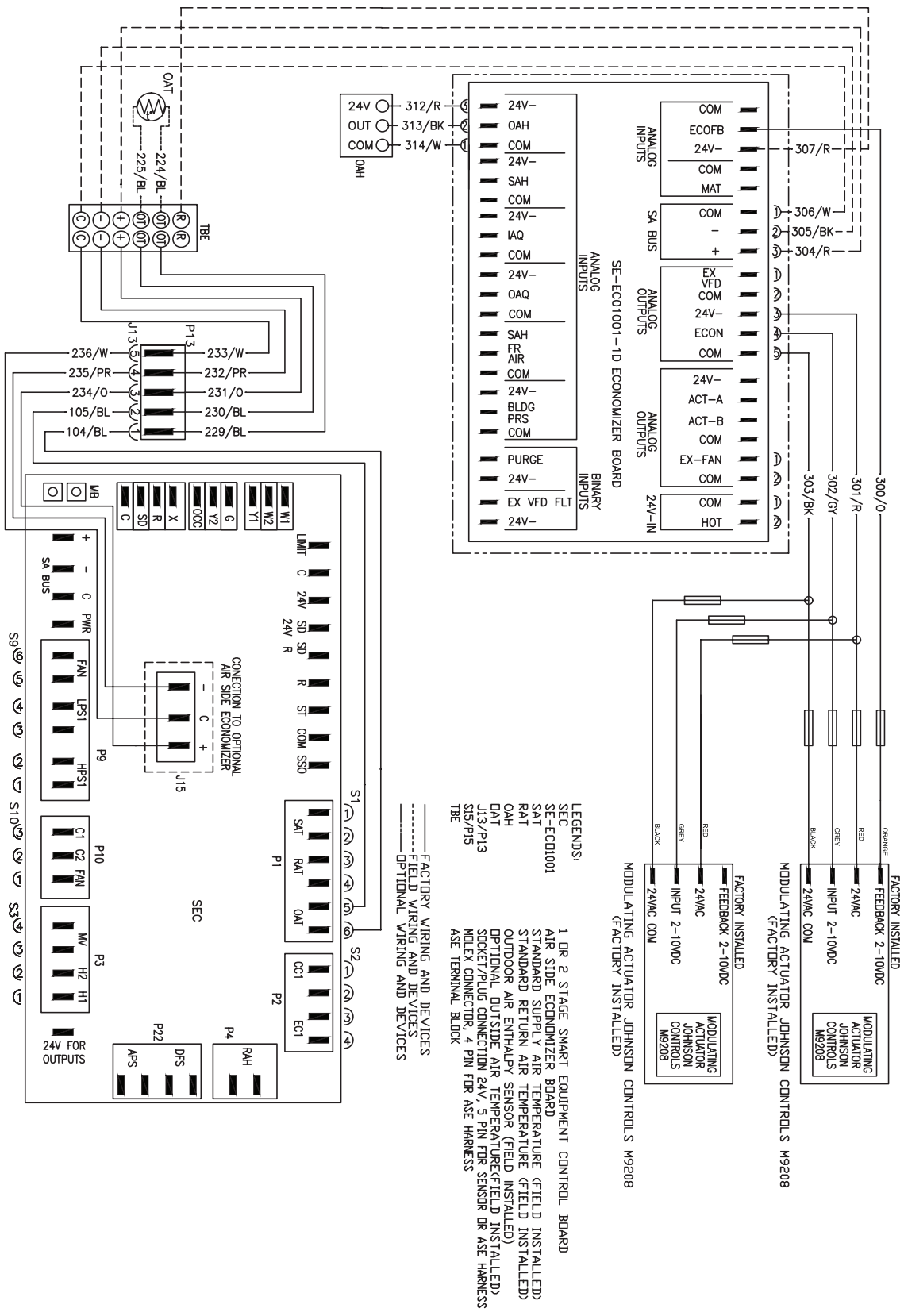
## DSH120C HORIZONTAL A/C UNIT CONTROL WIRING

## ELEMENTARY DIAGRAM

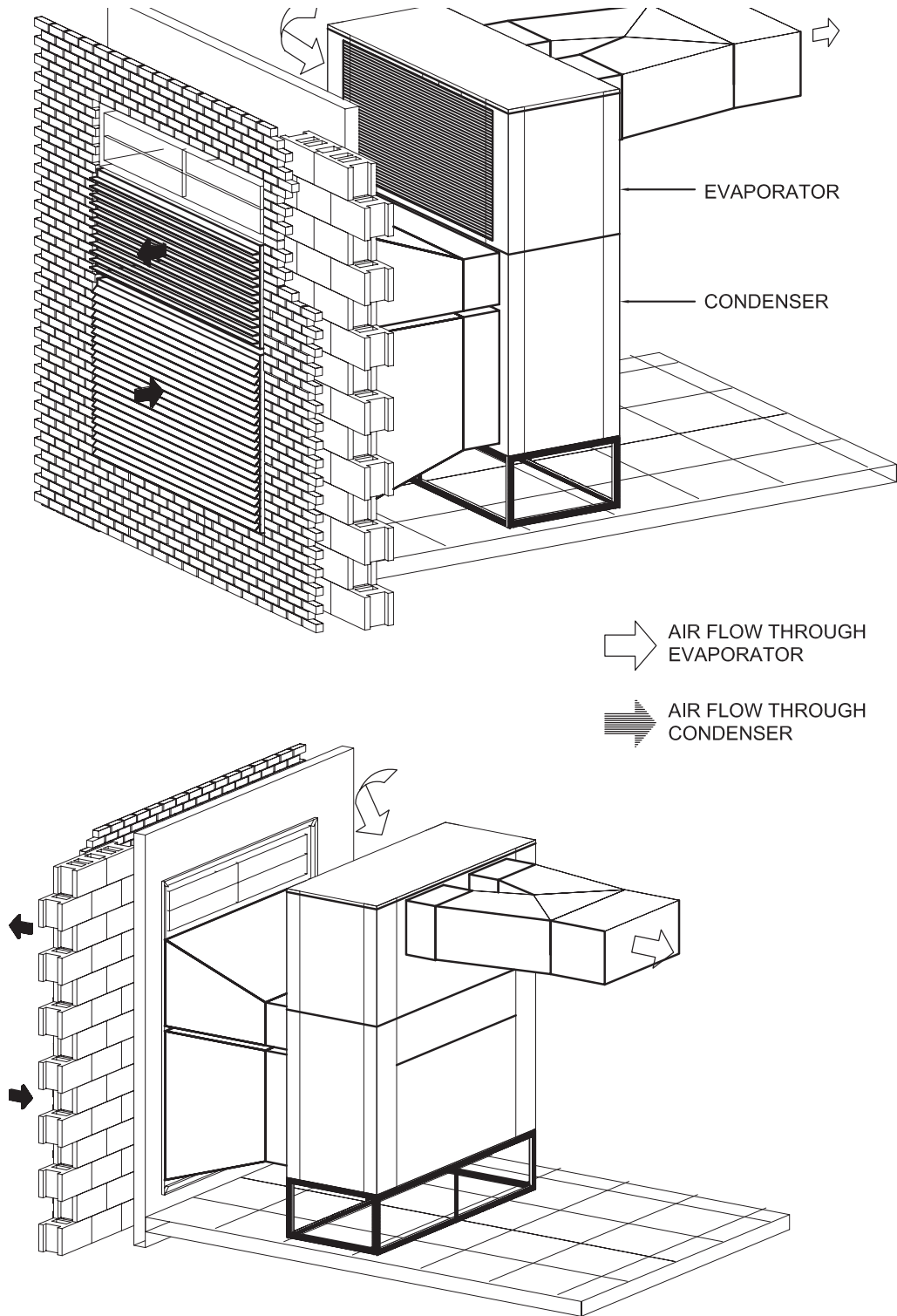


# DSH024-120C HORIZONTAL A/C UNIT ECONOMIZER

# ELEMENTARY DIAGRAM



# Vertical Application & Installation



# DSV Physical Data

**TABLE 17 - VERTICAL AIR-COOLED - DSV SERIES R-410A**

MODEL	DSV060C	DSV096C	DSV120C	DSV144C	DSV180C	DSV240C	DSV300C	
Nominal Cooling (Tons)	5	8	10	12	15	20	25	
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	
<b>COOLING PERFORMANCE</b>								
Gross Cooling Capacity (Btu/h)	62,000	98,000	123,000	143,000	185,000	251,000	282,000	
Net Cooling Capacity (Btu/h)	60,000	96,000	119,000	138,000	174,000	240,000	270,000	
Design Airflow (CFM)	2,000	3,200	4,000	4,800	6,000	8,000	9,200	
Net Cooling Airflow (CFM)	1,800	3,200	3,800	4,400	4,600	7,000	8,200	
SEER <sup>2</sup>	14.0	~	~	~	~	~	~	
EER <sup>3</sup>	~	11.2	11.2	11.2	11.0	10.0	10.0	
IEER <sup>3</sup>	~	12.9	12.9	14.0	13.2	12.2	12.5	
Compressor - Qty/Type	1/Scroll	2/Scroll	2/Scroll	2/Scroll	2/Scroll	2/Scroll	2/Scroll	
<b>EVAPORATOR COIL</b>								
Type	Enhanced Copper Tubes, Enhanced Aluminum Fins							
Dimension - Height x Width (in)	26x46	34x64	34x65	34x75	34x76	39x84	42x101	
Face Area (sq ft)	8.26	15.11	15.35	17.71	19.75	22.75	29.46	
Rows/FPI	4/16	4/14	5/14	4/14	5/15	5/14	5/14	
Filters - Quantity/Size (in)	4/25x14x2	4/24x18x2 2/20x18x2	4/24x18x2 2/20x18x2	8/20x18x2	3/20x18x2 1/24x18x2 3/20x20x2 1/24x20x2	4/24x20x2 4/20x20x2	6/25x18x2 6/20x18x2	
<b>CONDENSER COIL</b>								
Type	Enhanced Copper Tubes, Enhanced Aluminum Fins							
Dimension - Height x Width (in)	34x46	34x65	34x65	38x76	38x76	44x84	48x102	
Face Area (sq ft)	10.80	15.35	15.35	20.05	22.22	24.44	34.00	
Rows/FPI	5/16	4/14	5/14	4/14	5/14	5/14	5/14	
<b>EVAPORATOR FAN</b>								
Type	Centrifugal, Forward Curved							
Qty - Diameter x Width (in)	12x9	2-12x9	2-12x9	2-15x11	3-12x9	2-15x15	3-15x11	
Drive	Adjustable Belt							
Motor HP (Oversized)	1 (1.5)	1 (1.5)	1.5 (2)	2 (3)	3 (5)	5 (7.5)	7.5	
<b>CONDENSER FAN</b>								
Type	Centrifugal, Forward Curved							
Qty - Diameter x Width (in)	12x9	2-15x11	2-15x11	2-15x15	3-15x9	3-15x11	3-15x15	
Drive	Adjustable Belt							
Motor HP	1.5	2	3	3	5	7.5	10	
Dimensions	- Height (in)	76.5	88.0	88.0	91.5	93.6	102.0	110.0
	- Width (in)	52.0	71.5	71.5	82.5	86.5	90.5	108.5
	- Depth (in)	29.0	32.5	32.5	34.0	34.0	34.0	34.0
Weight	- Operating (lbs)	920	1,240	1,325	1,560	1,710	1,875	2,480
	- Shipping (lbs)	980	1,290	1,385	1,645	1,800	1,960	2,600

**NOTES**

- Cooling performance is rated at 95.0°F ambient, 80.0°F entering dry bulb, 67.0°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.
- Rated and certified in accordance with ANSI/AHRI Standard 210/240.
- Rated and certified in accordance with ANSI/AHRI Standard 340/360.

# DSV Performance Data

TABLE 18 - DSV060C PERFORMANCE DATA

DSV060C		SCFM	1600			1800			2000			2200			2400			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB																
	85°F	57°F	TC	52.9	55.9	58.9	54.9	58.2	61.4	56.8	60.1	63.5	58.3	61.8	65.4	59.7	63.3	67.0
			SC	51.8	54.8	57.9	53.6	56.8	60.1	55.1	58.5	61.9	56.4	59.9	63.5	57.5	61.2	64.8
			kW	3.46	3.48	3.52	3.48	3.51	3.54	3.50	3.53	3.56	3.51	3.55	3.58	3.53	3.56	3.60
		62°F	TC	57.8	57.8	59.0	59.1	59.0	61.4	60.2	60.1	63.5	60.8	61.8	65.4	61.7	63.4	67.0
			SC	43.7	51.7	57.9	46.2	54.8	60.1	48.6	58.5	61.9	50.7	59.9	63.5	53.0	61.2	64.9
			kW	3.51	3.51	3.52	3.53	3.52	3.54	3.54	3.53	3.56	3.55	3.55	3.58	3.55	3.57	3.60
		67°F	TC	63.1	63.1	63.2	64.2	64.3	64.3	65.4	65.4	65.5	66.2	66.4	66.4	66.9	67.0	67.1
			SC	36.0	44.1	51.6	37.1	46.0	54.8	38.9	48.5	58.2	40.5	50.9	61.3	41.4	53.1	64.9
			kW	3.57	3.57	3.56	3.58	3.58	3.58	3.60	3.59	3.59	3.60	3.60	3.60	3.61	3.61	3.60
		72°F	TC	68.6	68.6	68.7	69.8	70.0	70.0	70.9	71.0	71.1	71.7	71.9	72.0	72.4	72.6	72.7
			SC	27.7	35.8	44.0	28.8	37.1	46.0	29.1	38.9	48.7	29.3	39.9	50.5	30.2	41.5	52.9
			kW	3.63	3.63	3.62	3.64	3.64	3.64	3.66	3.65	3.65	3.67	3.66	3.66	3.68	3.67	3.67
	95°F	57°F	TC	50.8	53.7	56.7	52.7	55.8	59.0	54.4	57.7	61.0	55.9	59.3	62.7	57.1	60.6	64.2
			SC	49.7	52.7	55.6	51.4	54.5	57.7	52.8	56.0	59.4	53.9	57.4	60.8	55.0	58.5	62.1
			kW	3.90	3.93	3.96	3.93	3.96	3.99	3.94	3.98	4.01	3.96	4.00	4.03	3.98	4.01	4.05
		62°F	TC	55.0	55.0	56.7	56.3	55.9	59.0	57.1	57.7	61.0	57.9	59.3	62.7	58.4	60.7	64.2
			SC	42.6	50.7	55.7	45.0	54.6	57.7	47.2	56.1	59.4	49.3	57.4	60.8	51.8	58.5	62.1
			kW	3.96	3.95	3.97	3.97	3.96	3.99	3.98	3.98	4.01	3.99	4.00	4.03	3.99	4.01	4.05
		67°F	TC	60.1	60.1	60.2	61.2	61.2	61.4	62.1	62.3	62.2	62.9	63.0	62.8	63.5	63.6	64.3
			SC	34.8	42.5	50.2	35.9	44.9	53.4	37.5	47.3	56.9	39.0	48.0	60.9	40.5	51.6	62.1
			kW	4.01	4.01	4.01	4.03	4.03	4.02	4.04	4.04	4.03	4.05	4.04	4.03	4.06	4.05	4.05
		72°F	TC	65.3	65.4	65.4	66.4	66.5	66.6	67.4	67.6	67.6	68.2	68.4	68.5	68.7	68.9	69.0
SC			26.3	34.7	42.5	27.3	35.9	45.1	27.6	37.6	46.9	28.5	38.6	49.2	28.6	40.1	51.5	
kW			4.08	4.07	4.07	4.09	4.09	4.08	4.11	4.10	4.10	4.12	4.11	4.11	4.13	4.12	4.11	
105°F	57°F	TC	48.5	51.4	54.3	50.3	53.3	56.4	51.9	55.0	58.2	53.2	56.5	59.8	54.4	57.8	61.2	
		SC	47.4	50.3	53.2	50.3	52.0	55.1	50.2	53.4	56.6	51.3	54.6	57.9	52.3	55.7	59.1	
		kW	4.40	4.43	4.46	4.42	4.45	4.49	4.44	4.47	4.51	4.46	4.49	4.53	4.47	4.51	4.55	
	62°F	TC	52.1	52.0	54.3	53.1	53.4	56.4	54.0	55.1	58.3	54.6	56.6	59.9	55.2	57.8	61.2	
		SC	41.4	49.0	53.3	44.6	52.0	55.1	46.1	53.5	56.7	47.9	54.6	58.0	50.4	55.7	59.1	
		kW	4.45	4.44	4.46	4.46	4.45	4.49	4.47	4.48	4.51	4.48	4.49	4.53	4.48	4.51	4.55	
	67°F	TC	56.9	56.9	56.9	57.8	57.9	57.9	58.7	58.8	58.6	59.4	59.4	59.9	60.0	60.1	61.3	
		SC	33.5	41.3	49.2	35.3	43.6	52.6	36.0	45.8	55.9	37.4	48.3	58.0	38.7	50.4	59.1	
		kW	4.51	4.50	4.50	4.52	4.52	4.51	4.53	4.53	4.52	4.54	4.54	4.53	4.55	4.54	4.55	
	72°F	TC	61.8	61.9	61.9	62.8	62.9	63.0	63.7	63.9	63.9	64.4	64.6	64.7	64.9	65.1	65.1	
		SC	25.5	32.8	40.8	26.4	34.5	43.2	26.1	36.1	45.5	26.9	37.6	47.7	27.6	39.0	50.3	
		kW	4.57	4.57	4.56	4.59	4.58	4.58	4.60	4.59	4.59	4.61	4.60	4.60	4.62	4.61	4.60	
115°F	57°F	TC	46.1	48.8	51.7	47.7	50.7	53.6	49.2	52.2	55.3	50.4	53.6	56.8	51.5	54.7	58.0	
		SC	45.0	47.8	50.6	46.4	49.3	52.3	47.6	50.6	53.7	48.5	51.7	54.9	49.3	52.6	55.9	
		kW	4.94	4.97	5.01	4.96	5.00	5.03	4.98	5.02	5.05	5.00	5.04	5.07	5.02	5.05	5.09	
	62°F	TC	49.0	48.9	51.7	49.9	50.7	53.6	50.6	52.2	55.3	51.2	53.6	56.8	51.5	54.7	58.1	
		SC	39.8	47.8	50.6	42.3	49.4	52.3	44.6	50.6	53.7	46.4	51.7	54.9	49.4	52.6	55.9	
		kW	4.98	4.97	5.01	5.00	5.00	5.03	5.01	5.02	5.05	5.01	5.04	5.07	5.02	5.05	5.09	
	67°F	TC	53.5	53.5	53.4	54.3	54.4	54.1	55.1	55.1	55.3	55.7	55.8	56.8	56.2	56.2	58.1	
		SC	32.0	39.9	47.7	33.4	42.0	51.2	34.8	44.4	53.7	36.0	46.3	54.9	37.3	48.6	56.0	
		kW	5.05	5.04	5.03	5.06	5.05	5.04	5.07	5.06	5.05	5.08	5.07	5.07	5.09	5.08	5.09	
	72°F	TC	58.2	58.2	58.2	59.0	59.1	59.2	59.9	59.9	60.0	60.4	60.6	60.5	60.9	61.0	61.0	
		SC	24.0	31.4	39.5	24.2	33.0	42.2	25.0	34.4	44.4	25.7	35.8	46.3	25.8	37.1	48.8	
		kW	5.11	5.10	5.10	5.13	5.12	5.11	5.14	5.13	5.12	5.15	5.14	5.13	5.16	5.15	5.14	

**NOTE:**

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power



TABLE 19 - DSV096C PERFORMANCE DATA

DSV096C		SCFM	2600			3000			3400			3800			4200			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	85°F	EDB																
		EWB																
	57°F	TC	84	88.7	93.5	87.9	92.9	98.1	91.1	96.4	101.9	93.9	99.5	105.1	96.3	102	107.8	
		SC	84	88.7	93.5	87.9	92.9	98.1	91.1	96.4	101.9	93.9	99.5	105.1	96.3	102	107.8	
		kW	6.5	6.6	6.6	6.5	6.6	6.7	6.6	6.7	6.7	6.6	6.7	6.8	6.7	6.7	6.8	
	62°F	TC	91.6	91.5	93.6	93.8	93.6	98.2	95.7	96.6	101.9	97	99.4	105.1	96.3	102.1	107.9	
		SC	73.2	86.1	93.6	78.6	93.6	98.2	83.8	96.6	101.9	88.8	99.4	105.1	96.3	102.1	107.9	
		kW	6.6	6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.7	6.7	6.8	
	67°F	TC	99.8	99.8	99.8	102.3	102.2	102.1	104	104	103.9	105.4	105.4	105.2	106.7	106.5	108	
		SC	60.1	73	85.9	63.5	78.3	93	66.8	83.4	100	69.9	88.3	105.2	73	93.1	108	
		kW	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.7	6.8	6.8	6.8	6.8	6.8	6.8	
	72°F	TC	108.6	108.6	108.5	110.9	110.9	110.8	112.8	112.8	112.7	114.2	114.1	114.1	115.5	115.5	115.3	
		SC	46.8	59.7	72.7	48.3	63.1	77.9	49.6	66.4	83	50.9	69.4	87.8	52.2	72.5	92.7	
		kW	6.8	6.8	6.8	6.9	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	
	95°F	57°F	TC	80.5	85.2	89.8	84.2	89.1	94.1	87.3	92.4	97.7	89.8	95.2	100.6	92	97.6	103.2
			SC	80.5	85.2	89.8	84.2	89.1	94.1	87.3	92.4	97.7	89.8	95.2	100.6	92	97.6	103.2
			kW	7.2	7.3	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.3	7.4	7.5	7.4	7.4	7.5
		62°F	TC	87.1	86.8	89.9	89.2	89.2	94.2	90.8	92.5	97.7	91.9	95.3	100.8	92.9	97.7	103.3
			SC	71.2	84.2	89.9	76.5	89.2	94.2	81.5	92.5	97.7	86.8	95.3	100.8	91.9	97.7	103.3
			kW	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.5
		67°F	TC	95	94.9	94.9	97.2	97.1	96.9	98.7	98.8	98.3	100.1	99.9	100.7	101.1	101	103.3
			SC	58	70.9	83.8	61.4	76.2	91	64.7	81.3	98.3	67.8	86.2	100.7	70.8	91.2	103.3
			kW	7.4	7.4	7.4	7.5	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
		72°F	TC	103.3	103.3	103.2	105.5	105.4	105.3	107.2	107.1	107	108.4	108.3	108.3	109.6	109.5	109.4
SC			44.8	57.7	70.6	46.2	61.1	75.8	47.6	64.3	80.9	48.8	67.3	85.8	50.1	70.4	90.5	
kW			7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	
105°F	57°F	TC	76.8	81.3	86	80.2	85	89.9	83.1	88.1	93.1	85.5	90.7	96	87.5	92.8	98.3	
		SC	76.8	81.3	86	80.2	85	89.9	83.1	88.1	93.1	85.5	90.7	96	87.5	92.8	98.3	
		kW	8	8.1	8.2	8.1	8.1	8.2	8.1	8.2	8.3	8.2	8.2	8.3	8.2	8.3	8.3	
	62°F	TC	82.3	81.9	85.9	84.2	85	89.9	85.5	88.1	93.2	86.6	90.7	96	87.5	93	98.3	
		SC	68.9	81.9	85.9	74.2	85	89.9	79.5	88.1	93.2	84.7	90.7	96	87.5	93	98.3	
		kW	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.3	8.3	
	67°F	TC	89.8	89.9	89.7	91.9	91.7	91.5	93.3	93.1	93.2	94.4	94.2	96	95.4	95.1	98.4	
		SC	55.9	68.9	81.6	59.3	74.1	89	62.5	79.1	93.2	65.6	84.1	96	68.6	89.1	98.4	
		kW	8.2	8.2	8.2	8.3	8.3	8.2	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	
	72°F	TC	97.8	97.7	97.6	99.7	99.6	99.6	101.3	101.2	101	102.4	102.3	102.2	103.4	103.2	103.1	
		SC	42.7	55.6	68.5	44.1	58.9	73.7	45.5	62.1	78.7	46.7	65.2	83.6	47.9	68.2	88.3	
		kW	8.4	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	
115°F	57°F	TC	72.9	77.3	81.7	76	80.7	85.4	78.7	83.5	88.4	80.8	85.9	90.9	82.6	87.8	93	
		SC	72.9	77.3	81.7	76	80.7	85.4	78.7	83.5	88.4	80.8	85.9	90.9	82.6	87.8	93	
		kW	9	9	9.1	9	9.1	9.1	9.1	9.1	9.1	9.2	9.1	9.2	9.2	9.1	9.2	
	62°F	TC	77.3	77.3	81.8	78.7	80.7	85.5	80	83.5	88.4	80.9	85.9	90.9	82.7	87.9	93.1	
		SC	66.7	77.3	81.8	72.2	80.7	85.5	77.4	83.5	88.4	80.9	85.9	90.9	82.7	87.9	93.1	
		kW	9	9	9.1	9.1	9.1	9.1	9.1	9.1	9.2	9.1	9.2	9.2	9.1	9.2	9.2	
	67°F	TC	84.4	84.3	84	86.1	86	85.5	87.4	87.3	88.5	88.4	88.2	91	89.2	88.8	93.2	
		SC	53.7	66.6	79.7	57	71.8	85.5	60.2	76.8	88.5	63.3	82	91	66.2	87.1	93.2	
		kW	9.2	9.1	9.1	9.2	9.2	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	
	72°F	TC	91.9	91.8	91.8	93.6	93.6	93.4	95	94.8	94.7	95.9	95.9	95.7	96.8	96.8	96.5	
		SC	40.5	53.4	66.3	41.9	56.7	71.4	43.3	59.9	76.4	44.4	62.9	81.3	45.6	65.9	86.2	
		kW	9.3	9.3	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.3	9.3	

NOTE:

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

# DSV Performance Data (Cont'd)

TABLE 20 - DSV120C PERFORMANCE DATA

DSV120C		SCFM	3200			3600			4000			4400			4800			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB	TC	105.5	110.7	116.5	109	115	121.2	112.5	118.8	125.2	115.5	122.1	128.7	118.1	124.9	131.8
			kW	8.4	8.4	8.5	8.4	8.5	8.6	8.5	8.6	8.7	8.5	8.6	8.7	8.6	8.7	8.8
	85°F	62°F	TC	114.6	114.2	116.6	116.9	117.1	121.3	118.9	119.6	125.3	120.4	122.1	128.8	121.9	125	131.9
			SC	92.6	108.6	116.6	98	114.9	121.3	103.3	119.6	125.3	108.5	122.1	128.8	113.5	125	131.9
			kW	8.5	8.5	8.5	8.6	8.5	8.6	8.6	8.6	8.7	8.6	8.6	8.7	8.6	8.7	8.8
		67°F	TC	124.9	124.7	124.3	127.5	127.3	126.7	129.6	129.4	128.8	131.3	131.1	131.1	132.7	132.3	133
			SC	75.7	92	108.1	79.1	97.3	115.5	82.5	102.3	122.5	85.7	107.5	128	88.8	112.5	133
			kW	8.7	8.7	8.7	8.7	8.7	8.7	8.8	8.7	8.7	8.8	8.8	8.8	8.8	8.8	8.8
	72°F	TC	135.9	135.6	135.4	138.4	138.2	138	140.4	140.3	140	142.2	141.9	141.8	143.7	143.5	143.3	
		SC	59.3	75.2	91.1	60.8	78.6	96.4	62.1	81.9	101.5	63.5	85	106.5	64.8	88.1	111.4	
		kW	8.9	8.8	8.8	8.9	8.9	8.9	8.9	8.9	8.9	9	8.9	8.9	9	9	9	
	95°F	57°F	TC	100.7	106.3	111.9	104.4	110.3	116.3	107.7	113.9	120	110.5	116.9	123.3	113	119.5	126.1
			SC	100.7	106.3	111.9	104.4	110.3	116.3	107.7	113.9	120	110.5	116.9	123.3	113	119.5	126.1
			kW	9.3	9.3	9.4	9.3	9.4	9.5	9.4	9.5	9.5	9.4	9.5	9.6	9.5	9.5	9.6
		62°F	TC	109	108.9	111.9	111.1	111.6	116.3	112.8	113.9	120.1	114.4	117	123.3	115.7	119.6	126.2
			SC	90	105.7	111.9	95.5	111.4	116.3	100.7	113.9	120.1	105.7	117	123.3	110.5	119.6	126.2
			kW	9.4	9.4	9.4	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.6	9.5	9.5	9.6
		67°F	TC	118.9	118.4	118.1	121.2	120.9	120.3	123.1	122.7	122.7	124.7	124.2	124.7	125.9	125.3	126.3
			SC	73.1	89.4	105.5	76.6	94.8	113	79.8	99.9	119	83	105.1	124.2	86	109.9	126.3
			kW	9.6	9.5	9.5	9.6	9.6	9.6	9.6	9.6	9.6	9.7	9.6	9.6	9.7	9.7	9.6
		72°F	TC	129.3	129.1	128.9	131.7	131.4	131.2	133.6	133.2	132.9	135.1	134.8	134.6	136.3	136.2	135.8
			SC	56.8	72.7	88.7	58.3	76	93.8	59.6	79.2	98.9	60.9	82.4	103.9	62.2	85.4	108.9
			kW	9.7	9.7	9.7	9.8	9.8	9.7	9.8	9.8	9.8	9.9	9.8	9.8	9.9	9.9	9.8
105°F	57°F	TC	96	101.4	106.9	99.5	105.2	110.9	102.5	108.4	114.4	105.1	111.2	117.4	107.4	113.7	120	
		SC	96	101.4	106.9	99.5	105.2	110.9	102.5	108.4	114.4	105.1	111.2	117.4	107.4	113.7	120	
		kW	10.2	10.3	10.4	10.3	10.4	10.5	10.3	10.4	10.5	10.4	10.5	10.6	10.4	10.5	10.6	
	62°F	TC	102.9	103	106.9	104.8	105.4	111	106.4	108.5	114.5	107.7	111.4	117.5	109.2	113.8	120.1	
		SC	87.4	102.1	106.9	92.7	105.4	111	97.9	108.5	114.5	102.8	111.4	117.5	106.7	113.8	120.1	
		kW	10.4	10.4	10.4	10.4	10.4	10.5	10.4	10.4	10.5	10.4	10.5	10.6	10.5	10.5	10.6	
	67°F	TC	112.4	111.8	111.6	114.5	114	113.8	116.2	115.6	116	117.6	116.9	117.6	118.7	117.9	120.2	
		SC	70.5	86.9	102.7	73.8	92.2	109.6	77.1	97.4	115	80.2	102.4	117.6	83.2	107.2	120.2	
		kW	10.5	10.5	10.5	10.6	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.7	10.6	10.6	
	72°F	TC	122.3	122	121.7	124.4	124.1	123.7	126.1	125.8	125.2	127.4	127.1	126.7	128.7	128.4	127.7	
		SC	54.1	70	85.9	55.6	73.3	91.2	56.9	76.5	96.1	58.2	79.6	101.3	59.4	82.6	106.3	
		kW	10.7	10.7	10.7	10.8	10.7	10.7	10.8	10.8	10.7	10.8	10.8	10.8	10.9	10.8	10.8	
115°F	57°F	TC	91	96.1	101.3	94.2	99.6	105.1	96.9	102.5	108.2	99.3	105.1	110.9	101.4	107.3	113.3	
		SC	91	96.1	101.3	94.2	99.6	105.1	96.9	102.5	108.2	99.3	105.1	110.9	101.4	107.3	113.3	
		kW	11.3	11.4	11.5	11.4	11.5	11.6	11.4	11.5	11.6	11.5	11.6	11.7	11.5	11.6	11.7	
	62°F	TC	96.4	96.8	101.4	98	99.7	105.1	99.4	102.6	108.2	100.9	105.2	111	102.2	107.3	113.3	
		SC	84.4	96.8	101.4	89.6	99.7	105.1	94.8	102.6	108.2	98.9	105.2	111	102.2	107.3	113.3	
		kW	11.4	11.4	11.5	11.5	11.5	11.6	11.5	11.5	11.6	11.5	11.6	11.7	11.5	11.6	11.7	
	67°F	TC	105.3	104.8	104.4	107.3	106.7	106.8	108.8	108	108.5	110	109.2	111	110.9	110.2	113.4	
		SC	67.7	84.1	99.8	71	89.4	105.5	74.1	94.5	108.5	77.2	99.5	111	80.2	104.2	113.4	
		kW	11.6	11.6	11.6	11.7	11.6	11.6	11.7	11.6	11.6	11.7	11.7	11.7	11.7	11.7	11.7	
	72°F	TC	114.8	114.3	113.8	116.7	116.2	115.5	118.1	117.6	116.9	119.3	118.8	118.1	120.4	120	119	
		SC	51.3	67.1	83.7	52.8	70.4	88.6	54.1	73.6	93.5	55.3	76.6	98.5	56.5	79.7	103.7	
		kW	11.8	11.8	11.7	11.9	11.8	11.8	11.9	11.8	11.8	11.9	11.9	11.8	11.9	11.9	11.8	

**NOTE:**

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

TABLE 21 - DSV144C PERFORMANCE DATA

DSV144C		SCFM	4000			4400			4800			5200			5600				
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F		
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB	TC	124.9	131.6	138.6	128.3	135.4	142.7	131.4	138.7	146.3	134.1	141.7	149.4	136.6	144.4	152.3	
			SC	124.9	131.6	138.6	128.3	135.4	142.7	131.4	138.7	146.3	134.1	141.7	149.4	136.6	144.4	152.3	
	kW	10.1	10.2	10.3	10.2	10.2	10.3	10.2	10.3	10.3	10.3	10.2	10.3	10.4	10.2	10.3	10.4		
	85°F	57°F	TC	135	134.8	138.7	137	136.8	142.8	138.6	138.9	146.4	140.5	141.8	149.5	141.2	144.5	152.3	
			SC	109.1	128.5	138.7	114.1	135.4	142.8	118.9	138.9	146.4	123.7	141.8	149.5	128.1	144.5	152.3	
			kW	10.2	10.2	10.3	10.3	10.2	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.3	10.3	10.4
	85°F	62°F	TC	146.4	146.5	146.4	148.5	148.6	148.5	150.4	150.5	150.1	151.9	152.1	151.8	153	153.1	152.7	
			SC	88.9	108.6	128	92.1	113.6	134.7	95.2	118.3	141.2	98.1	123	147.5	100.9	127.4	152.7	
			kW	10.4	10.4	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
	85°F	72°F	TC	158.6	158.8	158.6	160.7	160.8	160.7	162.4	162.8	162.5	164	164.4	164	165.2	165.5	165.3	
			SC	68.6	88.3	107.9	69.9	91.4	112.7	71.3	94.4	117.5	72.5	97.4	122.1	73.7	100.2	126.5	
			kW	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.6	10.6	10.5	10.6	10.6	10.6
	95°F	57°F	TC	119.5	126.2	132.9	122.8	129.8	136.8	125.8	132.8	140.3	128.3	135.6	143.1	130.9	138	145.7	
			SC	119.5	126.2	132.9	122.8	129.8	136.8	125.8	132.8	140.3	128.3	135.6	143.1	130.9	138	145.7	
			kW	11.2	11.2	11.3	11.2	11.3	11.3	11.2	11.3	11.4	11.3	11.3	11.4	11.3	11.4	11.4	
		95°F	62°F	TC	128.2	127.9	133.1	130	130	136.8	131.5	132.9	140.1	132.8	135.7	143.3	133.8	138.2	145.9
				SC	106	125.5	133.1	110.9	130	136.8	115.7	132.9	140.1	120.3	135.7	143.3	124.9	138.2	145.9
				kW	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.4	11.3	11.3	11.4	11.3	11.4	11.4
		95°F	67°F	TC	139.2	139.3	139.1	141.1	141.2	140.9	142.8	142.9	142.4	144	144.2	143.6	145	145.3	145.9
				SC	85.9	105.5	124.9	89	110.4	131.6	92.1	115.2	138	95	119.8	143.6	97.7	124.3	145.9
				kW	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.5	11.4	11.4	11.5	11.5	11.4
		95°F	72°F	TC	150.7	150.8	150.7	152.6	152.8	152.5	154.2	154.4	154.3	155.6	155.9	155.6	156.9	157	156.7
				SC	65.7	85.3	104.8	67	88.4	109.7	68.3	91.4	114.5	69.5	94.3	119	70.7	97.1	123.5
				kW	11.5	11.5	11.5	11.6	11.5	11.5	11.6	11.6	11.5	11.6	11.6	11.6	11.6	11.6	11.6
	105°F	57°F	TC	113.8	120.3	126.9	116.9	123.5	130.3	119.6	126.4	133.5	122	129	136.3	124	131.2	138.7	
			SC	113.8	120.3	126.9	116.9	123.5	130.3	119.6	126.4	133.5	122	129	136.3	124	131.2	138.7	
			kW	12.3	12.4	12.4	12.4	12.4	12.5	12.4	12.4	12.5	12.4	12.5	12.5	12.5	12.4	12.5	12.6
		105°F	62°F	TC	120.8	120.6	127	122.6	123.6	130.4	124	126.5	133.6	125	129.1	136.3	125.9	131.3	138.8
				SC	102.6	120.6	127	107.5	123.6	130.4	112.3	126.5	133.6	116.9	129.1	136.3	121.5	131.3	138.8
				kW	12.4	12.4	12.4	12.4	12.4	12.5	12.4	12.4	12.5	12.5	12.5	12.5	12.5	12.5	12.5
		105°F	67°F	TC	131.3	131.5	131.2	133.1	133.2	132.7	134.5	134.6	134	135.7	135.9	136.4	136.7	136.7	138.9
				SC	82.6	102.3	121.5	85.8	107.1	128.4	88.8	111.9	134	91.7	116.5	136.4	94.4	120.9	138.9
				kW	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.6	12.5	12.6	12.6	12.5	12.6	12.6	12.6
		105°F	72°F	TC	142.4	142.5	142.2	144.1	144.1	143.9	145.6	145.7	145.3	146.9	146.8	146.4	147.7	147.9	147.5
				SC	62.6	82.2	101.6	63.9	85.2	106.5	65.1	88.2	111.1	66.3	91	115.7	67.4	93.7	120
				kW	12.7	12.6	12.6	12.7	12.7	12.6	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8	12.7
	115°F	57°F	TC	107.7	113.8	120.2	110.4	116.8	123.4	112.9	119.5	126.3	115	121.8	128.8	116.9	123.9	130.9	
			SC	107.7	113.8	120.2	110.4	116.8	123.4	112.9	119.5	126.3	115	121.8	128.8	116.9	123.9	130.9	
			kW	13.6	13.6	13.7	13.6	13.7	13.7	13.6	13.7	13.8	13.7	13.7	13.8	13.7	13.7	13.8	
		115°F	62°F	TC	113.1	113.9	120.2	114.5	116.9	123.5	115.6	119.6	126.4	116.8	121.9	128.8	117.3	124	131
				SC	99.1	113.9	120.2	104	116.9	123.5	108.8	119.6	126.4	113.4	121.9	128.8	117.3	124	131
				kW	13.7	13.6	13.7	13.7	13.7	13.7	13.7	13.7	13.8	13.7	13.7	13.8	13.7	13.8	13.8
		115°F	67°F	TC	123	123.2	122.6	124.6	124.5	124	125.9	125.7	126.5	126.9	126.7	128.9	127.9	127.6	131
				SC	79.2	98.8	118.3	82.4	103.7	124	85.3	108.4	126.5	88.1	112.8	128.9	90.9	117.4	131
				kW	13.8	13.8	13.7	13.8	13.8	13.7	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
		115°F	72°F	TC	133.6	133.4	133.2	134.9	134.8	134.7	136.4	136.2	135.8	137.4	137.3	136.9	138.4	138.2	137.8
				SC	59.4	78.8	98.2	60.5	81.7	103	61.8	84.7	107.7	62.9	87.5	112.2	64.1	90.3	116.5
				kW	13.9	13.9	13.8	13.9	13.9	13.9	14	13.9	13.9	14	13.9	13.9	14	13.9	13.9

NOTE:

TC: Total Gross Capacity (MBh)  
 SC: Sensible Capacity (MBh)  
 kW = Compressor Power + Outdoor Fan Power + Control Power

# DSV Performance Data (Cont'd)

TABLE 22 - DSV180C PERFORMANCE DATA

DSV180C		SCFM	4400			5000			5600			6200			6800				
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F		
AMBIENT CONDENSER AIR TEMPERATURE	85°F	EDB	EWB	TC	154.5	161.7	170.2	160.1	169.2	178.2	166.1	175.5	185.1	171.2	181.1	191.1	175.7	185.8	196.4
				SC	154.4	161.7	170.2	160.1	169.2	178.2	166.1	175.5	185.1	171.2	181.1	191.1	175.7	185.8	196.4
	kW	12.6	12.7	12.8	12.6	12.8	12.9	12.7	12.9	13	12.8	13	13.1	12.9	13.1	13.2			
	57°F	TC	169.1	168.8	170.4	173.5	173.1	178.4	177	176.6	185.2	179.9	181.2	191.2	175.7	186	196.5		
		SC	132.1	154.5	170.4	140.5	165.8	178.4	148.7	176.6	185.2	156.9	181.2	191.2	175.7	186	196.5		
		kW	12.8	12.8	12.8	12.9	12.9	12.9	12.9	12.9	13	13	13	13.1	12.9	13.1	13.2		
	62°F	TC	184.7	184.5	184	189.5	189.3	188.7	193.4	193	192.4	196.6	196.2	195.3	199.1	198.6	197.5		
		SC	108.9	131.3	153.7	114.2	139.6	165.4	119.4	147.8	176.5	124.4	155.8	187.1	129.2	163.5	197.5		
		kW	13.1	13	13	13.1	13.1	13.1	13.2	13.2	13.2	13.3	13.2	13.2	13.3	13.3	13.2		
	67°F	TC	201.5	201.2	200.9	206.5	206.3	205.9	210.2	210.1	209.9	213	212.9	212.8	215.8	215.6	215.5		
		SC	85.9	108.2	130.5	88.5	113.5	138.8	90.8	118.6	146.7	92.9	123.5	154.2	94.9	128.3	161.8		
		kW	13.3	13.3	13.3	13.4	13.4	13.4	13.5	13.5	13.5	13.6	13.5	13.5	13.6	13.6	13.6		
	72°F	TC	147.1	155.2	163.6	153.5	162.2	171.1	159	168.2	177.6	163.8	173.4	183.1	168	177.9	188		
		SC	147.1	155.2	163.6	153.5	162.2	171.1	159	168.2	177.6	163.8	173.4	183.1	168	177.9	188		
		kW	13.9	14	14.1	14	14.1	14.3	14.1	14.2	14.4	14.2	14.3	14.5	14.2	14.4	14.6		
	95°F	57°F	TC	160.8	160.4	163.8	164.6	164.2	171.2	167.8	168.3	177.7	170.4	173.5	183.3	172.7	178	188.1	
		SC	128.4	150.7	163.8	136.8	161.9	171.2	145	168.3	177.7	153.1	173.5	183.3	160.6	178	188.1		
		kW	14.1	14.1	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.3	14.3	14.5	14.3	14.4	14.6		
	62°F	TC	175.8	175.4	174.9	180	179.6	179.1	183.6	183.1	182.3	186.5	185.8	184.9	188.8	188	188.2		
		SC	105.2	127.7	150.2	110.4	136	161.7	115.5	144.1	172.6	120.4	152.3	183.2	125.1	160.2	188.2		
		kW	14.4	14.4	14.3	14.5	14.4	14.4	14.5	14.5	14.5	14.6	14.6	14.5	14.6	14.6	14.6		
	67°F	TC	191.8	191.5	191.1	196.3	196.1	195.6	199.8	199.6	199.3	202.3	202.1	202.1	204.8	204.6	204.3		
		SC	82.2	104.5	126.8	84.7	109.7	135.1	86.9	114.7	142.9	88.9	119.5	150.2	91	124.3	157.7		
		kW	14.7	14.6	14.6	14.8	14.7	14.7	14.8	14.8	14.8	14.9	14.9	14.8	15	14.9	14.9		
	72°F	TC	140.2	148.3	156.4	146.2	154.7	163.4	151.4	160.3	169.3	155.8	165.1	174.6	159.7	169.3	179.1		
		SC	140.2	148.3	156.4	146.2	154.7	163.4	151.4	160.3	169.3	155.8	165.1	174.6	159.7	169.3	179.1		
		kW	15.4	15.5	15.7	15.5	15.6	15.8	15.6	15.8	15.9	15.7	15.8	16	15.8	15.9	16.1		
	105°F	57°F	TC	151.8	151.2	156.5	155.2	155	163.5	158.1	160.4	169.5	160.5	165.2	174.6	162.2	169.4	179.3	
		SC	124.5	146.8	156.5	132.9	155	163.5	141	160.4	169.5	148.7	165.2	174.6	157	169.4	179.3		
		kW	15.6	15.6	15.7	15.7	15.7	15.8	15.7	15.8	15.9	15.8	15.8	16	15.8	15.9	16.1		
	62°F	TC	166	165.6	165.2	170	169.4	169	173.1	172.4	171.9	175.7	174.9	174.7	177.8	176.6	179.3		
		SC	101.2	123.8	146.3	106.4	132.2	157.3	111.5	140.6	168.2	116.3	148.5	174.7	121	156.5	179.3		
		kW	15.9	15.9	15.8	16	15.9	15.9	16	16	16	16.1	16	16	16.1	16.1	16.1		
	67°F	TC	181.4	181	180.5	185.5	185.1	184.6	188.6	188.4	187.7	190.8	190.8	190.2	193.1	192.8	192.2		
		SC	78.2	100.6	123.1	80.6	105.8	131.3	82.8	110.6	139	84.8	115.4	146.7	86.8	120.1	154.1		
		kW	16.2	16.1	16.1	16.3	16.2	16.2	16.3	16.3	16.3	16.4	16.3	16.3	16.5	16.4	16.3		
	72°F	TC	133	140.8	148.7	138.5	146.8	155.1	143.2	151.9	160.6	147.3	156.2	165.3	150.8	160.1	169.4		
		SC	133	140.8	148.7	138.5	146.8	155.1	143.2	151.9	160.6	147.3	156.2	165.3	150.8	160.1	169.4		
		kW	17.1	17.2	17.4	17.2	17.3	17.5	17.3	17.4	17.6	17.4	17.5	17.7	17.4	17.6	17.8		
	115°F	57°F	TC	142.2	141.8	148.8	145.2	146.8	155.2	148.1	152	160.7	149.6	156.3	165.7	151.5	160.2	169.5	
		SC	120.3	141.8	148.8	128.7	146.8	155.2	136.7	152	160.7	145.2	156.3	165.7	151.5	160.2	169.5		
		kW	17.3	17.2	17.4	17.3	17.3	17.5	17.4	17.4	17.6	17.4	17.5	17.7	17.5	17.6	17.8		
	62°F	TC	155.8	155.3	154.8	159.3	158.5	158	162	161.2	160.8	164.3	163.3	165.5	166.2	165.1	169.6		
		SC	97.1	119.8	142.2	102.4	128.5	153.5	107.4	136.6	160.8	112.3	144.9	165.5	116.9	151.8	169.6		
		kW	17.6	17.5	17.5	17.6	17.6	17.5	17.7	17.6	17.6	17.7	17.7	17.7	17.7	17.8	17.8		
	67°F	TC	170.4	169.9	169.3	174.1	173.6	172.8	176.9	176.5	175.4	178.9	178.6	177.8	180.8	180.5	179.4		
		SC	74.1	96.5	119.3	76.4	101.8	127.6	78.6	106.5	135.7	80.5	111	143	82.4	115.7	150.7		
		kW	17.9	17.8	17.8	18	17.9	17.8	18	18	17.9	18.1	18	17.9	18.1	18	18		

**NOTE:**

TC: Total Gross Capacity (MBh)  
 SC: Sensible Capacity (MBh)  
 kW = Compressor Power + Outdoor Fan Power + Control Power

TABLE 23 - DSV240C PERFORMANCE DATA

DSV240C		SCFM	6400			7200			8000			8800			9600			
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	
AMBIENT CONDENSER AIR TEMPERATURE	EDB	EWB	TC	215.2	226.8	238.8	223.5	235.8	248.4	230.7	243.6	256.7	237	250.4	263.9	242.6	256.4	270.3
	kW	18.1	18.3	18.5	18.3	18.5	18.7	18.4	18.6	18.8	18.5	18.7	18.9	18.6	18.8	19		
																	TC	234.6
	SC	189.5	222.5	239	200.6	237.2	248.9	211.7	243.7	256.9	222.1	250.5	264.1	242.6	256.5	270.5		
																	kW	18.4
	TC	255.9	255.4	254.8	261.5	261	260.1	266.1	265.7	264.6	269.3	269	268.1	272.2	271.8	270.6		
																	SC	155.3
	kW	18.8	18.8	18.8	18.9	18.9	18.9	19	19	18.9	19	19	19	19.1	19.1	19		
																	TC	278.4
	SC	121.8	154.2	186.9	124.7	161	197.1	127.7	167.7	207.6	130.4	174.1	217.8	132.9	180.3	227.6		
																	kW	19.2
	TC	206.1	217.6	229.4	214	226.1	238.7	220.8	233.3	246.3	226.6	239.6	253	231.8	245.2	259		
																	SC	206.1
	kW	19.7	19.9	20.1	19.8	20	20.2	19.9	20.1	20.4	20	20.3	20.5	20.1	20.4	20.6		
																	TC	222.7
	SC	184.3	217.2	229.7	195.5	226.5	238.7	206.2	233.4	246.4	217.4	239.8	253.1	227.6	245.4	259.1		
																	kW	20
	TC	243.4	242.6	242.2	248.5	247.6	246.9	252.6	251.6	250.7	255.6	254.7	253.4	258.3	258	259.3		
																	SC	150.5
	kW	20.3	20.3	20.3	20.4	20.4	20.4	20.5	20.5	20.4	20.6	20.5	20.5	20.6	20.6	20.6		
																	TC	265
	SC	116.7	149.3	182.3	119.5	155.7	192.3	122.4	162.3	202.3	125.2	168.8	212.5	127.7	174.9	222.3		
																	kW	20.7
	TC	195.8	207	218.3	203	214.8	226.9	209.2	221.5	234.1	214.7	227.3	240.3	219.4	232.4	245.8		
																	SC	195.8
	kW	21.4	21.6	21.8	21.5	21.7	21.9	21.6	21.8	22.1	21.7	22	22.2	21.8	22.1	22.3		
																	TC	209.1
	SC	178.6	209	218.6	189.5	214.9	227	200.9	221.6	234.2	211.5	227.4	240.4	220.4	232.5	245.9		
																	kW	21.6
	TC	228.9	228.2	227.4	233.2	232.5	231.4	236.9	236.2	234.9	240	238.8	240.6	242.3	240.9	246.1		
																	SC	144.9
	kW	22	22	21.9	22.1	22.1	22	22.2	22.1	22.1	22.2	22.2	22.2	22.3	22.2	22.3		
																	TC	249.5
	SC	111	143.8	176.7	113.7	150	186.8	116.5	156.4	196.7	119.1	162.7	206.9	121.6	168.8	216.8		
																	kW	22.4
	TC	184.5	195.4	206.3	191.1	202.5	213.9	196.7	208.6	220.5	201.6	213.9	226.2	205.9	218.5	231.2		
																	SC	184.5
	kW	23.3	23.5	23.6	23.4	23.6	23.8	23.5	23.7	23.9	23.6	23.8	24	23.7	23.9	24.1		
																	TC	194.7
	SC	172.3	195.6	206.4	183.9	202.7	214	194.4	208.8	220.6	203.6	214	226.3	206	218.6	231.3		
																	kW	23.5
	TC	213	212.5	211.3	217.1	216.1	215.2	219.9	219	220.7	222.9	221.6	226.4	224.9	223.1	231.5		
																	SC	138.9
	kW	23.8	23.8	23.7	23.9	23.9	23.8	24	23.9	23.9	24	24	24	24.1	24	24.1		
																	TC	232.7
	SC	104.9	137.9	170.9	107.2	144	181.4	110.2	150.3	191.9	112.7	156.3	201.5	115.2	162.3	212		
																	kW	24.2

NOTE:

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

# DSV Fan Performance Data

TABLE 24 - DSV300C PERFORMANCE DATA

DSV300C		SCFM	7600			8200			8800			9400			10000				
		EDB	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F	75°F	80°F	85°F		
AMBIENT CONDENSER AIR TEMPERATURE	85°F	EVB	TC	246	259.2	272.5	252	265.6	279.4	257.4	271.5	285.8	262.4	276.9	291.6	266.9	281.9	297	
			SC	246	259.2	272.5	252	265.6	279.4	257.4	271.5	285.8	262.4	276.9	291.6	266.9	281.9	297	
	kW	21.3	21.6	22	21.5	21.8	22.2	21.6	22	22.3	21.7	22.1	22.5	21.9	22.2	22.6			
	57°F	TC	265.6	264.7	272.6	269.3	268.6	279.6	272.6	271.7	286	275.3	277.1	291.8	266.9	282	297.1		
		SC	218.1	256.9	272.6	226.5	267.3	279.6	234.6	271.7	286	242.8	277.1	291.8	266.9	282	297.1		
		kW	21.8	21.8	22	21.9	21.9	22.2	22	22	22.3	22.1	22.1	22.5	21.9	22.3	22.6		
	62°F	TC	289.5	288.6	287.7	293.7	292.3	291.3	297.3	295.7	294.7	300.7	298.8	297.4	303.3	301.4	300.1		
		SC	177.6	216.8	255.2	183.1	225.3	266.7	188.2	233.6	277.6	193.2	241.7	288.7	198	249.5	298.8		
		kW	22.5	22.4	22.4	22.6	22.5	22.5	22.7	22.6	22.6	22.8	22.7	22.7	22.9	22.8	22.7		
	72°F	TC	316.1	314.6	313.1	320.5	318.9	317.2	324.2	323.8	320.8	327.2	325.9	324	329.8	328.5	326.6		
		SC	137.5	176.4	215.4	139.9	181.5	223.6	142.3	186.4	231.6	144.3	191	239.4	146.3	195.7	246.7		
		kW	23.2	23.1	23.1	23.4	23.3	23.2	23.5	23.4	23.3	23.6	23.5	23.4	23.6	23.5	23.5		
	95°F	57°F	TC	235.6	248.4	261.4	241.2	254.4	267.8	246.2	259.9	273.8	250.8	264.9	279.2	255.1	269.5	284.2	
			SC	235.6	248.4	261.4	241.2	254.4	267.8	246.2	259.9	273.8	250.8	264.9	279.2	255.1	269.5	284.2	
			kW	23.2	23.5	23.9	23.3	23.7	24	23.5	23.8	24.2	23.6	24	24.4	23.7	24.1	24.5	
		62°F	TC	252.1	251.2	261.6	255.5	254.6	268.1	258.2	260	274	260.7	265	279.3	263	269.7	284.4	
			SC	211.9	250.2	261.6	220.4	254.6	268.1	228.8	260	274	236.9	265	279.3	244.6	269.7	284.4	
			kW	23.6	23.6	23.9	23.7	23.7	24	23.8	23.8	24.2	23.9	24	24.4	24	24.1	24.5	
		67°F	TC	275	273.9	272.9	278.6	277.4	276.2	281.9	280.4	279.1	284.6	283.1	282.1	287.2	285.5	284.6	
			SC	172.2	211	249.9	177.4	219.4	260.9	182.5	227.7	271.6	187.4	235.6	282.1	192.2	243.4	284.6	
			kW	24.3	24.2	24.2	24.4	24.3	24.3	24.5	24.4	24.4	24.6	24.5	24.4	24.7	24.6	24.5	
		72°F	TC	300.7	298.8	297.1	304.5	302.5	300.6	307.7	306	303.9	310.3	309	306.7	312.8	311.5	309.1	
			SC	131.6	170.9	209.8	133.9	175.9	218	136.1	180.7	226.2	138.1	185.1	234.2	140.2	189.6	241.8	
			kW	25.1	24.9	24.9	25.2	25.1	25	25.3	25.2	25.1	25.4	25.2	25.1	25.5	25.3	25.2	
	105°F	57°F	TC	224	236.1	248.7	229	241.7	254.7	233.6	246.7	260	237.9	251.1	264.9	241.7	255.5	269.5	
			SC	224	236.1	248.7	229	241.7	254.7	233.6	246.7	260	237.9	251.1	264.9	241.7	255.5	269.5	
			kW	25.2	25.5	25.8	25.3	25.7	26	25.5	25.8	26.2	25.6	25.9	26.3	25.7	26.1	26.4	
		62°F	TC	236.9	236.3	248.9	239.6	241.8	254.8	242.1	246.8	260.1	244.1	251.3	265.1	246.2	256.4	269.6	
			SC	205.4	236.3	248.9	214	241.8	254.8	222.4	246.8	260.1	230.4	251.3	265.1	237.9	256.4	269.6	
			kW	25.6	25.5	25.8	25.6	25.7	26	25.7	25.8	26.2	25.8	25.9	26.3	25.8	26.1	26.4	
		67°F	TC	258.2	257.3	256	261.3	260.3	259.2	264.1	263	261.3	266.7	265.1	265.3	268.9	267.2	269.8	
			SC	165.8	204.3	243.1	171.2	212.5	253.8	176.3	220.9	261.3	181.5	229.1	265.3	186.1	236.8	269.8	
			kW	26.2	26.1	26	26.3	26.2	26.1	26.4	26.3	26.2	26.4	26.3	26.3	26.5	26.4	26.4	
		72°F	TC	282.8	280.5	279	286.4	284.1	282.2	290.6	288	284.9	292.5	289.6	287.4	293.9	292.4	289.4	
			SC	124.9	165	203.4	127.2	169.6	211.5	129.8	174.7	219.6	131.6	178.8	227.3	133.4	183.1	235	
			kW	26.9	26.8	26.7	27.1	26.9	26.8	27.2	27	26.9	27.3	27.1	26.9	27.3	27.1	27	
	115°F	57°F	TC	210.8	222.4	234.4	215.4	227.4	239.8	219.5	231.9	244.6	223.3	236.1	249.2	226.7	239.9	253.3	
			SC	210.8	222.4	234.4	215.4	227.4	239.8	219.5	231.9	244.6	223.3	236.1	249.2	226.7	239.9	253.3	
			kW	27.3	27.6	27.9	27.4	27.7	28.1	27.5	27.9	28.2	27.6	28	28.3	27.7	28.1	28.4	
		62°F	TC	220	222.6	234.5	222.6	227.5	239.9	224.4	232.1	244.9	226.4	236.3	249.3	227.9	240	253.5	
			SC	198.6	222.6	234.5	206.7	227.5	239.9	215.3	232.1	244.9	222.6	236.3	249.3	227.9	240	253.5	
			kW	27.6	27.6	27.9	27.6	27.7	28.1	27.7	27.9	28.2	27.7	28	28.3	27.8	28.1	28.4	
		67°F	TC	240.1	239.2	237.9	243	241.6	240.1	245.3	243.7	245.1	247.4	245.8	249.5	249.2	247.3	253.6	
			SC	158.8	197.2	235.2	164.2	205.8	240.1	169.3	214	245.1	174.3	221.8	249.5	179.2	229.9	253.6	
			kW	28.1	28.1	28	28.2	28.1	28.1	28.3	28.2	28.2	28.4	28.3	28.3	28.4	28.3	28.5	
		72°F	TC	263.7	260.6	259.4	266.8	263.6	262.3	268.9	266.2	264.4	271.2	268.6	266.5	273.2	270.6	268.1	
			SC	117.9	157.9	196.2	120	162.9	204.2	122	168.1	212.3	124	172.7	220.3	125.9	177.1	228.5	
			kW	28.9	28.7	28.6	29	28.8	28.7	29.1	28.9	28.8	29.2	29	28.8	29.3	29	28.9	

**NOTE:**

TC: Total Gross Capacity (MBh)

SC: Sensible Capacity (MBh)

kW = Compressor Power + Outdoor Fan Power + Control Power

TABLE 25 - EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - INCHES W.C. <sup>1</sup>																			
		0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSV060C	1600	408	0.13	555	0.29	652	0.38	739	0.45	819	0.54	893	0.63	963	0.71	1029	0.81	~	~	~	~
	1800	459	0.20	600	0.39	689	0.48	770	0.58	846	0.66	917	0.76	984	0.86	1047	0.96	~	~	~	~
	2000	510	0.25	647	0.51	729	0.61	806	0.71	877	0.81	944	0.92	1008	1.00	1069	1.14	~	~	~	~
	2200	561	0.35	695	0.65	772	0.76	843	0.88	911	0.99	975	1.10	1036	1.23	1094	1.34	~	~	~	~
	2400	612	0.45	745	0.83	816	0.95	883	1.07	947	1.19	1008	1.31	1066	1.44	~	~	~	~	~	~
DSV096C	2600	498	0.30	607	0.40	704	0.50	790	0.62	869	0.74	943	0.88	1011	1.00	1075	1.14	1136	1.28	1194	1.42
	3000	540	0.40	641	0.52	730	0.66	812	0.78	888	0.92	959	1.06	1025	1.20	1089	1.34	1148	1.50	1205	1.64
	3400	586	0.56	678	0.68	761	0.82	839	0.98	911	1.12	979	1.26	1044	1.42	1105	1.58	~	~	~	~
	3800	632	0.72	717	0.88	796	1.04	869	1.20	938	1.36	1002	1.52	~	~	~	~	~	~	~	~
	4200	681	0.94	760	1.12	833	1.28	902	1.46	967	1.64	~	~	~	~	~	~	~	~	~	~
DSV120C	3200	573	0.48	668	0.62	754	0.76	833	0.88	906	1.02	975	1.18	1040	1.32	1102	1.48	1160	1.66	1225	1.86
	3600	621	0.66	708	0.80	788	0.96	863	1.10	933	1.26	999	1.42	1061	1.58	1121	1.74	1178	1.90	~	~
	4000	667	0.86	748	1.02	823	1.18	893	1.34	960	1.52	1023	1.68	1083	1.86	1141	2.04	~	~	~	~
	4400	723	1.12	797	1.28	868	1.46	934	1.64	997	1.84	1057	2.02	~	~	~	~	~	~	~	~
	4800	775	1.40	845	1.60	911	1.80	973	2.00	~	~	~	~	~	~	~	~	~	~	~	~
DSV144C	4000	436	0.48	521	0.64	597	0.80	667	0.98	730	1.16	790	1.34	845	1.54	896	1.75	946	2.01	992	2.29
	4400	456	0.58	536	0.76	609	0.94	676	1.12	738	1.32	796	1.52	851	1.72	902	1.82	950	2.17	996	2.52
	4800	475	0.70	555	0.88	621	1.08	686	1.28	746	1.48	803	1.70	857	1.92	908	2.14	956	2.36	1000	2.70
	5200	494	0.84	567	1.04	634	1.24	697	1.46	755	1.68	811	1.90	863	2.12	913	2.36	961	2.60	1007	2.84
	5600	517	1.00	587	1.22	651	1.44	711	1.66	768	1.90	822	2.14	873	2.38	922	2.62	969	2.86	~	~
DSV180C	4400	578	0.66	674	0.84	761	1.02	841	1.23	916	1.41	985	1.62	1050	1.83	1112	2.07	1170	2.28	1227	2.52
	5000	630	0.90	718	1.11	799	1.32	874	1.53	945	1.74	1011	1.98	1074	2.19	1134	2.43	1191	2.67	1246	2.94
	5600	685	1.20	766	1.44	841	1.65	912	1.89	978	2.13	1042	2.40	1102	2.64	1160	2.88	1215	3.15	1268	3.42
	6200	741	1.59	815	1.83	886	2.07	952	2.34	1015	2.61	1076	2.88	1133	3.15	1189	3.42	1242	3.69	1294	3.99
	6800	798	2.01	867	2.31	933	2.58	996	2.85	1055	3.15	1113	3.42	1168	3.72	1221	4.02	1273	4.32	1323	4.62
DSV240C	6400	606	1.56	671	1.86	733	2.16	792	2.50	849	2.84	904	3.20	956	3.56	1007	3.94	1055	4.32	1102	4.72
	7200	665	2.08	724	2.40	781	2.74	836	3.10	889	3.48	940	3.86	989	4.24	1037	4.66	1084	5.06	1128	5.48
	8000	725	2.76	780	3.12	832	3.50	883	3.88	932	4.28	979	4.70	1026	5.12	1071	5.54	1115	5.98	1158	6.44
	8800	787	3.60	837	3.98	886	4.40	932	4.80	978	5.24	1023	5.68	1066	6.12	1109	6.58	1150	7.06	1191	7.54
	9600	850	4.60	896	5.02	941	5.44	985	5.90	1027	6.36	1069	6.82	1110	7.30	1150	7.80	~	~	~	~
DSV300C	7600	554	1.50	622	1.83	686	2.16	746	2.49	802	2.85	855	3.21	906	3.57	954	3.93	1001	4.32	1045	4.71
	8200	587	1.83	651	2.16	712	2.52	769	2.88	823	3.27	874	3.63	923	4.02	971	4.41	1016	4.83	1059	5.22
	8800	620	2.22	681	2.58	739	2.94	793	3.33	845	3.72	895	4.11	942	4.53	988	4.95	1032	5.37	1075	5.79
	9400	654	2.64	712	3.03	767	3.42	819	3.84	869	4.23	917	4.65	963	5.10	1007	5.52	1050	5.97	1092	6.42
	10000	688	3.12	743	3.54	795	3.96	845	4.38	894	4.83	940	5.25	984	5.70	1028	6.18	1069	6.63	1110	7.11

## NOTES:

- Blower performance includes wet evaporator coil and 2" filters.
- At higher evaporator airflows and wet bulb conditions, condensate carry-over may occur. Decrease airflow downward as necessary.

Standard Factory Drive
Low Static Drive (Field-Supplied)
High-Static Drive
High-Static Drive (Field-Supplied)

TABLE 26 - CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	AVAILABLE EXTERNAL STATIC PRESSURE - INCHES W.C.													
		0.0		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSV060C	3100	513	0.50	615	0.65	706	0.80	790	0.98	867	1.15	938	1.33	1006	1.50
DSV096C	4400	478	0.60	560	0.78	634	0.96	702	1.14	765	1.34	824	1.54	880	1.74
DSV120C	5500	614	1.22	680	1.44	741	1.66	799	1.90	854	2.14	906	2.38	956	2.62
DSV144C	6000	535	1.02	609	1.28	679	1.56	744	1.84	805	2.14	862	2.44	921	2.82
DSV180C	7200	548	1.44	618	1.74	682	2.04	742	2.37	800	2.70	854	3.03	906	3.36
DSV240C	10800	748	3.99	799	4.41	848	4.86	895	5.34	940	5.79	984	6.27	1026	6.75
DSV300C	12800	735	4.41	790	4.98	843	5.55	894	6.15	944	6.78	992	7.41	1031	8.01

Standard Factory Drive
High-Static Drive
High-Static Drive (Field-Supplied)

**DSV Electrical Data****TABLE 27 - STANDARD EVAPORATOR MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COMPRESSOR #2			EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP		
		QTY	RLA	LRA	QTY	RLA	LRA	HP	FLA	HP	FLA				
DSV060C2	208-230/3/60	1	@	15.9	110.0				1.00	3.1	1.50	4.5	27.48	40	
DSV060C4	460/3/60	1	@	7.1	52.0				1.00	1.5	1.50	2.2	12.58	15	
DSV060C5	575/3/60	1	@	5.1	39.5				1.00	1.2	1.50	1.8	9.38	15	
DSV096C2	208-230/3/60	1	@	14.0	83.1	1	@	13.8	83.1	1.00	3.1	2.00	5.8	40.20	50
DSV096C4	460/3/60	1	@	6.4	41.0	1	@	6.2	41.0	1.00	1.5	2.00	2.9	18.60	25
DSV096C5	575/3/60	1	@	4.6	33.0	1	@	4.9	33.0	1.00	1.2	2.00	2.3	14.15	15
DSV120C2	208-230/3/60	1	@	16.5	110.0	1	@	16.0	110.0	1.50	4.5	3.00	8.5	49.63	60
DSV120C4	460/3/60	1	@	7.2	52.0	1	@	7.8	52.0	1.50	2.2	3.00	4.2	23.20	30
DSV120C5	575/3/60	1	@	5.7	43.08	1	@	5.7	38.9	1.50	1.8	3.00	3.4	18.03	20
DSV144C2	208-230/3/60	1	@	17.6	136.0	1	@	19.0	123.0	2.00	5.8	3.00	8.5	55.30	70
DSV144C4	460/3/60	1	@	8.5	66.1	1	@	9.7	62.0	2.00	2.9	3.00	4.2	27.43	35
DSV144C5	575/3/60	1	@	6.3	55.3	1	@	7.4	50.0	2.00	2.3	3.00	3.4	20.98	25
DSV180C2	208-230/3/60	2	@	25.3	184.0				3.00	8.5	5.00	14.0	79.43	100	
DSV180C4	460/3/60	2	@	9.6	84.0				3.00	4.2	5.00	6.6	32.40	40	
DSV180C5	575/3/60	2	@	8.4	60.0				3.00	3.4	5.00	5.3	27.60	35	
DSV240C2	208-230/3/60	2	@	32.6	240.0				5.00	14.0	7.50	20.4	107.75	125	
DSV240C4	460/3/60	2	@	14.8	130.0				5.00	6.6	7.50	9.7	49.60	60	
DSV240C5	575/3/60	2	@	11.1	93.7				5.00	5.3	7.50	7.8	38.08	45	
DSV300C2	208-230/3/60	2	@	35.4	240.0				7.50	20.4	10.00	25.0	125.05	150	
DSV300C4	460/3/60	2	@	16.5	140.0				7.50	9.7	10.00	12.5	59.33	70	
DSV300C5	575/3/60	2	@	12.9	107.6				7.50	7.8	10.00	10.0	46.83	50	

**TABLE 28 - OVERSIZED EVAPORATOR MOTOR**

MODEL #	VOLTAGE	COMPRESSOR #1			COMPRESSOR #2			EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP		
		QTY	RLA	LRA	QTY	RLA	LRA	HP	FLA	HP	FLA				
DSV060C2	208-230/3/60	1	@	15.9	110.0				1.50	4.5	1.50	4.5	28.88	40	
DSV060C4	460/3/60	1	@	7.1	52.0				1.50	2.2	1.50	2.2	13.28	20	
DSV060C5	575/3/60	1	@	5.1	39.5				1.50	1.8	1.50	1.8	9.98	15	
DSV096C2	208-230/3/60	1	@	14.0	83.1	1	@	13.8	83.1	1.50	4.5	2.00	5.8	41.60	50
DSV096C4	460/3/60	1	@	6.4	41.0	1	@	6.2	41.0	1.50	2.2	2.00	2.9	19.30	25
DSV096C5	575/3/60	1	@	4.6	33.0	1	@	4.9	33.0	1.50	1.8	2.00	2.3	14.75	15
DSV120C2	208-230/3/60	1	@	16.5	110.0	1	@	16.0	110.0	2.00	5.8	3.00	8.5	50.45	60
DSV120C4	460/3/60	1	@	7.2	52.0	1	@	7.8	52.0	2.00	2.9	3.00	4.2	23.70	30
DSV120C5	575/3/60	1	@	5.7	43.8	1	@	5.7	38.9	2.00	2.3	3.00	3.4	17.43	20
DSV144C2	208-230/3/60	1	@	17.6	136.0	1	@	19.0	123.0	3.00	8.5	3.00	8.5	58.00	70
DSV144C4	460/3/60	1	@	8.5	66.1	1	@	9.7	62.0	3.00	4.2	3.00	4.2	28.73	35
DSV144C5	575/3/60	1	@	6.3	55.3	1	@	7.4	50.0	3.00	3.4	3.00	3.4	22.08	25
DSV180C2	208-230/3/60	2	@	25.3	184.0				5.00	14.0	5.00	14.0	84.93	110	
DSV180C4	460/3/60	2	@	9.6	84.0				5.00	6.6	5.00	6.6	34.80	40	
DSV180C5	575/3/60	2	@	8.4	60.0				5.00	5.3	5.00	5.3	29.50	35	
DSV240C2	208-230/3/60	2	@	32.6	240.0				7.50	20.4	7.50	20.4	114.15	125	
DSV240C4	460/3/60	2	@	14.8	130.0				7.50	9.7	7.50	9.7	52.70	60	
DSV240C5	575/3/60	2	@	11.1	93.7				7.50	7.8	7.50	7.8	40.58	50	
DSV300C2	208-230/3/60	2	@	35.4	240.0				7.50	20.4	10.00	25.0	125.05	150	
DSV300C4	460/3/60	2	@	16.5	140.0				7.50	9.7	10.00	12.5	59.33	70	
DSV300C5	575/3/60	2	@	12.9	107.6				7.50	7.8	10.00	10.0	46.83	50	

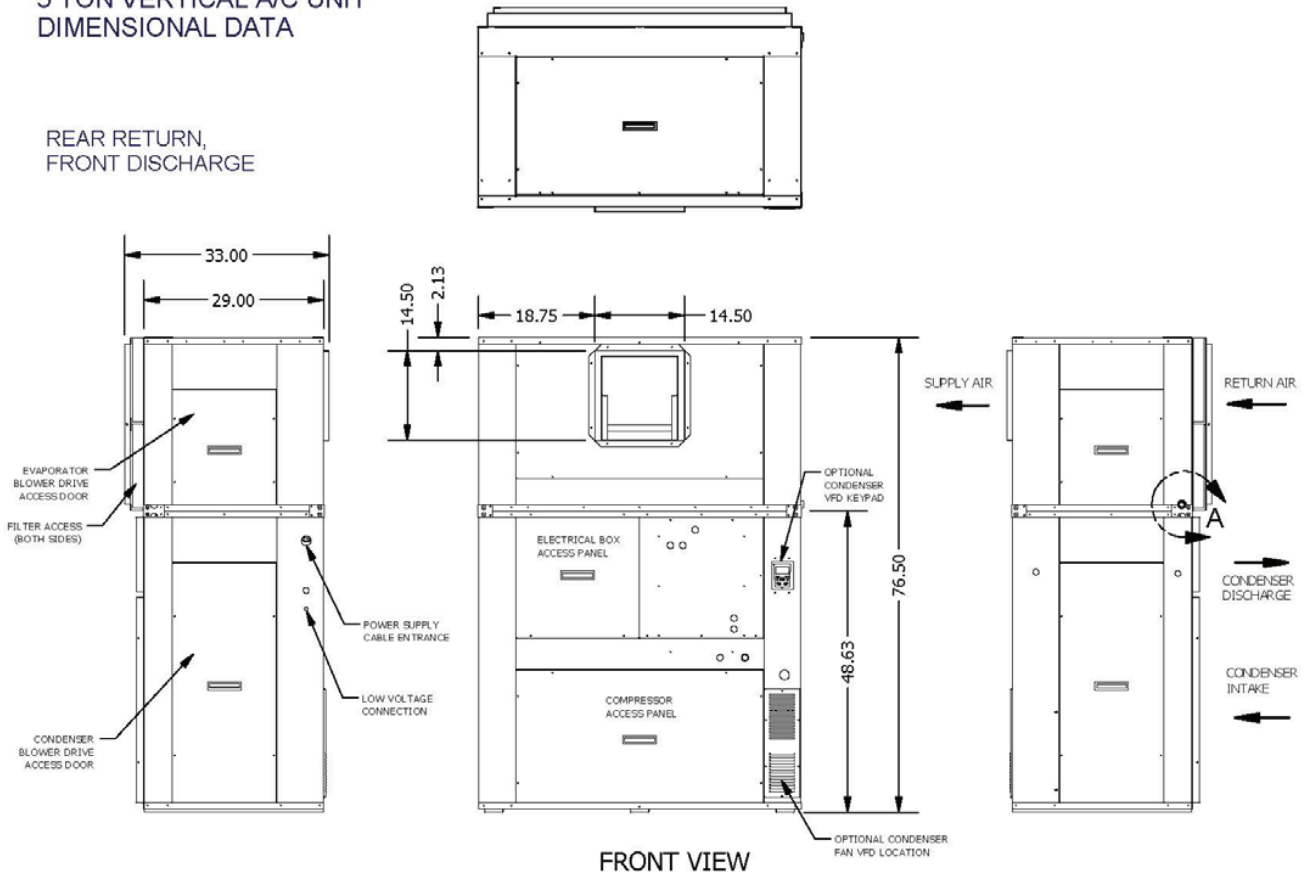


# DSV Dimensional Data

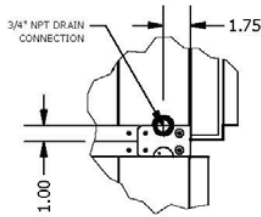
## DSV060C FRONT DISCHARGE AIR-COOLED UNIT

5 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE

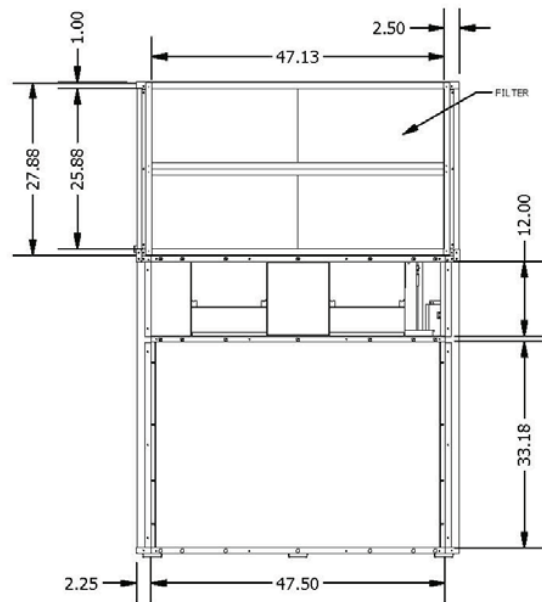


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

LD28331

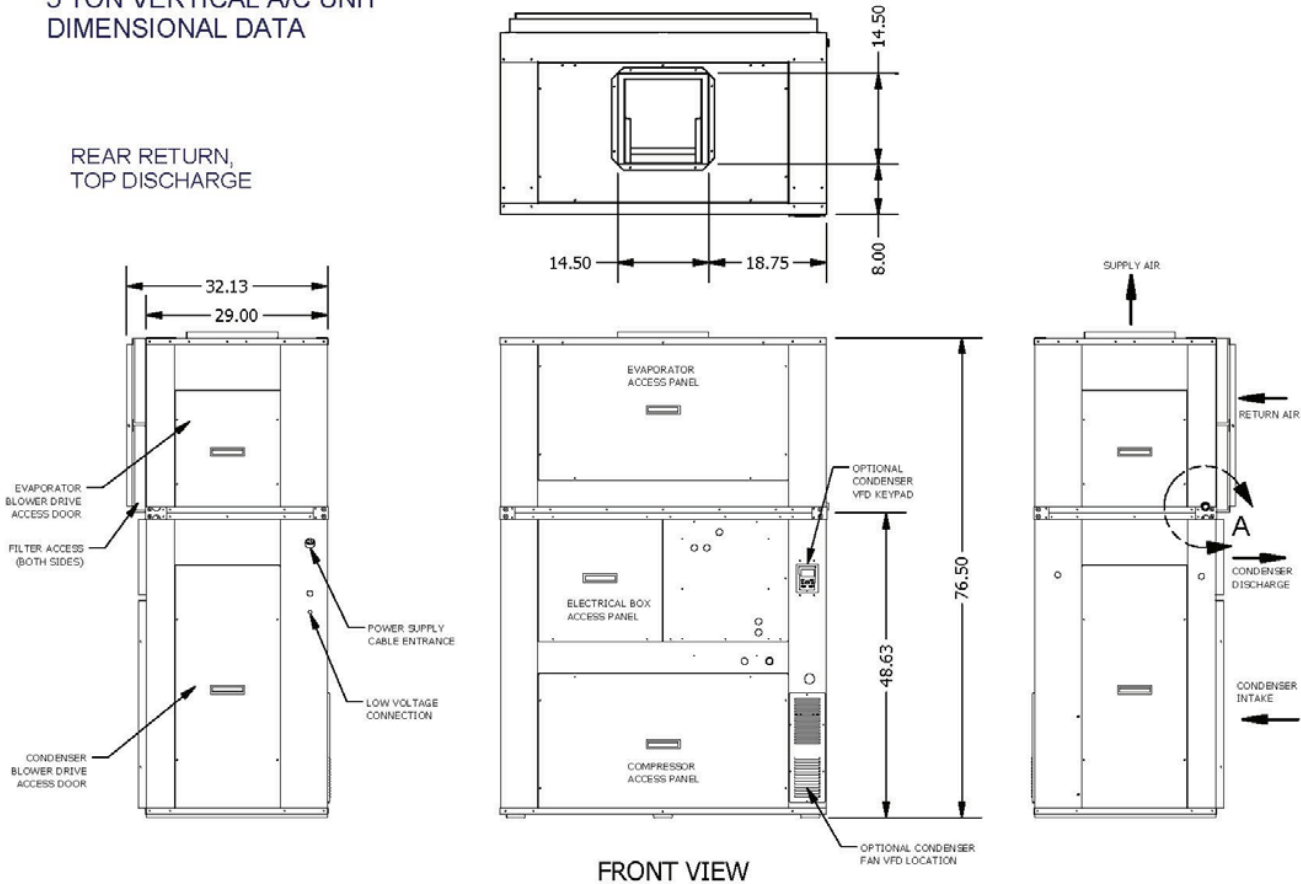
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

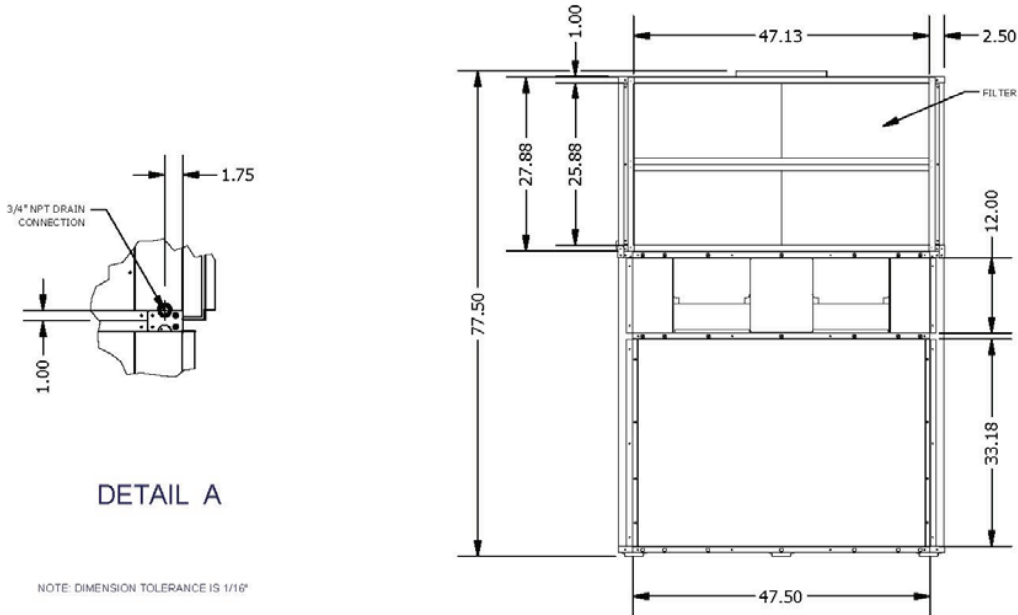
## DSV060C VERTICAL DISCHARGE AIR-COOLED UNIT

5 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
TOP DISCHARGE



FRONT VIEW



DETAIL A

BACK VIEW

NOTE: DIMENSION TOLERANCE IS 1/16"

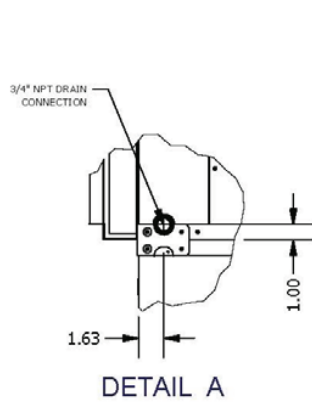
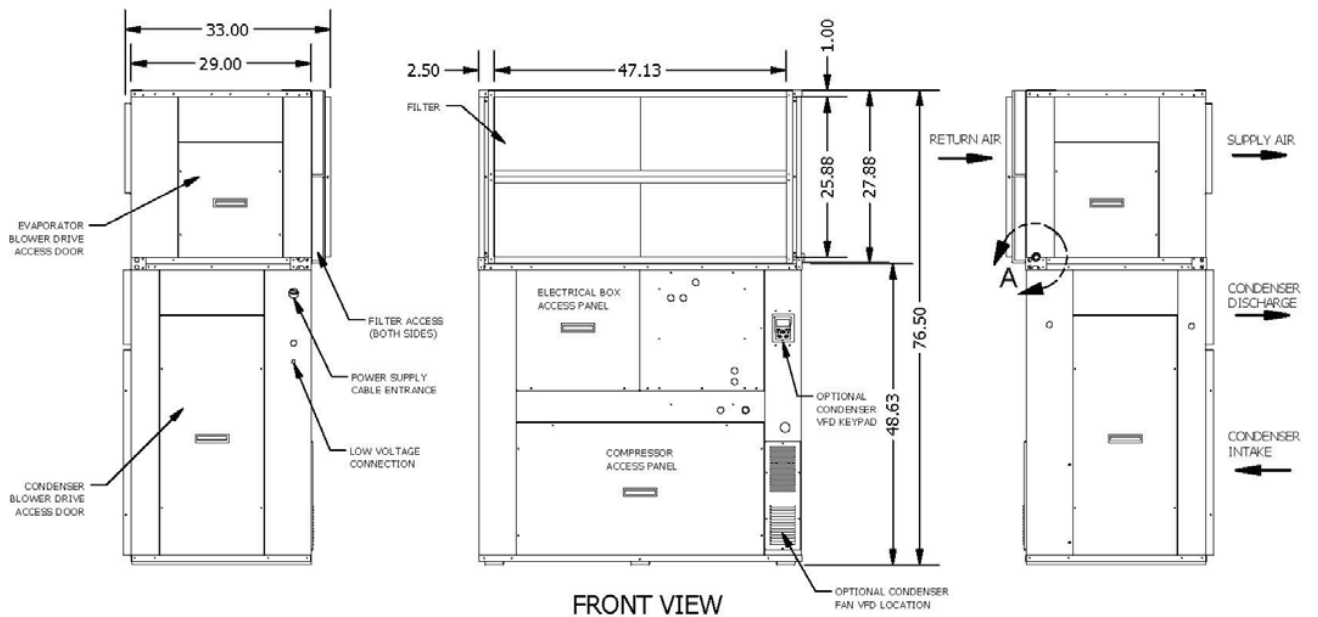
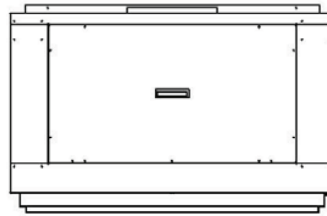
LD28332

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

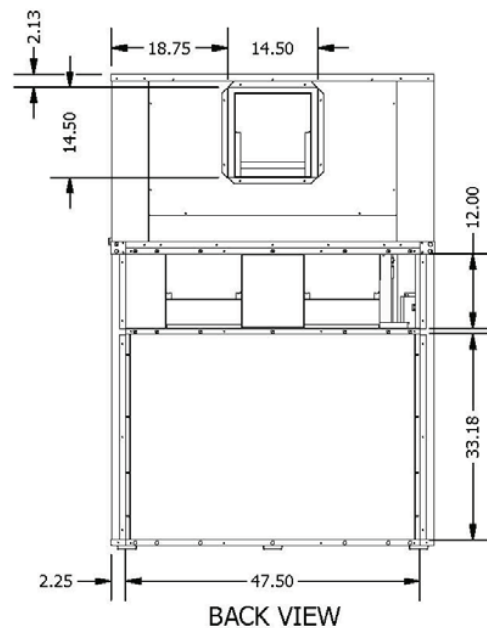
## DSV060C REAR DISCHARGE AIR-COOLED UNIT

5 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
REAR DISCHARGE



NOTE: DIMENSION TOLERANCE IS 1/16"



LD28333

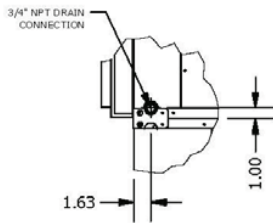
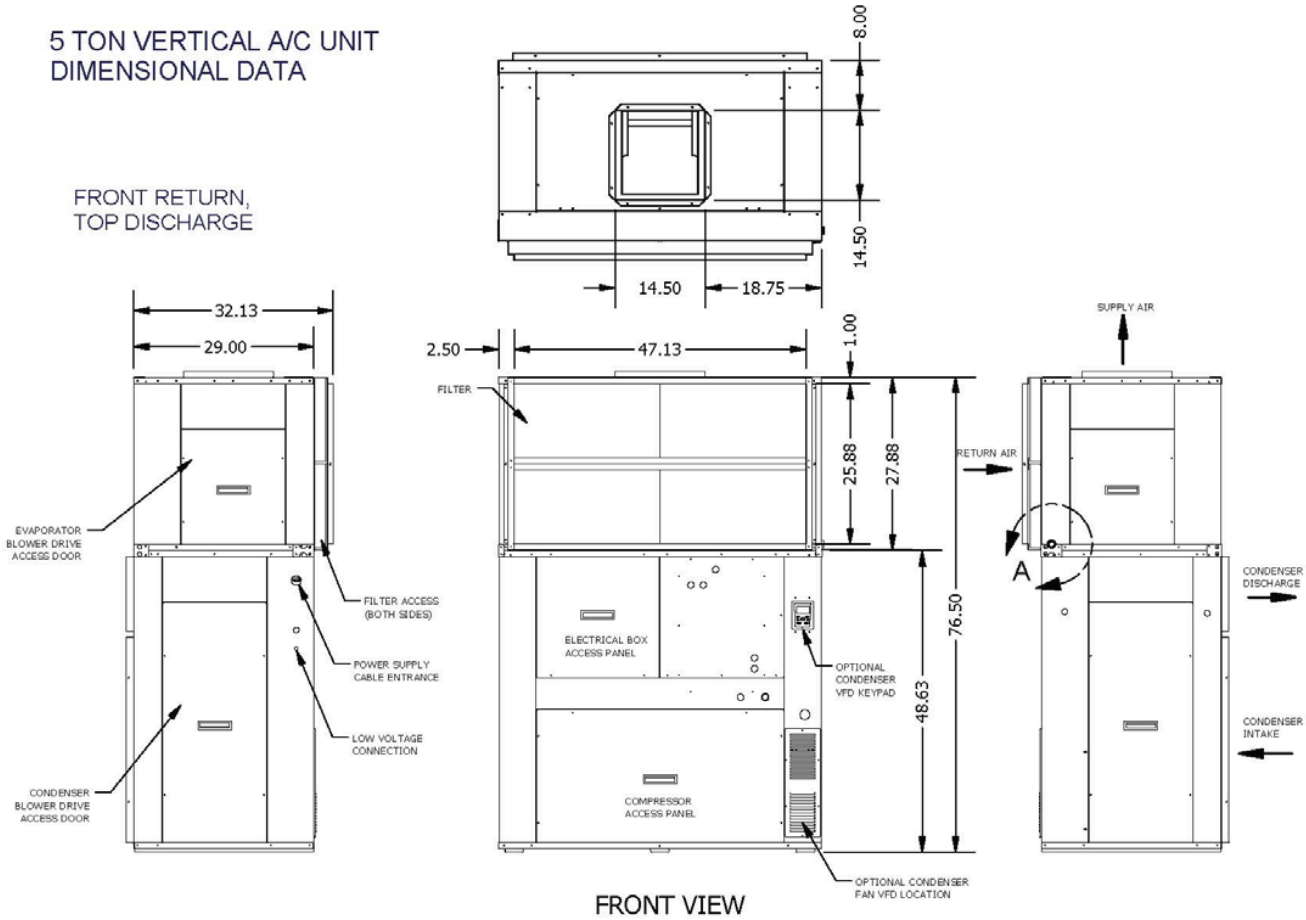
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

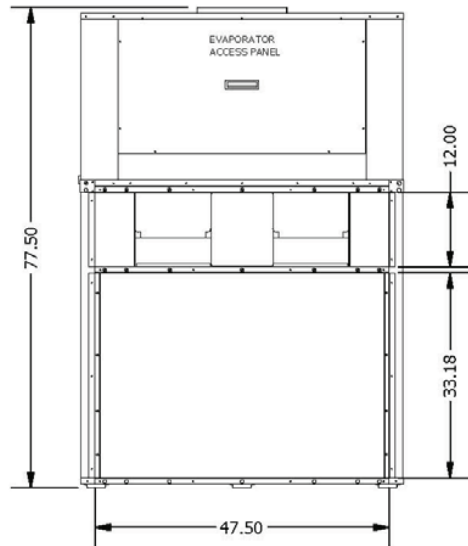
## DSV060C VERTICAL DISCHARGE AIR-COOLED UNIT

5 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
TOP DISCHARGE



NOTE: DIMENSION TOLERANCE IS 1/16"



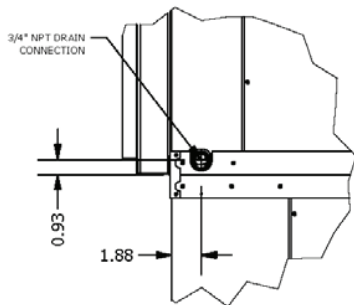
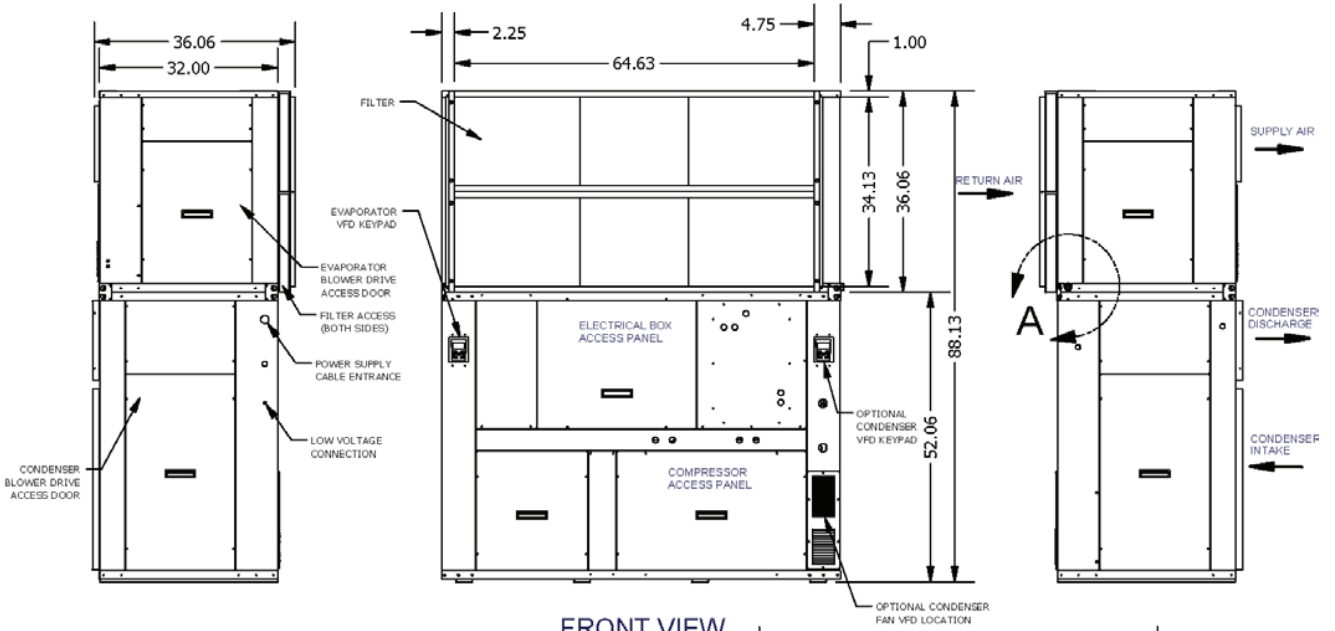
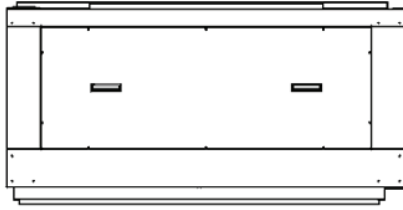
LD28334

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

## DSV096C/DSV120C REAR DISCHARGE AIR-COOLED UNIT

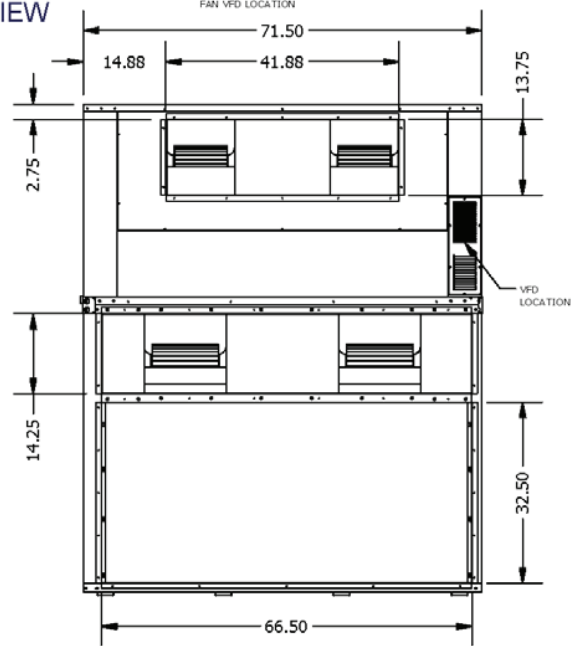
### 8 & 10 TON VERTICAL A/C UNIT DIMENSIONAL DATA

FRONT RETURN,  
REAR DISCHARGE



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



LD28335

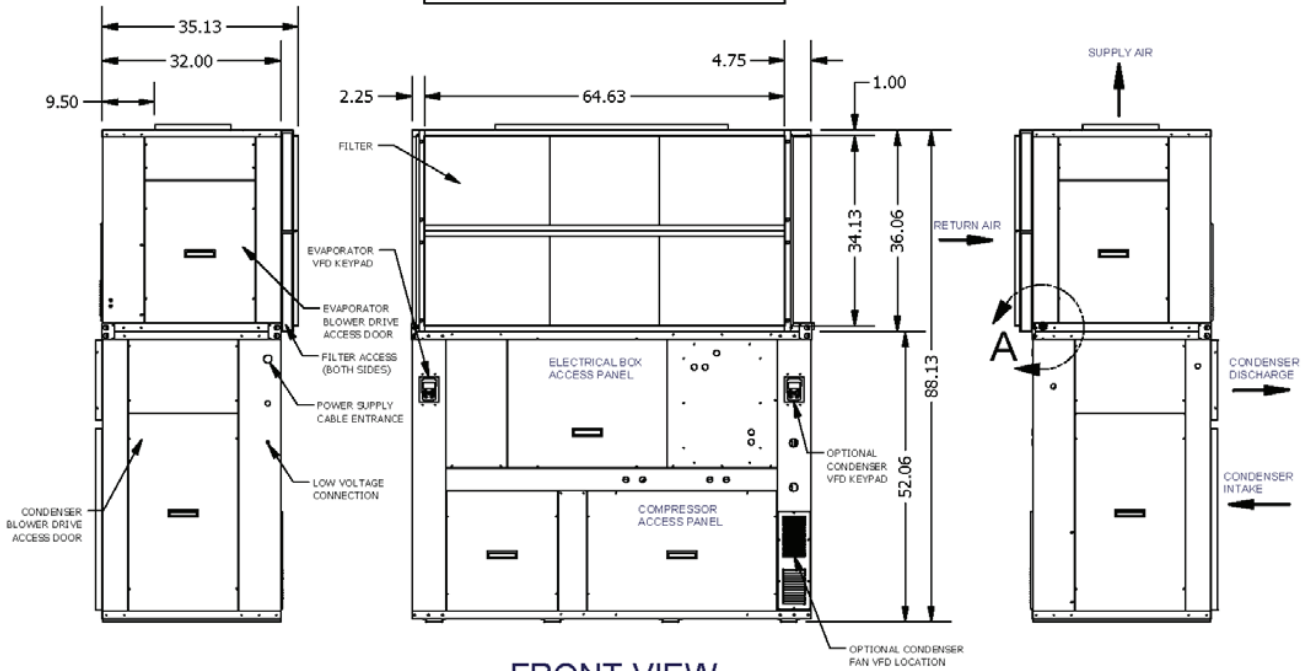
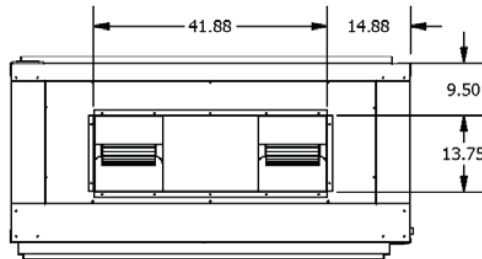
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

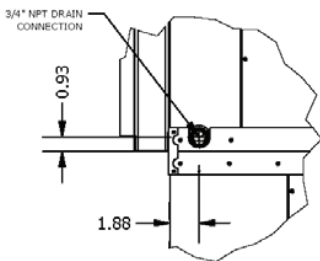
## DSV096C/DSV120C VERTICAL DISCHARGE AIR-COOLED UNIT

8 & 10 TON VERTICAL A/C  
UNIT DIMENSIONAL DATA

FRONT RETURN,  
TOP DISCHARGE

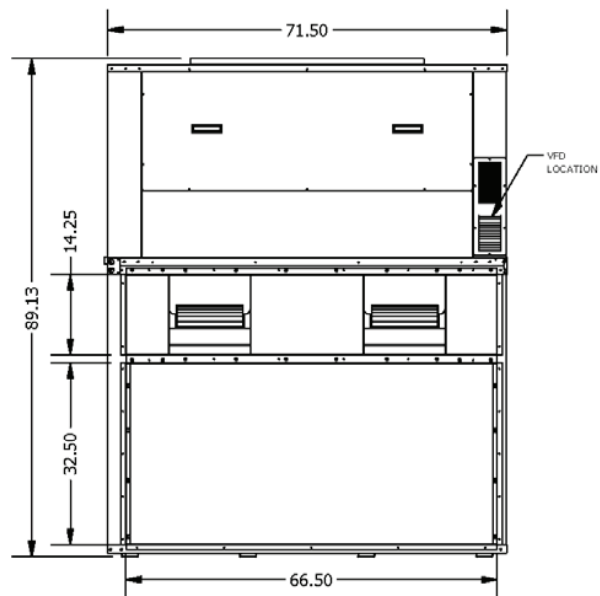


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

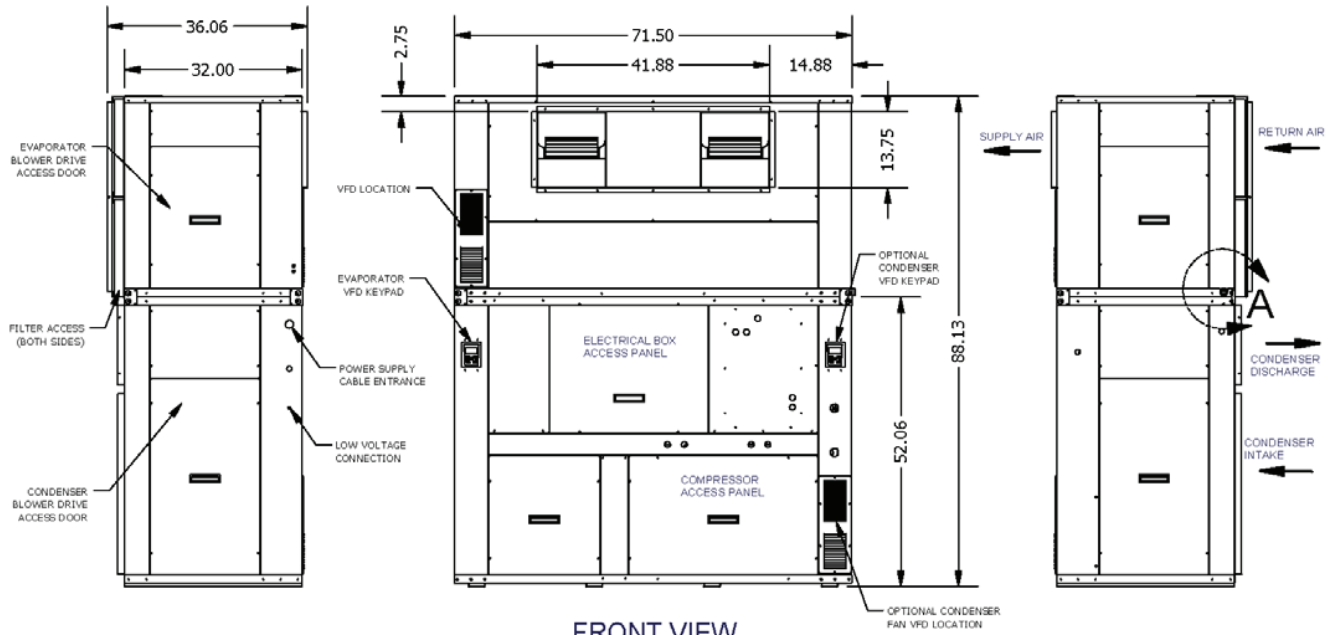
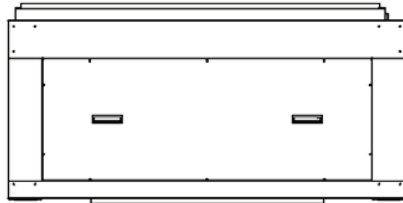
LD28336

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

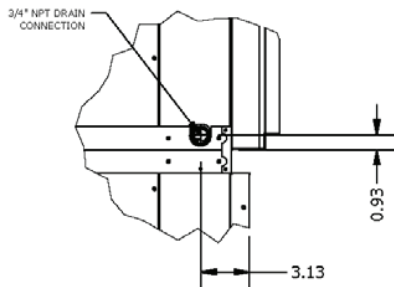
## DSV096C/DSV120C FRONT DISCHARGE AIR-COOLED UNIT

8 & 10 TON VERTICAL A/C  
UNIT DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE

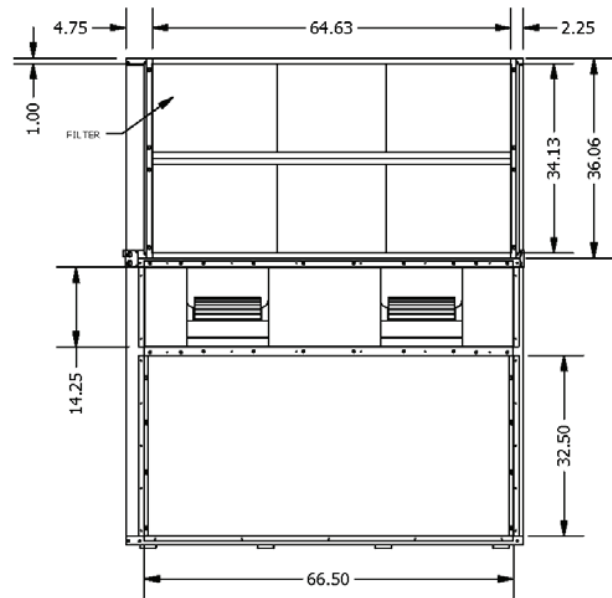


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

LD28337

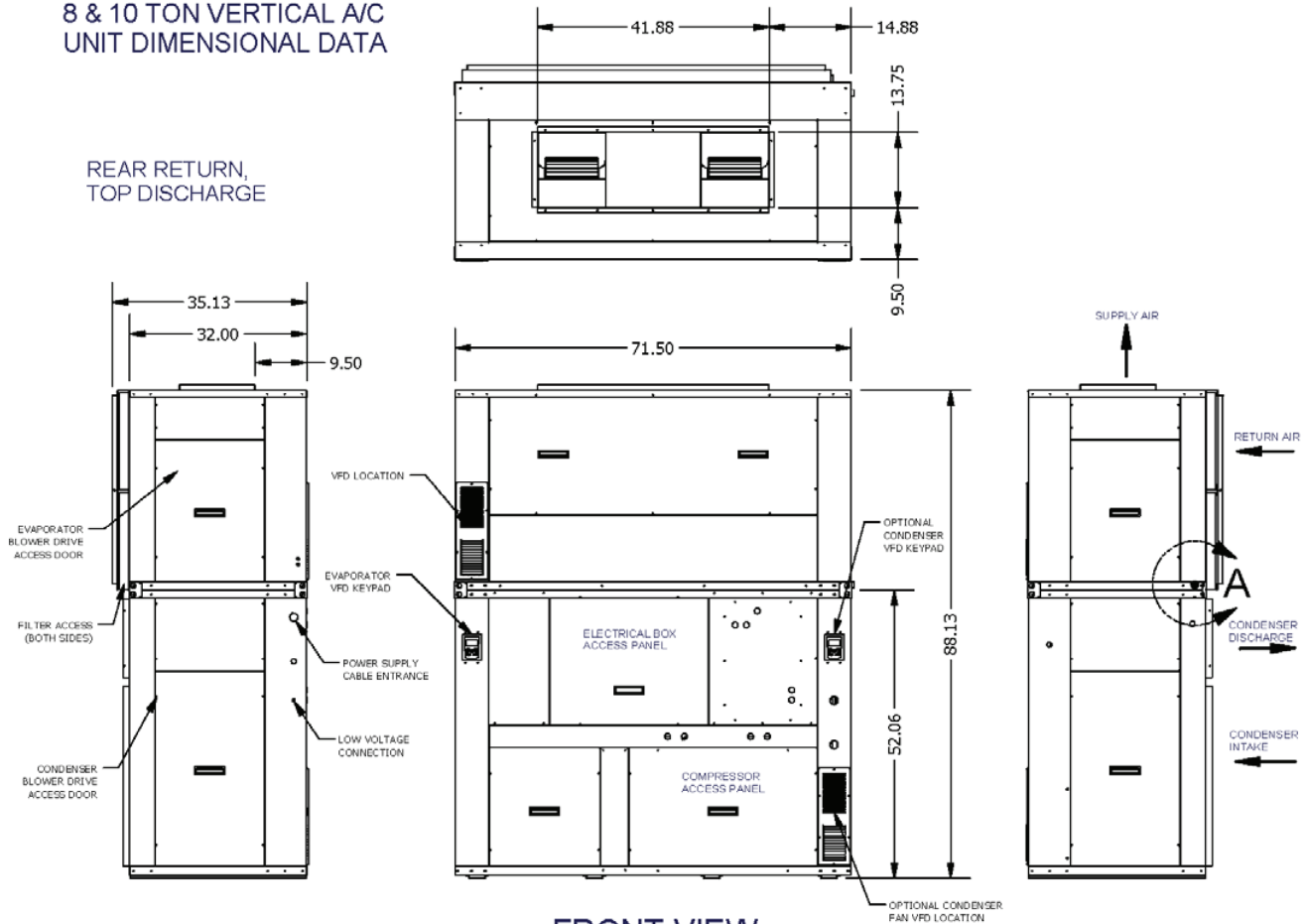
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

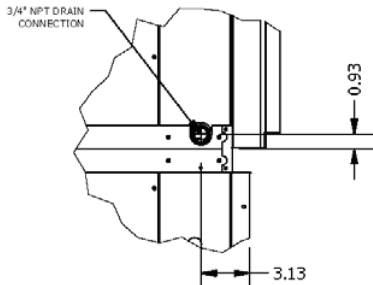
## DSV096C/DSV120C VERTICAL DISCHARGE AIR-COOLED UNIT

8 & 10 TON VERTICAL A/C  
UNIT DIMENSIONAL DATA

REAR RETURN,  
TOP DISCHARGE

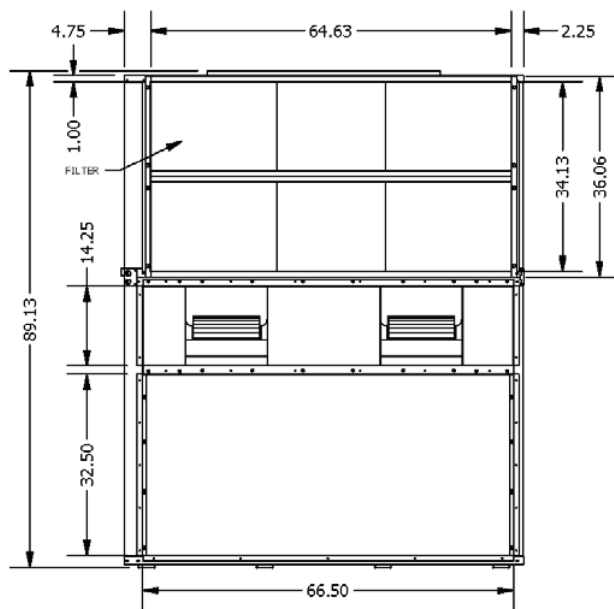


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

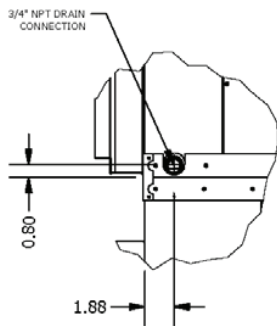
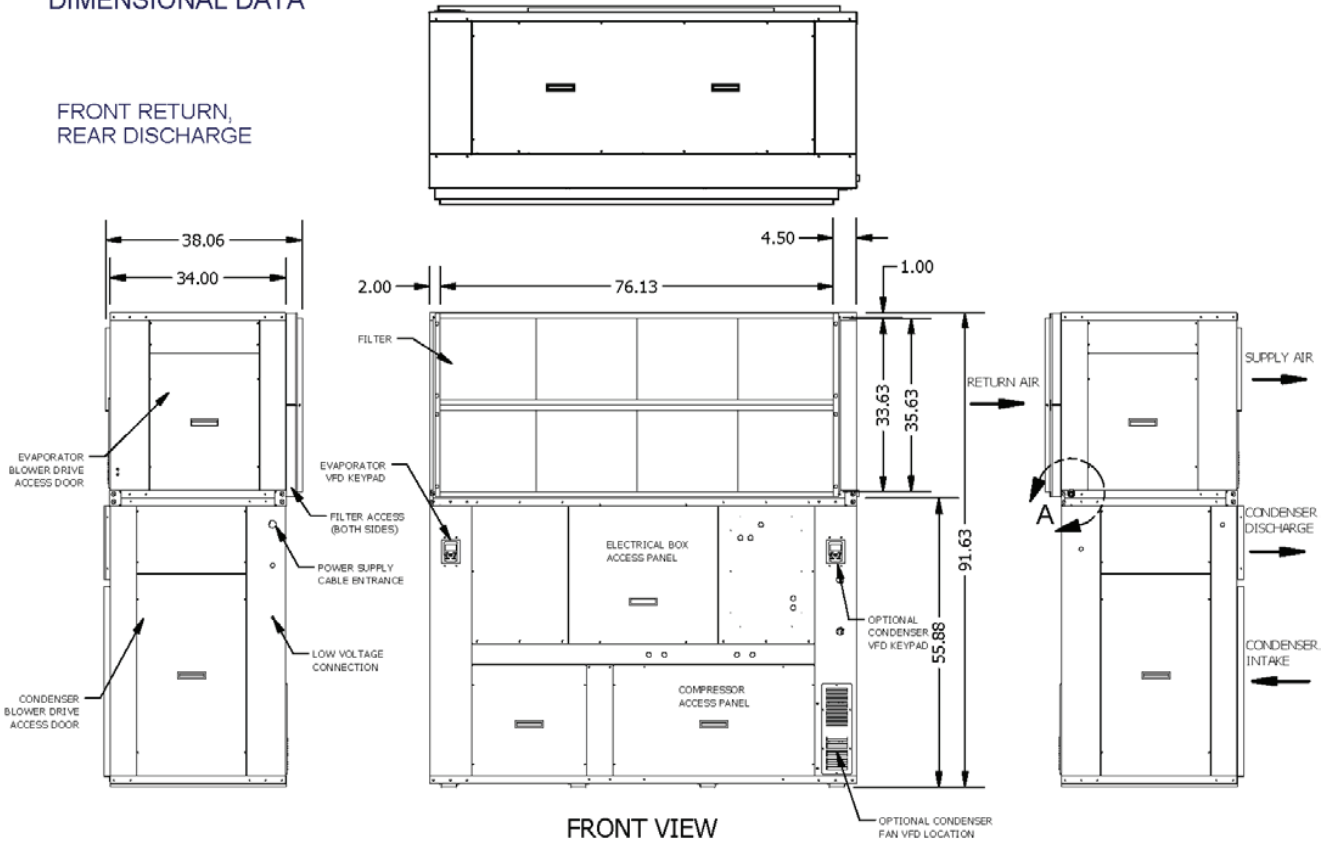
LD28338

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

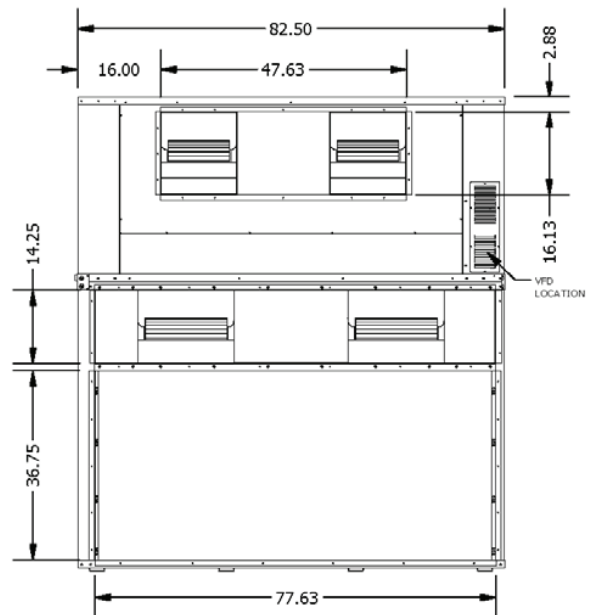


## DSV144C REAR DISCHARGE AIR-COOLED UNIT

12 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA



NOTE: DIMENSION TOLERANCE IS 1/16"



LD28343

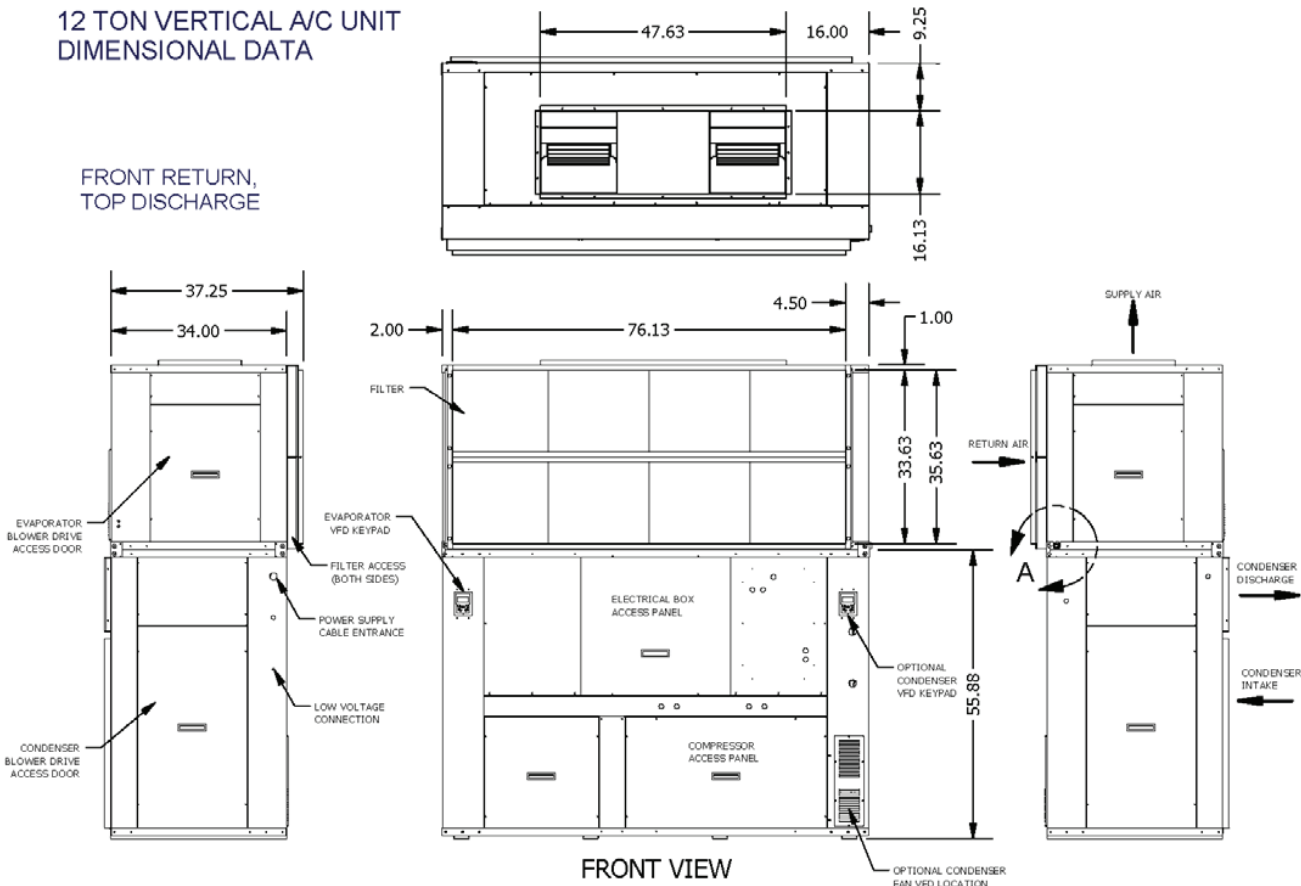
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

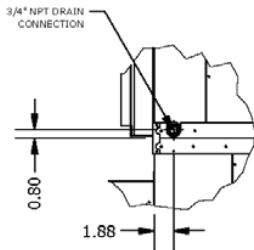
## DSV144C VERTICAL DISCHARGE AIR-COOLED UNIT

12 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
TOP DISCHARGE

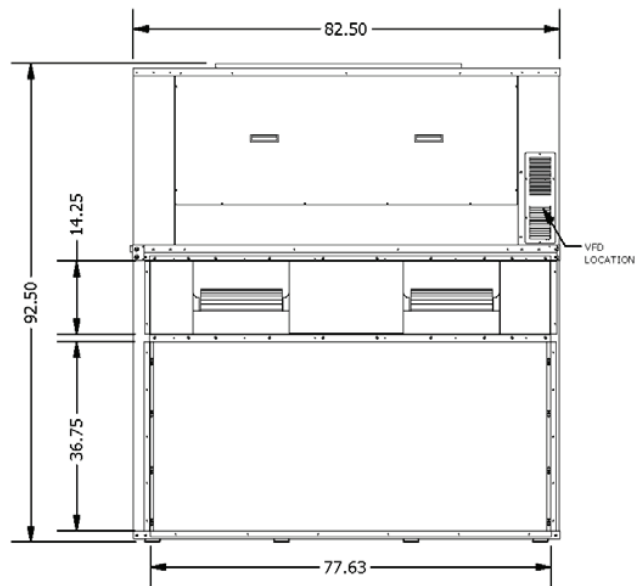


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

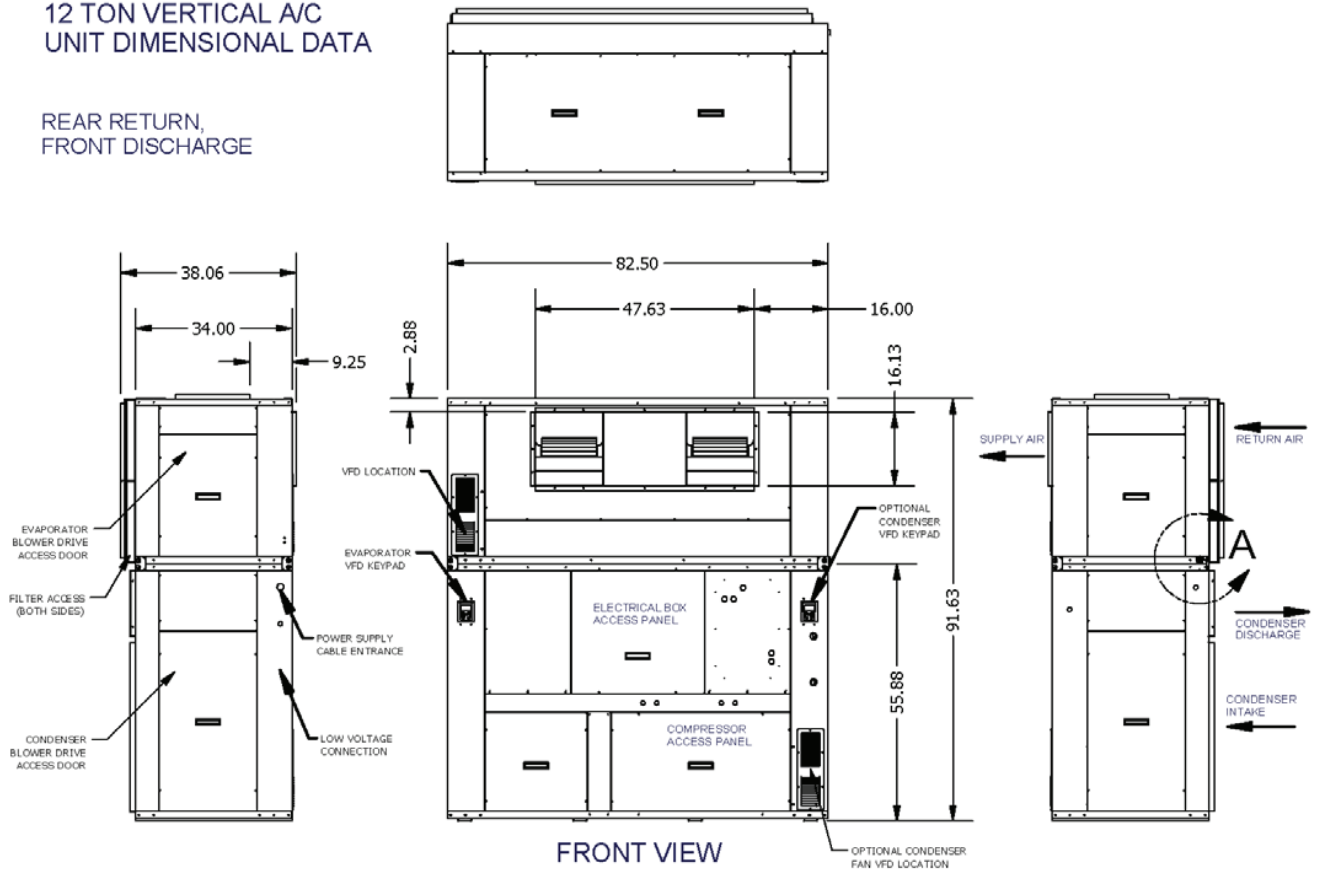
LD28344

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

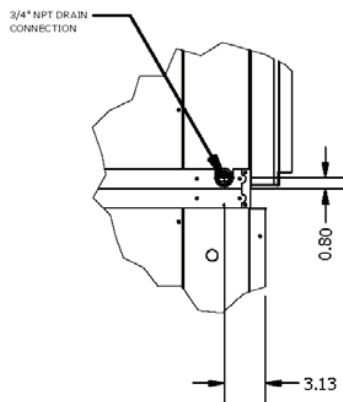
## DSV144C FRONT DISCHARGE AIR-COOLED UNIT

12 TON VERTICAL A/C  
UNIT DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE

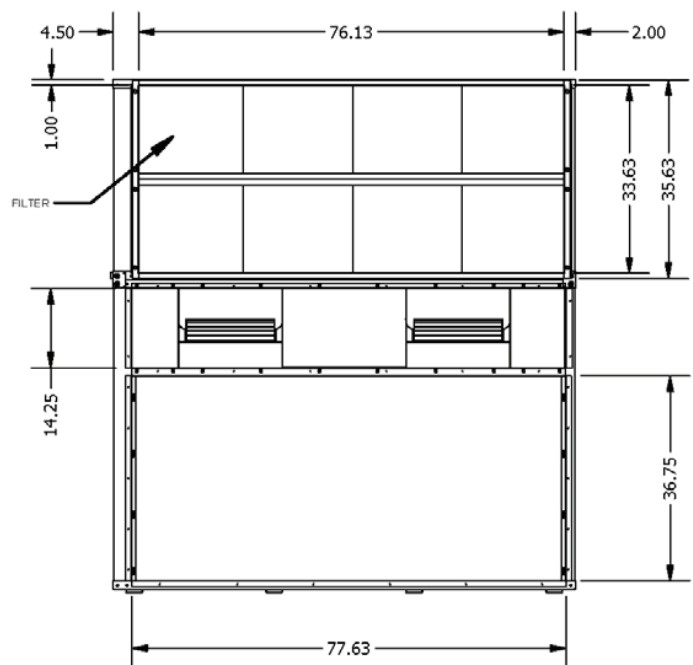


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

LD28345

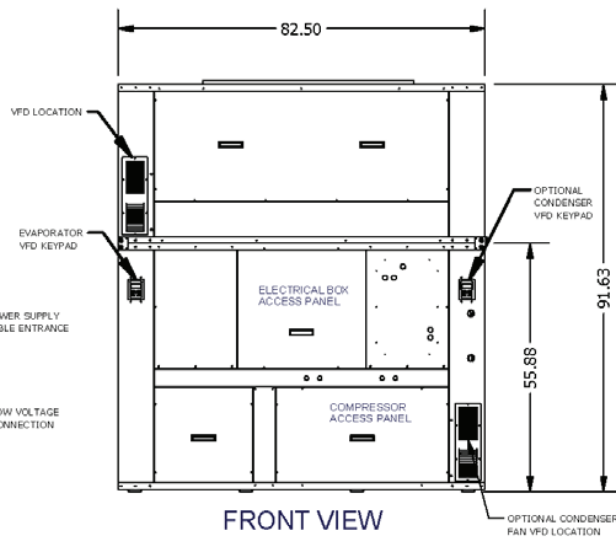
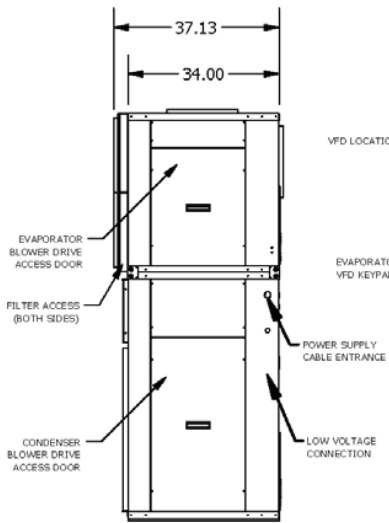
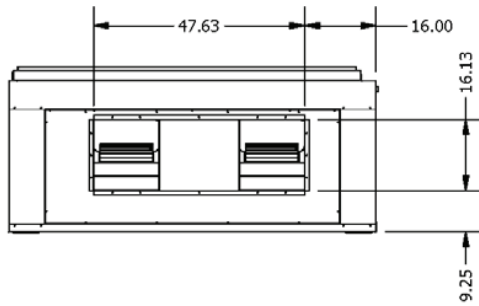
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

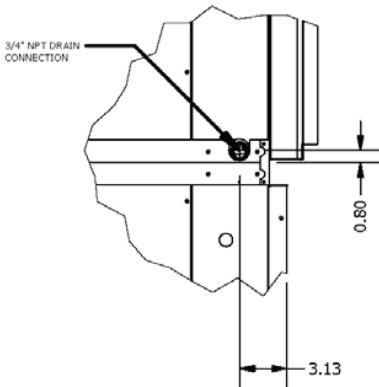
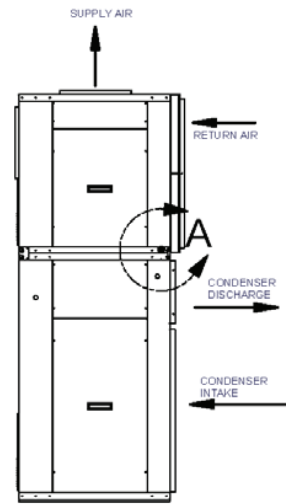
## DSV144C VERTICAL DISCHARGE AIR-COOLED UNIT

12 TON VERTICAL A/C  
UNIT DIMENSIONAL DATA

FRONT RETURN,  
TOP DISCHARGE

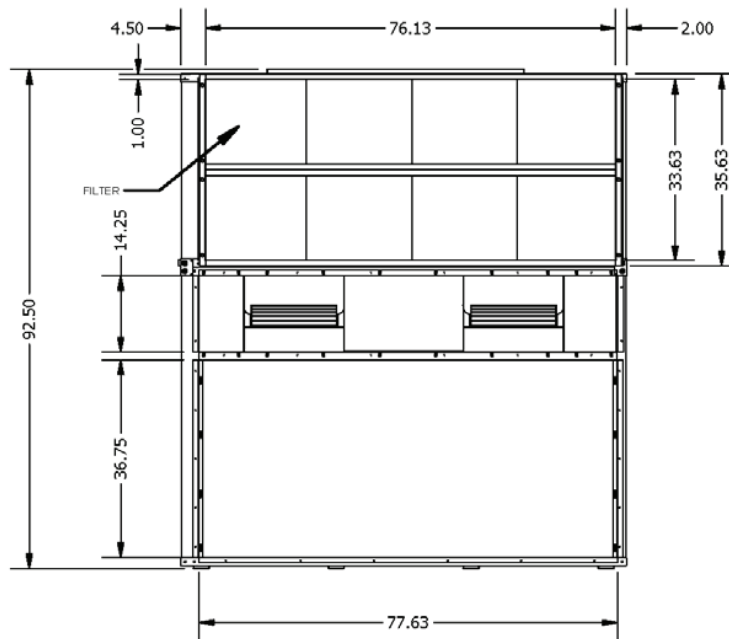


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

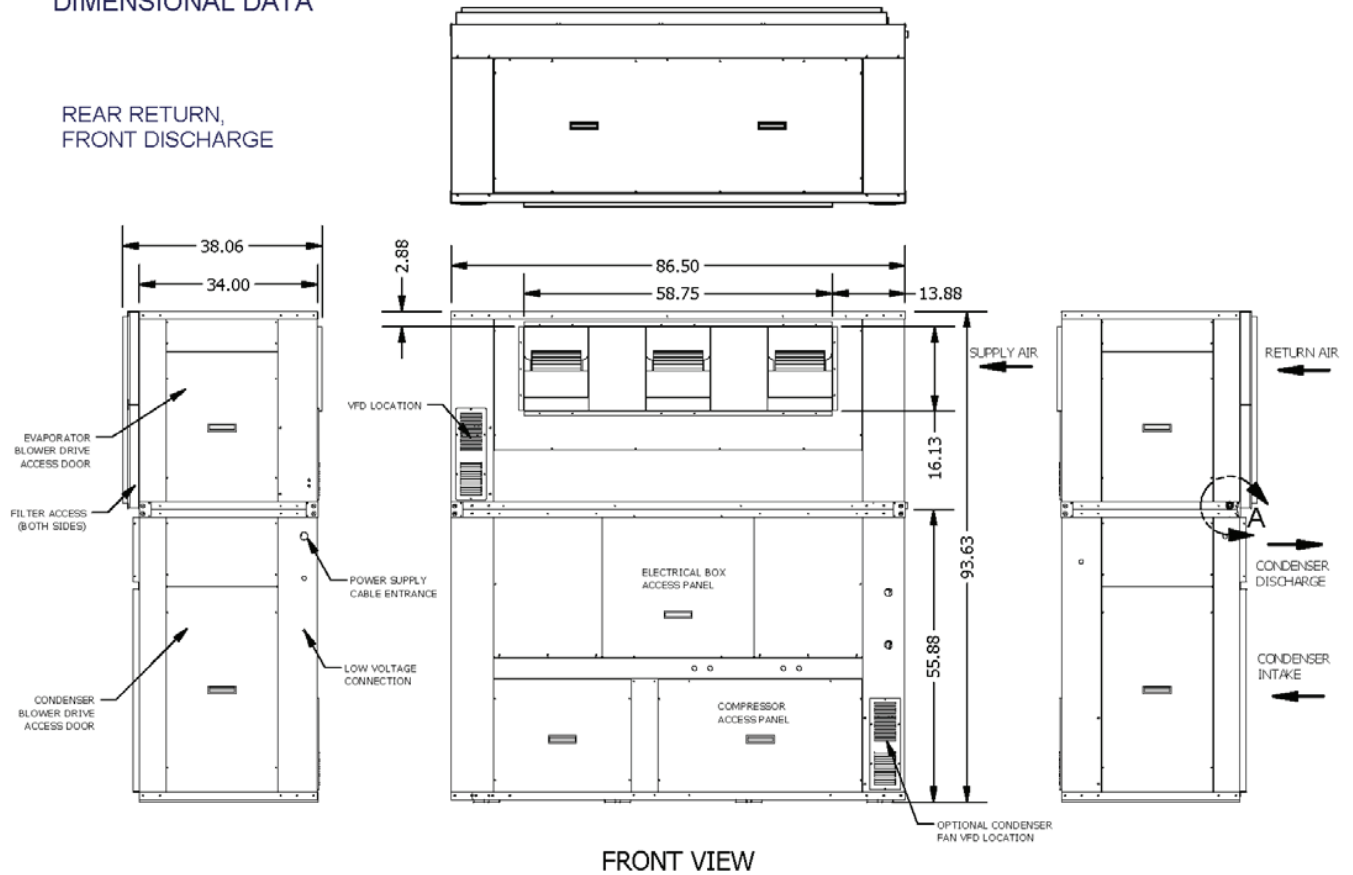
LD28346

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

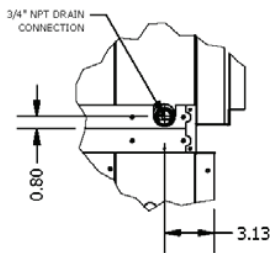
## DSV180C FRONT DISCHARGE AIR-COOLED UNIT

15 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE

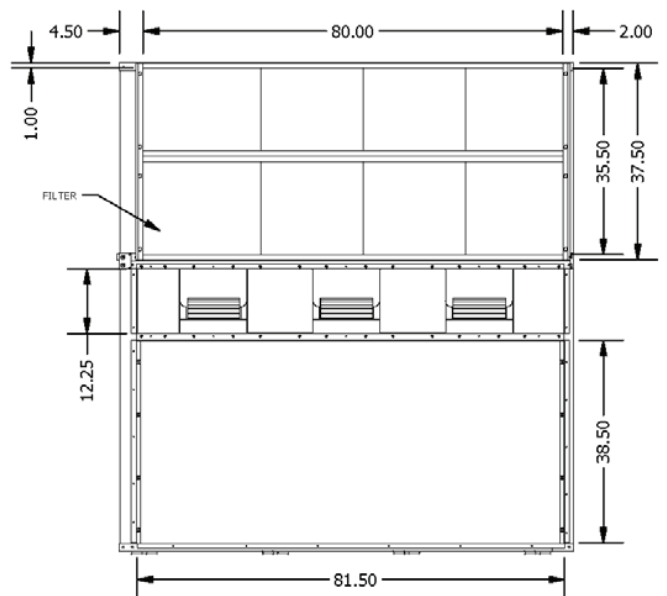


FRONT VIEW



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

LD28339

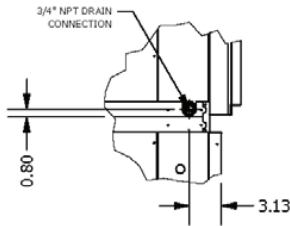
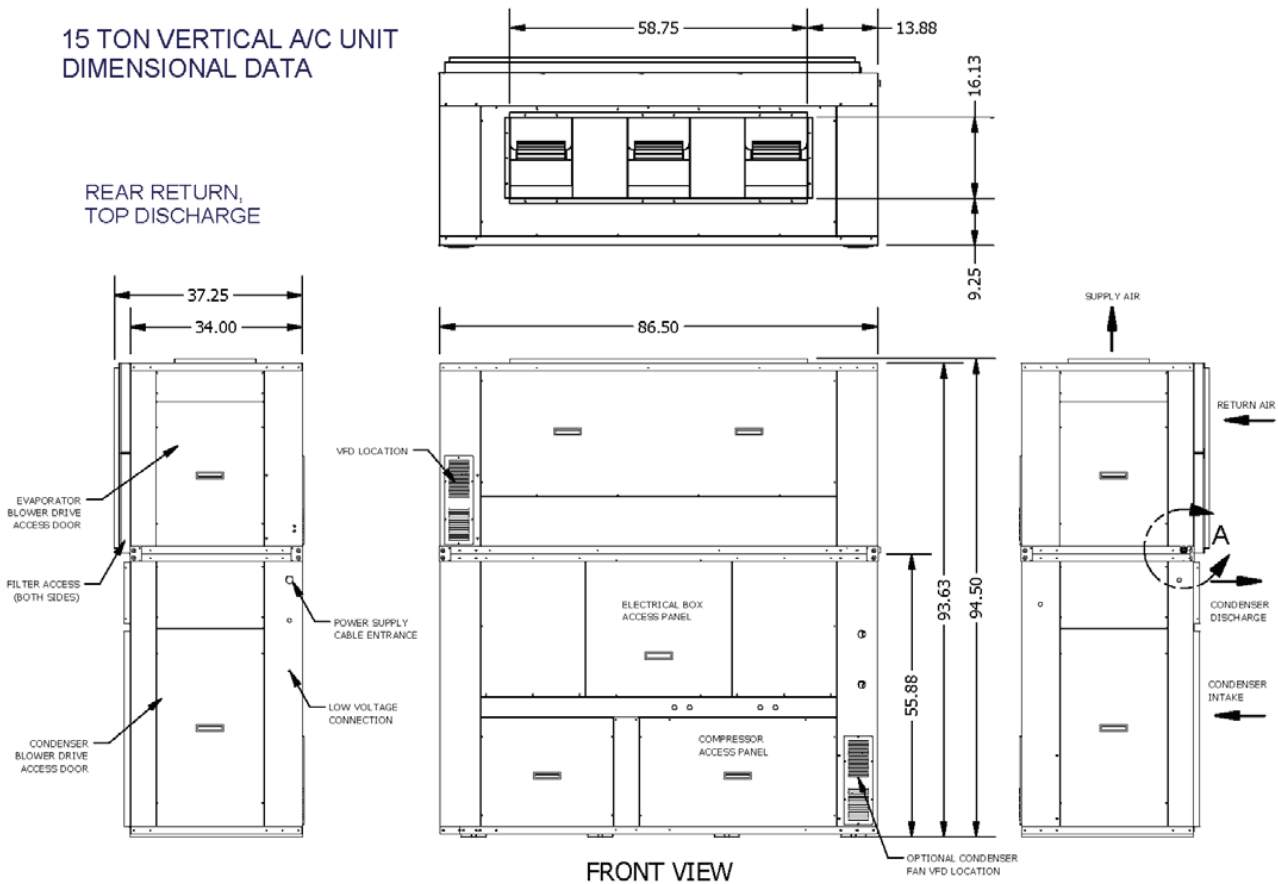
SkyMark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

## DSV180C VERTICAL DISCHARGE AIR-COOLED UNIT

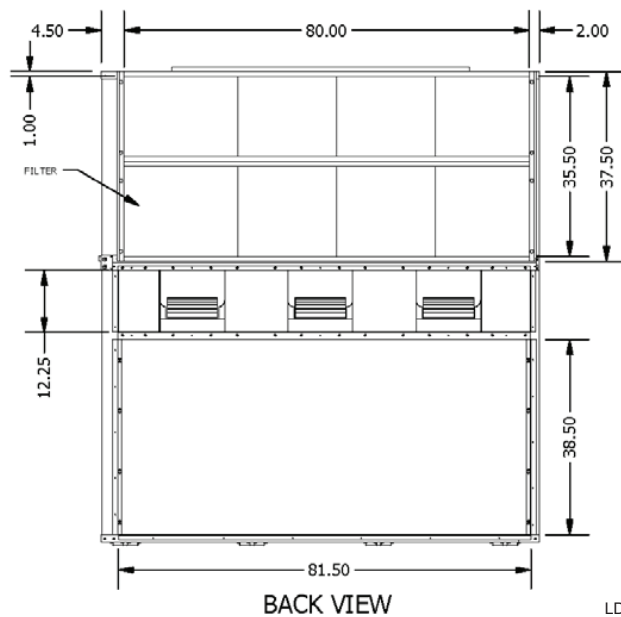
15 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
TOP DISCHARGE



DETAIL A

NOTE: DIMENSION TOLERANCE IS 1/16"



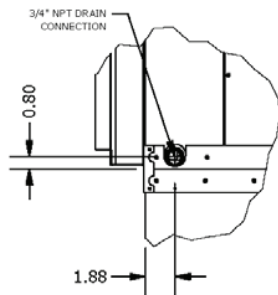
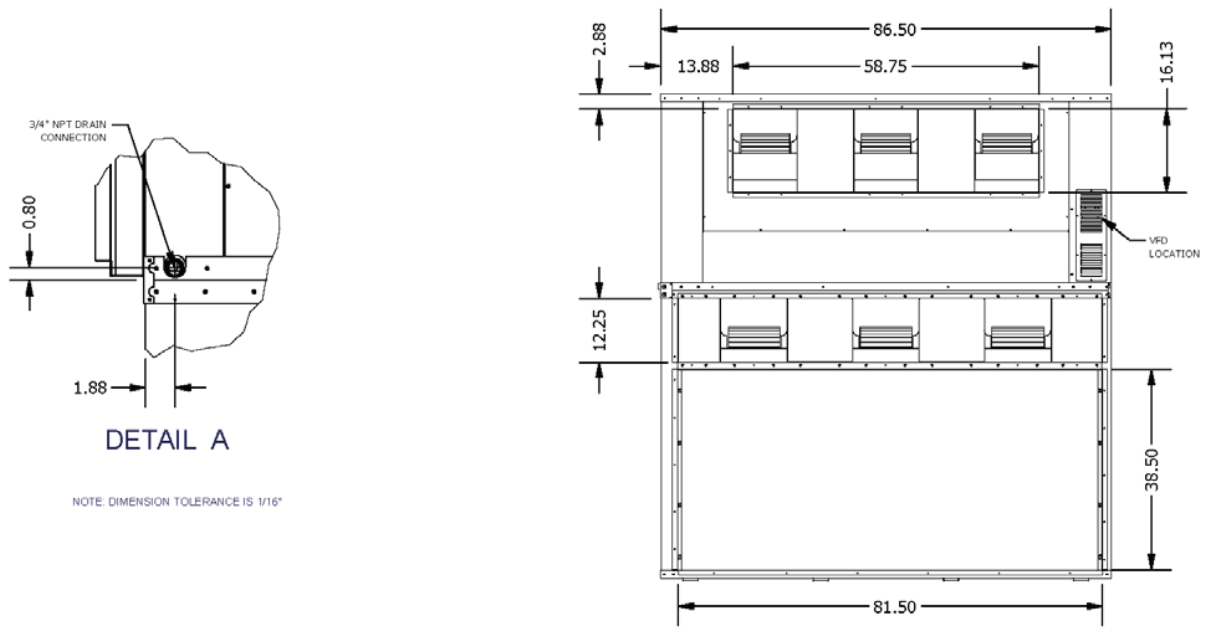
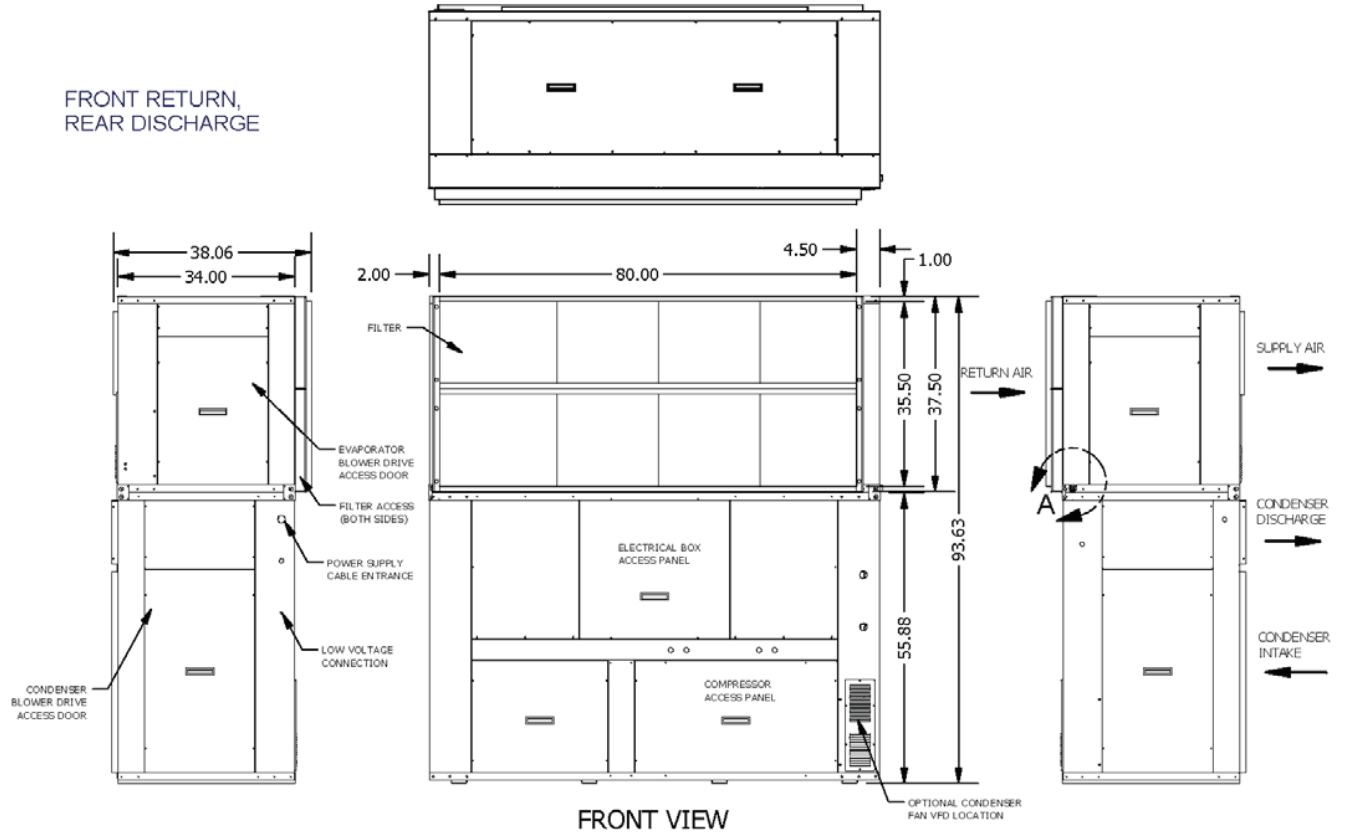
LD28340

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

## DSV180C REAR DISCHARGE AIR-COOLED UNIT

15 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
REAR DISCHARGE



NOTE: DIMENSION TOLERANCE IS 1/16"

LD28341

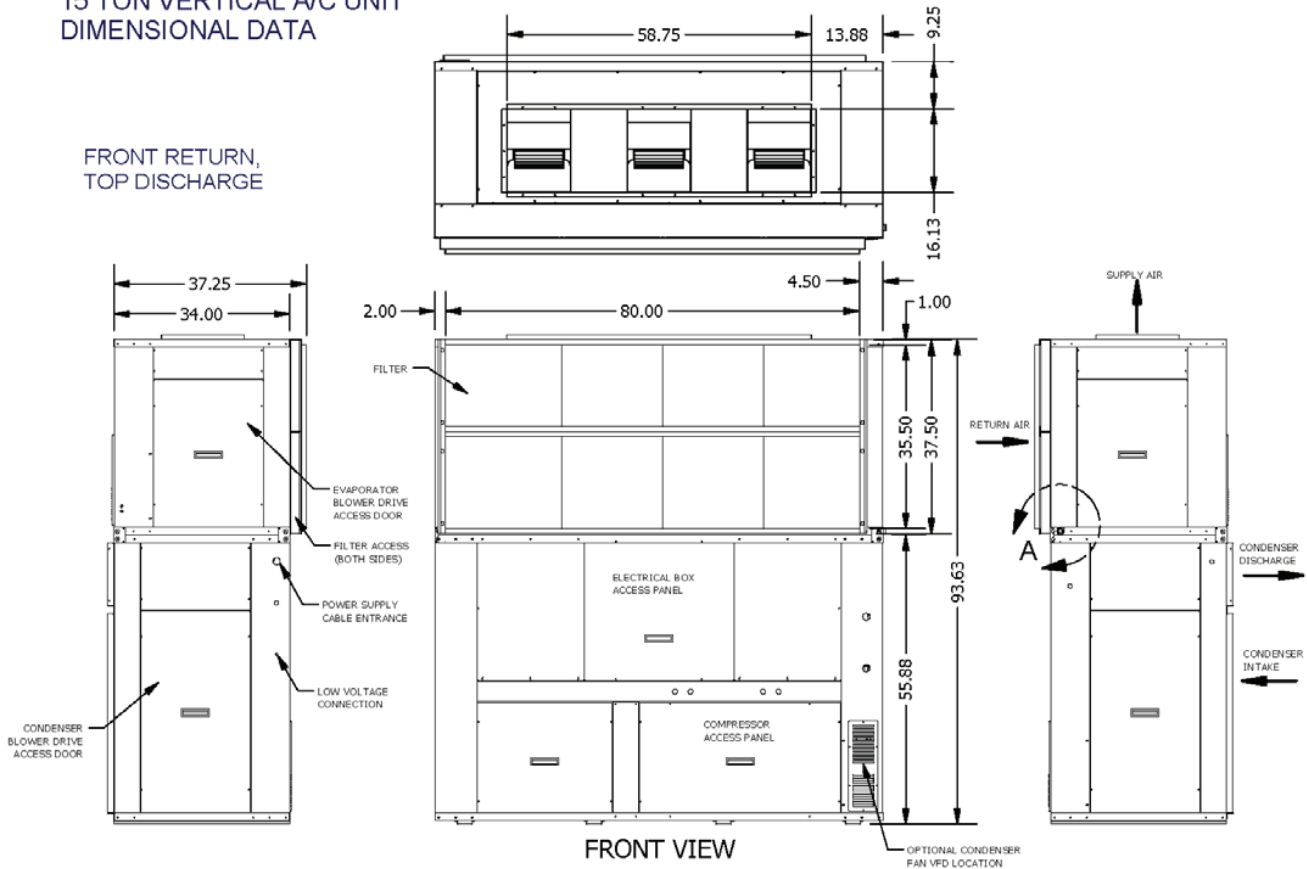
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

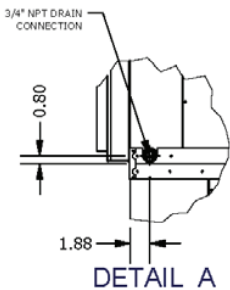
## DSV180C VERTICAL DISCHARGE AIR-COOLED UNIT

15 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

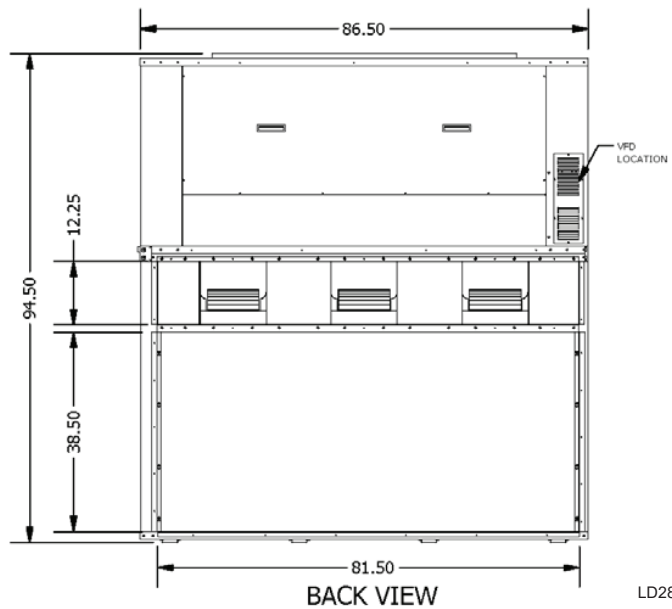
FRONT RETURN,  
TOP DISCHARGE



FRONT VIEW



NOTE: DIMENSION TOLERANCE IS 1/16"



BACK VIEW

LD28342

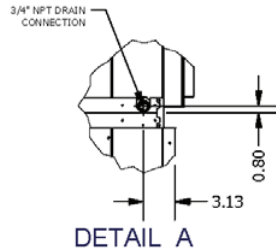
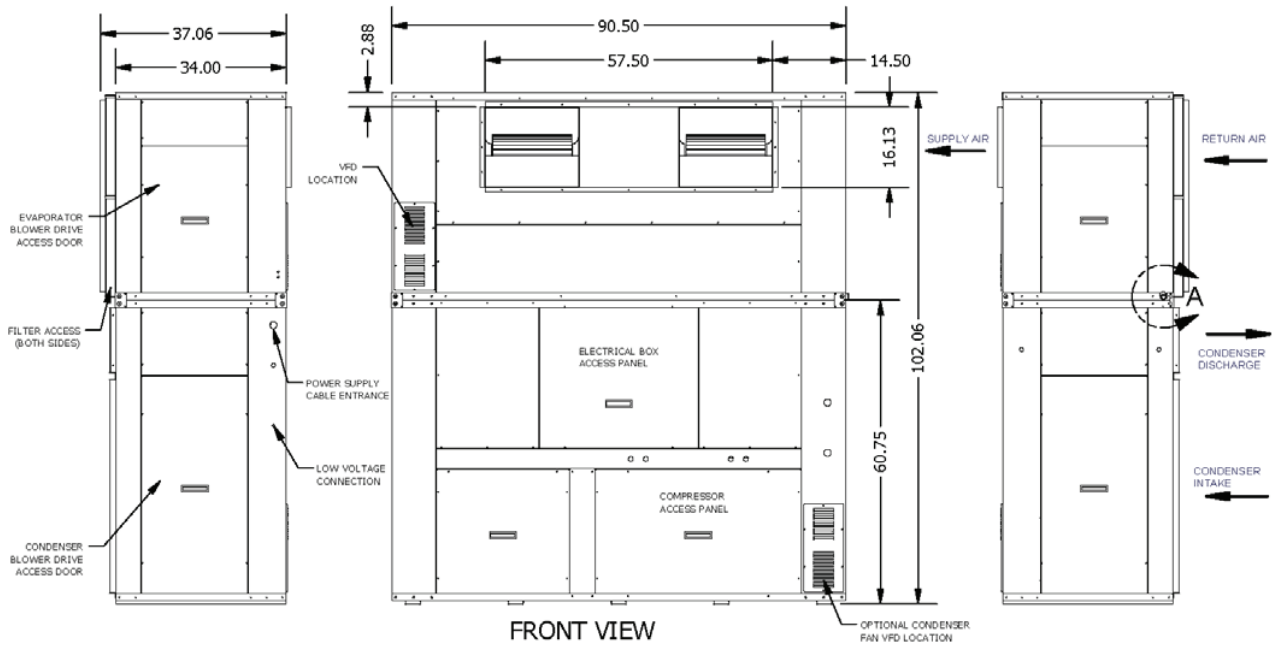
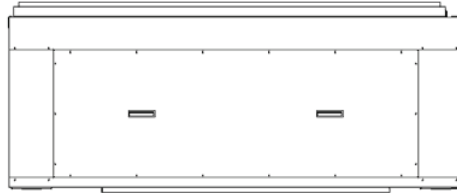
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.



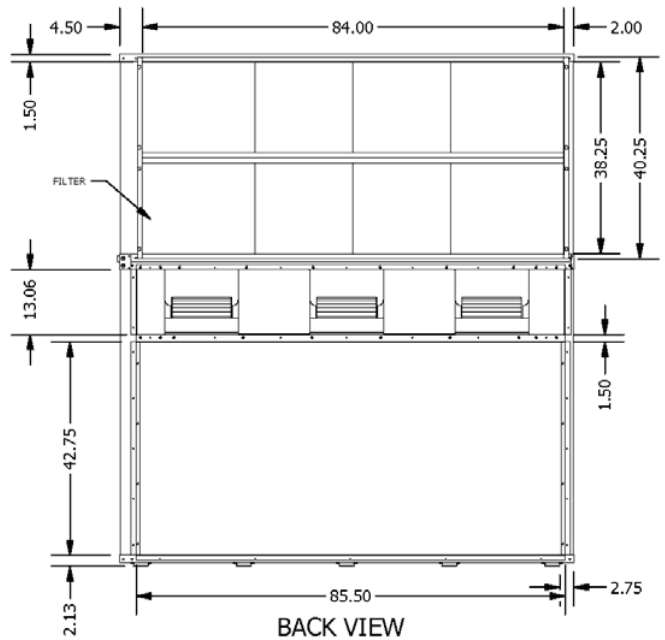
## DSV240C FRONT DISCHARGE AIR-COOLED UNIT

20 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE



NOTE: DIMENSION TOLERANCE IS 1/16"



Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

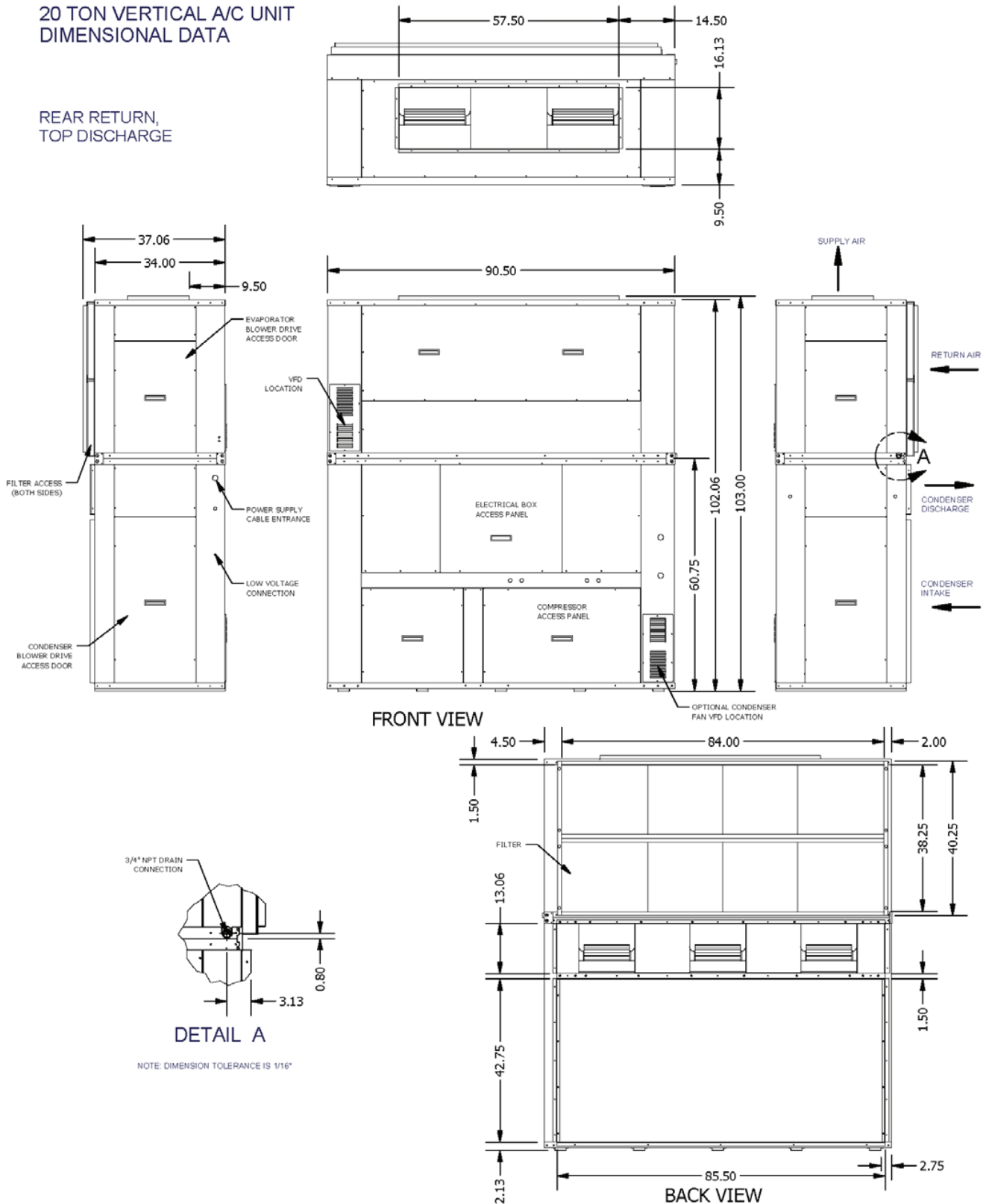
LD28347

# DSV Dimensional Data (Cont'd)

## DSV240C VERTICAL DISCHARGE AIR-COOLED UNIT

20 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
TOP DISCHARGE



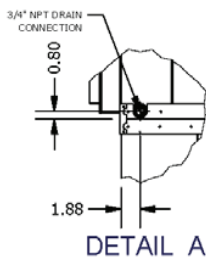
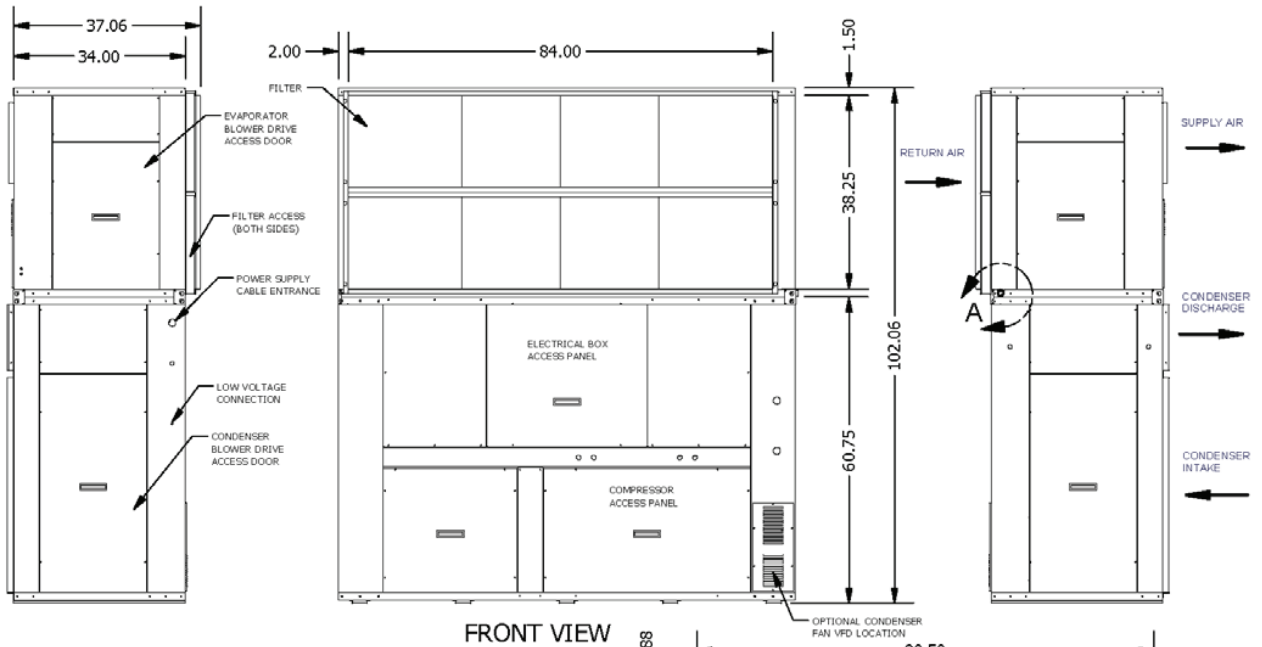
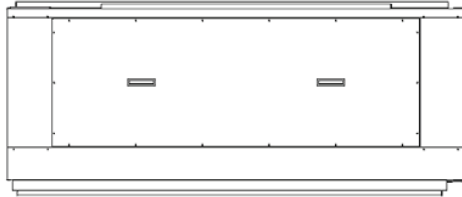
LD28348

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

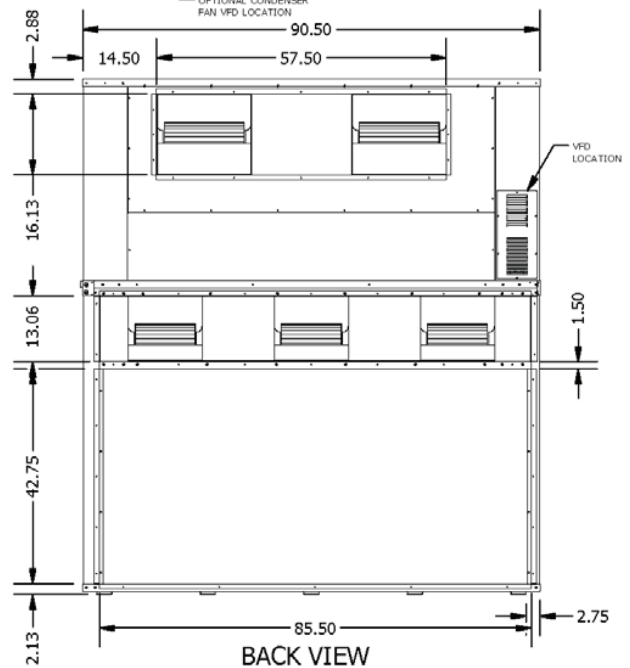
## DSV240C REAR DISCHARGE AIR-COOLED UNIT

20 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
REAR DISCHARGE



NOTE: DIMENSION TOLERANCE IS 1/16"



SkyMark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

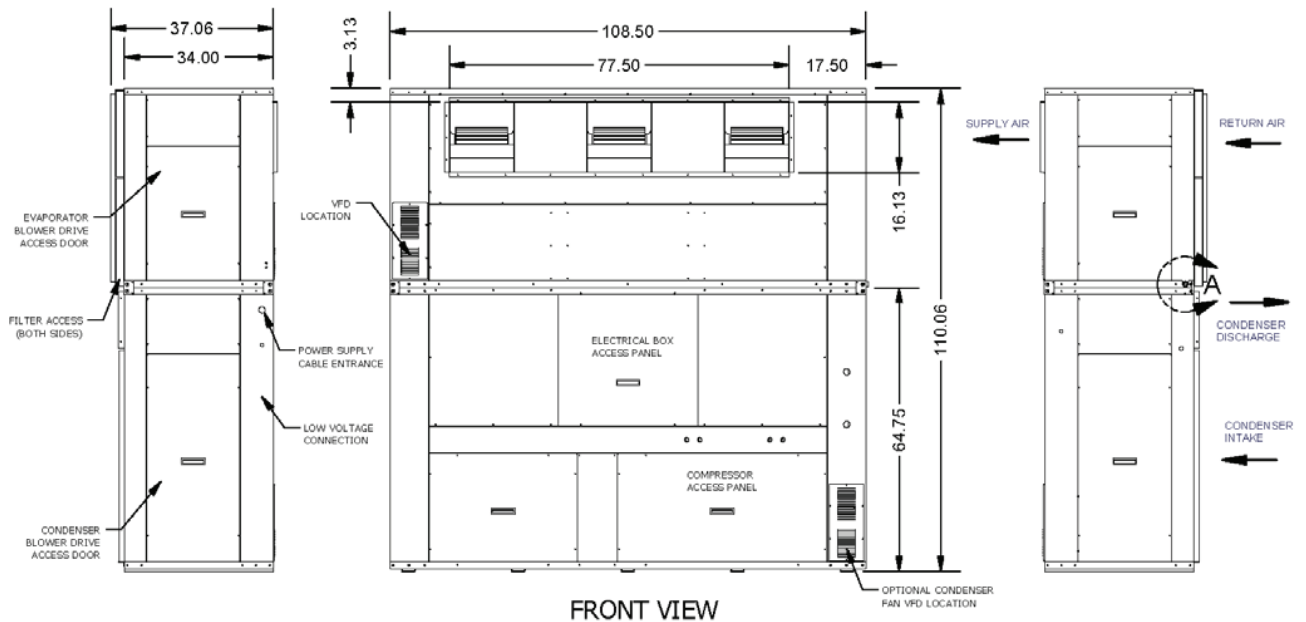
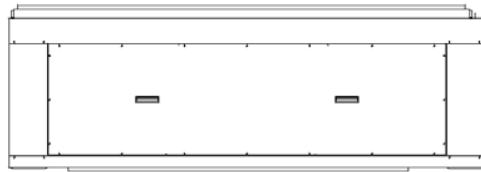
LD28349



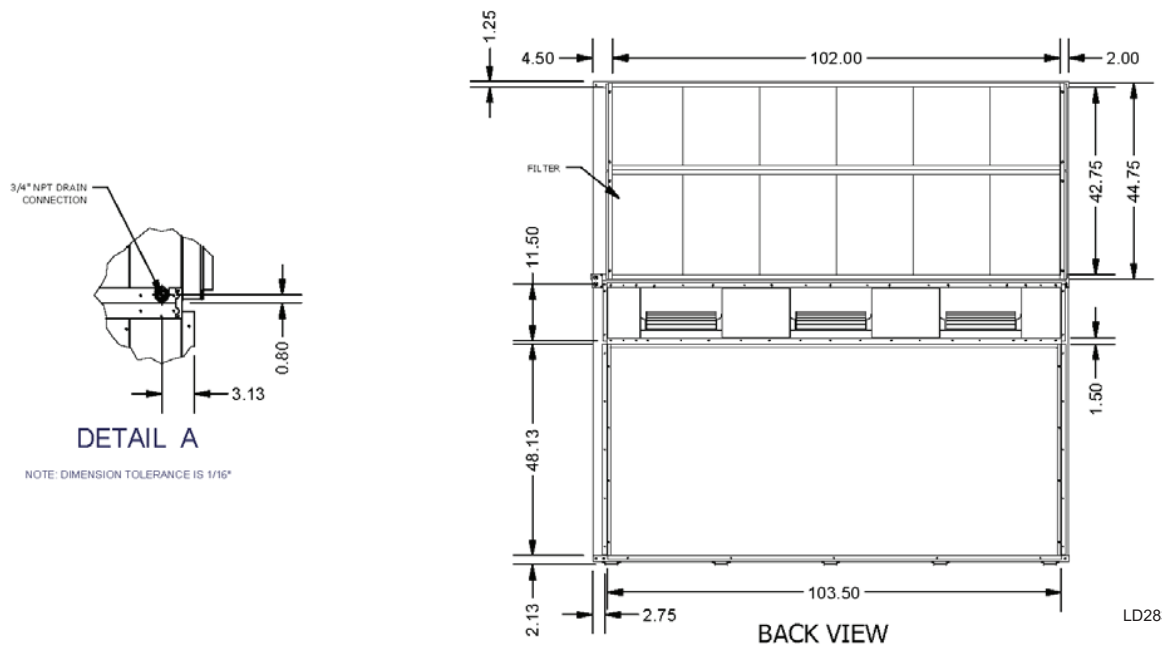
## DSV300C FRONT DISCHARGE AIR-COOLED UNIT

25 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
FRONT DISCHARGE



FRONT VIEW



BACK VIEW

LD28351

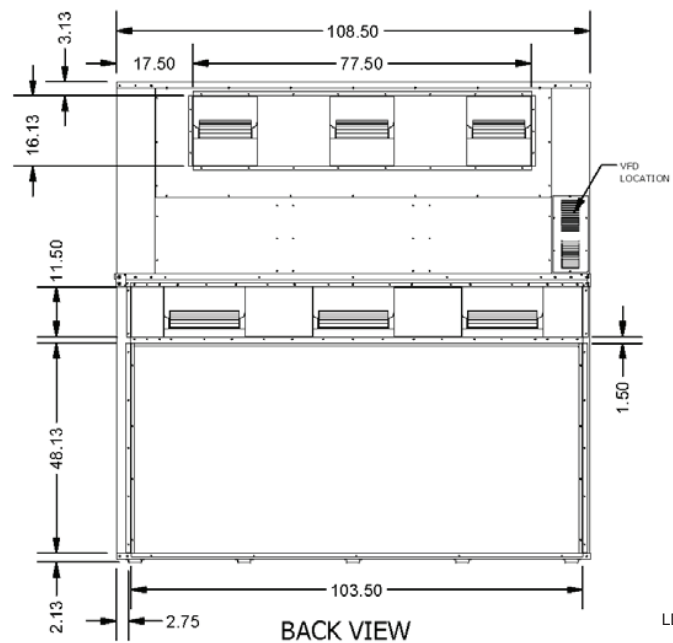
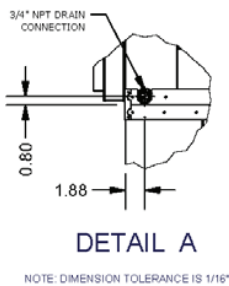
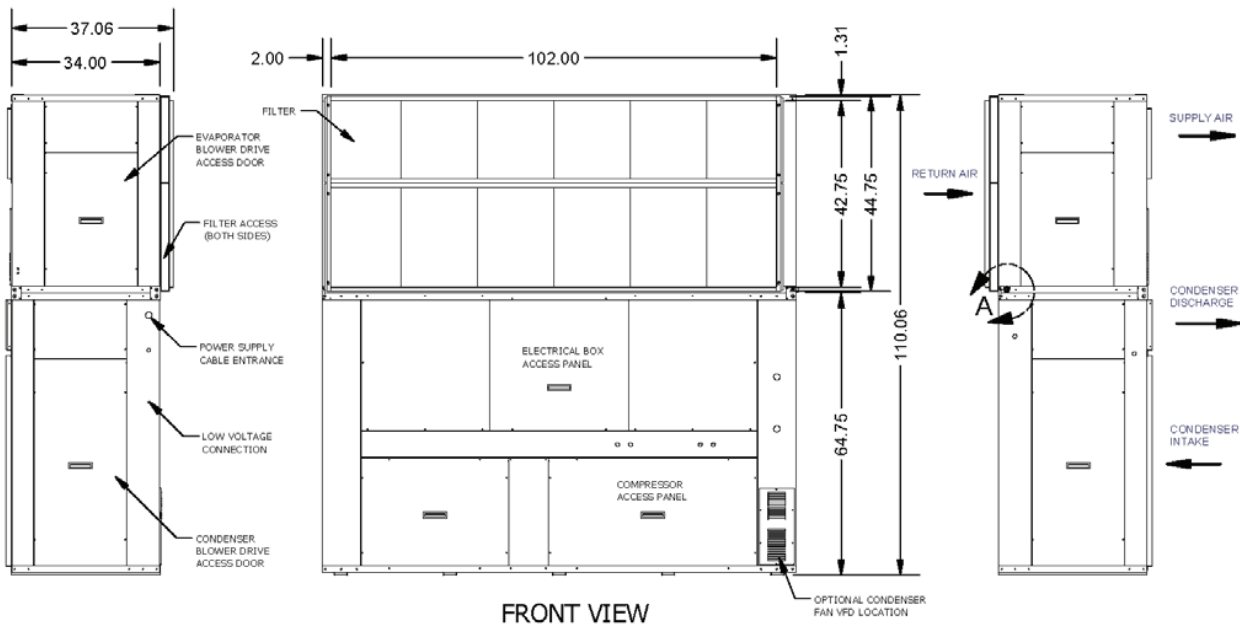
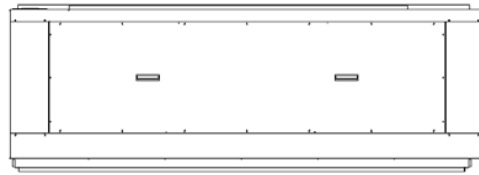
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

## DSV300C REAR DISCHARGE AIR-COOLED UNIT

25 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
REAR DISCHARGE



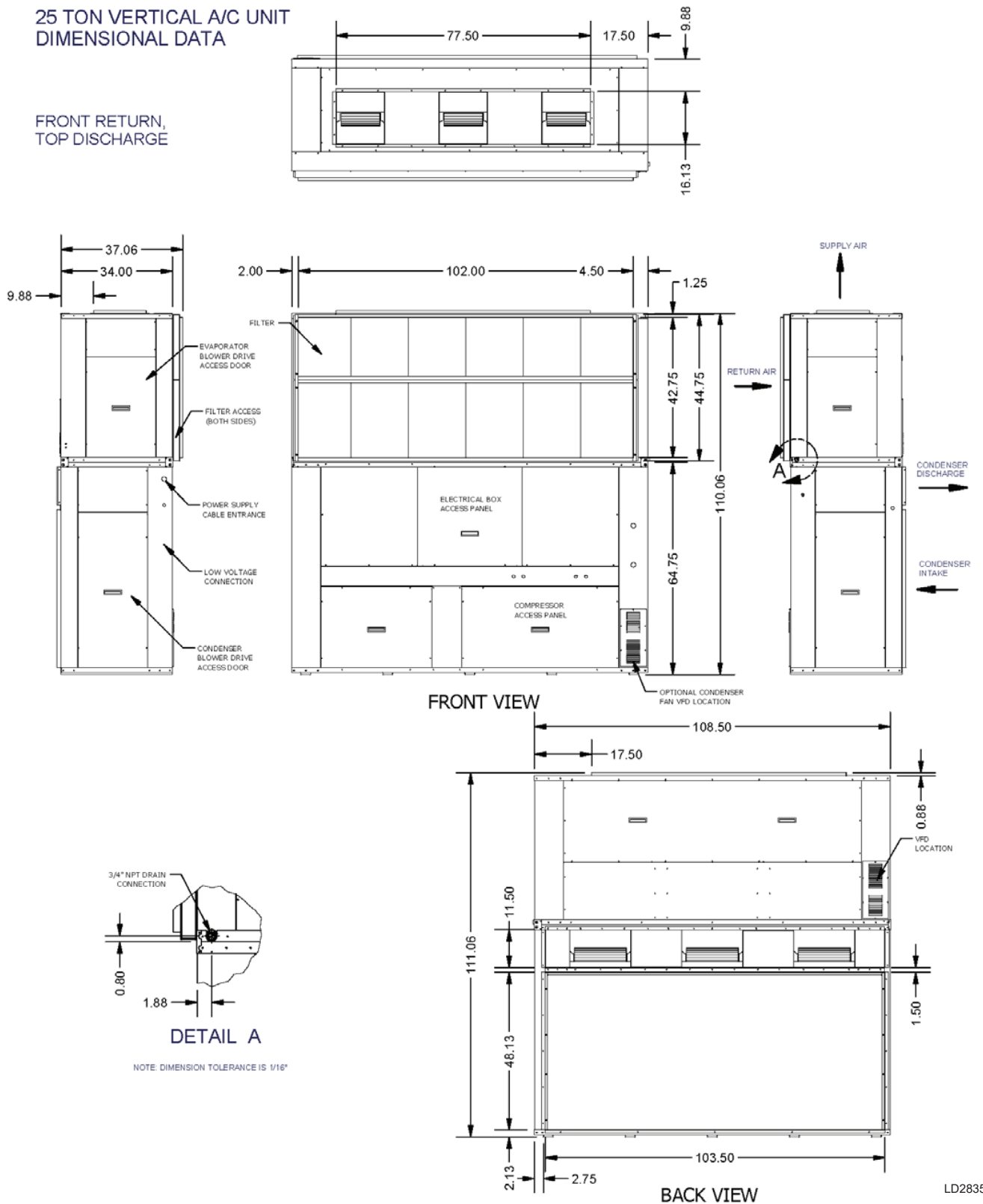
LD28352

Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

## DSV300C VERTICAL DISCHARGE AIR-COOLED UNIT

25 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

FRONT RETURN,  
TOP DISCHARGE



LD28353

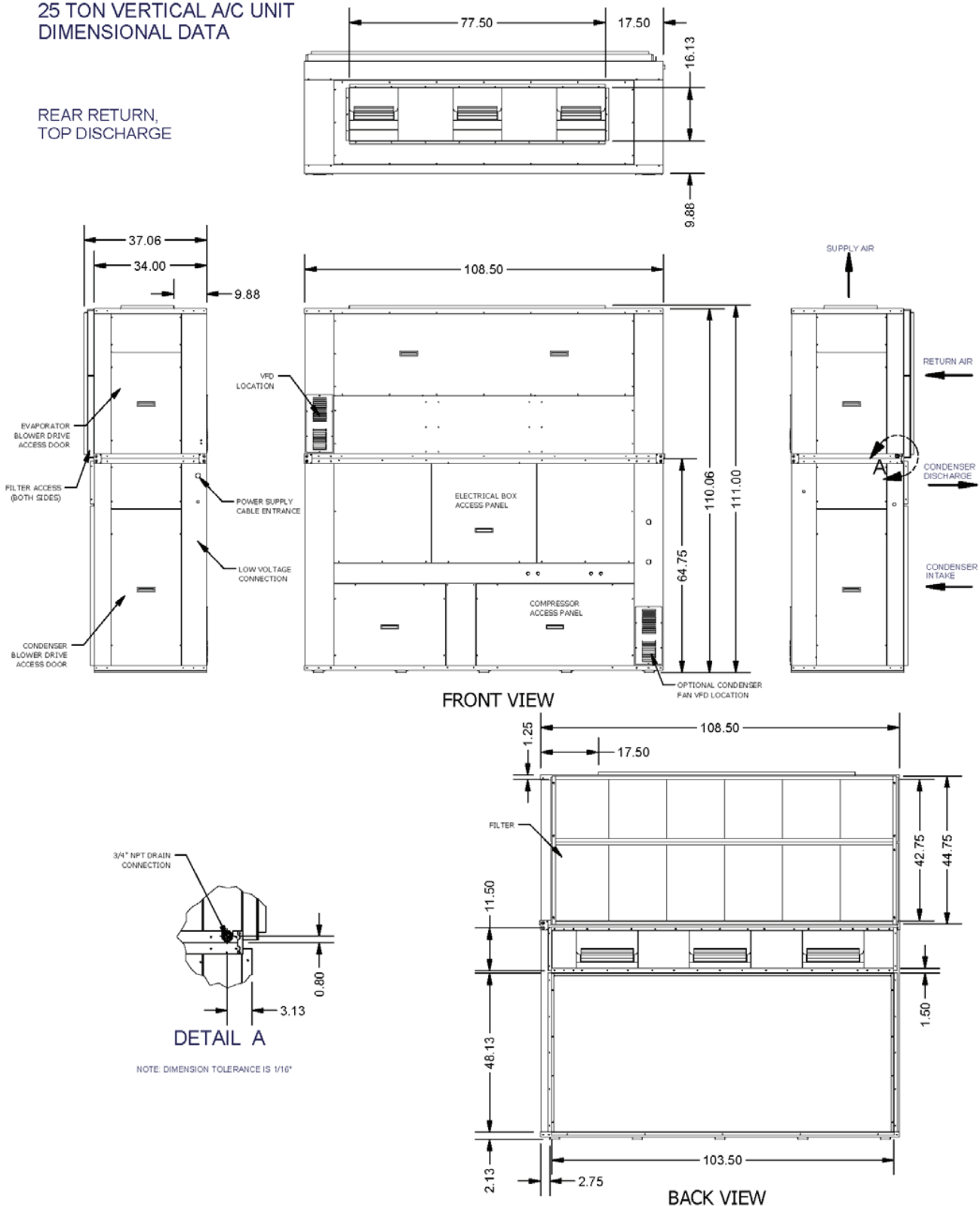
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

# DSV Dimensional Data (Cont'd)

## DSV300C VERTICAL DISCHARGE AIR-COOLED UNIT

25 TON VERTICAL A/C UNIT  
DIMENSIONAL DATA

REAR RETURN,  
TOP DISCHARGE



LD28354

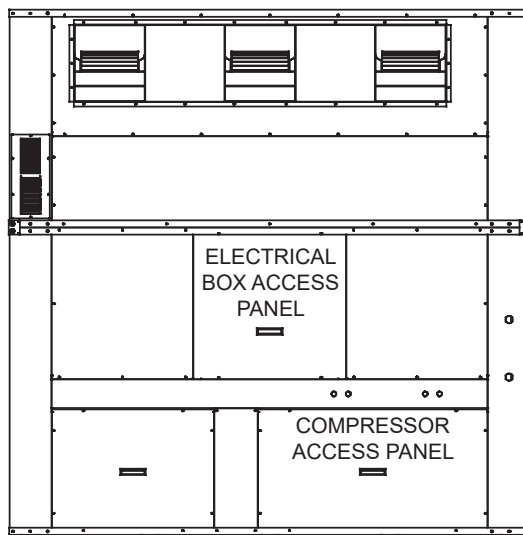
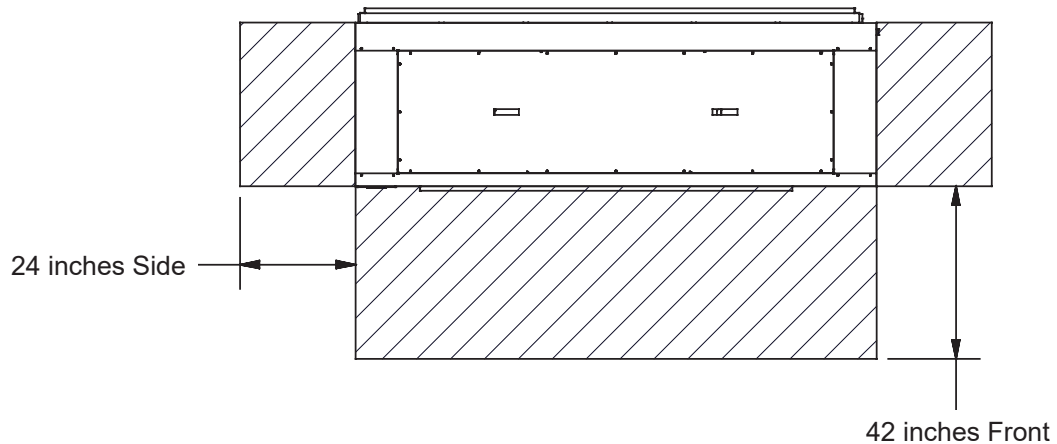
Skymark maintains a continuous product improvement policy, therefore specifications are subject to change without notice.



# DSV Typical Service Clearances

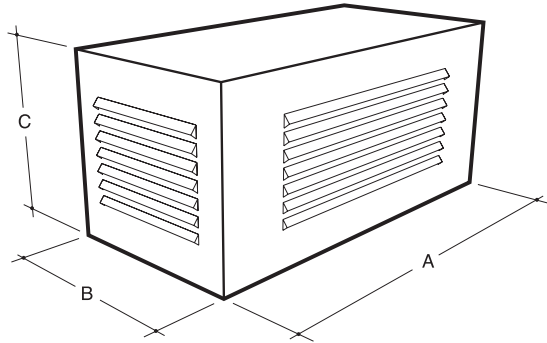
VERTICAL A/C UNIT  
SERVICE CLEARANCES

TOP VIEW



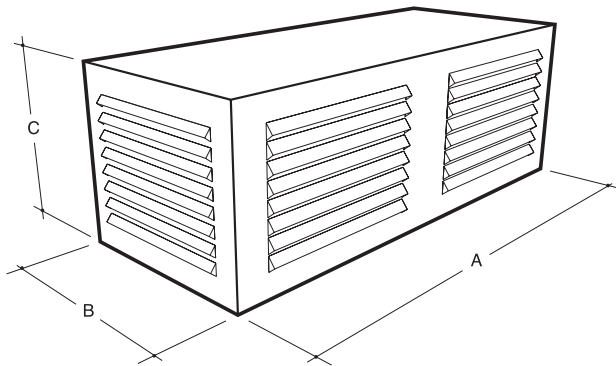
FRONT VIEW

# DSV Discharge Plenum



**TABLE 29 - PLENUM DIMENSIONS (INCHES)**

UNIT SIZE	DIMENSIONS			SIDE GRILL	FRONT GRILL
	A	B	C		
5 TON	52	29	24	16x12 (2x)	32x12
8 TON	71.5	32	24	20x18 (2x)	48x18



**TABLE 30 - PLENUM DIMENSIONS (INCHES)**

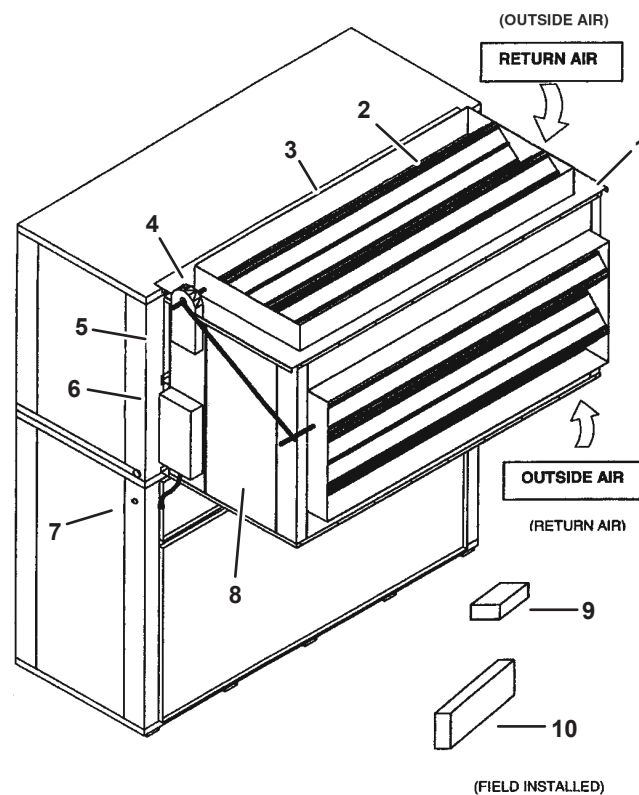
UNIT SIZE	DIMENSIONS			SIDE GRILL	FRONT GRILL
	A	B	C		
12 TON	82.5	34	28	24x20 (2x)	28x20 (2x)
15 TON	86.5	34	28	24x20 (2x)	28x20 (2x)
20 TON	90.5	34	28	24x20 (2x)	32x20 (2x)
25 TON	108.5	34	28	24x20 (2x)	40x20 (2x)

## DSV Airside Economizer

Airside economizers are designed to meet current building and legislated codes for indoor ventilation. In addition to improving indoor air quality, economizers provide substantial energy savings by utilizing cool outside air instead of mechanical cooling whenever outside conditions permit.

The outlet or discharge of the airside economizer is fitted to the return air inlet of the packaged air conditioning unit. The two inlets to the economizer are fitted to the return air and outside air ductwork. The opposed blade dampers located in each inlet modulate the incoming air streams as they enter the mixing box. The outside air damper can be maintained at a predetermined position. In this way the buildings ventilation requirements can be met at all times.

### VERTICAL DSV ECONOMIZER



All economizers are shipped complete with:

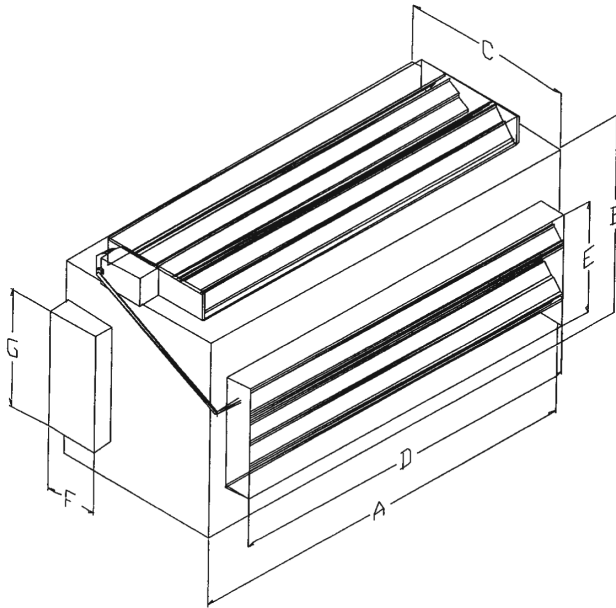
1. 18-gauge galvanized cabinet, fully insulated.
2. Opposed blade, ultra low leakage damper sections.
3. Steel securing strip for unit support\*.
4. Skymark M9200 Series return damper actuator.
5. Filters and access.
6. Skymark SMART Equipment Economizer Controller SE-ECO1001 with protective cabinet.
7. One step jack/plug wiring assembly.
8. Access doors on both sides of cabinet.
9. Enthalpy sensor.
10. Discharge sensor.

Return air/outside configuration is field convertible.

\*NOTE: Additional field support required.

# DSV Airside Economizer (Cont'd)

## VERTICAL DSV ECONOMIZER



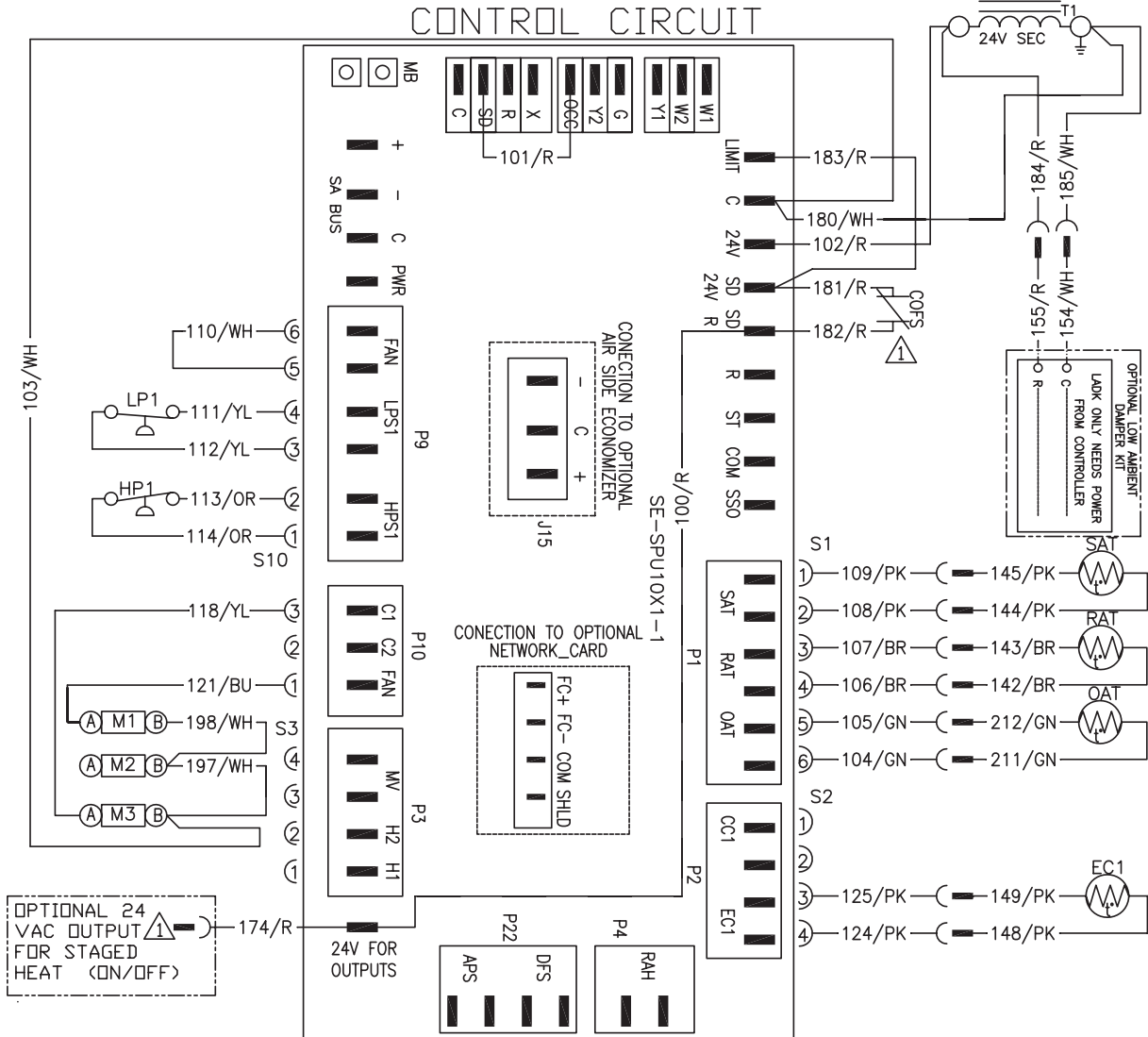
VERTICAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIM'N			DAMPER DIM'N	
		A	B	C	D	E
DSV060C	VASE-060C-1	49.00	27.75	24.00	40.00	14.00
DSV096C	VASE-120C-1	66.50	36.25	26.50	58.00	19.50
DSV144C	VASE-144C-1	78.00	35.75	28.50	70.00	19.50
DSV180C	VASE-180C-1	82.00	37.75	28.50	74.00	21.50
DSV240C	VASE-240C-1	86.00	41.00	34.00	78.00	25.00
DSV300C	VASE-300C-1	104.00	45.00	34.00	90.00	25.00

CONTROL MODULE	
F	G
11.00	12.50
11.00	12.50
11.00	12.50
11.00	12.50
11.00	12.50
11.00	12.50

# DSV Wiring Diagrams

## DSV060C VERTICAL A/C UNIT

## ELEMENTARY DIAGRAM



**NOTES:**

OPTIONAL CONDENSATE OVERFLOW SWITCH TO BE CONNECTED BETWEEN WIRE NO 181 & 182.

FACTORY WIRING AND DEVICES  
 FIELD WIRING AND DEVICES  
 OPTIONAL WIRING AND DEVICES

**LEGEND:**

- COF5 OPTIONAL CONDENSATE OVERFLOW SWITCH
- SE-SPU1001 1 STAGE SE CONTROL BOARD
- SE-SPU10X1 1 STAGE SE CONTROL BOARD WITH COMMUNICATION CARD
- HP1 HIGH PRESSURE SWITCH (COMP 1)
- LP1 LOW PRESSURE SWITCH (COMP 1)
- SAT STANDARD SUPPLY AIR TEMPERATURE (FIELD INSTALLED)
- RAT STANDARD RETURN AIR TEMPERATURE (FIELD INSTALLED)
- OAT OPTIONAL OUTSIDE AIR TEMPERATURE (FIELD INSTALLED)
- EC1 SUCTION LINE 1 TEMPERATURE SENSOR
- M1 EVAP. FAN MOTOR CONTACTOR
- M2 COND. FAN MOTOR CONTACTOR
- M3 COMP. CONTACTOR
- SPU1001 P1/S1 SOCKET/PLUG CONNECTION, 24V, 6 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P2/S2 SOCKET/PLUG CONNECTION, 24V, 8 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P3/S3 SOCKET/PLUG CONNECTION, 24V, 4 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P4/S4 SOCKET/PLUG CONNECTION, 24V, 4 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P5/S5 SOCKET/PLUG CONNECTION, 24V, 3 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P9/S9 SOCKET/PLUG CONNECTION, 24V, 10 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P10/S10 SOCKET/PLUG CONNECTION, 24V, 5 PIN ON 1 STAGE SE CONTROL BOARD
- SPU1001 P22/S22 SOCKET/PLUG CONNECTION, 24V, 4 PIN ON 1 STAGE SE CONTROL BOARD

**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**

STK-2007C

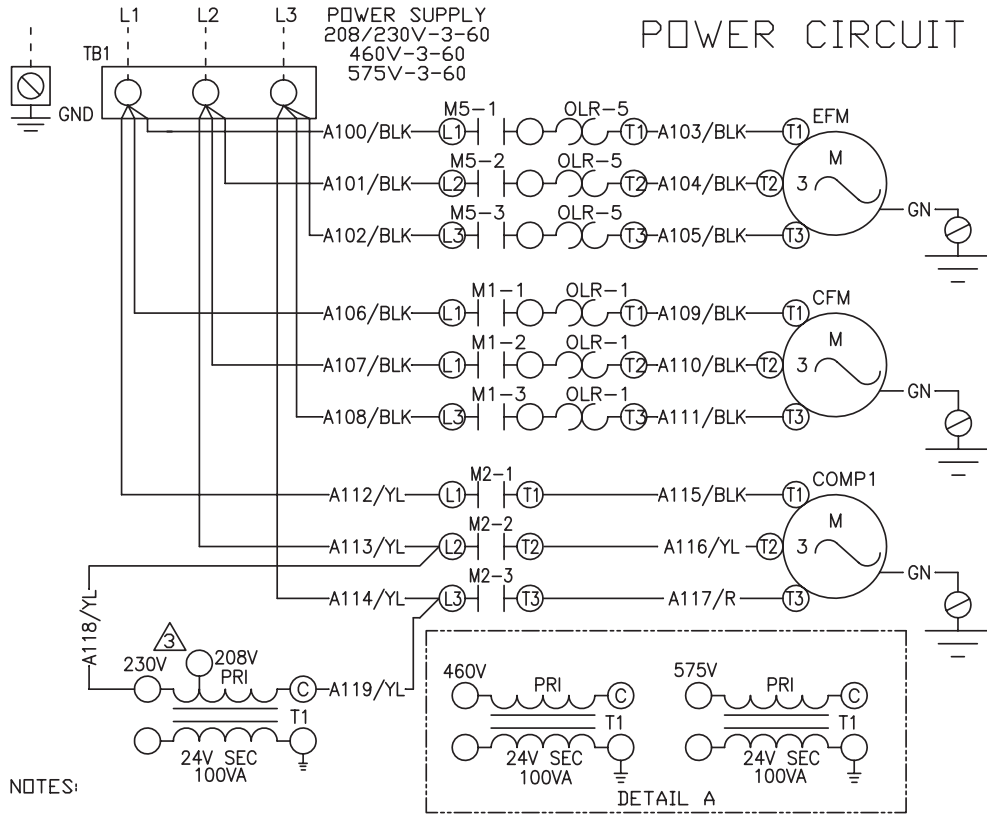
REV 1 SHT 10F1

# DSV Wiring Diagrams (Cont'd)

A	B	C	D	E	F	G	H
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## ELEMENTARY DIAGRAM

### DSV060C VERTICAL A/C UNIT 208/230/460/575-3-60



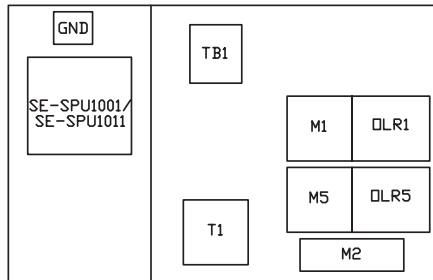
NOTES:

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
- ⚠** FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A118 TO 208 VOLT TERMINAL ON T1. SIMILARLY FOR 460 AND 575 VOLT SEE DETAIL A.

LEGENDS:

- SE-SPU1001 1 STAGE SMART EQUIPMENT CONTROL BOARD
- SE-SPU1011 1 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
- TB1 LINE VOLTAGE TERMINAL BLOCK
- CFM CONDENSER FAN MOTOR
- EFM EVAPORATOR FAN MOTOR
- COMP1 1 STAGE COMPRESSOR
- T1 TRANSFORMER 208,230/460
- GND GROUND
- M1 COND. FAN MOTOR CONTACTOR
- M2 COMP 1 CONTACTOR
- M3 COMP 2 CONTACTOR
- OLR1 COND. FAN MOTOR OVERLOAD
- OLR5 EVAP. FAN MOTOR OVERLOAD

- FACTORY WIRING AND DEVICES
- FIELD WIRING AND DEVICES
- OPTIONAL WIRING AND DEVICES



**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**

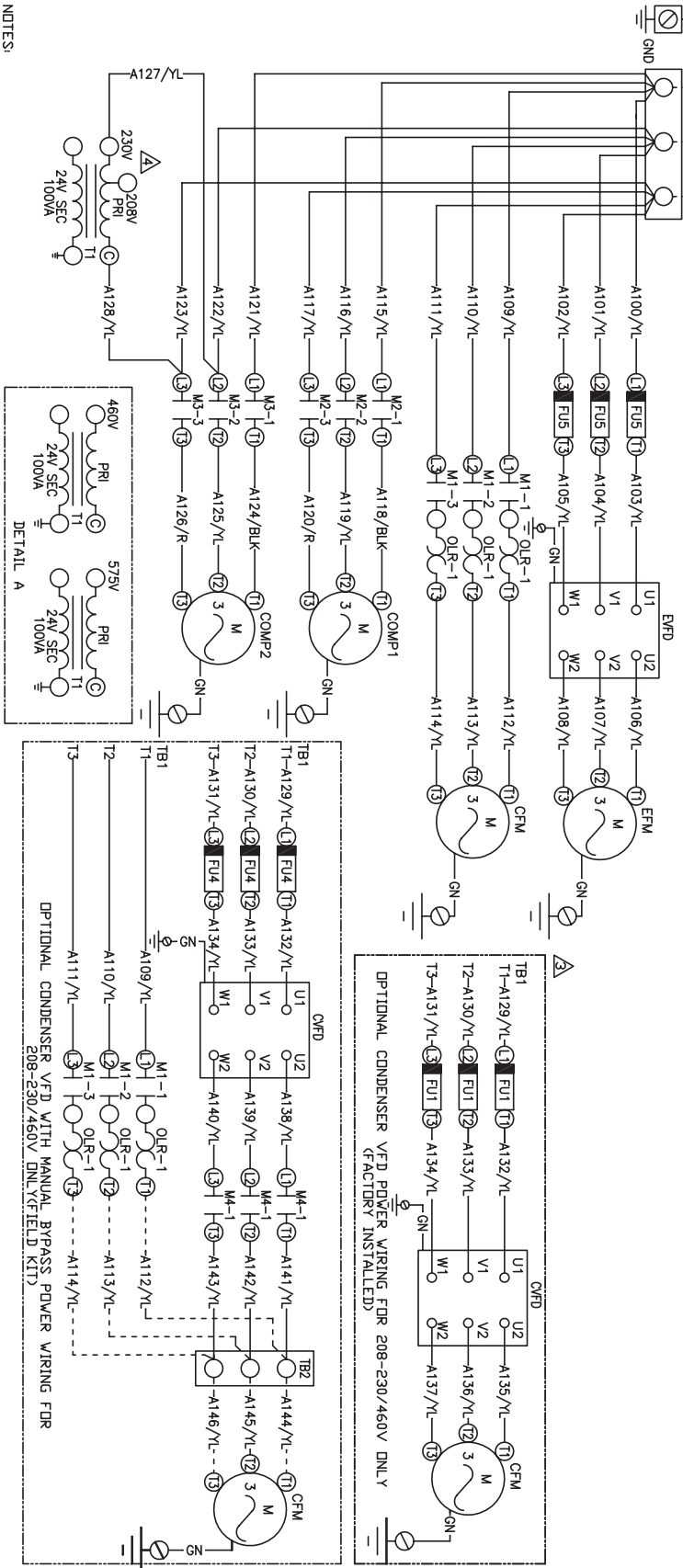
**STK-2005C**

**REV1 SHT 1OF1**

LD28624

# DSV096/120/144C VERTICAL A/C UNIT 208/230/460/575-3-60 ELEMENTARY DIAGRAM

## POWER CIRCUIT



**NOTES:**

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING. CONTROL WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING AS SUPPLIED WITH THE UNIT MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RE-NUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
3. VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDED BY VFD.
4. FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A127 TO 208 VOLT TERMINAL ON T1. SIMILARLY FOR 460 AND 575 VOLT. SEE DETAIL A.
5. INSTALLED WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY WIRING AND DEVICES. FIELD WIRING AND DEVICES. OPTIONAL WIRING AND DEVICES.

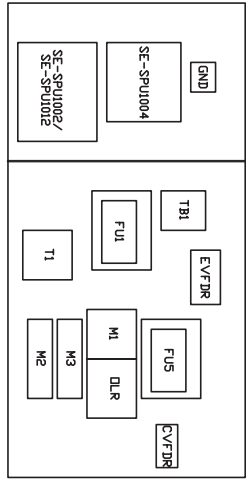
**LEGENDS:**

- SE-SPU004 4 STAGE SMART EQUIPMENT CONTROL BOARD
- SE-SPU002 2 STAGE SMART EQUIPMENT CONTROL BOARD
- SE-SPU012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
- LINE VOLTAGE TERMINAL BLOCK
- VFD BYPASS TERMINAL BLOCK
- CONDENSER FAN MOTOR
- EVAPORATOR FAN MOTOR
- 2 STAGE COMPRESSOR
- 1 STAGE SCROLL COMPRESSOR
- TRANSFORMER 208-230/24V
- GROUND TERMINAL
- EVAP FAN MOTOR VFD
- COND FAN VFD BYPASS FUSE
- EVAP FAN MOTOR FUSE
- COND MOTOR OVERLOAD
- COMP 1 CONTACTOR
- COMP 2 CONTACTOR
- COND BYPASS CONTACTOR
- COND MOTOR DIVERLOAD
- COND FAN VFD
- EVAP FAN VFD
- COND VFD RELAY
- EVAP VFD RELAY

**OPTIONAL CONDENSER VFD WITH MANUAL BYPASS POWER WIRING FOR**



**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-2006C REV 1 SHT 1 OF 1**



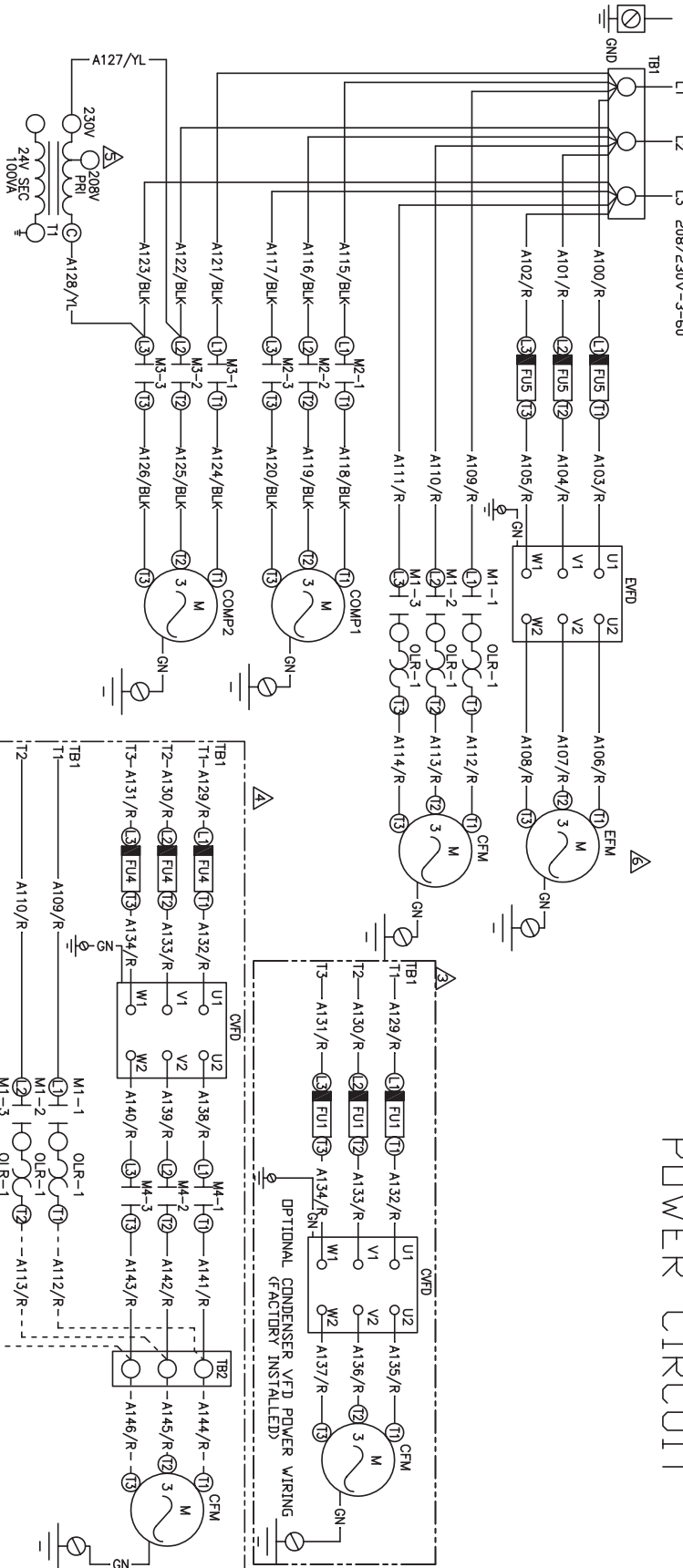
# DSV Wiring Diagrams (Cont'd)

## DSV180C VERTICAL A/C UNIT 208/230-3-60

## ELEMENTARY DIAGRAM

### POWER SUPPLY

LD28628

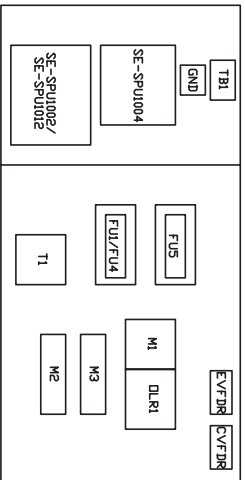
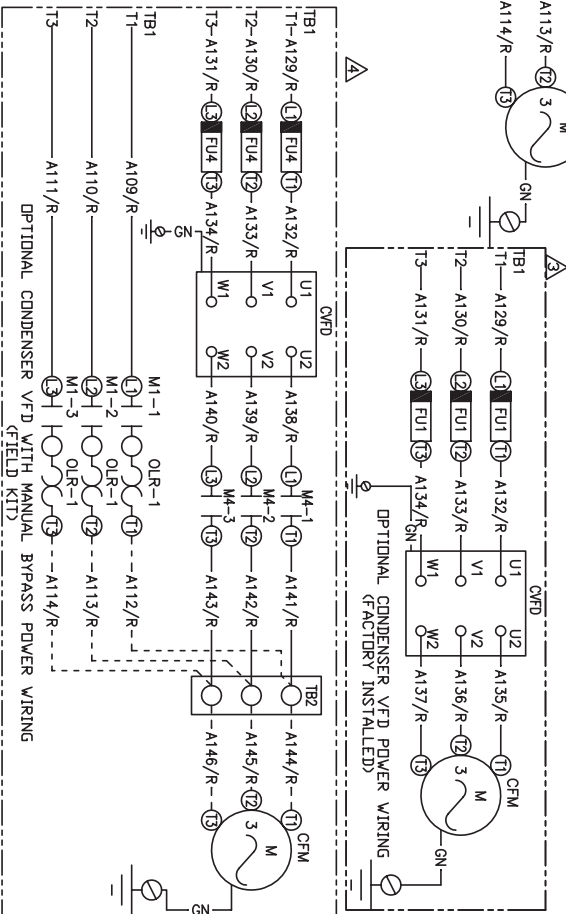


**NOTES:**

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING OPERATIONS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
- ⚠️ VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDLED BY VFD.
  - ⚠️ VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.
  - ⚠️ FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A127 TO 208 VOLT TERMINAL ON T1.
  - ⚠️ EVAPORATOR MOTOR VFD WIRING WILL REMAIN SAME FOR D/S EVAPORATOR MOTOR OPTION

----- FACTORY WIRING AND DEVICES  
 ----- FIELD WIRING AND DEVICES  
 ----- OPTIONAL WIRING AND DEVICES

- LEGENDS:**
- SE-SPU1004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1002 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD BYPASS TERMINAL BLOCK
  - CONDENSER FAN MOTOR
  - EVAPORATOR FAN MOTOR
  - 2 STAGE SCROLL COMPRESSOR
  - TRANSFORMER 208-230/24V
  - GROUND
  - COND. FAN MOTOR FUSE
  - COND. VFD BYPASS FUSE
  - EVAP. FAN MOTOR FUSE
  - COND. FAN MOTOR CONTACTOR
  - COND. FAN MOTOR CONTACTOR
  - COND. FAN MOTOR CONTACTOR
  - COND. MOTOR OVERLOAD
  - EVAP. FAN VFD
  - COND. FAN VFD
  - EVAP. FAN VFD RELAY
  - EVAP. FAN VFD RELAY

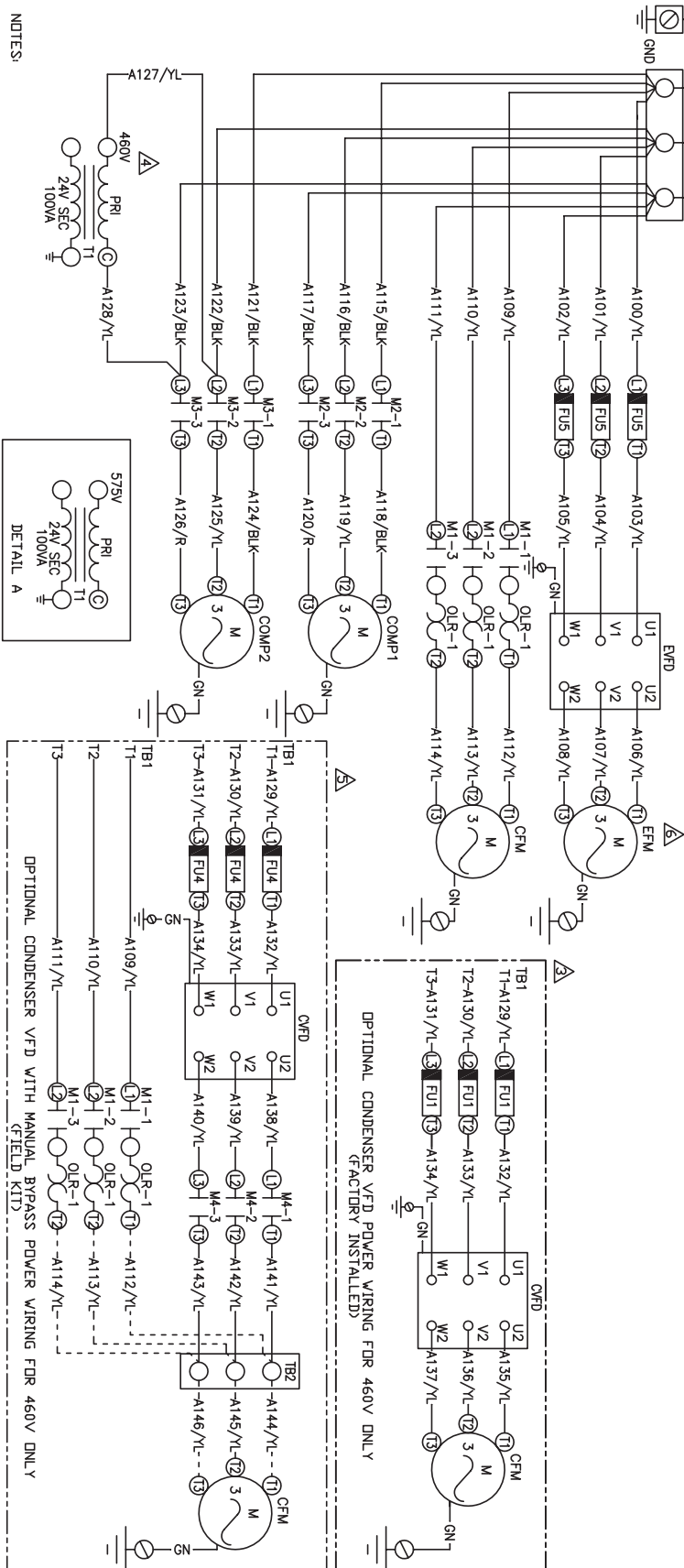


**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-2010C REV 1 SHT 1 OF 1**



# DSV180C VERTICAL A/C UNIT 460/575-3-60

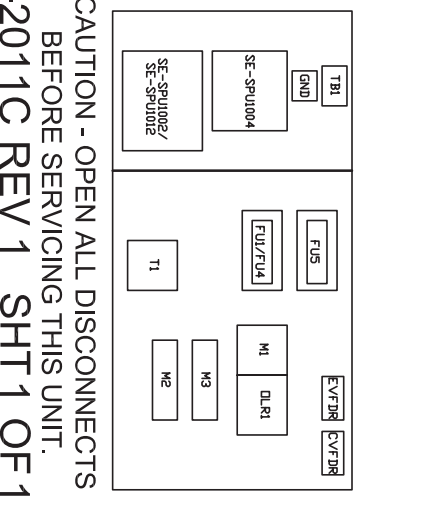
# ELEMENTARY DIAGRAM POWER CIRCUIT



**NOTES:**

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY REMEMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
- ⚠ VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDED BY VFD.  
⚠ FACTORY WIRED FOR 460 VOLT OPERATION. FOR 575 VOLT OPERATION SEE DETAIL A  
⚠ VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.  
⚠ EVAPORATOR MOTOR VFD WIRING WILL REMAIN SAME FOR D/S EVAPORATOR MOTOR OPTION  
⚠ FACTORY WIRING AND DEVICES  
⚠ FIELD WIRING AND DEVICES  
⚠ OPTIONAL WIRING AND DEVICES

- LEGENDS:**
- SE-SPU004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD BYPASS TERMINAL BLOCK
  - TB1 VFD BYPASS TERMINAL BLOCK
  - TB2 CONDENSER FAN MOTOR
  - CFM EVAPORATOR FAN MOTOR
  - CFM 2 STAGE SCROLL COMPRESSOR
  - COMP1 2 STAGE SCROLL COMPRESSOR
  - COMP2 TRANSFORMER
  - T1 GROUND
  - COND. FAN MOTOR FUSE
  - FU1 GND
  - FU4 COND. VFD BYPASS FUSE
  - FU5 EVAP. FAN MOTOR FUSE
  - M1 COND. FAN MOTOR CONTACTOR
  - M2 COMP 1 CONTACTOR
  - M3 COND. VFD BYPASS CONTACTOR
  - M4 COND. MOTOR OVERLOAD
  - DLR1 COND. FAN VFD
  - DLR2 EVAP. FAN VFD
  - CVFDR GND. VFD RELAY
  - EVFDR EVAP. VFD RELAY



**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**

**STK-2011C REV 1 SHT 1 OF 1**

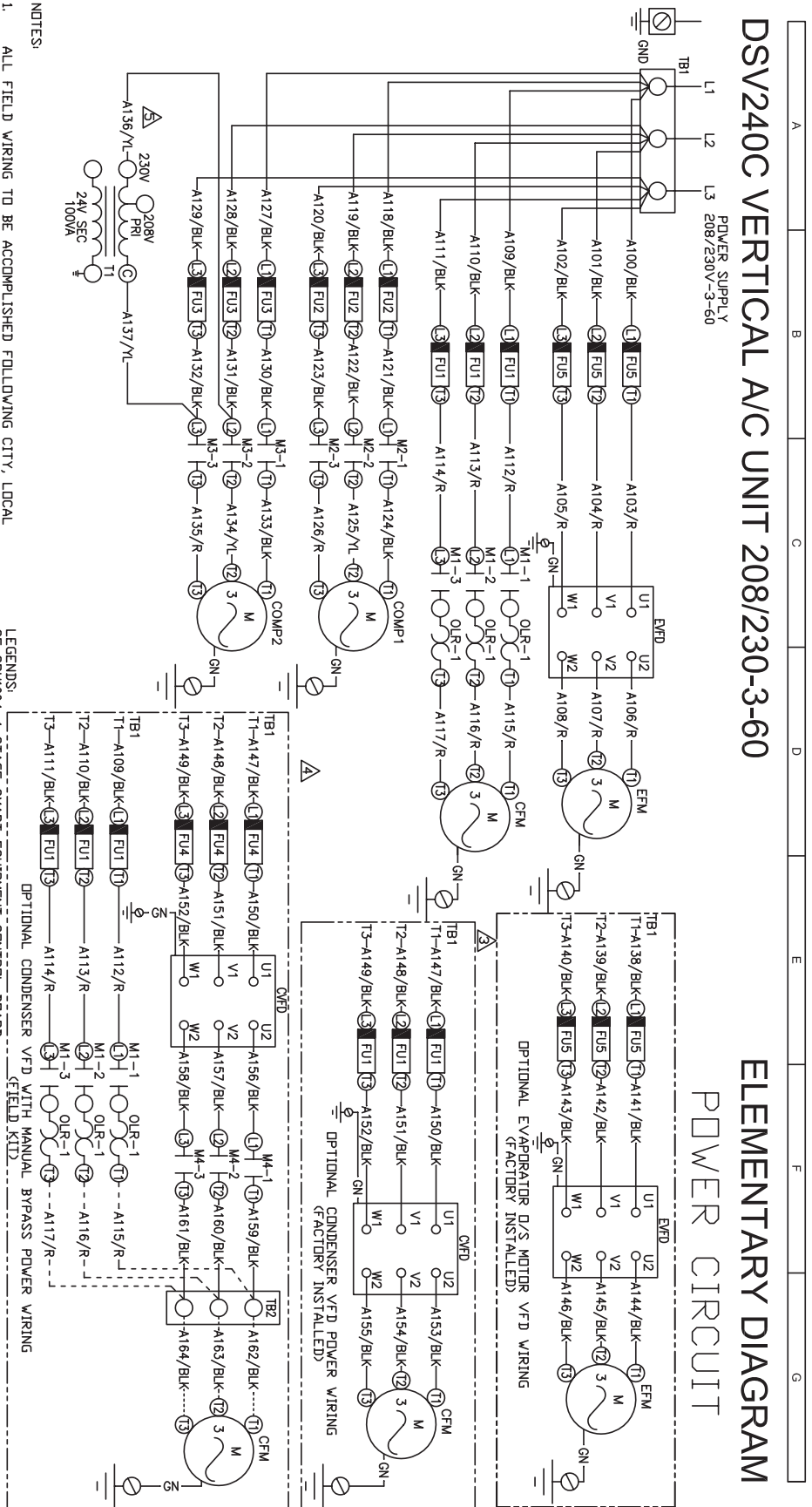
# DSV Wiring Diagrams (Cont'd)

## DSV240C VERTICAL A/C UNIT 208/230V-3-60

## ELEMENTARY DIAGRAM

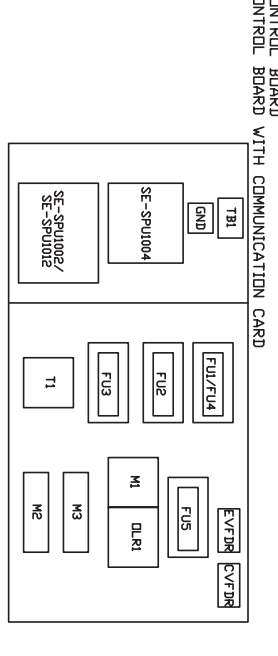
### POWER SUPPLY

LD28632



- 1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
- 2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING. CONTROL WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE, 600 VOLT WIRE OR EQUIVALENT CLEARLY RE-NUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.

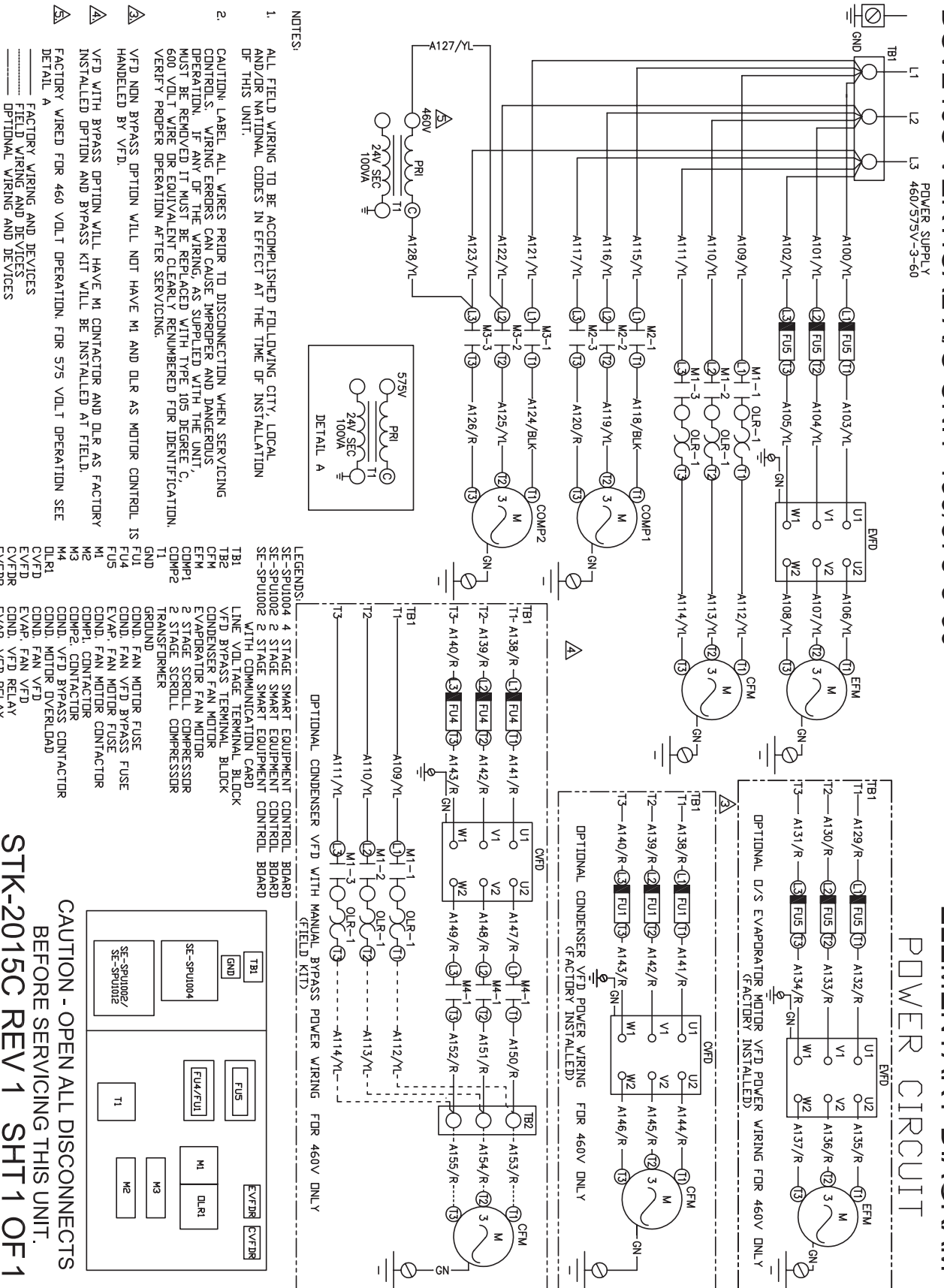
- 1. VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDED BY VFD.
- 2. VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.
- 3. FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A133 TO 208 VOLT TERMINAL ON T1.



# DSV240C VERTICAL A/C UNIT 460/575-3-60

# ELEMENTARY DIAGRAM

## POWER CIRCUIT



- NOTES:**
- ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  - CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING. CONTROLS WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING AS SUPPLIED WITH THE UNIT MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
- ▲ VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDELED BY VFD.  
 ▲ VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.  
 ▲ FACTORY WIRED FOR 460 VOLT OPERATION. FOR 575 VOLT OPERATION SEE DETAIL A  
 ----- FACTORY WIRING AND DEVICES  
 ..... FIELD WIRING AND DEVICES  
 - - - - - OPTIONAL WIRING AND DEVICES

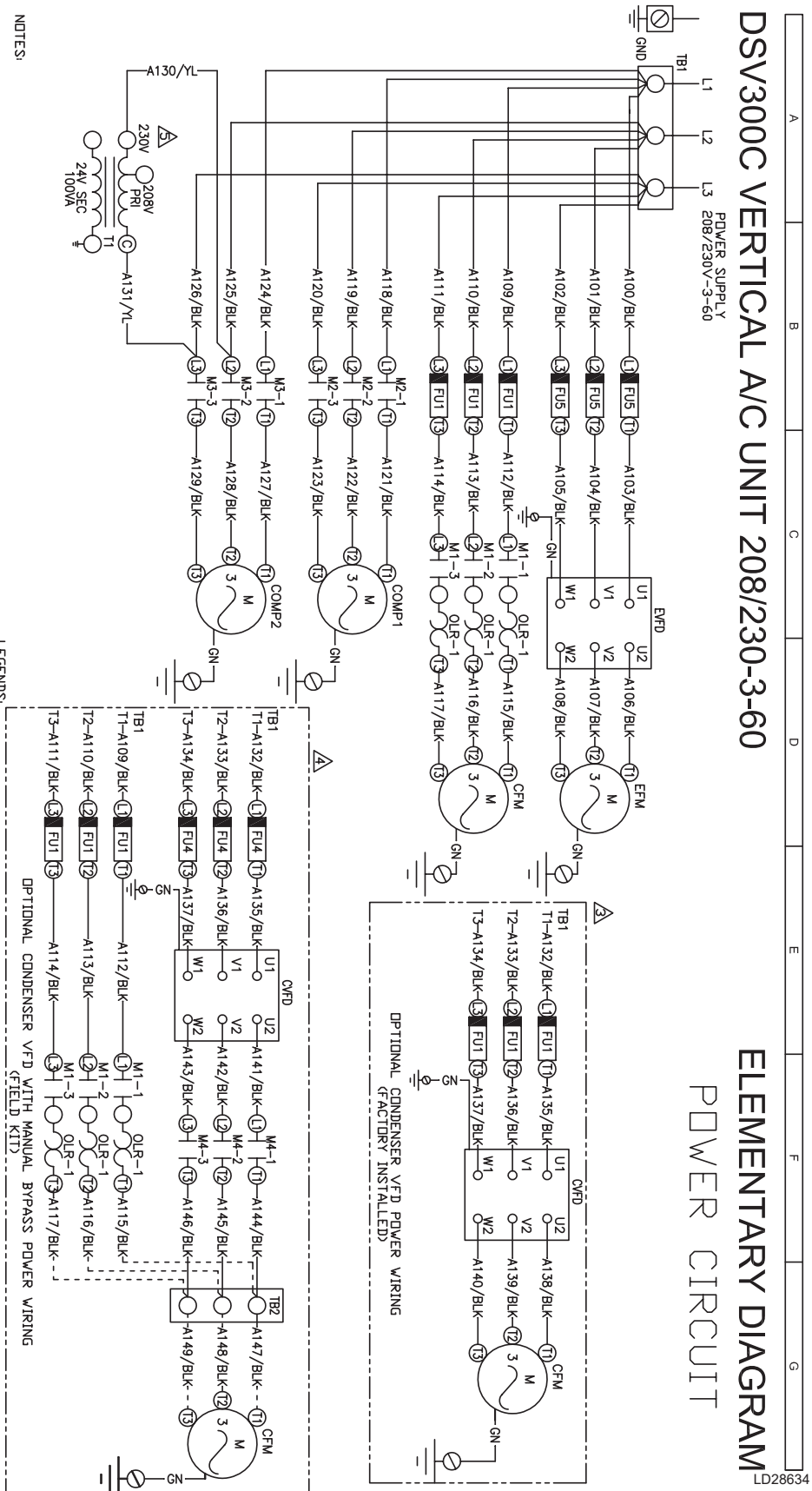
**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-2015C REV 1 SHT 1 OF 1**

# DSV Wiring Diagrams (Cont'd)

## DSV300C VERTICAL A/C UNIT 208/230-3-60

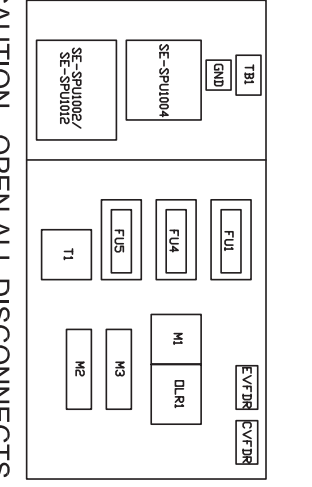
## ELEMENTARY DIAGRAM

### POWER CIRCUIT



- NOTES:**
1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
  3. VFD NON BYPASS OPTION WILL NOT HAVE M1 AND DLR AS MOTOR CONTROL IS HANDED BY VFD.
  4. VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND DLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

- LEGENDS:**
- SE-SPU1004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU1012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD BYPASS TERMINAL BLOCK
  - CONDENSER FAN MOTOR
  - EVAPORATOR FAN MOTOR
  - 2 STAGE SCROLL COMPRESSOR
  - 2 STAGE SCROLL COMPRESSOR TRANSFORMER 208-230/24V
  - GROUND
  - COND: FAN MOTOR FUSE
  - FU4 COND: VFD BYPASS FUSE
  - FU5 EVAP FAN MOTOR FUSE
  - M1 COND: FAN MOTOR CONTACTOR
  - M2 COMP: 1 CONTACTOR
  - M3 COMP: 2 CONTACTOR
  - M4 COND: MOTOR OVERLOAD
  - DLR1 COND: FAN VFD
  - M1 COND: FAN VFD
  - M2 EVAP: FAN VFD
  - M3 COND: VFD RELAY
  - M4 EVAP: VFD RELAY

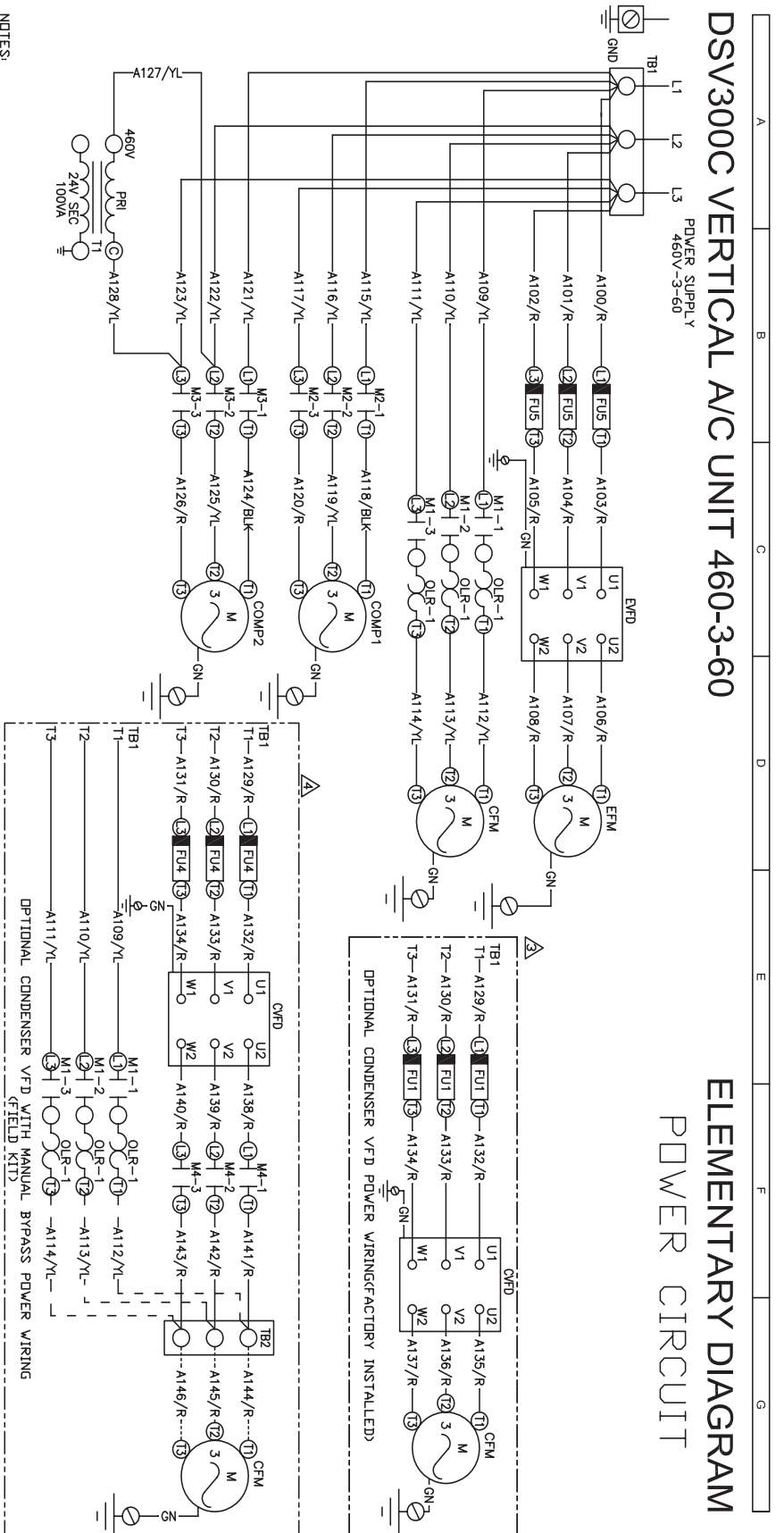


**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-2016C REV 1 SHT 1 OF 1**

LD28634

# DSV300C VERTICAL A/C UNIT 460V-3-60

# ELEMENTARY DIAGRAM POWER CIRCUIT

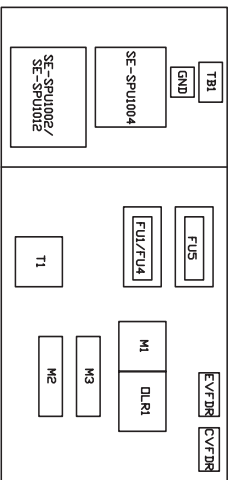


**NOTES:**

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.

----- FACTORY WIRING AND DEVICES  
----- FIELD WIRING AND DEVICES  
----- OPTIONAL WIRING AND DEVICES

- LEGENDS:**
- SE-SPU004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPU012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD BYPASS TERMINAL BLOCK
  - TB1 CONDENSER FAN MOTOR
  - TB2 EVAPORATOR FAN MOTOR
  - CFM FAN MOTOR
  - CFM1 CONDENSER FAN MOTOR
  - CFM2 2 STAGE SCROLL COMPRESSOR
  - CFM3 2 STAGE SCROLL COMPRESSOR
  - COMP1 COMPRESSOR
  - COMP2 COMPRESSOR
  - T1 TRANSFORMER
  - GROUND
  - FU1 FAN MOTOR FUSE
  - FU4 FAN MOTOR FUSE
  - FUS FAN MOTOR FUSE
  - COND. FAN MOTOR CONTACTOR
  - COND. 2 CONTACTOR
  - COND. 1 CONTACTOR
  - COND. VFD BYPASS CONTACTOR
  - COND. MOTOR OVERLEAD
  - COND. FAN VFD
  - EVAP. FAN VFD
  - COND. VFD RELAY
  - EVAP. VFD RELAY



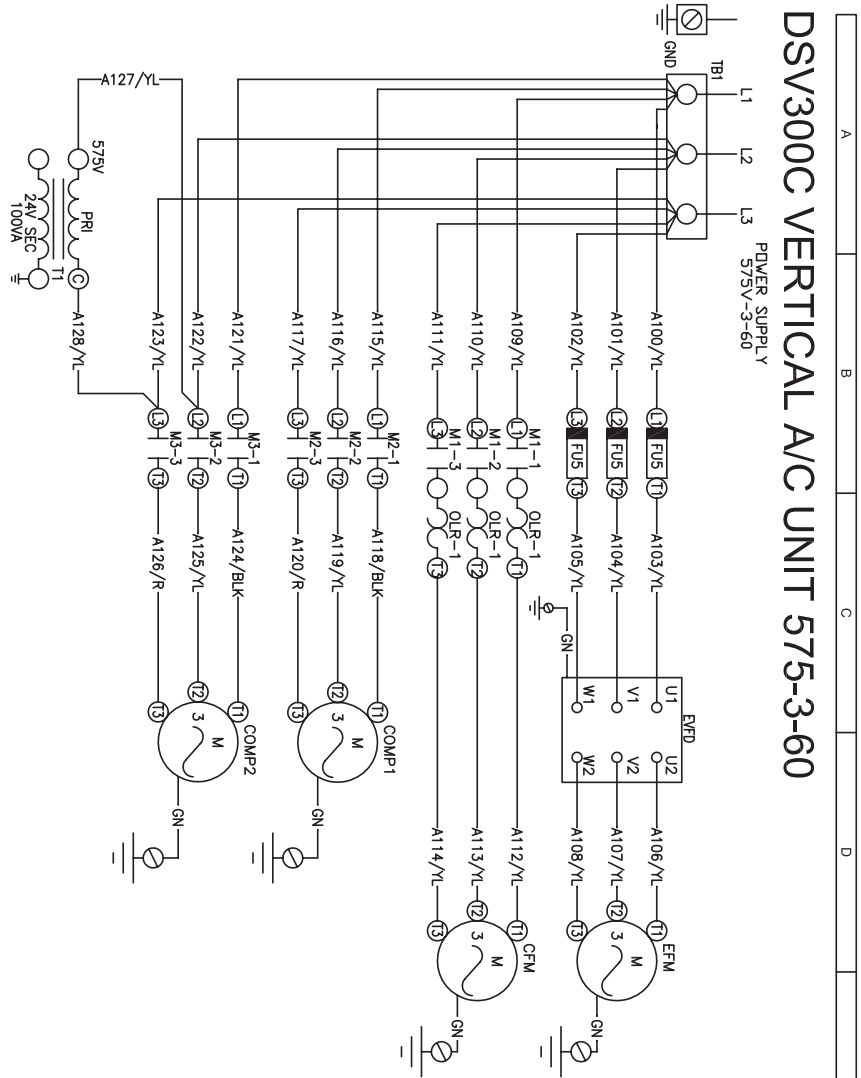
**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-20177C REV 1 SHT 1 OF 1**

# DSV Wiring Diagrams (Cont'd)

## DSV300C VERTICAL A/C UNIT 575-3-60

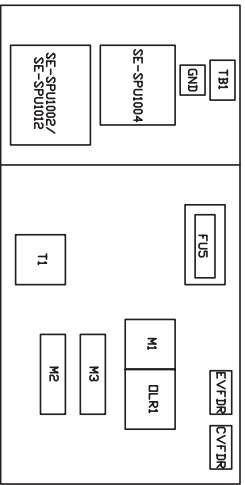
## ELEMENTARY DIAGRAM

### POWER CIRCUIT



- NOTES:**
1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT THE TIME OF INSTALLATION OF THIS UNIT.
  2. CAUTION, LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRING, AS SUPPLIED WITH THE UNIT, MUST BE REMOVED IT MUST BE REPLACED WITH TYPE 105 DEGREE C, 600 VOLT WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.

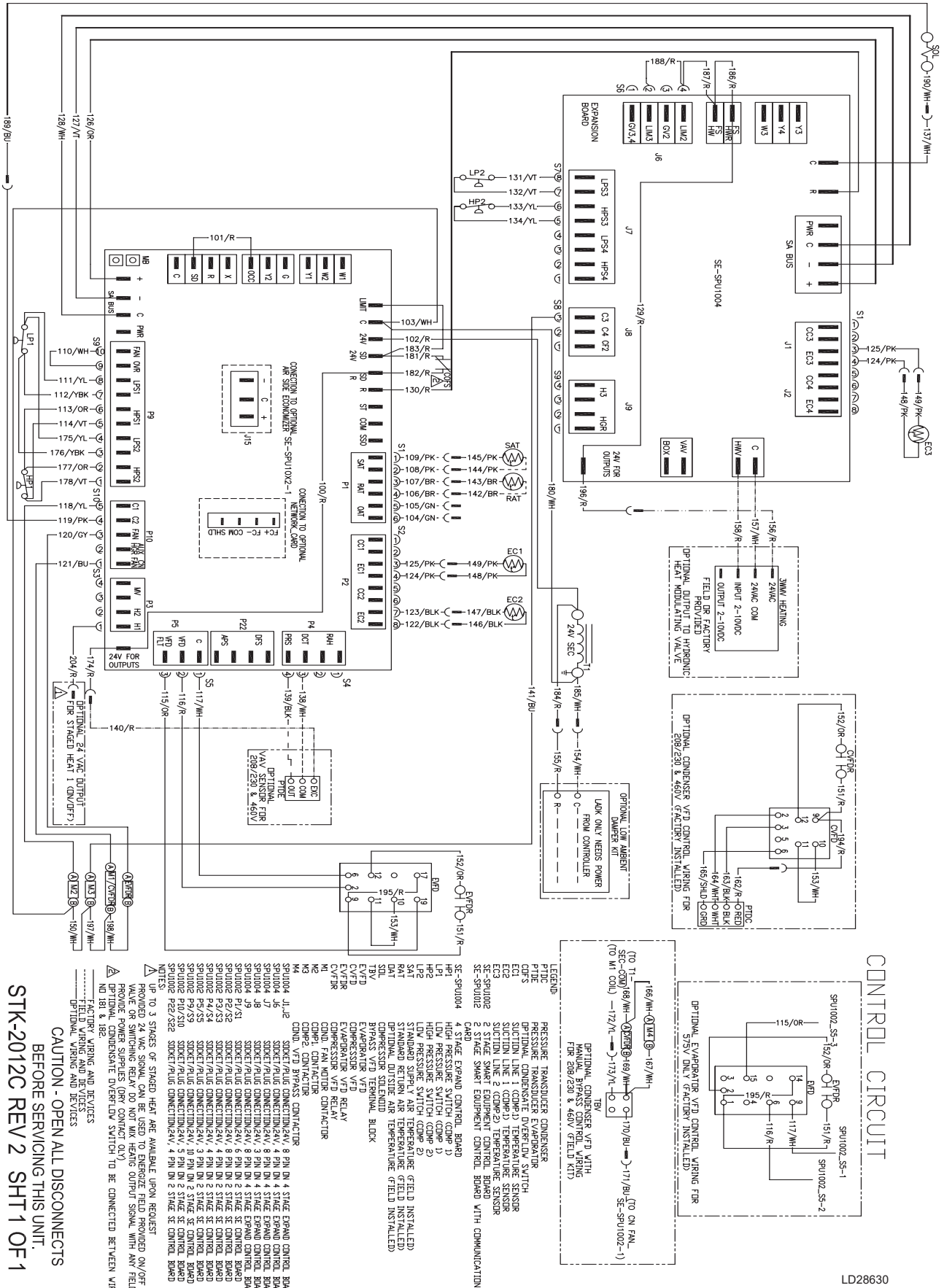
- LEGENDS:**
- SE-SPUI004 4 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPUI002 2 STAGE SMART EQUIPMENT CONTROL BOARD
  - SE-SPUI012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
  - LINE VOLTAGE TERMINAL BLOCK
  - VFD TERMINAL BLOCK
  - TB1 TERMINAL BLOCK
  - TB2 TERMINAL BLOCK
  - CFM CONDENSER FAN MOTOR
  - EVAPORATOR FAN MOTOR
  - COMP1 2 STAGE COMPRESSOR
  - COMP2 1 STAGE SCROLL COMPRESSOR
  - TRANSFORMER
  - GND GROUND
  - EVAP FAN MOTOR FUSE
  - COND FAN MOTOR CONTACTOR
  - COMP 1 CONTACTOR
  - M3 2 CONTACTOR
  - COND MOTOR OVERLOAD
  - DLR1 EVAP FAN VFD
  - EVFD EVAP VFD RELAY
  - EVFDR EVAP VFD RELAY
  - ..... FACTORY WIRING AND DEVICES
  - FIELD WIRING AND DEVICES
  - \_\_\_\_\_ OPTIONAL WIRING AND DEVICES



**CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.**  
**STK-2018C REV 1 SHT 1 OF 1**

DSV096/120/144C VERTICAL A/C UNIT CONTROL WIRING

ELEMENTARY DIAGRAM









# Specifications

## GENERAL

### Horizontal Models

All horizontal models ship as a fully assembled, factory charged, packaged unit. All models are designed for suspended mounting via integral structural channels. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split.

### Vertical Models

The 5 ton model ships as a fully assembled, factory charged, packaged unit with vertical evaporator discharge as standard. All 8–25 ton models shall be shipped as a factory split unit with a nitrogen holding charge with horizontal evaporator fan discharge as standard. All models are designed for free standing mounting, or on a field-fabricated structural steel stand.

## CABINET

All cabinets shall be completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) shall be insulated with 1/2" thick, 2-lb. density insulation. Service panels shall be equipped with lifting handles for ease of removal and handling. Duct flanges for condenser discharge, condenser intake, and evaporator discharges shall be provided with the unit for field installation. Duct flange on evaporator return shall be incorporated into the filter frame.

## COMPRESSORS

All models shall utilize high-efficiency "Scroll" type, R-410A, hermetic compressors. Compressors shall be mounted on rubber isolators to minimize vibration transmission. Internal motor overload protection shall be provided. External high pressure and low pressure cut-out switches are included in each compressor control circuit. All 8–25 ton models shall have two individual scroll compressors/refrigeration circuits, supporting three or four stages of mechanical cooling. DSH096 and DSV096–144 models utilize one standard scroll compressor and one advanced 2-stage compressor and have three total stages of mechanical cooling (33.5%, 50%, and 100% of total nominal combined compressor capacity). DSV180–300 models utilize two advanced 2-stage compressors and have four total stages of mechanical cooling (33.5%, 68%, 83.5% and 100% of nominal combined compressor capacity).

## REFRIGERANT CIRCUITS

Models 5 tons and smaller have a single refrigeration circuit. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Vertical models 8–25 tons shall have two independent refrigeration circuits, and ship with a nitrogen holding charge only. The 8 ton horizontal model is fully charged with R-410A refrigerant before shipment. Each refrigeration circuit includes an adjustable thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

## EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils shall be constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils shall be employed in a draw-thru configuration. Large evaporator coil face area minimizes potential for water blow-off. For all units 8–25 tons, the evaporator coil shall have fully interlaced refrigerant circuiting between two installed refrigeration circuits.

## INDOOR/OUTDOOR FANS

Forward curved, double inlet and double width centrifugal blowers shall be used for both evaporator and condenser air movement. Blower wheels shall be fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearings. All blowers shall be belt driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm. Motor shall be 1750 RPM, open drip proof design. For 8–25 ton models, indoor fan shall have either discrete speeds or variable speed controlled by duct pressure sensor. Indoor fan discrete or variable speeds are achieved by means of variable frequency drive (VFD). The discrete speed steps are matched to compressor stages active. The indoor fan speed range is limited to range of 50%–100% of nominal airflow.

## FILTERS

All models shall be shipped with 2-inch thick medium-efficiency throwaway filters factory installed.

## ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overload protection is provided on both evaporator and condenser motors, either through external manual reset overload protection or inherent VFD overload protection. The 24 volt control circuit includes an oversized transformer with an internal circuit breaker.

## MICROPROCESSOR CONTROLS

The control system microprocessor board shall be specifically designed for air-cooled unit operation.

- A. Unit shall be complete with self-contained low-voltage control circuit. Microprocessor shall be of direct digital controller (DDC) type.
- B. Unit shall incorporate a lockout circuit which provides reset capability at the space thermostat or base unit, should any of the following standard safety devices trip and shut off compressor.
  - Loss-of-charge/low-pressure switch
  - High-pressure switch
  - Condensate overflow protection switch
  - Suction line temperature sensor
  - SD alarm (smoke or any other shutdown alarm)
  - Supply air temperature

## Specifications (Cont'd)

- C. Unit shall operate with conventional thermostat designs and have a low voltage terminal strip for easy hook-up. Instead of thermostat, unit can be controlled by JCI Net Sensor or network communicated temperature value (BMS).
- D. Unit control board shall have on-board diagnostics, local display, and fault code display.
- E. Standard controls shall include anti-short cycle, random start, and low voltage protection.
- F. Control board shall monitor each refrigerant safety switch independently.
- G. Control board shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
- H. Control board shall accept the following inputs: space temperature, set point adjustment, outdoor air temperature, indoor air quality (IAQ), outdoor air quality (OAQ), compressor lockout, fire shutdown, enthalpy switch, and fan status/filter status/humidity/remote occupancy.
- I. Control board shall retain last five fault codes in non volatile memory which will not be lost in the event of a power loss (applicable to units with optional communication card).

### FACTORY INSTALLED OPTIONS

#### Oversized Evaporator/Condenser Fan Motors

Increased horsepower motor and drive components for applications where external static pressure requirements exceed the capability of the standard motor.

#### Corrosion Resistant Coatings

Evaporator and/or condenser coil shall receive a 1-millimeter thickness of a cathodic epoxy type electro-deposition coating, applied in a multiple dip and bake process.

#### Stainless Steel Drain Pan

Evaporator drain pan shall be fabricated of 304 stainless steel material. The 3/4" NPT drain connection fitting is also fabricated of 304 stainless steel.

#### Condensate Overflow Switch

Condensate overflow switch shall be mounted in the evaporator drain pan and in the event of an alarm, shutoff power to unit compressor.

#### Hot Gas Bypass (DSV/DSH 8-25 Tons)

Adjustable hot gas regulator and all necessary piping shall be installed on lead compressor circuit. The modulating regulator diverts hot discharge gas to evaporator inlet. Bypass capacity shall be minimum 50% of compressor capacity. The bypass valve opens at a preset suction pressure to prevent coil freeze-up at light evaporator load or low airflow conditions.

### **Supply Pressure Controlled Variable Frequency Drive (VFD)**

Airflow modulation and static pressure control shall be achieved by increasing or decreasing the speed of the VFD.

The VFD shall be approved for plenum duty applications. The compressors shall be staged to meet the discharge air temperature set point.

The installer shall provide and install two sensor tubing lines complete with static pressure tips from a factory installed pressure transducer (located in VFD enclosure) to duct locations.

### **Condenser Fan VFD**

Head pressure control VFD factory option will allow unit operation down to 0.0°F ambient. Airflow modulation and refrigerant head pressure control shall be achieved by increasing or decreasing the speed of the condenser fan VFD.

The VFD shall be approved for plenum duty applications. The refrigerant pressure transducer shall be installed on circuit #1.

The factory low ambient kit with VFD on condenser shall be fully configured by factory.

### **Network Communication Cards**

The Smart Equipment Controller (SEC) communication card comes with a connector that enables communication to a BMS. This card supports BACnet® MS/TP, Modbus™, and N2 communication types. For LONWORKS networks, an external gateway is required from the BACnet device to the Modbus network.

Communication card features include:

- Support for multiple communication types
- Plug-in on the UCB
- Real-time clock chip
- Communication traffic LEDs and on-board end-of-line switch

### **FIELD INSTALLED OPTIONS**

#### **Low Ambient Damper Kit**

Head pressure control damper kit will allow unit operation down to 0.0°F ambient. Damper assembly mounts on condenser air exhaust.

#### **Low Ambient VFD Kit**

Head pressure control VFD field kit will allow unit operation down to 0.0°F ambient. VFD field kit shall come complete with manual bypass. Manual bypass shall enable operation of the unit without VFD, using condenser fan starter circuit. Low ambient VFD kit is installed on unit exterior; field wiring connections and pressure transducer installation is required.

#### **High-Static Evaporator/Condenser Drive Kit**

Drive components for high static evaporator/condenser applications are available for field installation. This kit does not include larger motors.

## ***Specifications (Cont'd)***

### **Network Sensor**

The surface-mounted NS Series network sensor with fault code capability is an electronic zone sensor designed to function directly with Skymark BACnet MS/TP digital controllers in SEC controls. Models in this series monitor the temperature set point and zone temperature and transmit this data to a field controller on the sensor actuator (SA) bus.

### **MAP Gateway**

MAP gateway is an intuitive controller commissioning tool that simplifies how users can access the Skymark family of products. The MAP gateway enables users to leverage the power of mobility using smart phones, tablets, and laptop PCs to interact with building automation equipment controls and HVAC equipment.

### **Airside Economizer**

The equipment comes with integrated mixing box and control assembly designed for easy mating to all DSVxxxC Series air handlers. A factory supplied wiring harness simplifies field wiring. No additional controls or transformers are necessary to complete the installation. VASE-xxxC (Gen C) of economizers shall be matched to DSVxxxC (Gen C) of D-Series units only.

The mixing box shall be manufactured from heavy gauge steel and completely insulated with 0.5 inch of insulation. The mixing box is complete with fully modulating opposed blade dampers and linkage.

The dampers shall have an air leakage rate not greater than 4 cfm/ft<sup>2</sup> (20.3 L/s · m<sup>2</sup>) of damper surface area at 1.0 iwg (249 Pa). The dampers shall have leakage rate tested in accordance with AMCA Standard 500-D.

The digital economizer control module is a multi-functional controller capable of analyzing dry bulb, enthalpy, and air quality inputs. An output from the economizer module will position the mixing box dampers to provide energy saving through the introduction of outside air for free cooling. Economizer module shall communicate with unit's SEC using SA bus protocol.

### **Discharge Plenum**

Plenums shall mount on top of the evaporator section, with fans arranged for vertical discharge. Double deflection grills shall allow air discharge in multiple directions.

## NOTES



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