ENGINEERING GUIDE

FORM 145.10-EG2 (121)

Air-Cooled Self-Contained Units

D-Series, Horizontal and Vertical

SIGMA CORPORATION

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 *DSH Physical Data* table to update the Gross and Net Cooling Capacities for DSH096C–120C and Net Cooling Airflow for DSH120C	April 2020
39	Revised the *DSV Physical Data* 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 *DSH Physical Data table* for DSH096C–120C	July 2020
41 – 46	Revised the *DSV Physical Data table* for DSH096C, DSV144C–300C	July 2020
4	Updated DSH and DSV Nomenclature	November 2020

Listings/Certifications

Table of Contents

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

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

Product Identifier
H = Horizontal, Ceiling Mounted

Nominal Capacity
024 = 2 TON
036 = 3 TON
048 = 4 TON
060 = 5 TON
096 = 8 TON
120 = 10 TON

Design Series
C = Current

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

Control Options
S = Equipment (SE) Microprocessor Controls
N = SEC w/ BACnet®

Indoor Fan Options
1 = Standard [1]
2 = High Static [1]
3 = Standard with VFD (VAV) [2]
4 = High Static with VFD (VAV) [2]
5 = Intellispeed™ Discrete Speeds (VFD Std Static) [2]
6 = Intellispeed™ Discrete Speeds(VFD Hi Static) [2]

Cabinet Configuration
P = Single Packaged (Standard)
S = Factory Split (Charged R-410A)
N = Factory Split (Nitrogen Charge Only)

Indoor Airside Options
A = Standard Airside Coil
C = Corrosion Protective Coating
D = Stainless Steel Drain Pan
F = Coated Coil w/ Stainless Steel Drain Pan

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

Outdoor Fan Options
1 = Standard
2 = High Static
3 = Standard with Low Ambient Control VFD [3]
4 = High Static with Low Ambient Control VFD [3]

Refrigerant Circuit Options
A = None
B = Hot Gas Bypass

Heating Options
0 = None

Customization
0 = None
S = Special Quote

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
DS	V	120	C	2	S	1	H	A	A	1	A	0	A

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 = Equipment Controls
N = Equipment Controls w/ BACnet

ID Motor
1 = Std [1]
2 = High Static [1]
3 = Std with VFD (VAV) [2]
4 = High Static with VFD (VAV) [2]
5 = Intellispeed™ Discrete Speeds (VFD Std Static) [2]
6 = Intellispeed™ Discrete Speeds (VFD Hi Static) [2]

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

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

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

Condenser Motor Options
1 = Std. Motor & Drive
2 = High Static Drive
3 = Std Motor & Drive w/ Low Ambient Control VFD [3]
4 = High Static Drive w/ Low Ambient Control VFD [3]

Refrigerant Circuit Options
A = None
B = Hot Gas Bypass

Heating Options
0 = None

Customization
0 = None
S = Special Quote

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 Sigma offer a complete line of unit options for high-rise and single-story building applications.

Sigma 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 Sigma 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

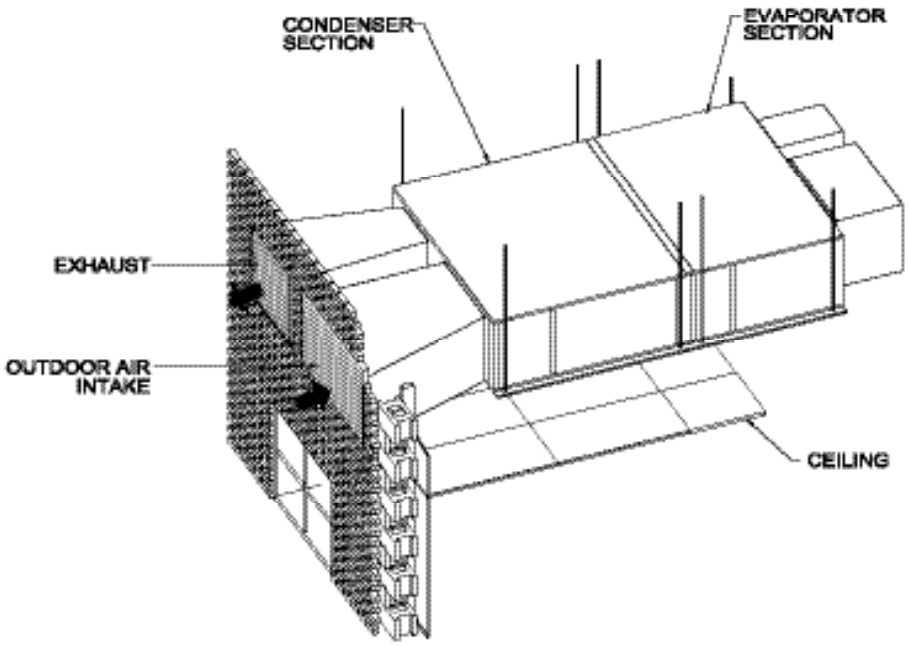
FEATURES

- 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.

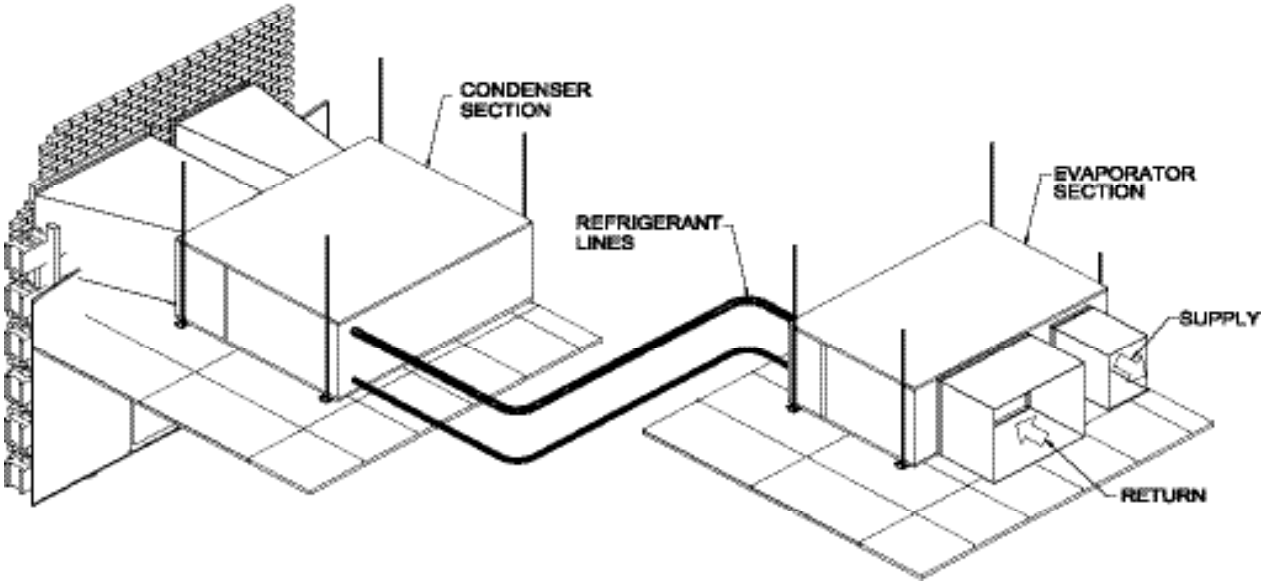
Horizontal Application and Installation

2–5 TON UNIT

Ductable Ceiling Air Conditioner
Packaged Installation



Ductable Ceiling Air Conditioner
Split Installation

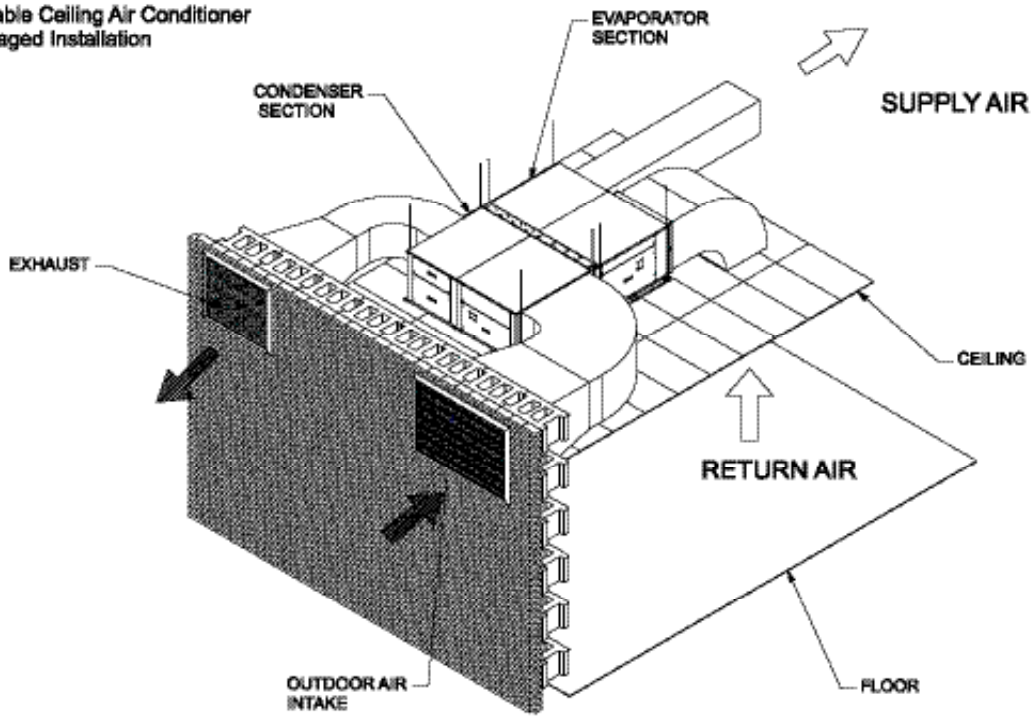


Horizontal Application and Installation (Cont'd)

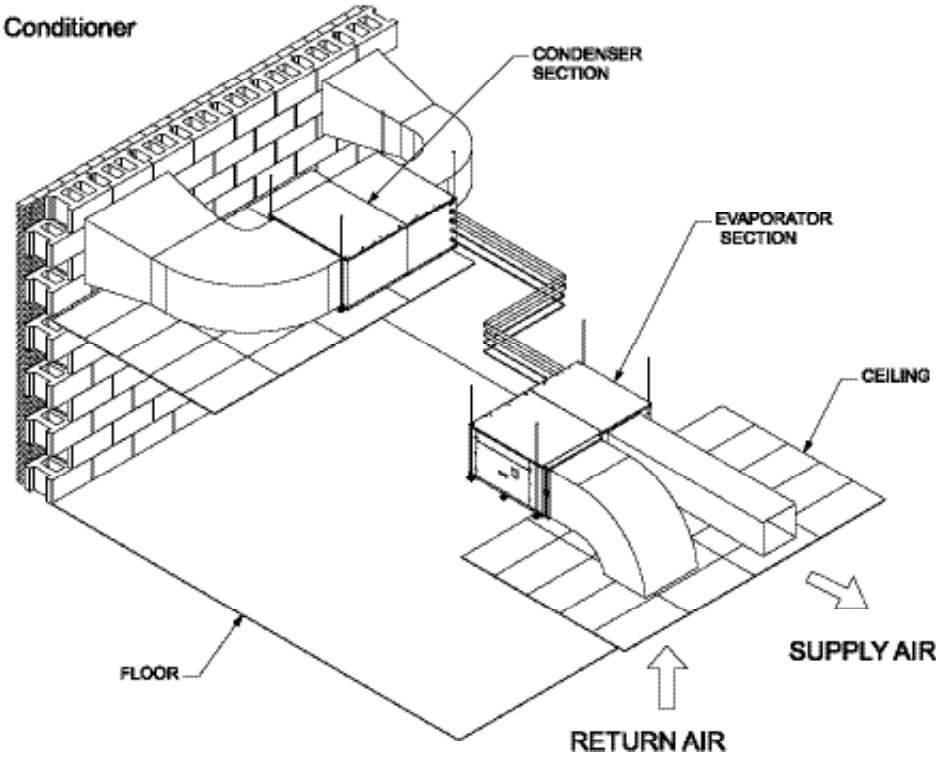
8–10 TON UNIT

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
COOLING PERFORMANCE								
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[2]			14.2	14	14.2	14	~	~
EER[3]			~	~	~	~	11.2	11.2
IEER[3]			~	~	~	~	12.9	12.9
Compressor - Qty/Type			1/Scroll	1/Scroll	1/Scroll	1/Scroll	2/Scroll	2/Scroll
EVAPORATOR COIL								
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
CONDENSER COIL								
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
EVAPORATOR FAN								
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
CONDENSER FAN								
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:

4. 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.
5. Rated and certified in accordance with ANSI/AHRI Standard 210/240.
6. 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	EDB	EWB															
	85°F	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	2.29	2.29	2.28	2.32	2.26	2.31
	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	3.54	3.51	3.53	3.56
		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
	EDB	EWB																
AMBIENT CONDENSER AIR TEMPERATURE	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

TABLE 8 - EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - INCHES W.C. [1]																									
		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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DSH036C	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DSH048C	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	1023	0.60	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-
	2000	637	0.50	680	0.55	720	0.60	760	0.65	797	0.70	869	0.80	937	0.91	1001	1.00	-	-	-	-	-	-	-	-	-	-	-	-
DSH060C	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	1066	0.86	-	-	-	-	-	-	-	-
	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	1092	1.04	-	-	-	-	-	-	-	-
	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	1121	1.24	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-
DSH096C	2400	360	0.22	409	0.27	458	0.31	501	0.37	543	0.42	619	0.53	690	0.64	752	0.75	812	0.87	878	1.04	935	1.21	985	1.40	1038	1.51
	2800	417	0.35	460	0.40	503	0.44	542	0.51	580	0.57	650	0.69	715	0.83	776	0.97	831	1.11	885	1.27	942	1.45	998	1.65	1045	1.77
	3200	465	0.50	504	0.55	542	0.60	578	0.67	613	0.74	678	0.88	739	1.02	796	1.18	847	1.33	903	1.49	960	1.66	1017	1.83	1072	2.01
	3600	539	0.75	573	0.80	607	0.85	639	0.93	670	1.00	730	1.16	786	1.32	839	1.48	890	1.66	939	1.83	980	1.99	-	-	-	-
	4000	598	1.02	629	1.07	660	1.12	689	1.21	718	1.29	773	1.46	826	1.64	876	1.82	924	2.00	-	-	-	-	-	-	-	-	-	-
DSH120C	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	771	1.19	815	1.33	857	1.48	896	1.63
	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	800	1.48	847	1.68	885	1.89	923	2.07
	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	817	1.73	867	2.13	905	2.29	941	2.45
	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	843	2.06	882	2.24	920	2.43	962	2.76
	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	874	2.46	911	2.66	948	2.86	983	3.06

Low Static Drive (Field Supplied)
Standard Static Drive
High Static Drive
High Static Drive (Field Supplied) [2]

NOTES:

1. Blower performance includes wet evaporator coil and 2" filters
2. For external static requirements outside of factory supplied drives, consult factory for appropriate drive information.

DSH Electrical Data

3. At higher evaporator airflows and wet bulb conditions, condensate carry-over may occur. Decrease airflow downward as necessary.

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

DSH Electrical Data (Cont'd)

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

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					0.50	1.6	11.23	15
DSH036C2	208-230/3/60	1	@	10.4	73.0					0.75	2.1	15.10	25
DSH036C4	460/3/60	1	@	5.8	38.0					0.75	1.0	8.25	15
DSH036C5	575/3/60	1	@	3.8	36.5					0.75	0.9	5.62	15
DSH048C2	208-230/3/60	1	@	13.8	83.1					1.50	4.5	21.75	35
DSH048C4	460/3/60	1	@	6.2	41.0					1.50	2.2	9.95	15
DSH048C5	575/3/60	1	@	4.9	33.0					1.50	1.8	7.93	15
DSH060C2	208-230/3/60	1	@	15.9	110.0					1.50	4.5	24.38	40
DSH060C4	460/3/60	1	@	7.1	52.0					1.50	2.2	11.08	15
DSH060C5	575/3/60	1	@	5.1	39.5					1.50	1.8	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

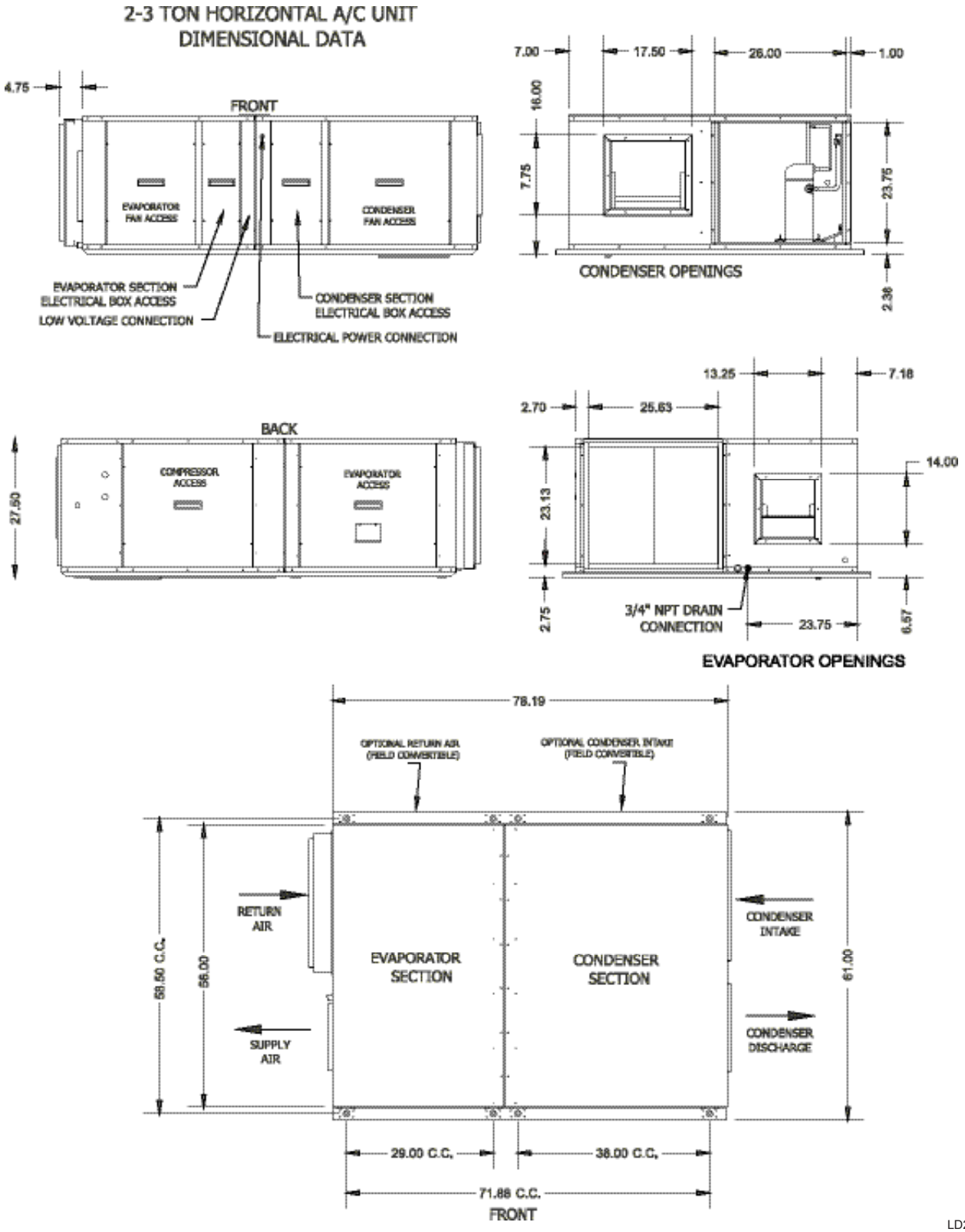
MODEL #	VOLTAGE	COMPRESSOR #1				COND FAN		MCA	MAX FUSE / CCT. BKR. AMP
		QTY		RLA	LRA	HP	FLA		
DSH120C2	208-230/3/60	2	@	16.2	110.0	5.00	14.0	50.45	60
DSH120C4	460/3/60	2	@	7.6	52.0	5.00	6.6	23.70	30
DSH120C5	575/3/60	2	@	5.3	38.9	5.00	5.3	17.23	20

NOTE:

Oversized condenser motors do not utilize compressor #2.

DSH Dimensional Data

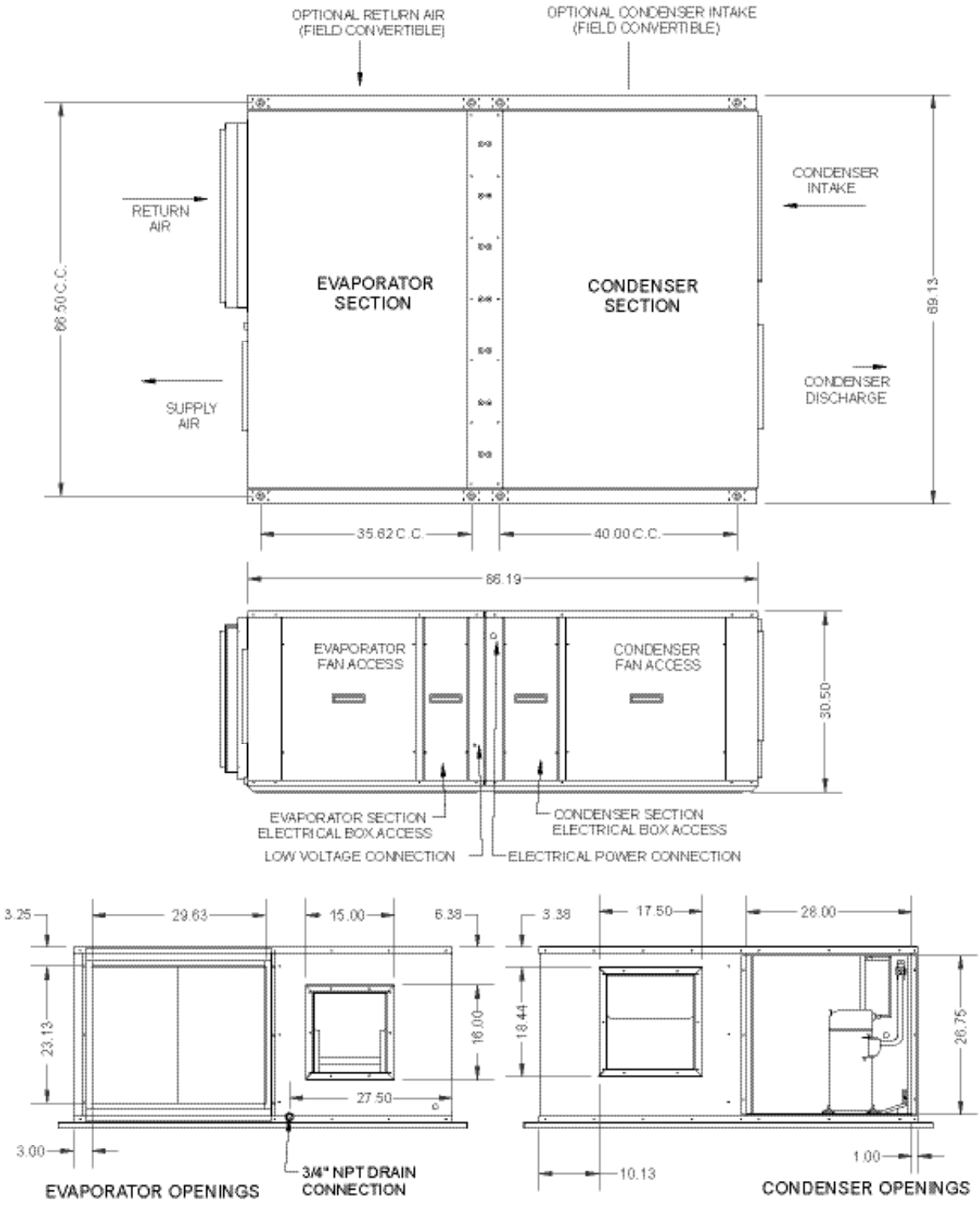
DSH024C & DSH036C



Sigma 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



LD284621

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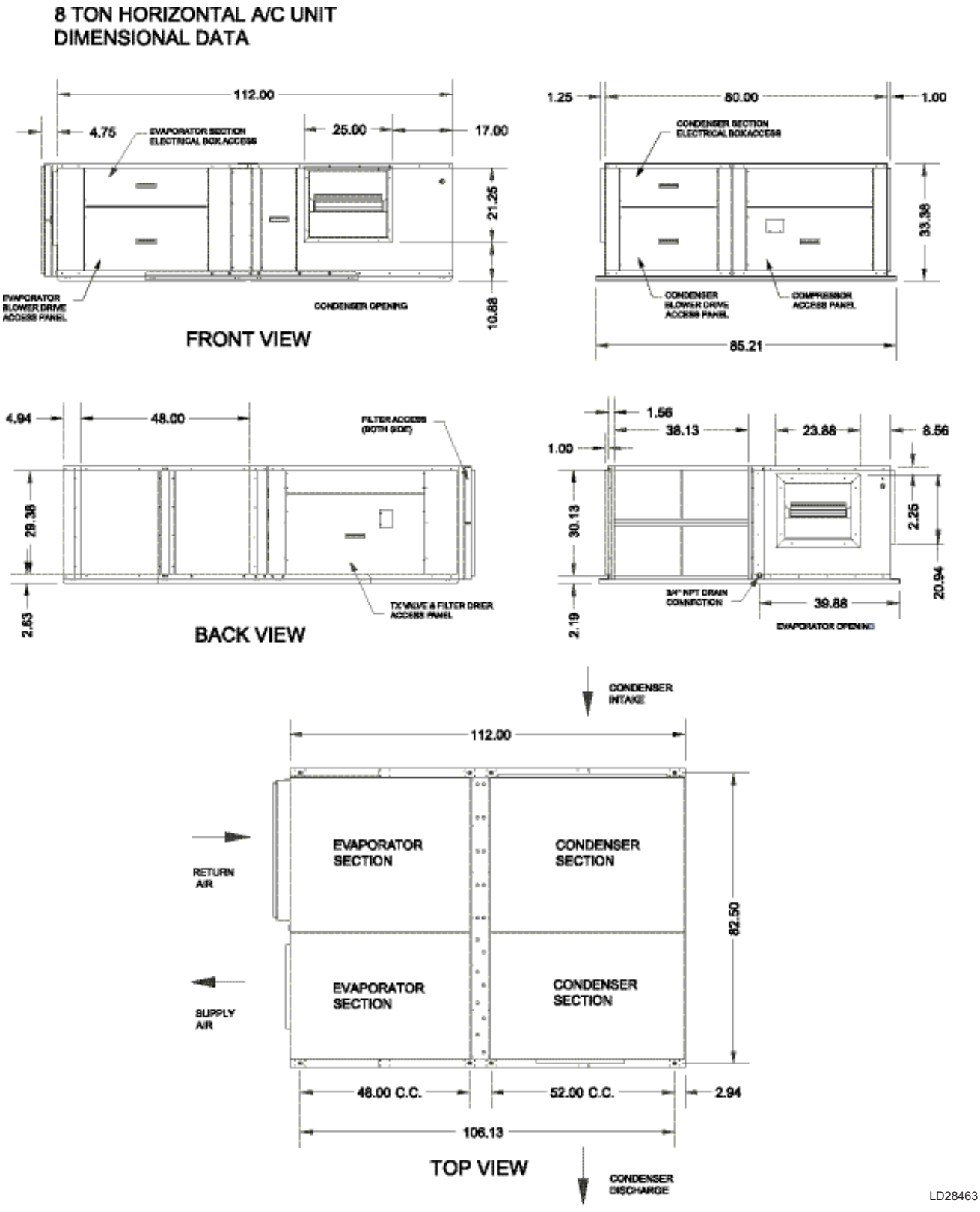
DSH Dimensional Data (Cont'd)

DSH096C



LD28463

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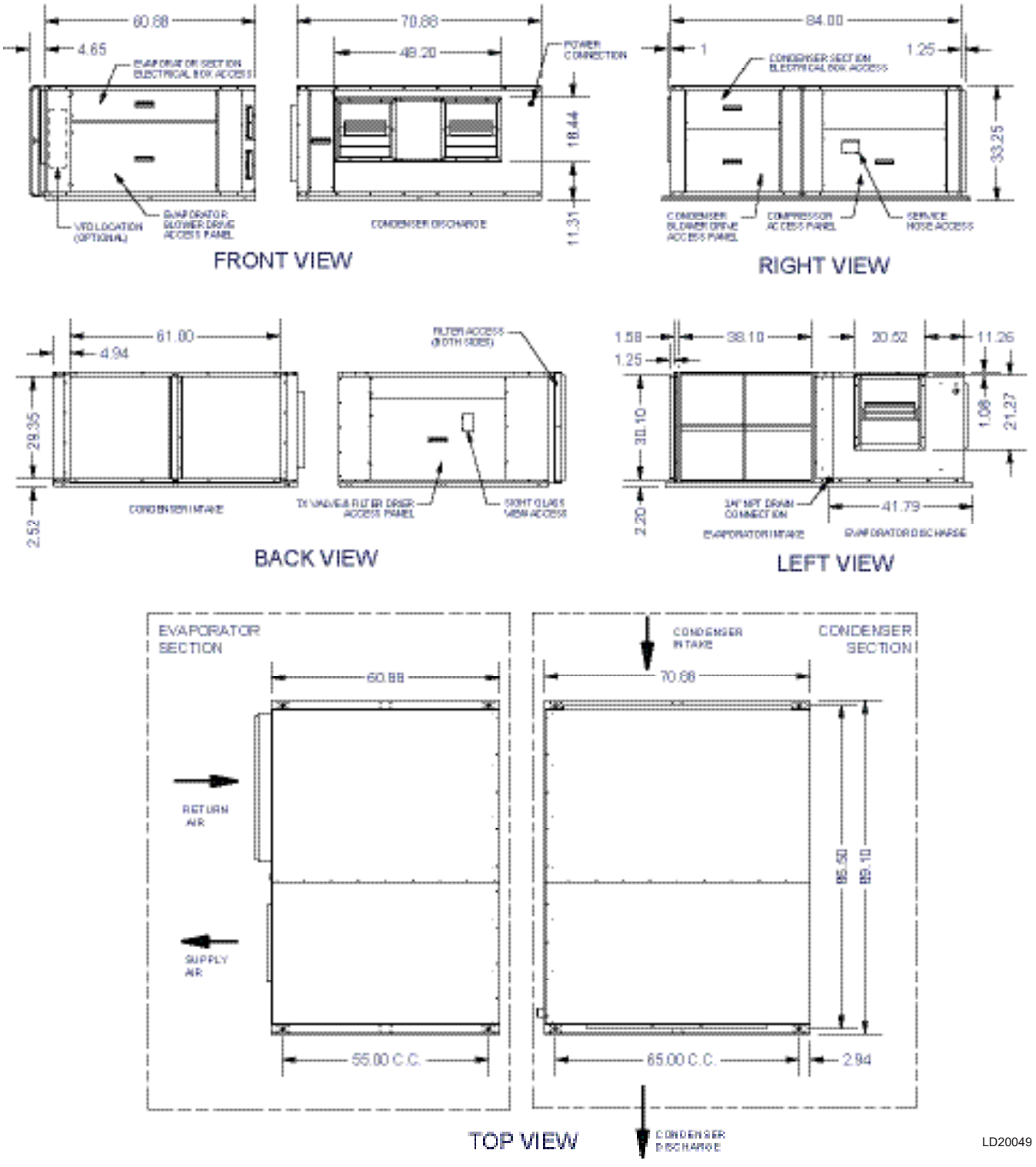
DSH120C

10 TON HORIZONTAL A/C UNIT DIMENSIONAL DATA



LD20049

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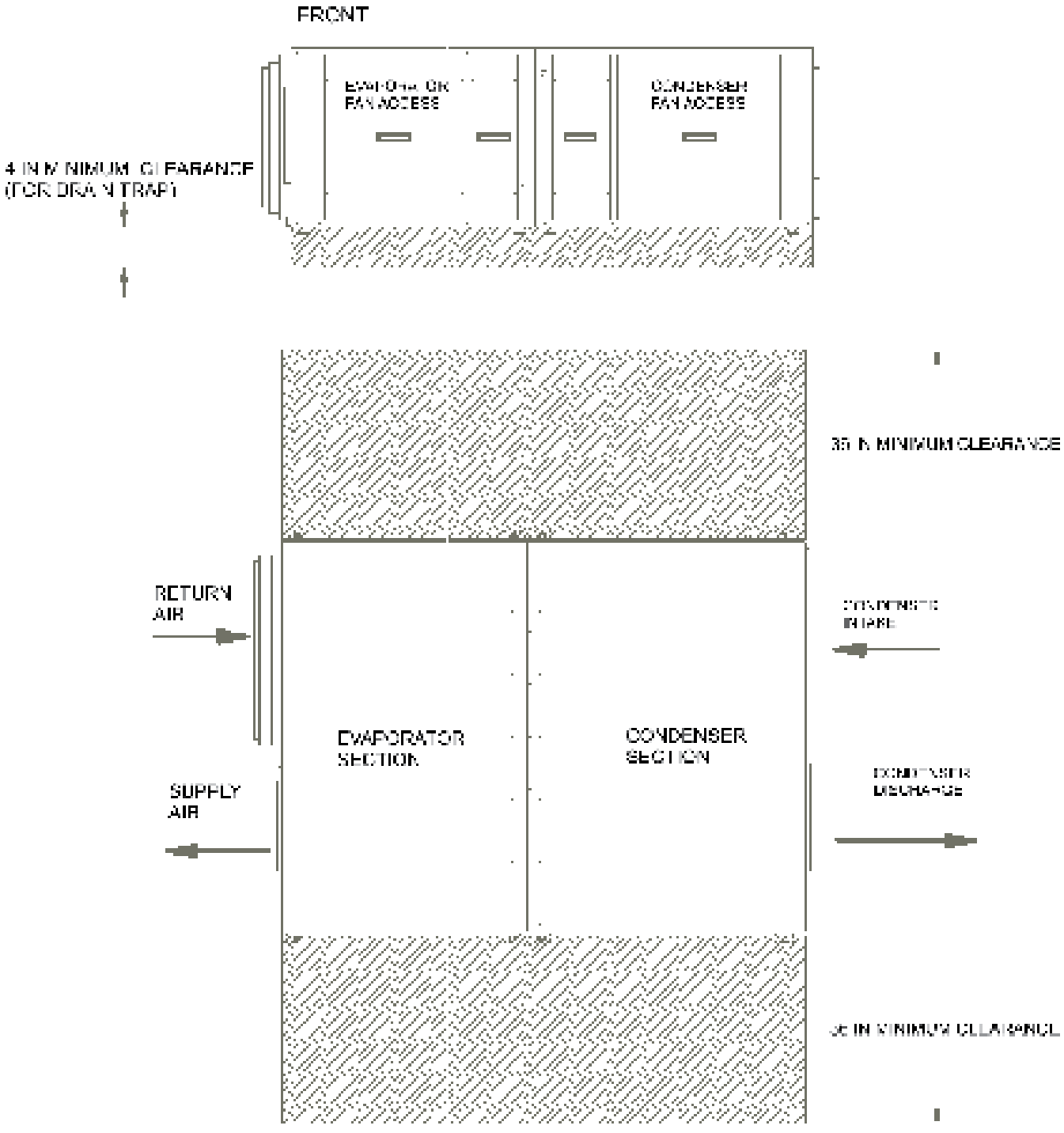
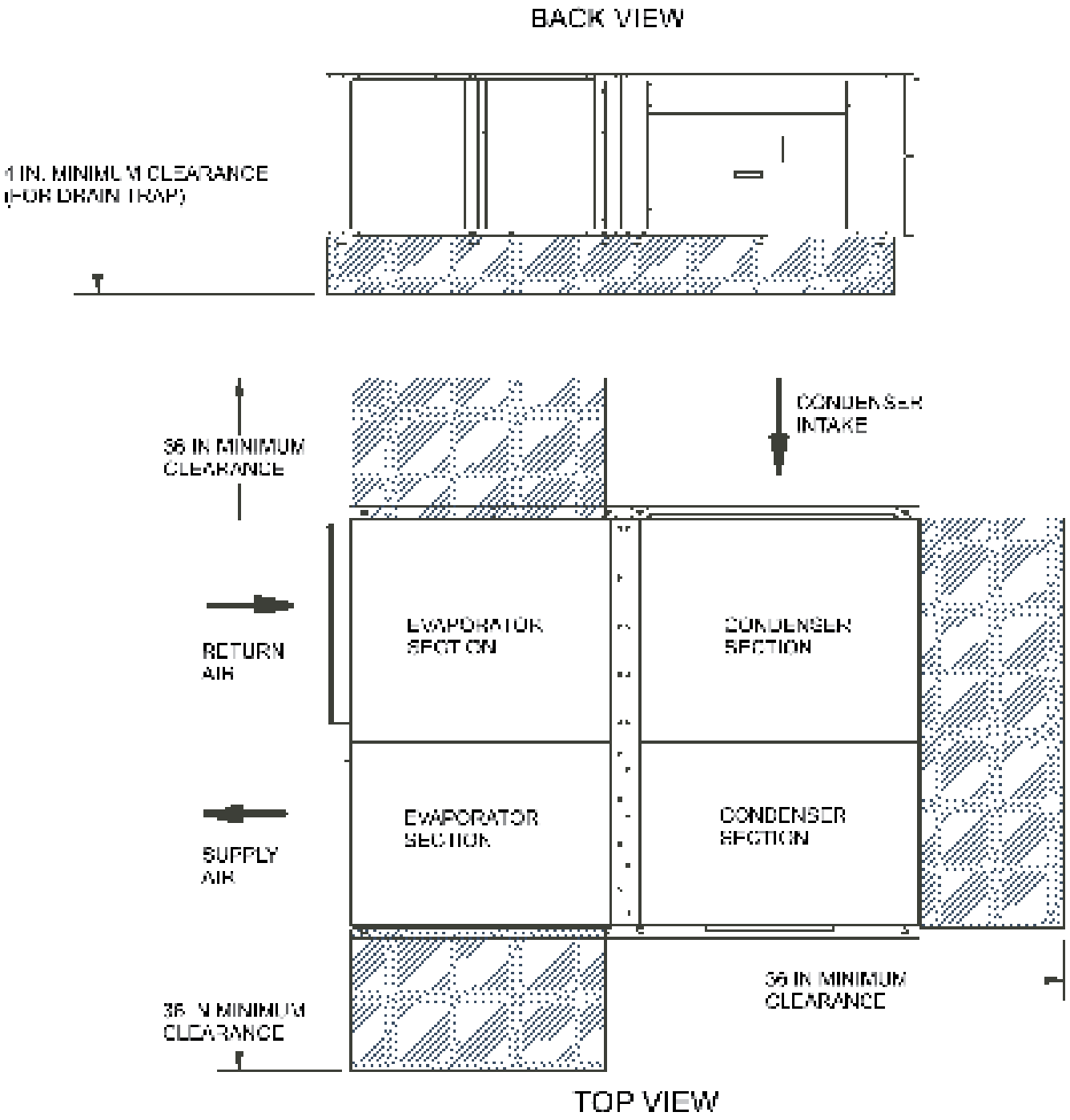
DSH Typical Service Clearances

2–5 TON HORIZONTAL A/C UNIT
SERVICE CLEARANCES*



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



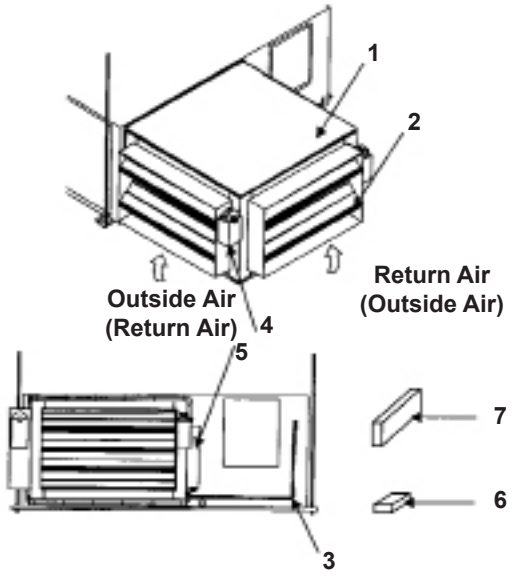
*Unit ships factory split (field assembled unit shown)

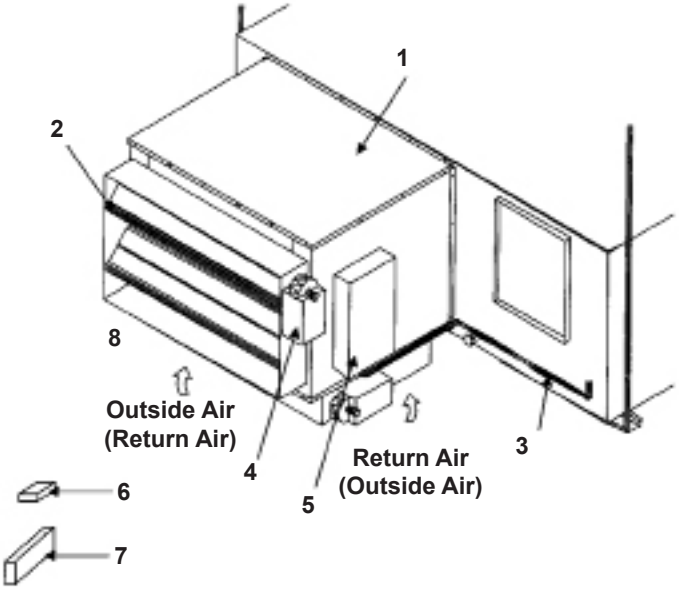
DSH Airside Economizer

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



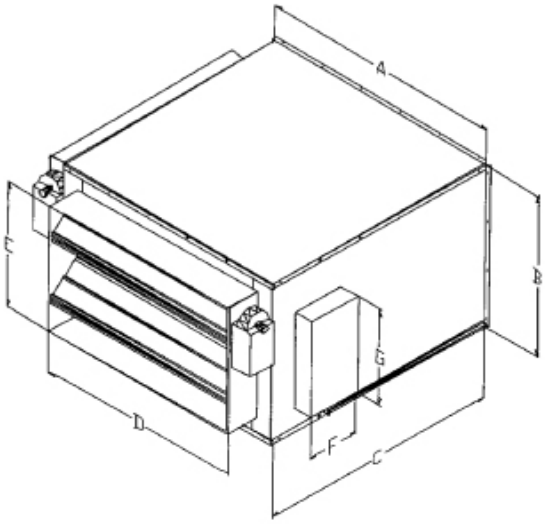


All economizers are shipped complete with:

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

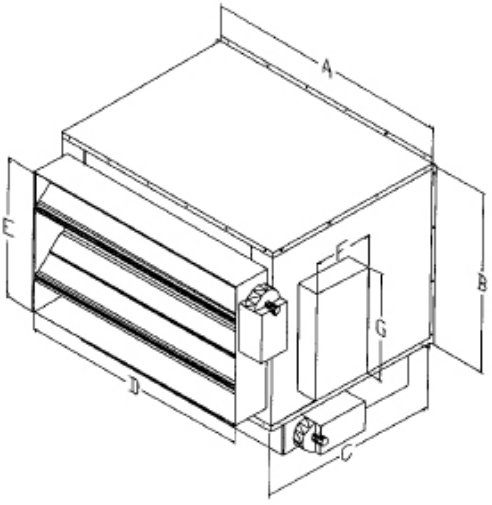
NOTE: Additional field support required.

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

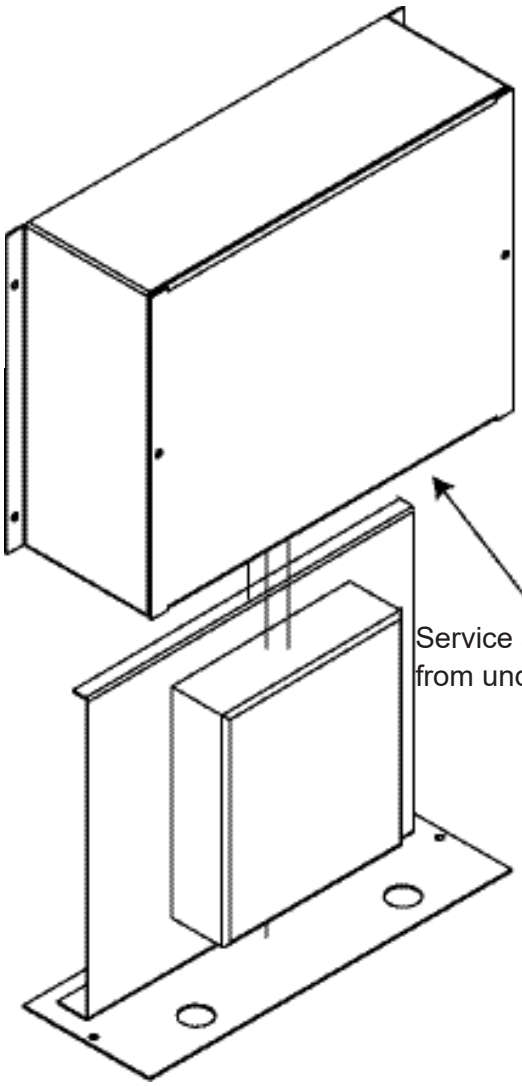
OPTIONAL BOTTOM & FRONT DAMPER ARRANGEMENT



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

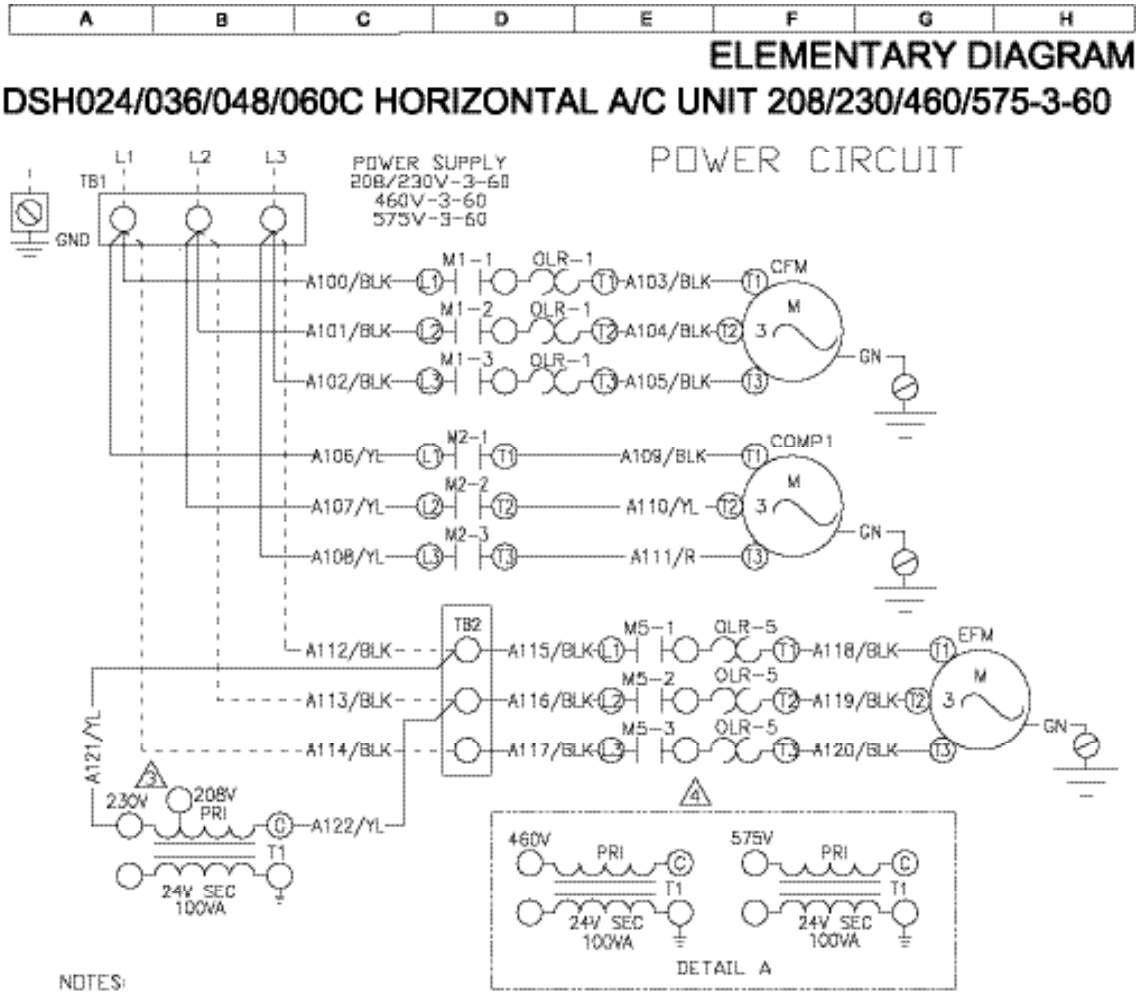
DSH Airside Economizer (Cont'd)

SERVICE ACCESS FOR DSH AIRSIDE ECONOMIZER MODULE



LD29119

DSH Wiring Diagrams

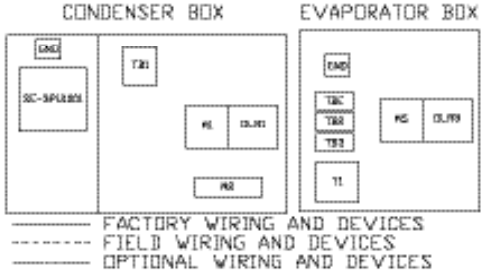


NOTES:

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. 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.
4. 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

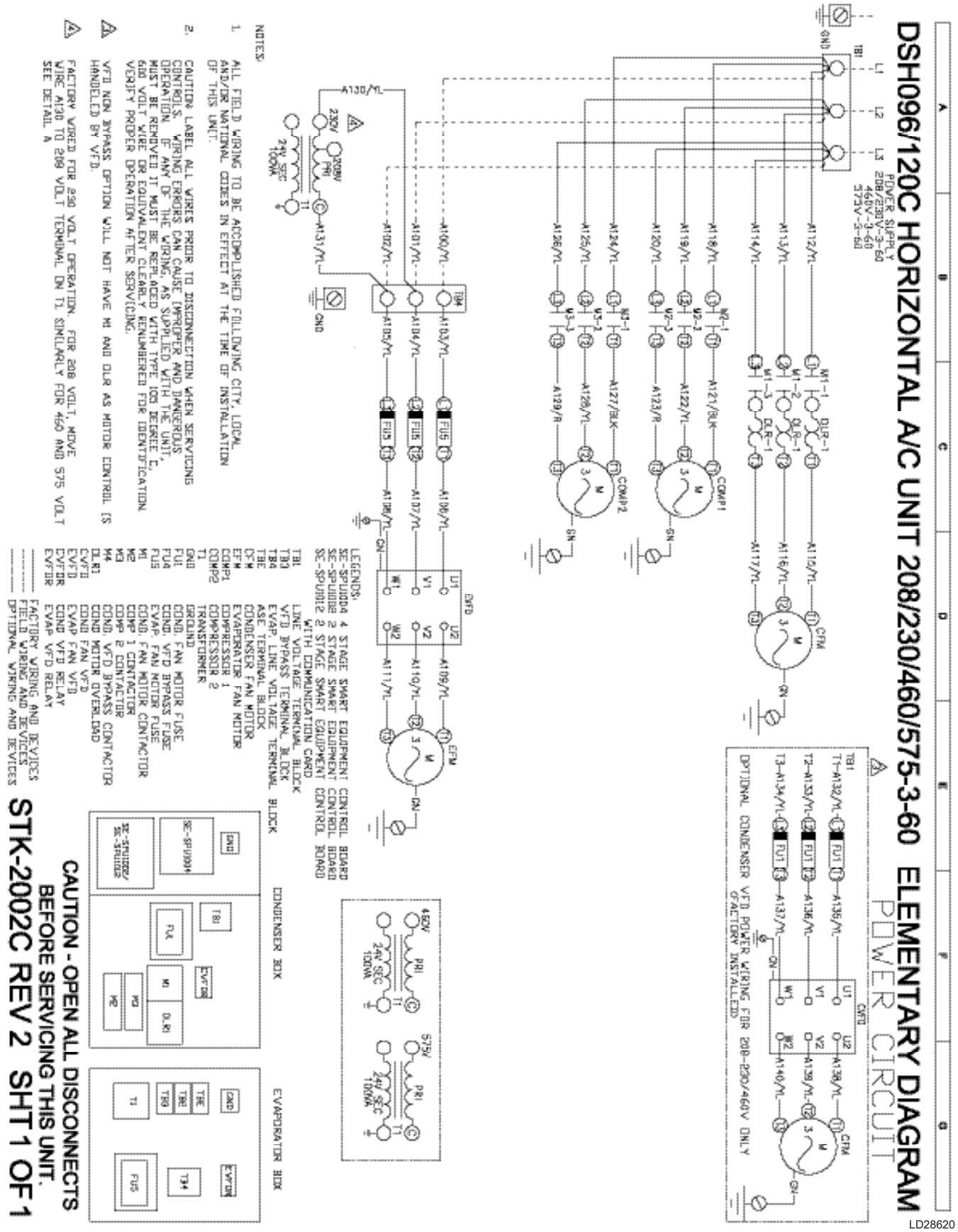


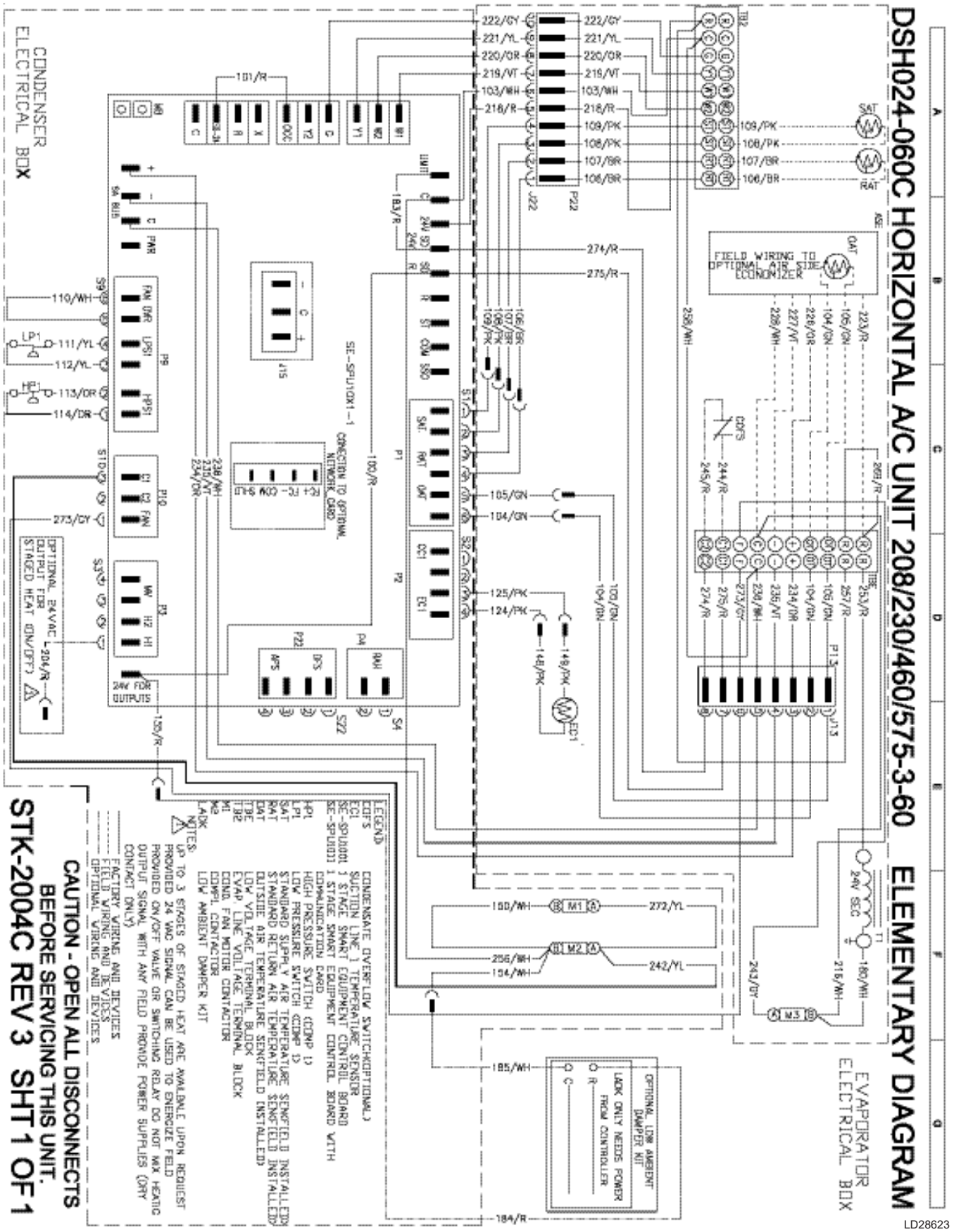
CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2008C REV 1 SHT 1OF 1

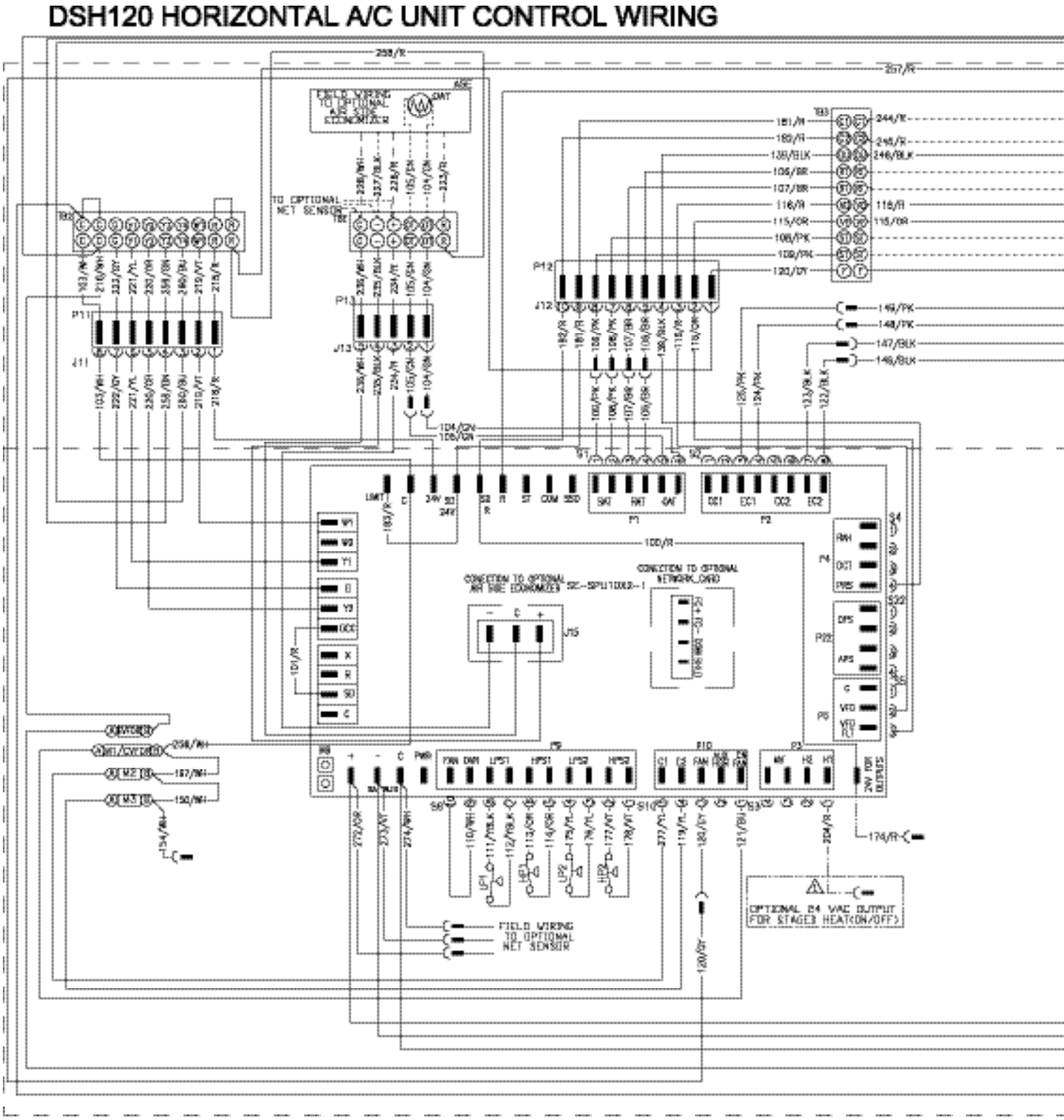
LD28627

DSH Wiring Diagrams (Cont'd)

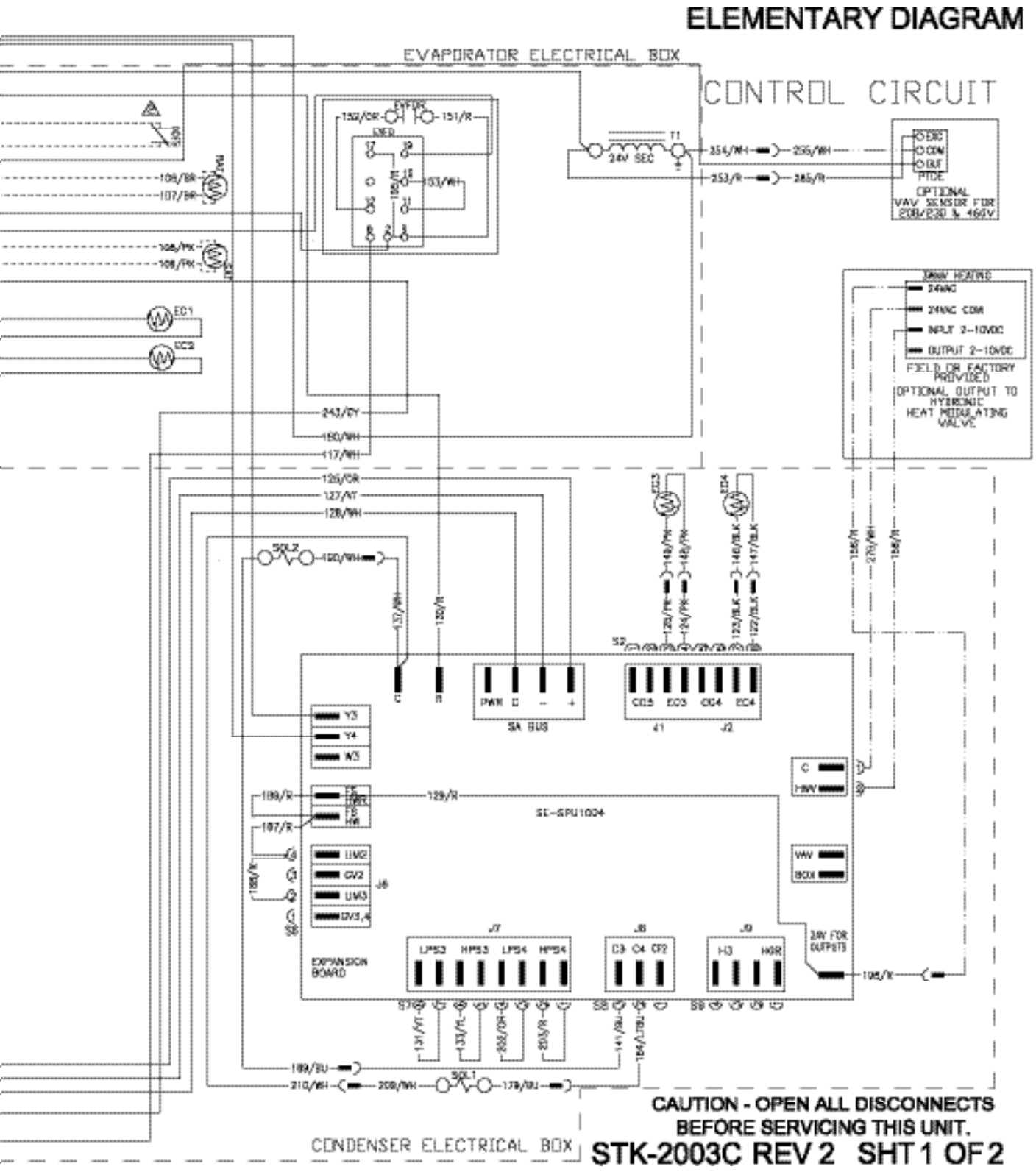



DSH024-060C HORIZONTAL A/C UNIT 208/230/460/575-3-60 ELEMENTARY DIAGRAM
CONDENSER ELECTRICAL BOX
EVAPORATOR ELECTRICAL BOX
FIELD WIRING TO OPTIONAL AIR SIDE ECONOMIZER
OPTIONAL LOW AMBIENT DAMPER KIT
LOCK ONLY NEEDS POWER FROM CONTROLLER
CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.
STK-2004C REV 3 SHT 1 OF 1
LEGEND
NOTES:
LD28623

DSH Wiring Diagrams (Cont'd)

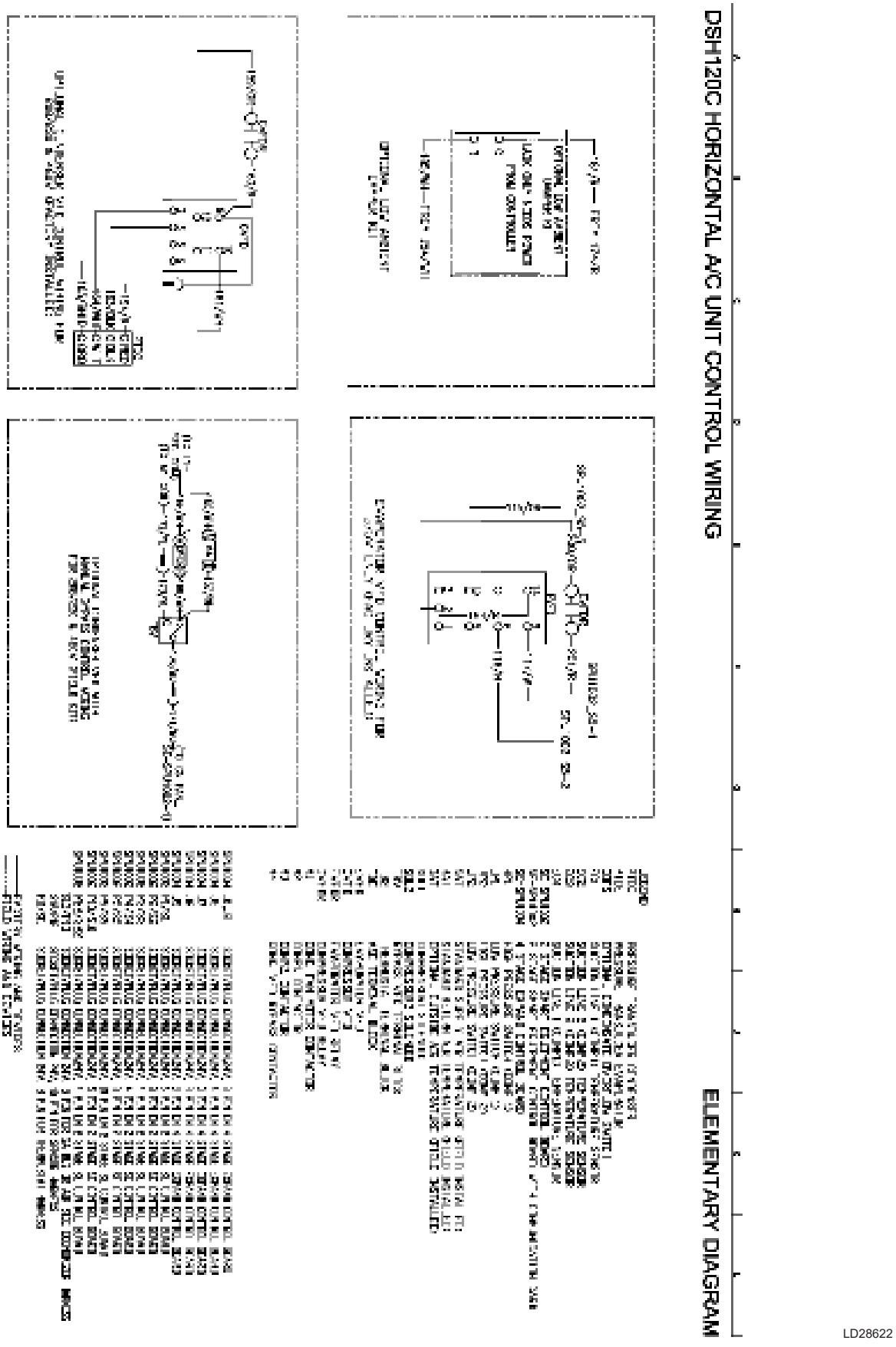


LD28621a

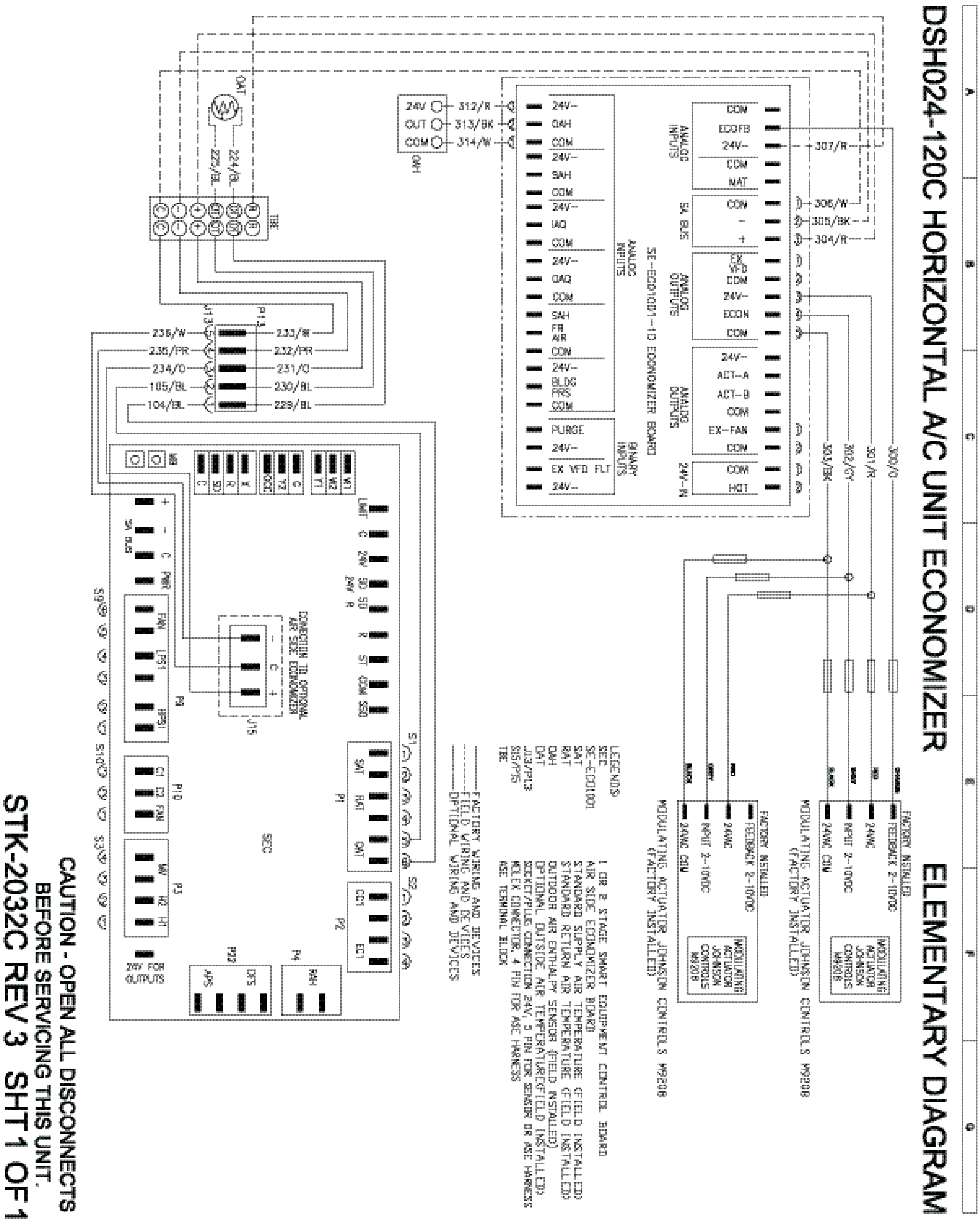

ELEMENTARY DIAGRAM
EVAPORATOR ELECTRICAL BOX
CONTROL CIRCUIT
EXPORT
152/OR
151/R
T1
24V SEC
254/WH
255/WH
253/R
255/R
OPTIONAL VAV SENSOR FOR 208/230 & 460V
24VAC
24VAC COM
INPUT 2-10VDC
OUTPUT 2-10VDC
FIELD OR FACTORY PROVIDED OPTIONAL OUTPUT TO HYDRONIC HEAT MODULATING VALVE
EC1
EC2
EC3
EC4
243/GY
160/WH
117/WH
126/OR
127/VT
128/WH
SOL2
190/WH
137/WH
130/R
148/PK
146/BLK
147/BLK
155/R
270/WH
SA BUS
Y3
Y4
W3
189/R
129/R
187/R
SE-SPU1024
GV2
GV3,4
J6
J7
J8
J9
LPS3
HPS3
LPS4
HPS4
C3
C4
CF2
H3
HGR
24V FOR OUTPUTS
EXPANSION BOARD
131/VT
133/YL
202/GN
203/R
141/BU
164/LTBU
189/BU
210/WH
208/WH
SOL1
179/BU
CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.
CONDENSER ELECTRICAL BOX
STK-2003C REV 2 SHT 1 OF 2

LD28621b

DSH Wiring Diagrams (Cont'd)

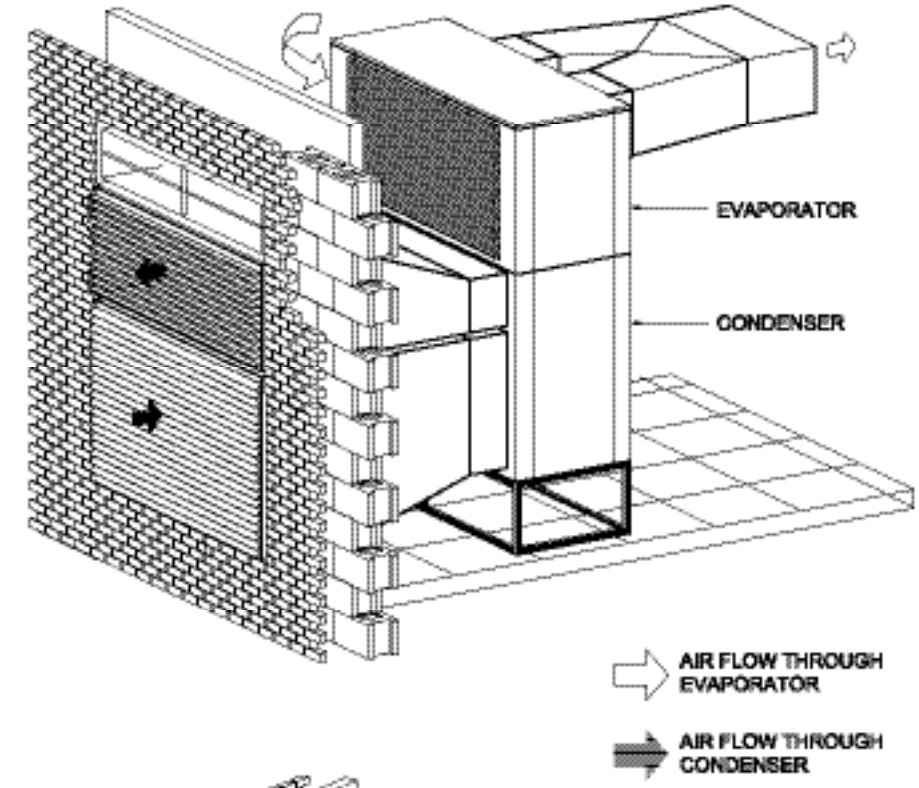


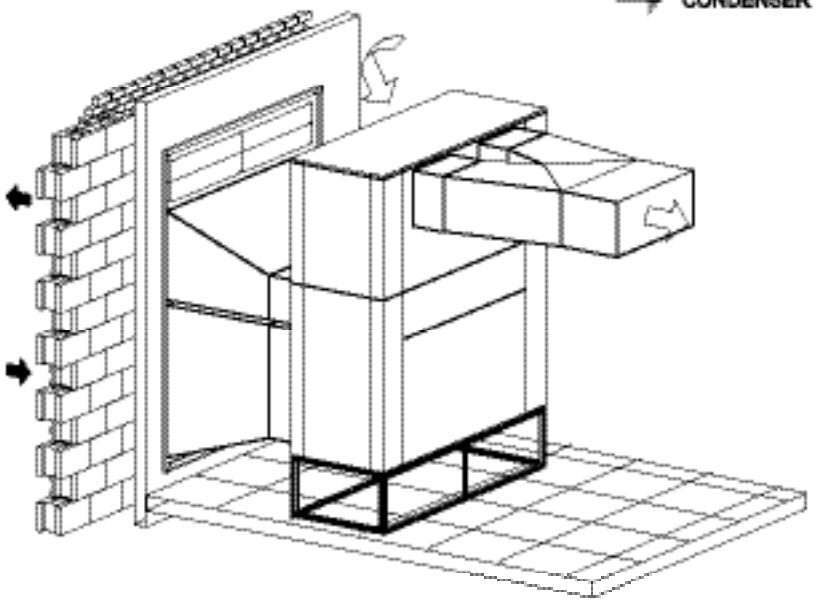
LD28622


DSH024-120C HORIZONTAL A/C UNIT ECONOMIZER ELEMENTARY DIAGRAM
SE-ECO1001-1D ECONOMIZER BOARD
ANALOG INPUTS
SA BUS
ANALOG OUTPUTS
BINARY INPUTS
24V~ IN
MODULATING ACTUATOR JOHNSON CONTROLS M9208 (FACTORY INSTALLED)
FACTORY INSTALLED
FEEDBACK 2-10VDC
24VAC
INPUT 2-10VDC
24VAC COM
CONNECTION TO OPTIONAL AIR SIDE ECONOMIZER
LEGENDS
SEC 1 OR 2 STAGE SMART EQUIPMENT CONTROL BOARD
SE-ECO1001 AIR SIDE ECONOMIZER BOARD
SAT STANDARD SUPPLY AIR TEMPERATURE (FIELD INSTALLED)
RAT STANDARD RETURN AIR TEMPERATURE (FIELD INSTALLED)
OAH OUTDOOR AIR ENTHALPY SENSOR (FIELD INSTALLED)
OAT OPTIONAL OUTSIDE AIR TEMPERATURE(FIELD INSTALLED)
J13/P13 SOCKET/PLUG CONNECTION 24V, 5 PIN FOR SENSOR OR ASE HARNESS
S15/P15 MOLEX CONNECTOR, 4 PIN FOR ASE HARNESS
TBE ASE TERMINAL BLOCK
FACTORY WIRING AND DEVICES
FIELD WIRING AND DEVICES
OPTIONAL WIRING AND DEVICES
CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.
STK-2032C REV 3 SHT 1 OF 1

LD28637

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
COOLING PERFORMANCE									
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[2]			14.0	~	~	~	~	~	~
EER[3]			~	11.2	11.2	11.2	11.0	10.0	10.0
IEER[3]			~	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
EVAPORATOR COIL									
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
CONDENSER COIL									
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
EVAPORATOR FAN									
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
CONDENSER FAN									
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

1. 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.
2. Rated and certified in accordance with ANSI/AHRI Standard 210/240.
3. 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	EDB	EWB																
	85°F	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	8.5	8.4	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	9.2	9.1	9.2	9.2	9.1	9.2	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																
	85°F	57°F	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
			SC	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
		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															
	85°F	57°F	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	10.2	10.3	10.4	10.2	10.3	10.4
		62°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	10.4	10.3	10.3	10.4
		67°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
		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	10.6	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
		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
		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
		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	12.4	12.5	12.6
		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	12.6
		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
		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	12.8	12.7	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
		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
		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
		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	EDB	EWB																
	85°F	57°F	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
		62°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
		67°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
		72°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
	95°F	57°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
		62°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
		67°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
		72°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
	105°F	57°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
		62°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
		67°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
		72°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
	115°F	57°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
		62°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
		67°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	17.8	17.7	17.8
		72°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															
	85°F	57°F	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
			SC	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
		62°F	TC	234.6	233.9	239	239.8	239	248.9	243.8	243.7	256.9	247.3	250.5	264.1	242.6	256.5	270.5
			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	18.4	18.5	18.5	18.5	18.7	18.6	18.6	18.8	18.7	18.7	18.9	18.6	18.8	19
		67°F	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	188.4	221.4	162.3	199.2	236.5	169.1	209.1	250.7	175.4	219.3	264.2	181.7	229.7	270.6
			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
		72°F	TC	278.4	278.2	277.5	283.5	283.4	283.1	288.1	287.9	287.6	291.7	291.4	291.1	294.5	294.4	294
			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	19.2	19.2	19.3	19.3	19.3	19.4	19.4	19.3	19.5	19.4	19.4	19.5	19.5	19.5
	95°F	57°F	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	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
			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
		62°F	TC	222.7	222.1	229.7	227.3	226.5	238.7	231.2	233.4	246.4	234.1	239.8	253.1	236.5	245.4	259.1
			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	19.9	20.1	20.1	20	20.2	20.1	20.1	20.4	20.2	20.3	20.5	20.2	20.4	20.6
		67°F	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	183.5	216.1	157.3	194.5	231.2	163.8	205.2	245.8	170	215.6	253.4	176.2	223.8	259.3
			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
		72°F	TC	265	264.6	263.9	269.6	269.4	269.3	273.8	273.4	273.2	277.2	277	276.5	279.8	279.3	279
			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	20.7	20.7	20.8	20.8	20.8	20.9	20.9	20.9	21	21	20.9	21.1	21	21
	105°F	57°F	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	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
			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
		62°F	TC	209.1	209	218.6	213.4	214.9	227	216.5	221.6	234.2	219.1	227.4	240.4	221.9	232.5	245.9
			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	21.6	21.8	21.7	21.7	21.9	21.8	21.9	22.1	21.8	22	22.2	21.9	22.1	22.3
		67°F	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	178	210.9	151.6	189.1	226	158	199.5	234.9	164.1	210.1	240.6	170.1	220.1	246.1
			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
		72°F	TC	249.5	249	248.2	253.9	253.5	253	257.5	257.1	256.4	260.4	260	259	262.6	262.3	261.4
			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	22.4	22.4	22.5	22.5	22.4	22.6	22.6	22.5	22.7	22.6	22.6	22.7	22.7	22.6
	115°F	57°F	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	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
			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
		62°F	TC	194.7	195.6	206.4	198.2	202.7	214	200.9	208.8	220.6	203.6	214	226.3	206	218.6	231.3
			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	23.5	23.6	23.5	23.6	23.8	23.6	23.7	23.9	23.6	23.8	24	23.7	23.9	24.1
		67°F	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	172	204.9	145.9	182.7	215.2	152	193.9	220.7	158	203.3	226.4	164	214.7	231.5
			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
		72°F	TC	232.7	231.9	230.8	235.7	236	234.8	239.9	239.1	237.7	242.3	241.6	240.2	244.4	243.8	243.1
			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	24.2	24.1	24.3	24.3	24.2	24.4	24.3	24.3	24.5	24.4	24.3	24.5	24.4	24.4

NOTE:

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

DSV Performance Data (Cont'd)

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	EDB	EWB																
	85°F	57°F	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
		62°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
		67°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

DSV Fan Performance Data

TABLE 25 - EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	AVAILABLE EXTERNAL STATIC PRESSURE - INCHES W.C. [1]																			
		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:

1. Blower performance includes wet evaporator coil and 2" filters.
2. 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

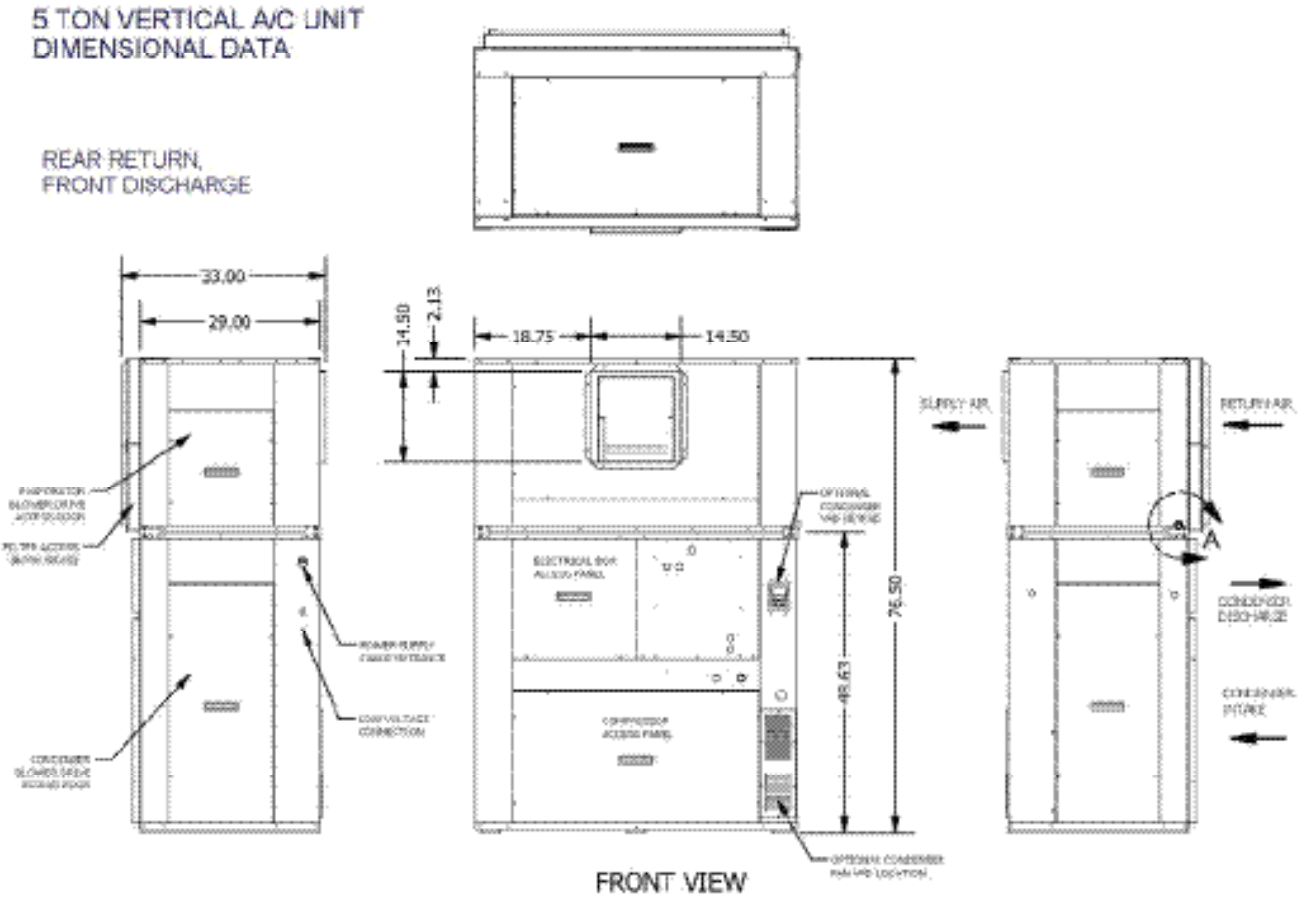
MODEL #	VOLTAGE	COMPRESSOR #1				COMPRESSOR #2				EVAP FAN		COND FAN		MCA	MAX FUSE / CCT. BKR. AMP
		QTY		RLA	LRA	QTY		RLA	LRA	HP	FLA	HP	FLA		
DSV060C2	208-230/3/60	1	@	15.9	110.0					1.00	3.1	1.50	4.5	27.48	40
DSV060C4	460/3/60	1	@	7.1	52.0					1.00	1.5	1.50	2.2	12.58	15
DSV060C5	575/3/60	1	@	5.1	39.5					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

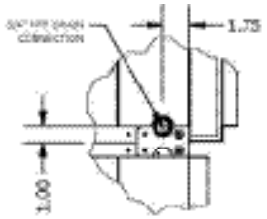
TABLE 28 - OVERSIZED EVAPORATOR MOTOR

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

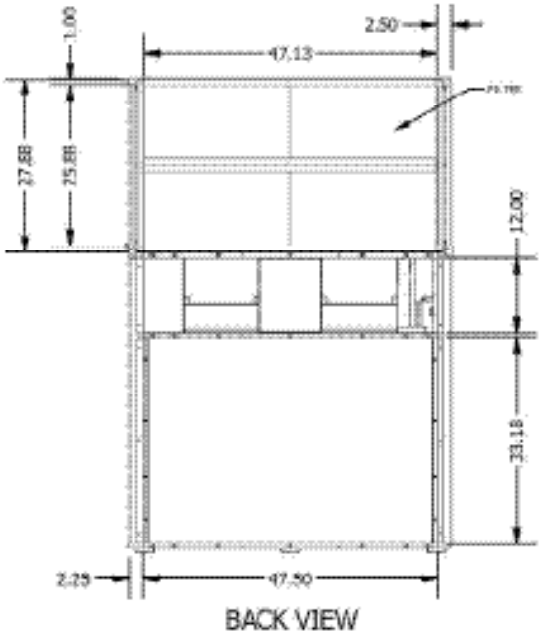
DSV Dimensional Data

DSV060C FRONT DISCHARGE AIR-COOLED UNIT





DETAIL A



LD28331

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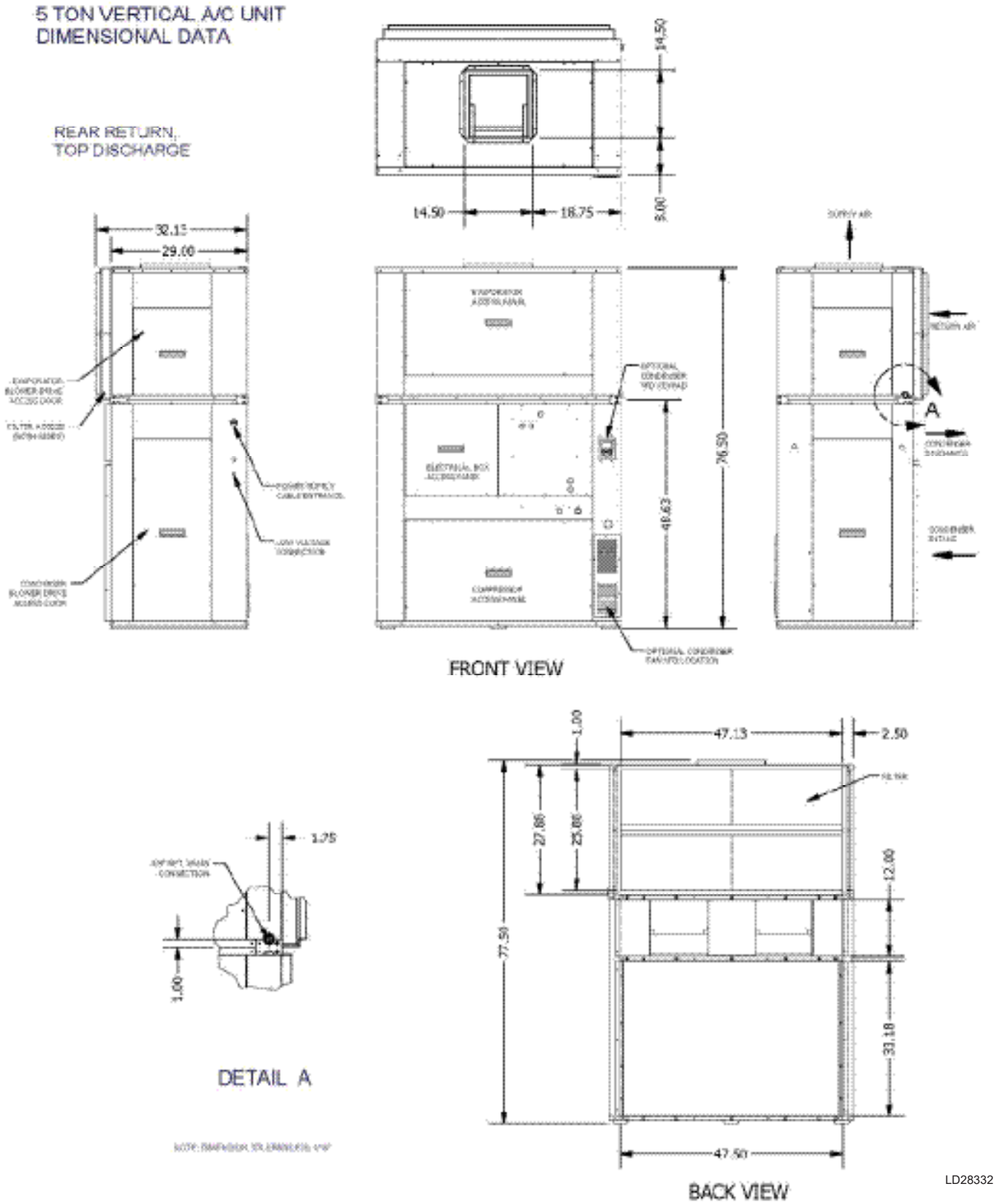
DSV Dimensional Data (Cont'd)

DSV060C VERTICAL DISCHARGE AIR-COOLED UNIT



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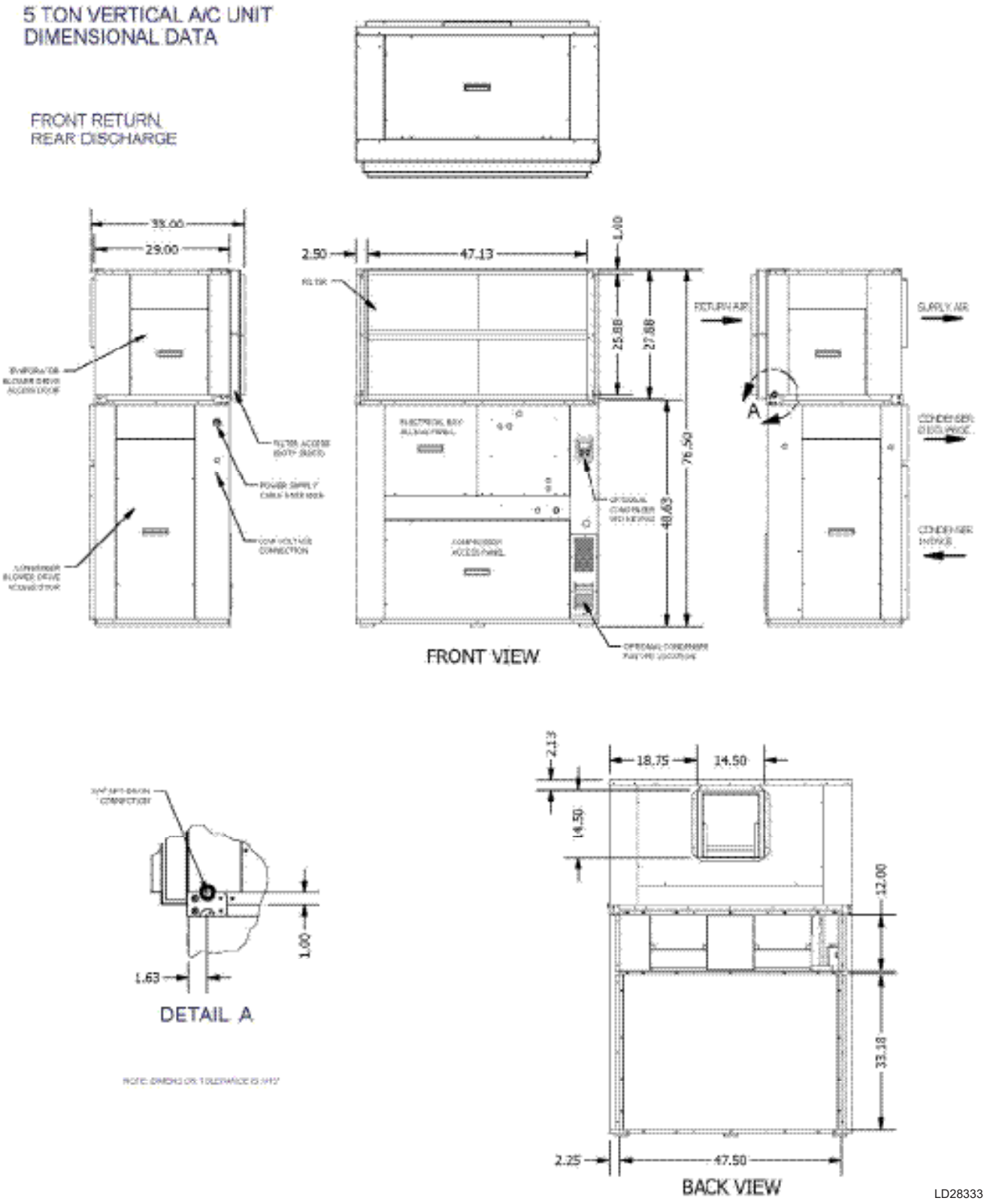
DSV060C REAR DISCHARGE AIR-COOLED UNIT



LD28333

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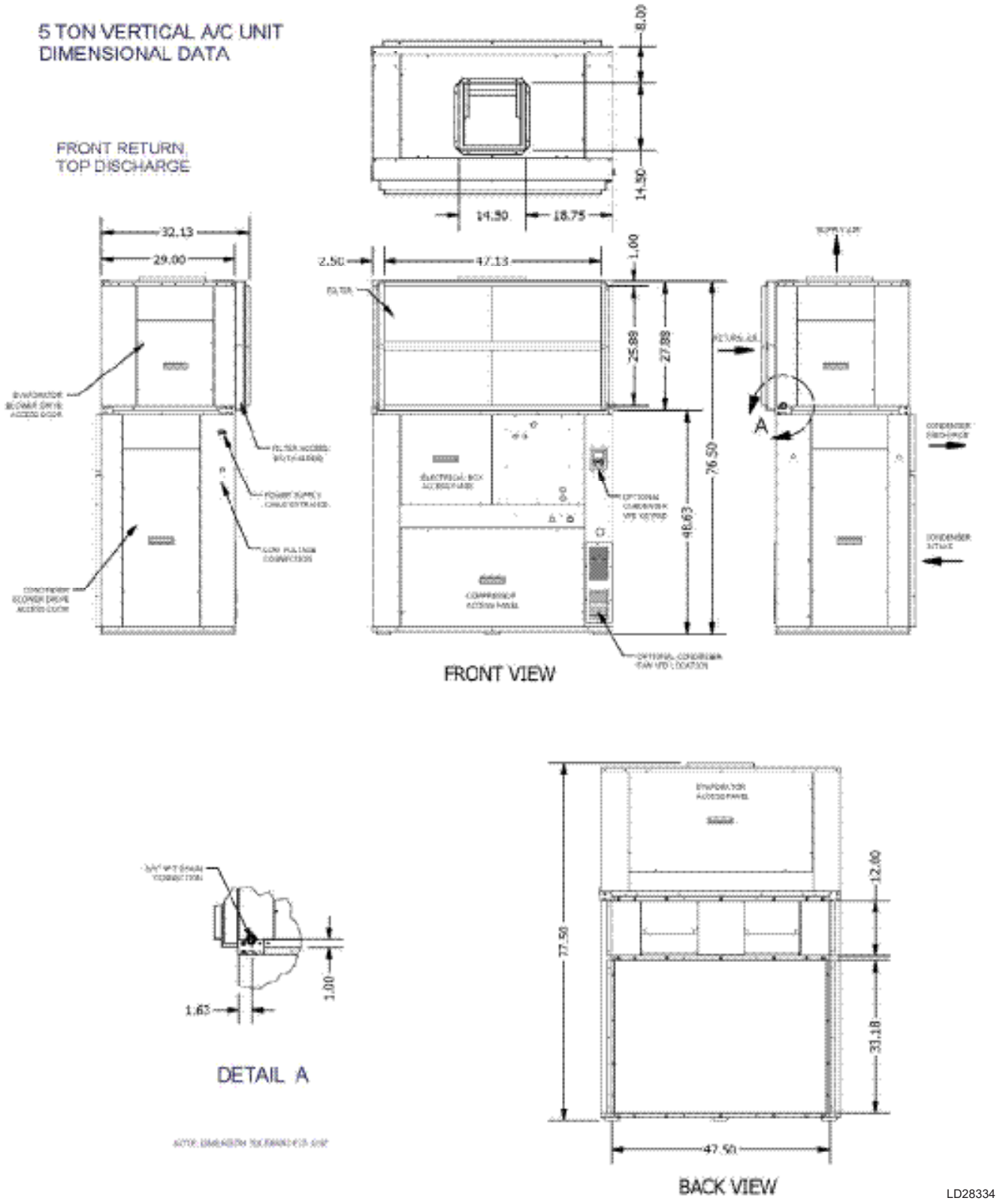
DSV Dimensional Data (Cont'd)

DSV060C VERTICAL DISCHARGE AIR-COOLED UNIT



LD28334

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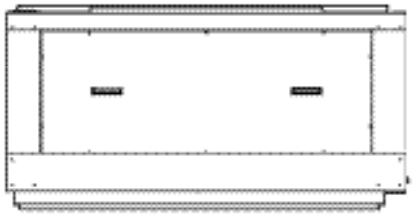
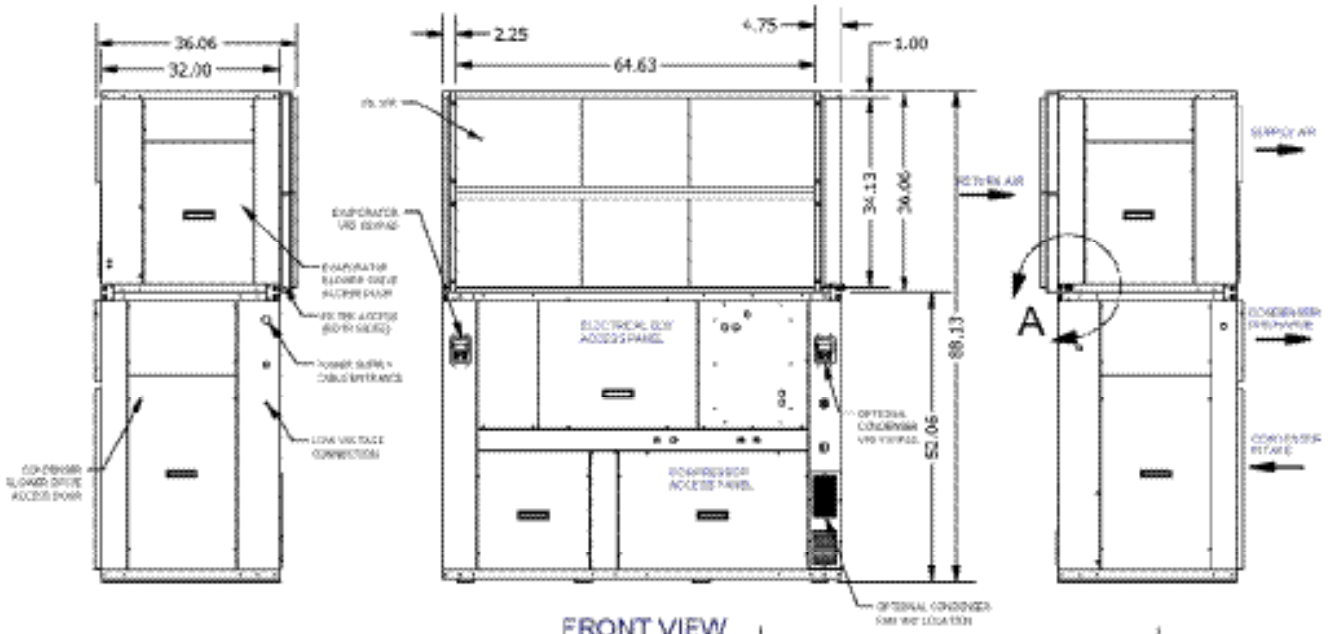
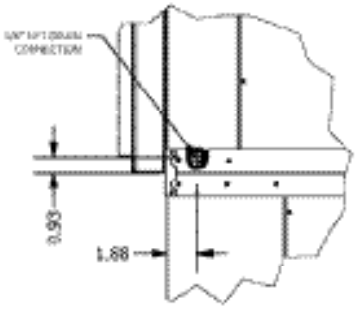
DSV096C/DSV120C REAR DISCHARGE AIR-COOLED UNIT

8 & 10 TON VERTICAL A/C UNIT DIMENSIONAL DATA

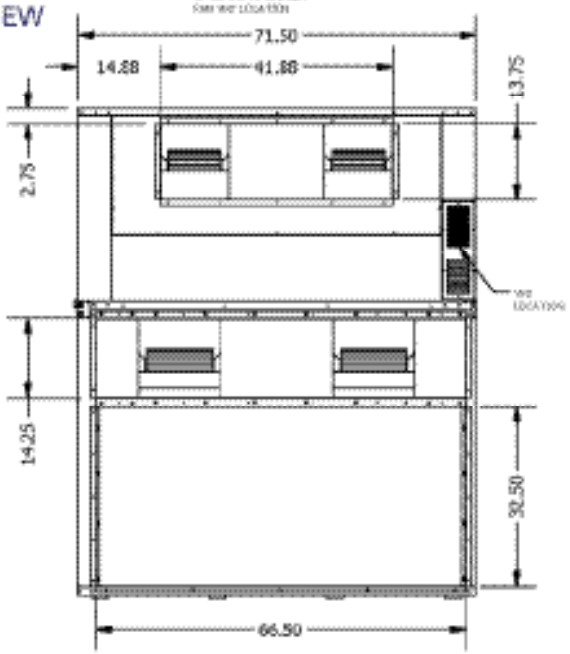
FRONT RETURN,
REAR DISCHARGE







DETAIL A



LD28335

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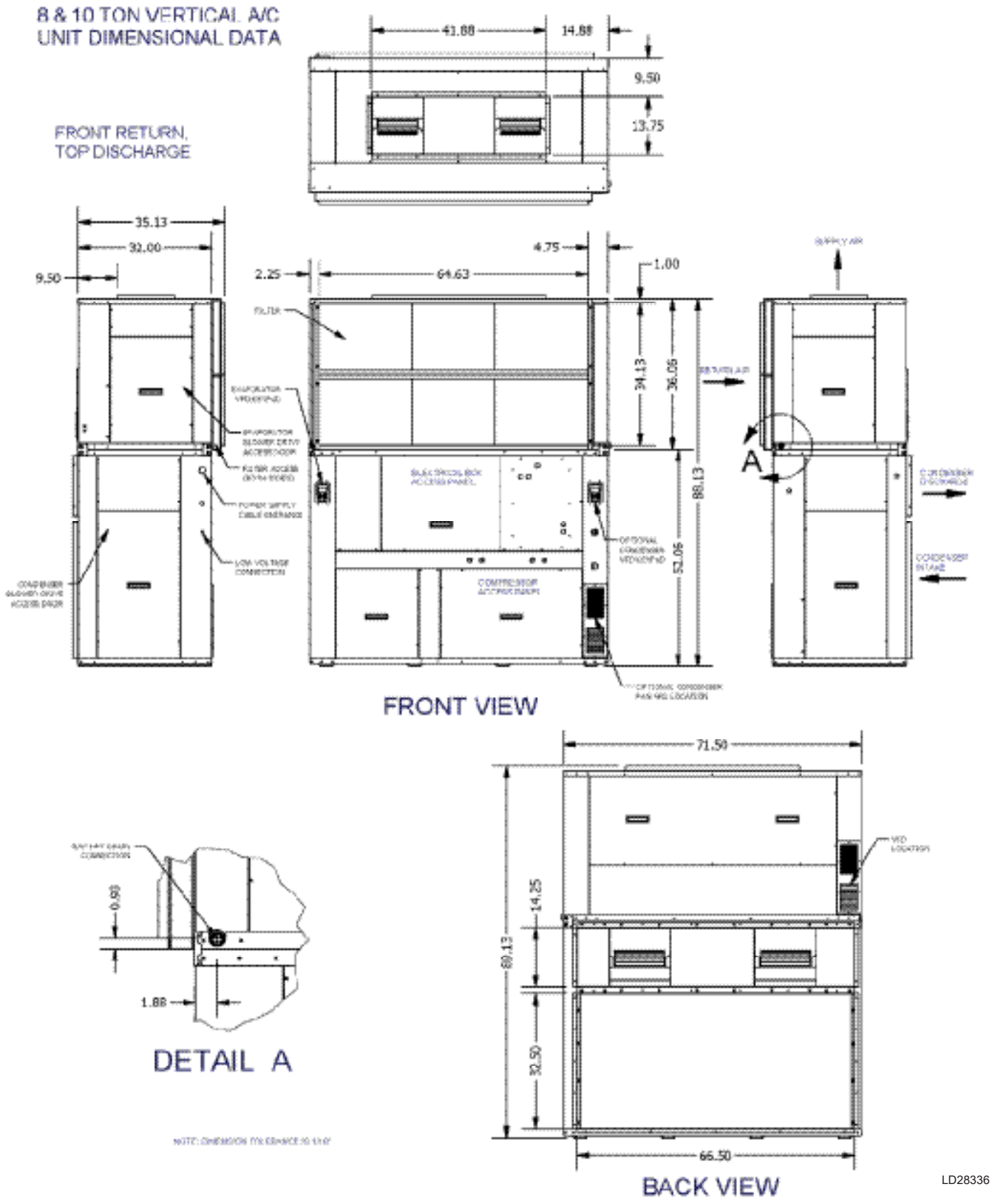
DSV Dimensional Data (Cont'd)

DSV096C/DSV120C VERTICAL DISCHARGE AIR-COOLED UNIT



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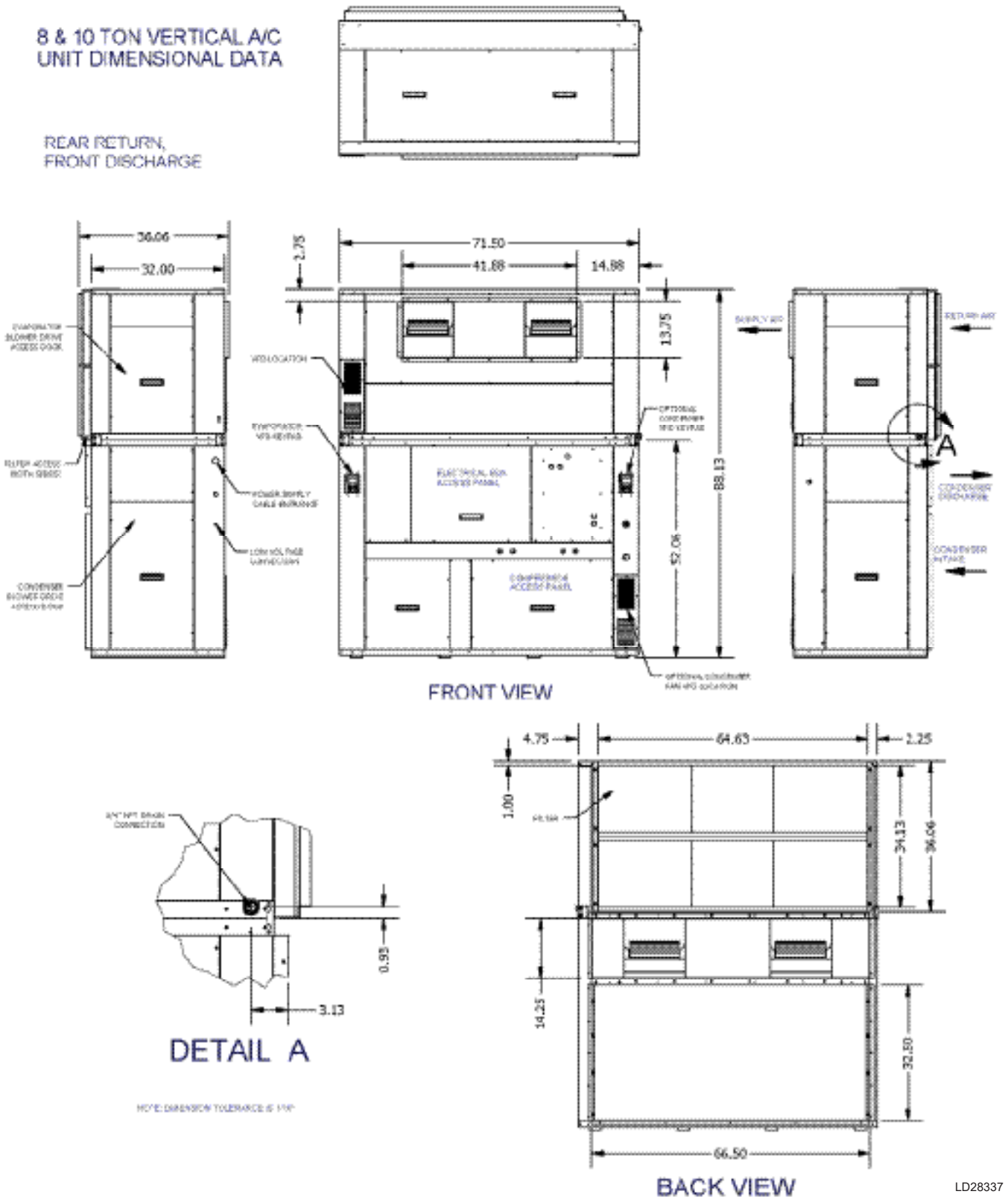
DSV096C/DSV120C FRONT DISCHARGE AIR-COOLED UNIT



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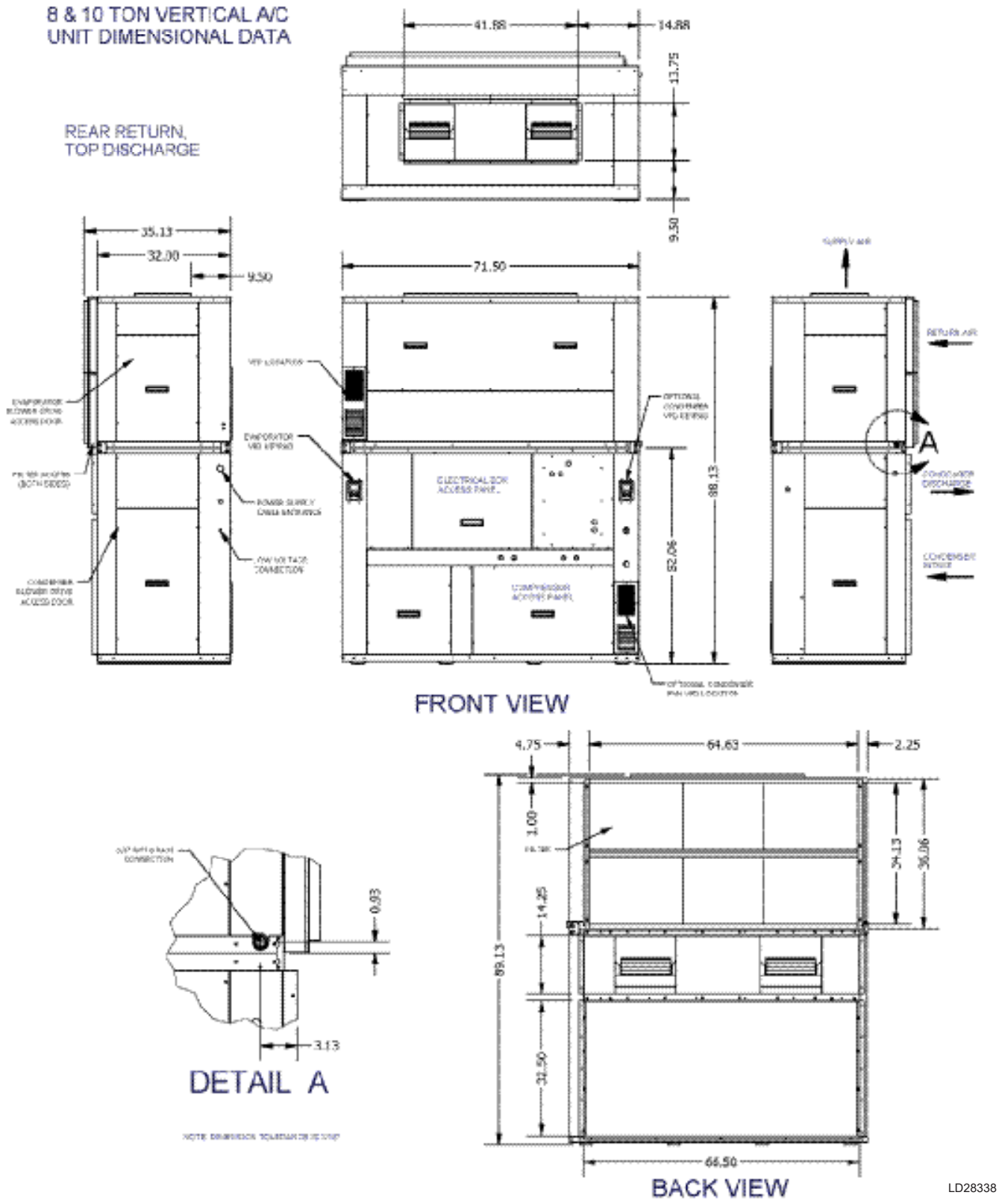
DSV Dimensional Data (Cont'd)

DSV096C/DSV120C VERTICAL DISCHARGE AIR-COOLED UNIT



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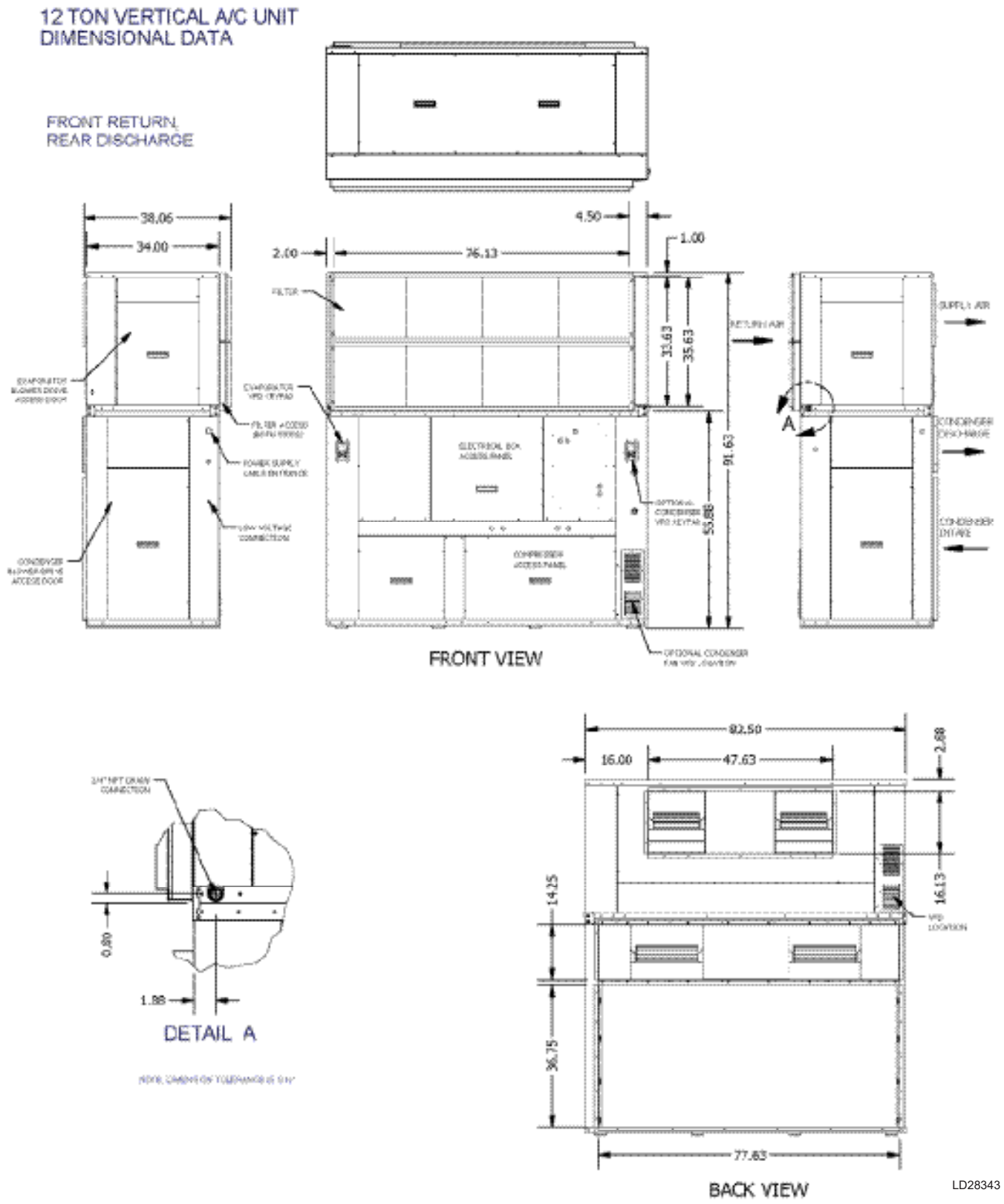
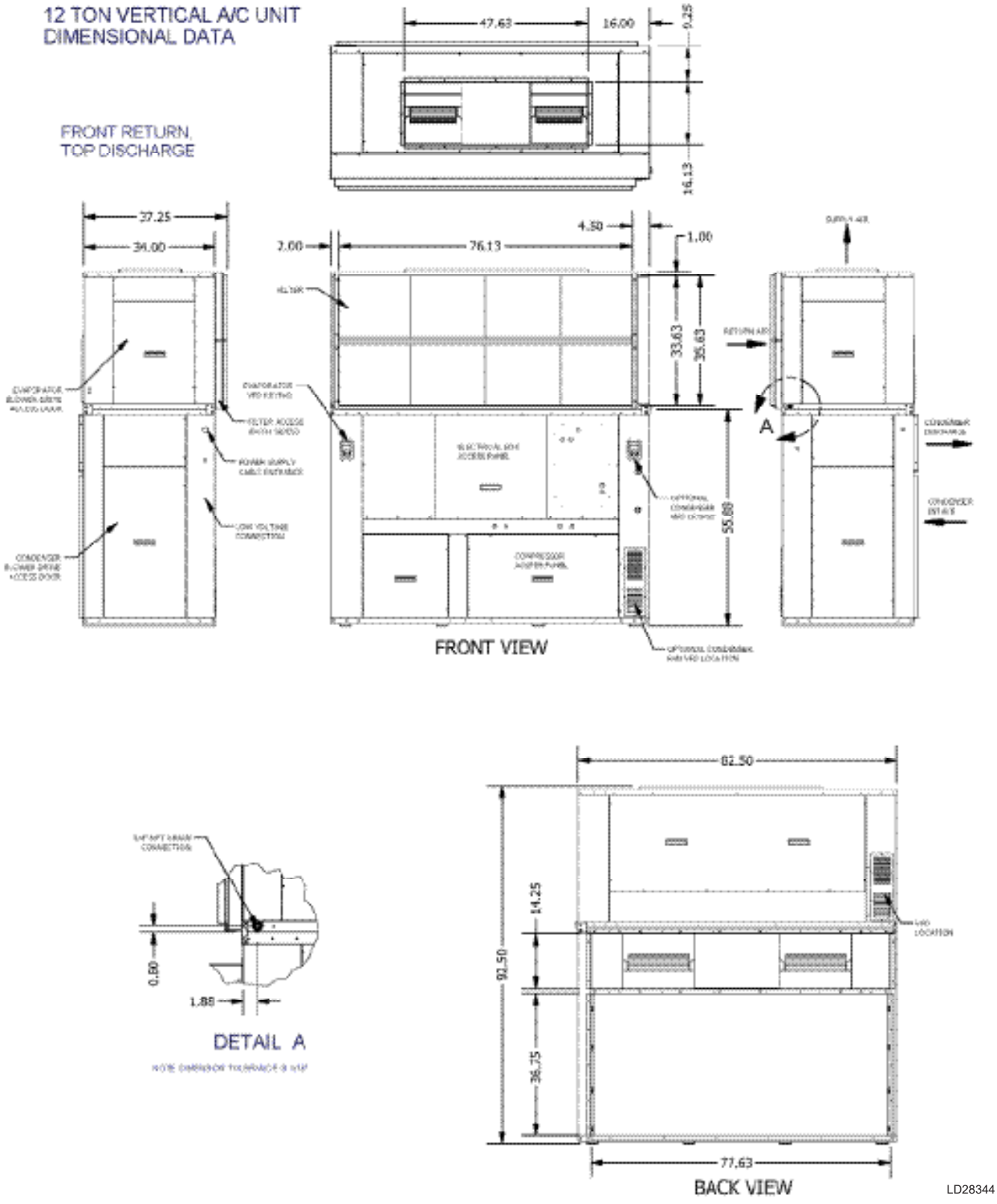
DSV144C REAR DISCHARGE AIR-COOLED UNIT



Sigma 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



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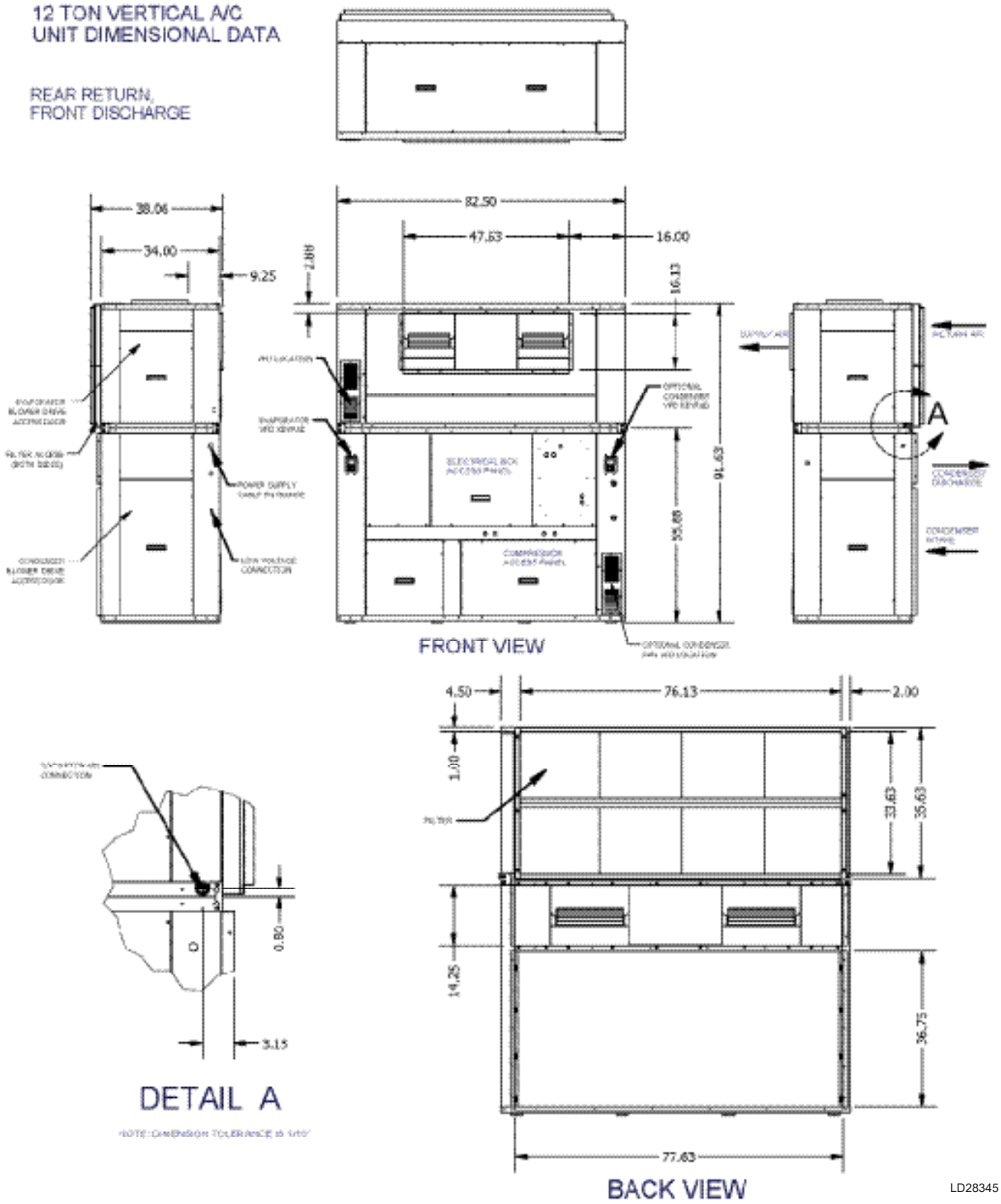
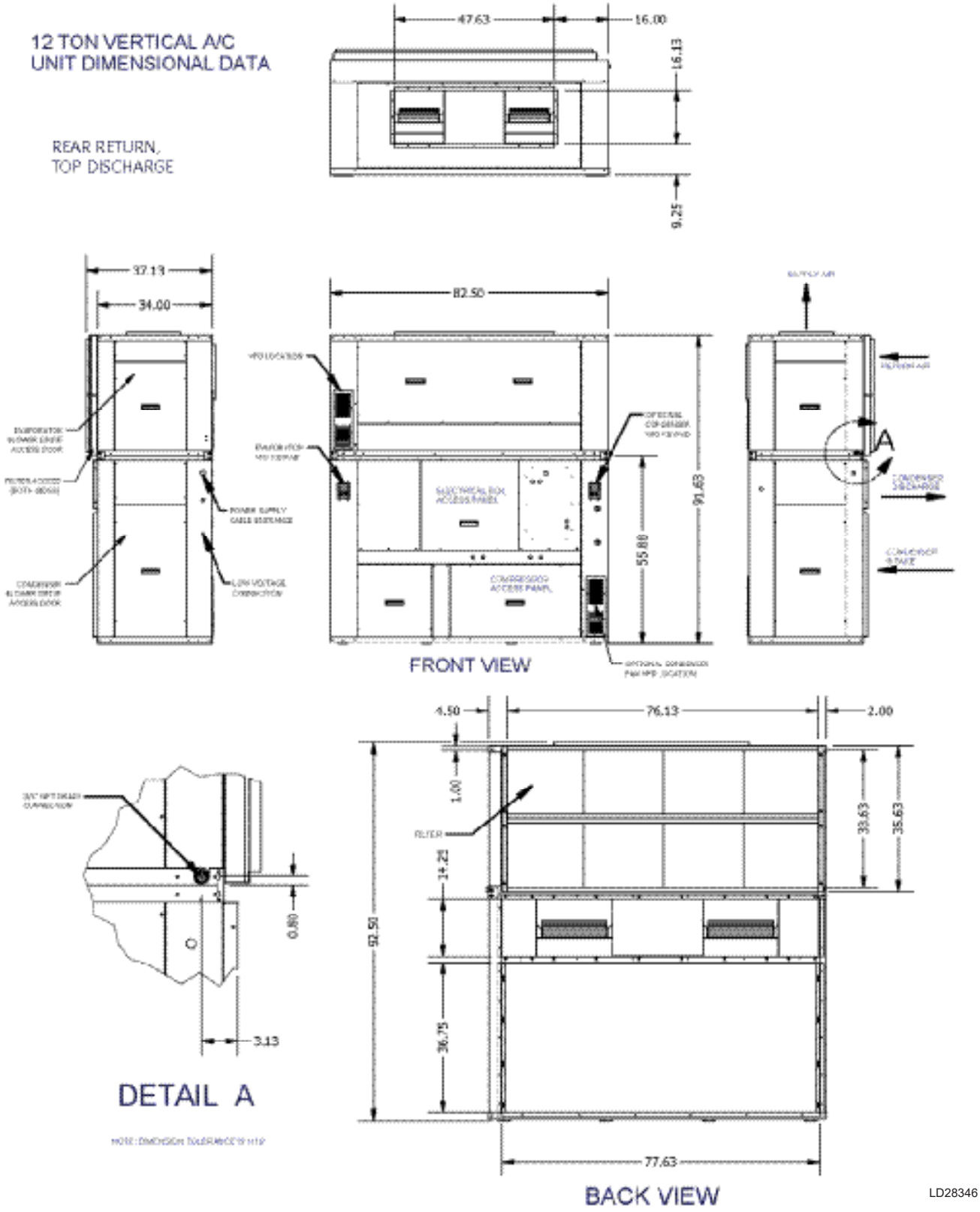
DSV144C FRONT DISCHARGE AIR-COOLED UNIT



Sigma 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



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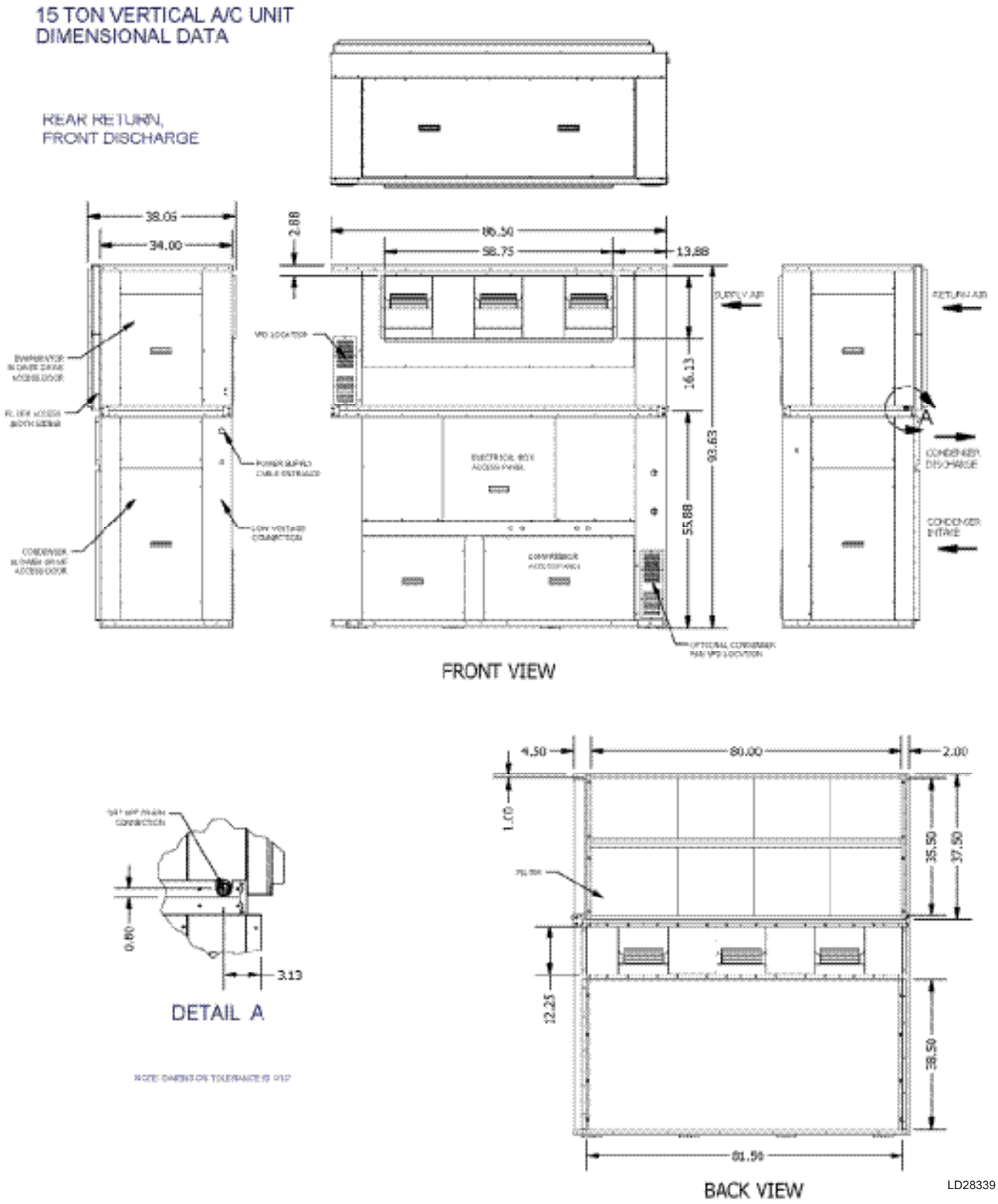
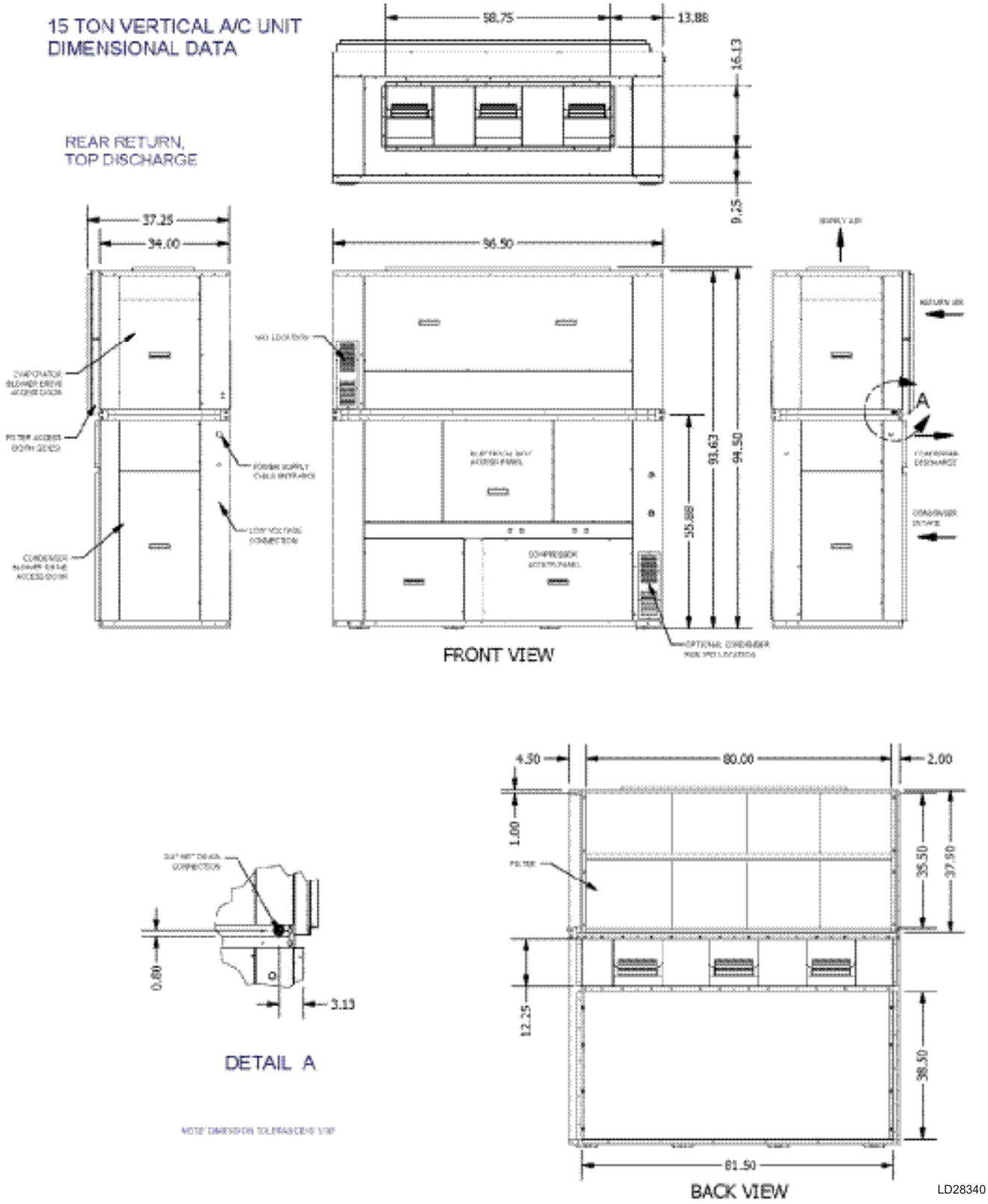
DSV180C FRONT DISCHARGE AIR-COOLED UNIT



Sigma 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



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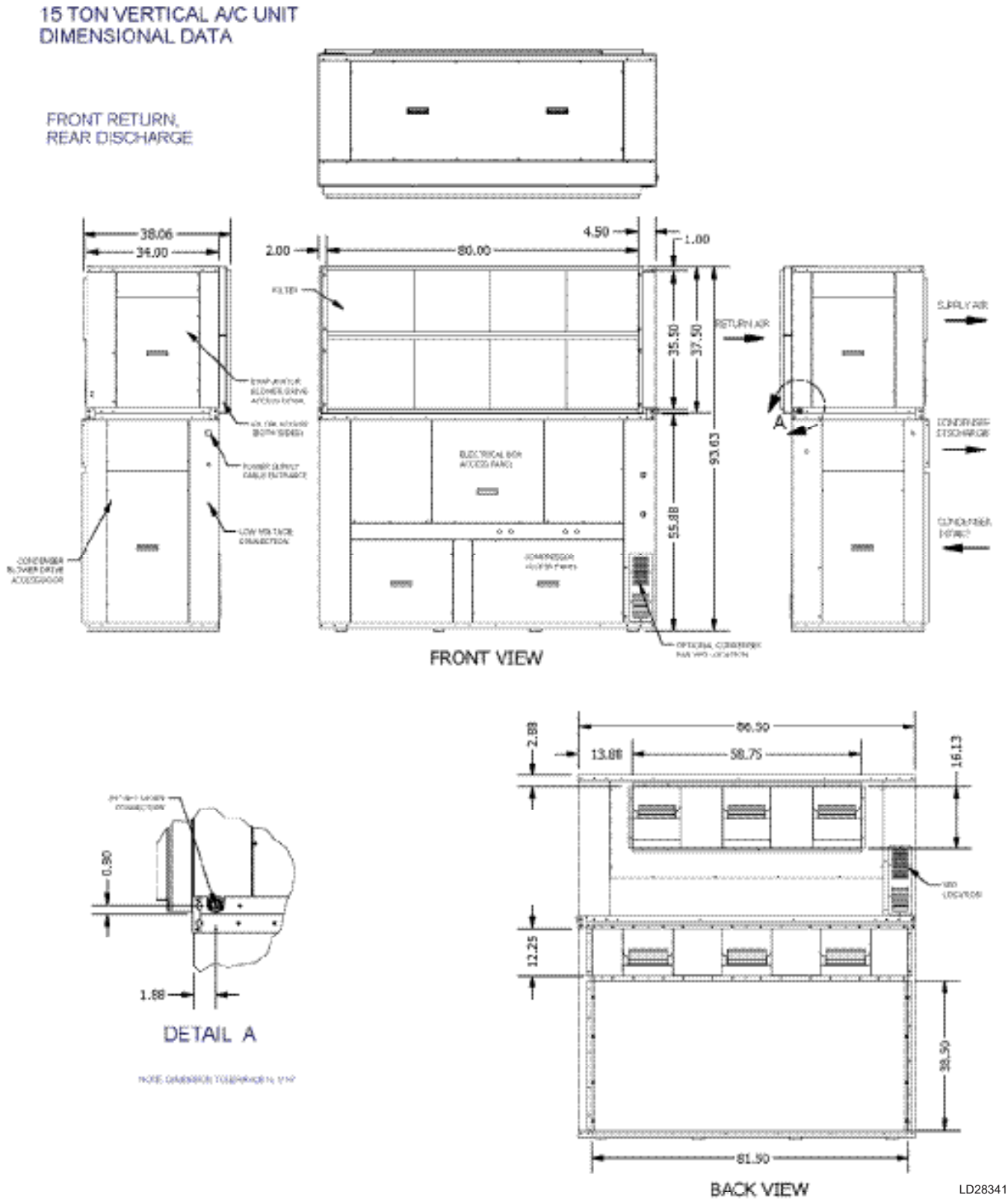
DSV180C REAR DISCHARGE AIR-COOLED UNIT



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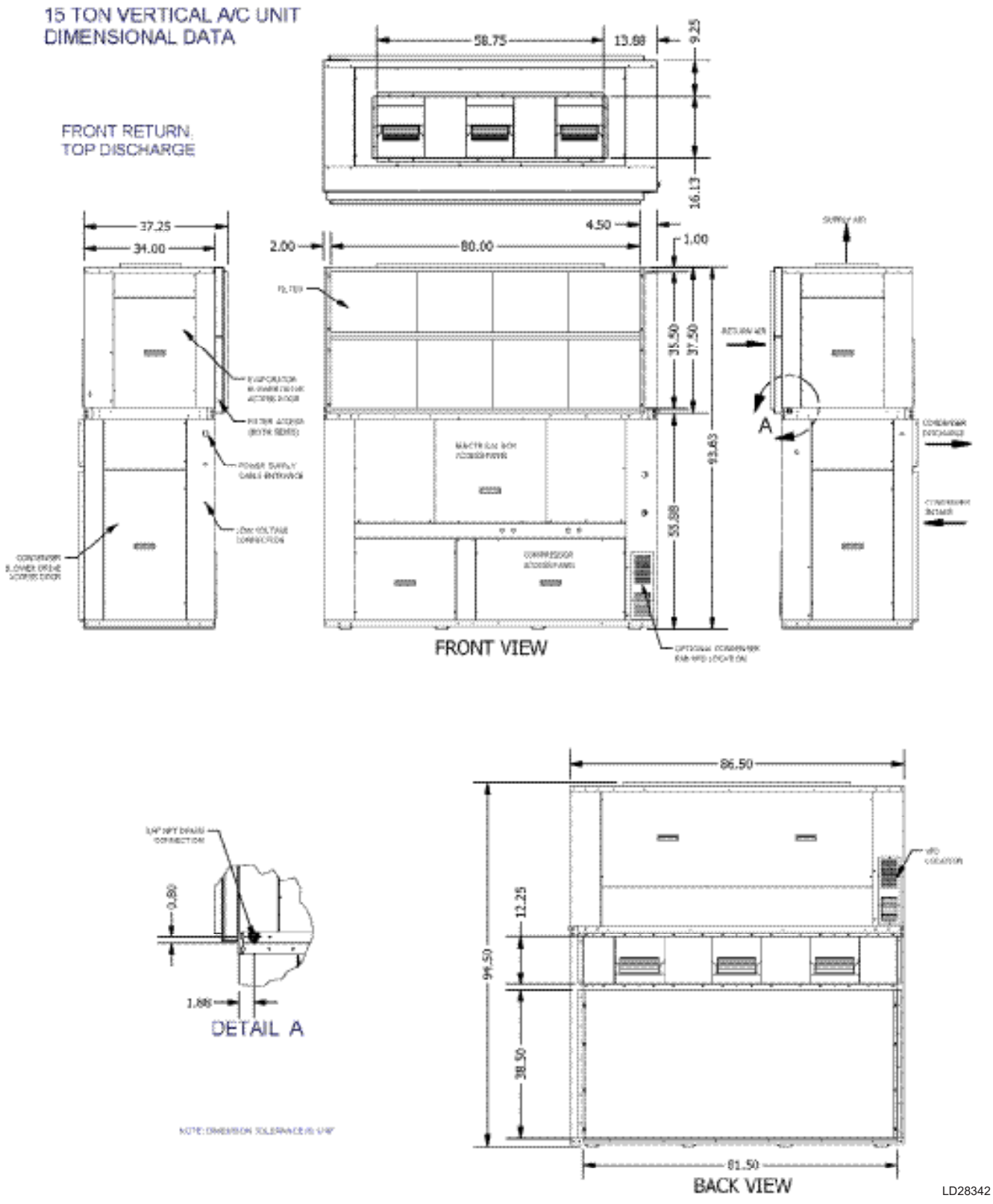
DSV Dimensional Data (Cont'd)

DSV180C VERTICAL DISCHARGE AIR-COOLED UNIT



LD28342

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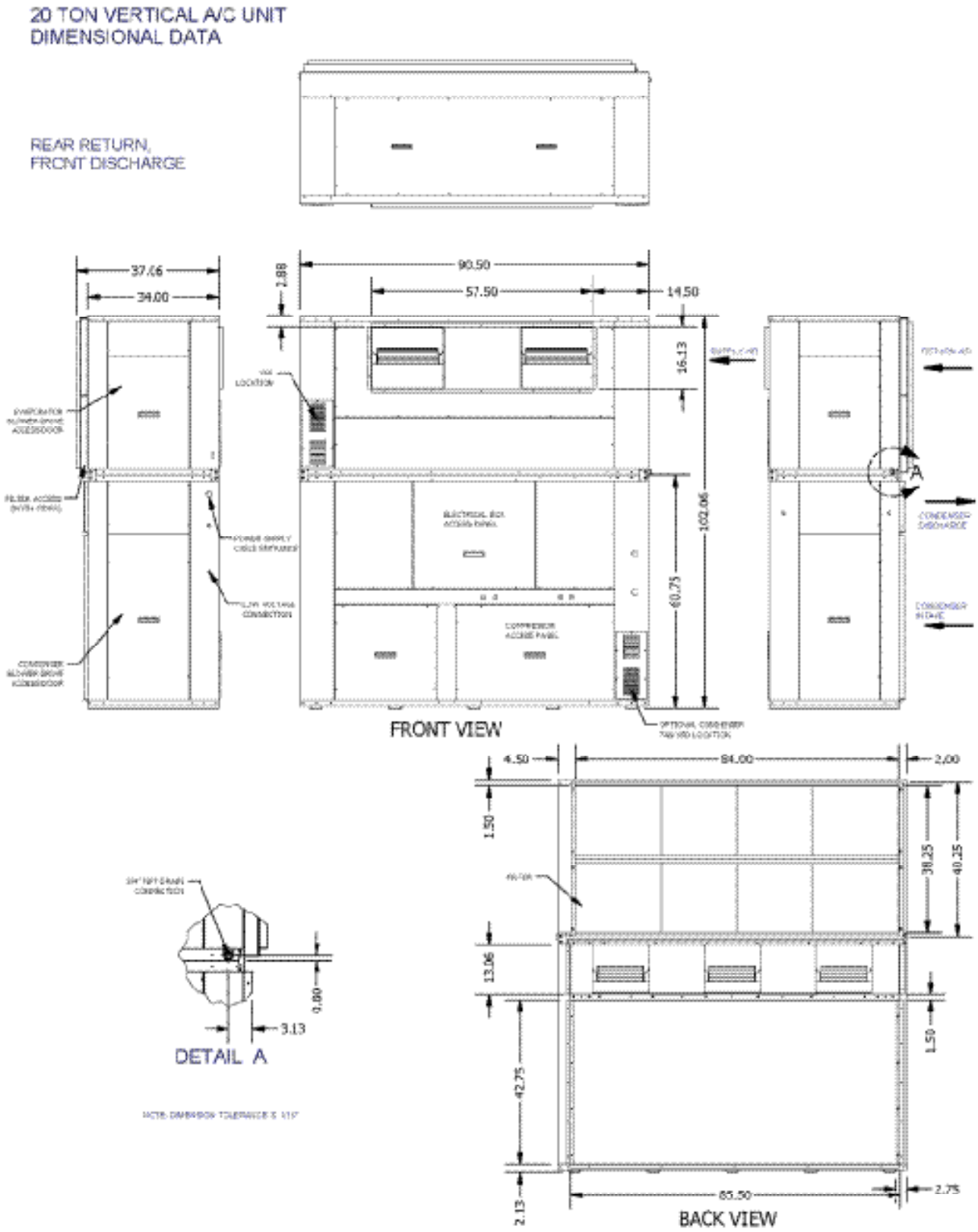
DSV240C FRONT DISCHARGE AIR-COOLED UNIT



LD28347

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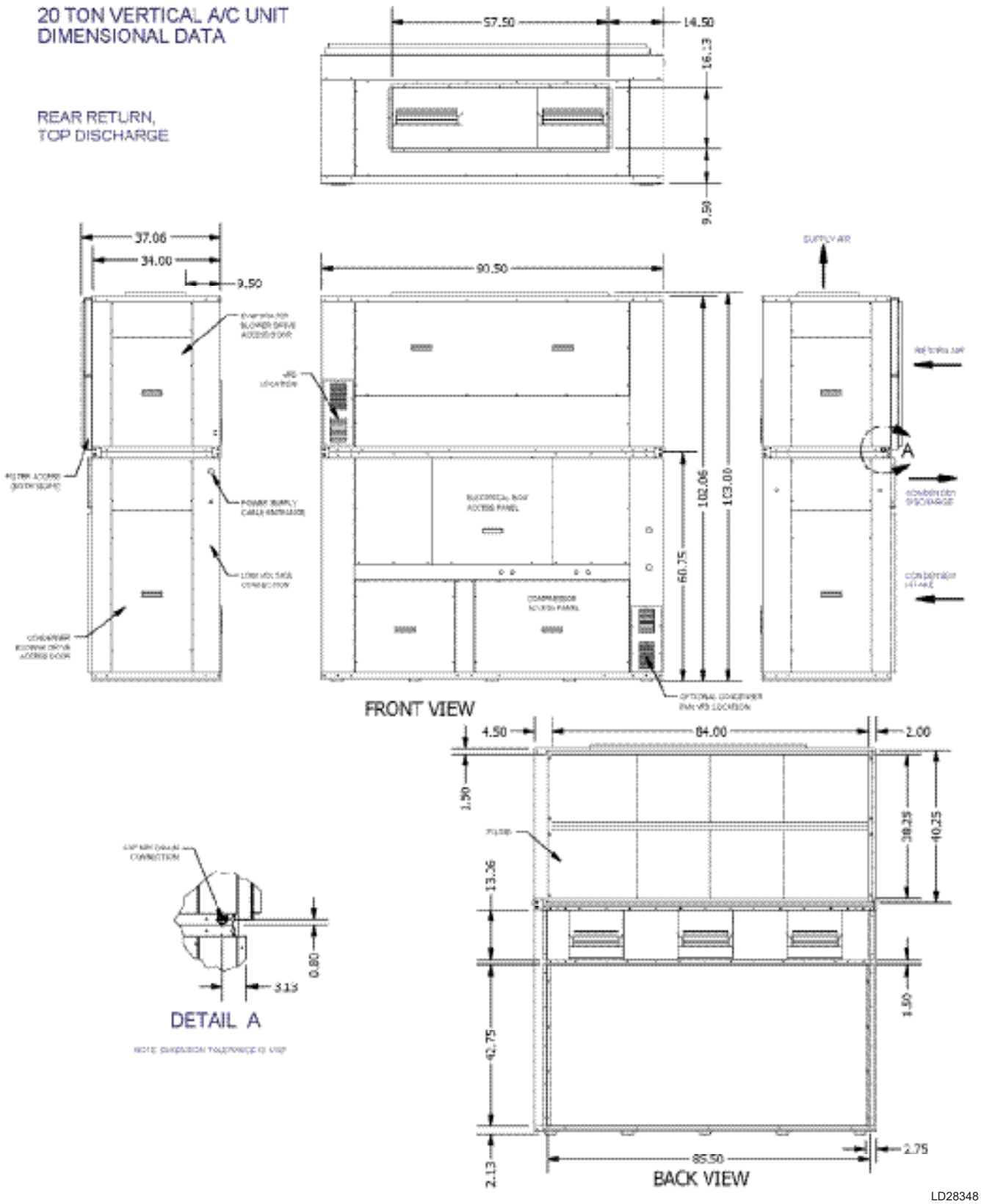
DSV Dimensional Data (Cont'd)

DSV240C VERTICAL DISCHARGE AIR-COOLED UNIT



LD28348

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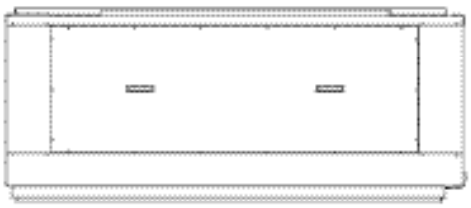
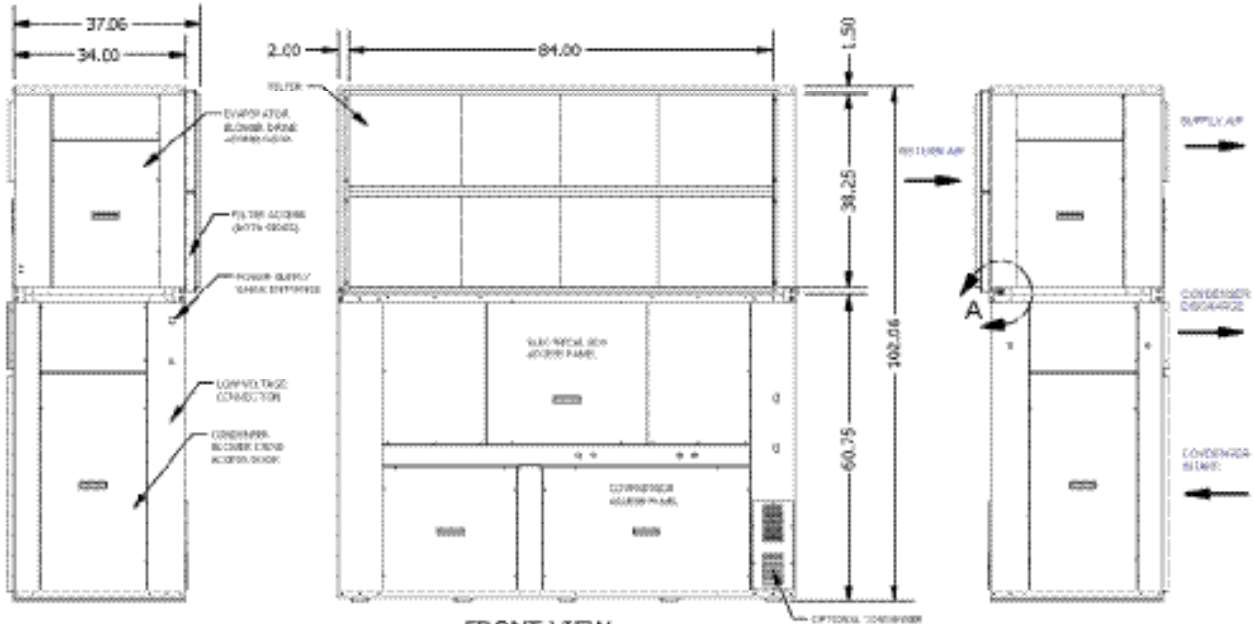
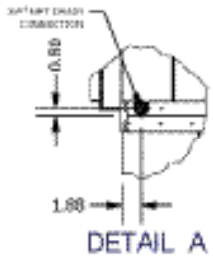
DSV240C REAR DISCHARGE AIR-COOLED UNIT

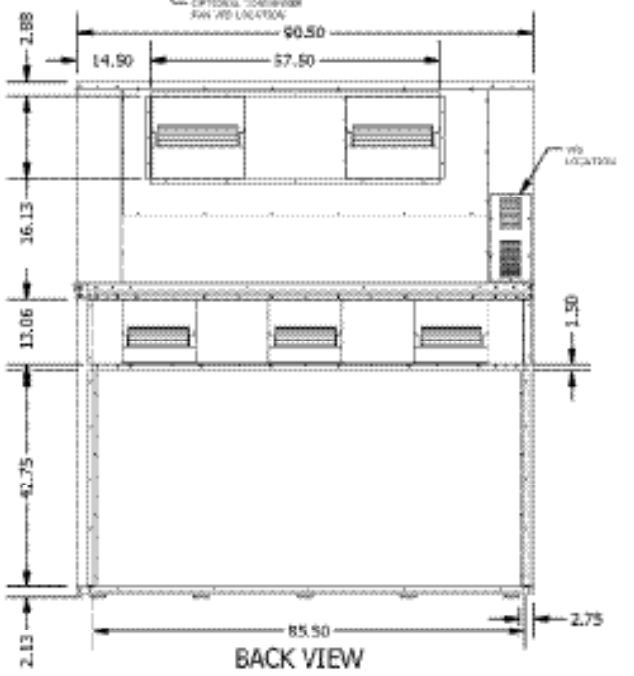
20 TON VERTICAL A/C UNIT
DIMENSIONAL DATA

FRONT RETURN,
REAR DISCHARGE







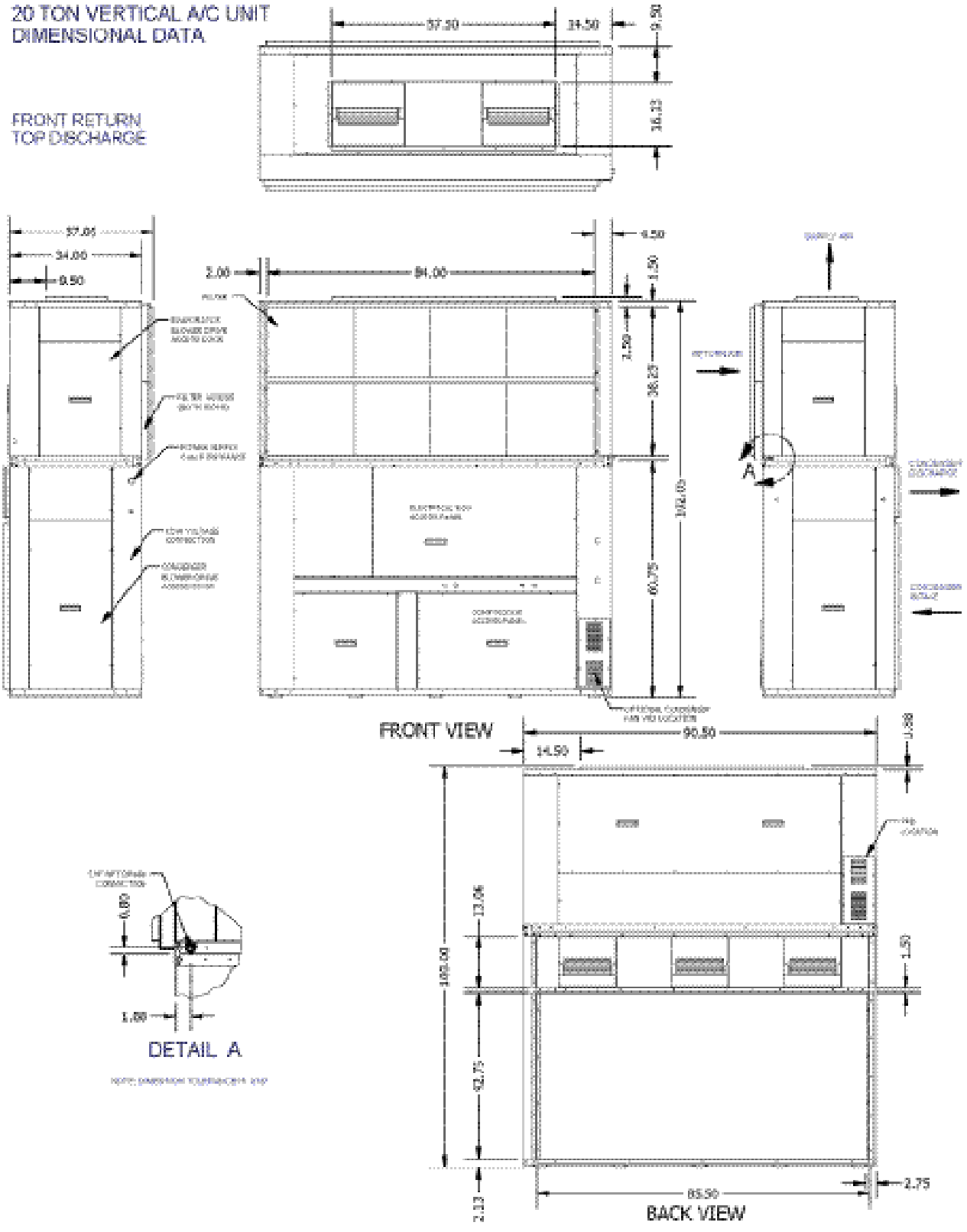


LD28349

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

DSV Dimensional Data (Cont'd)

DSV240C VERTICAL DISCHARGE AIR-COOLED UNIT



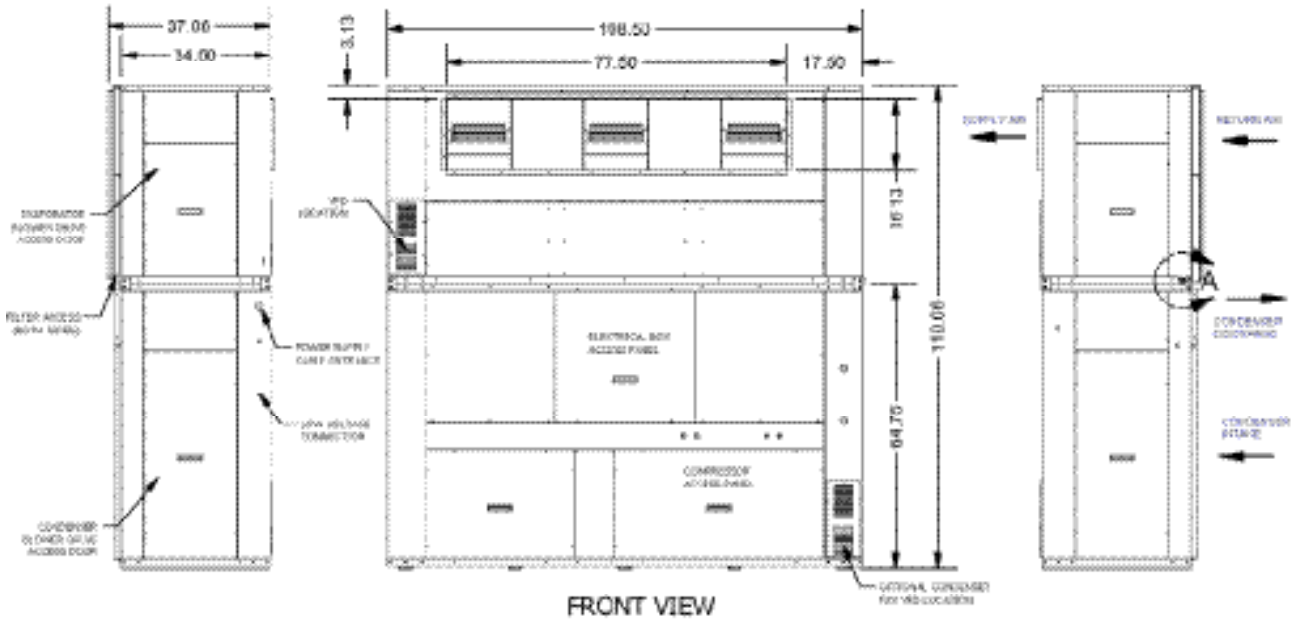
LD28350

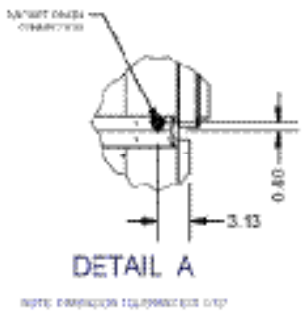
Sigma maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

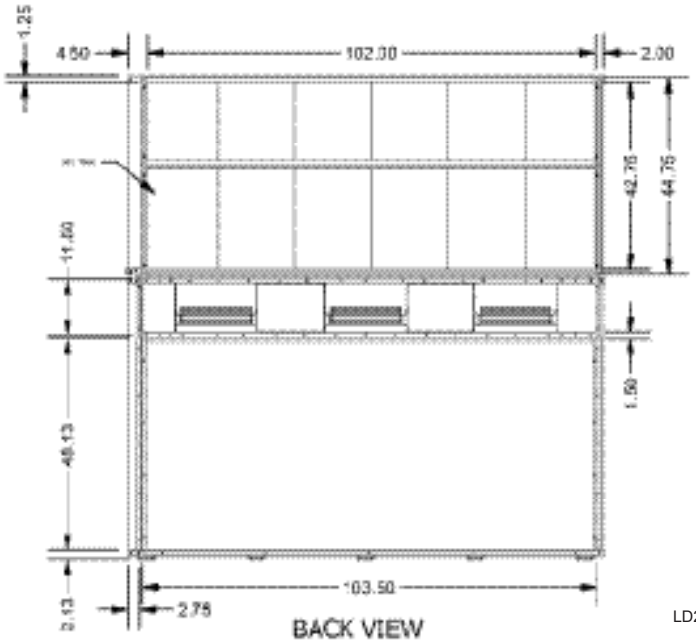
DSV300C FRONT DISCHARGE AIR-COOLED UNIT

25 TON VERTICAL A/C UNIT
DIMENSIONAL DATA

REAR RETURN,
FRONT DISCHARGE







LD28351

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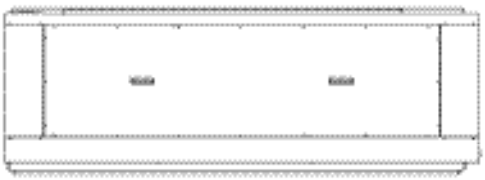
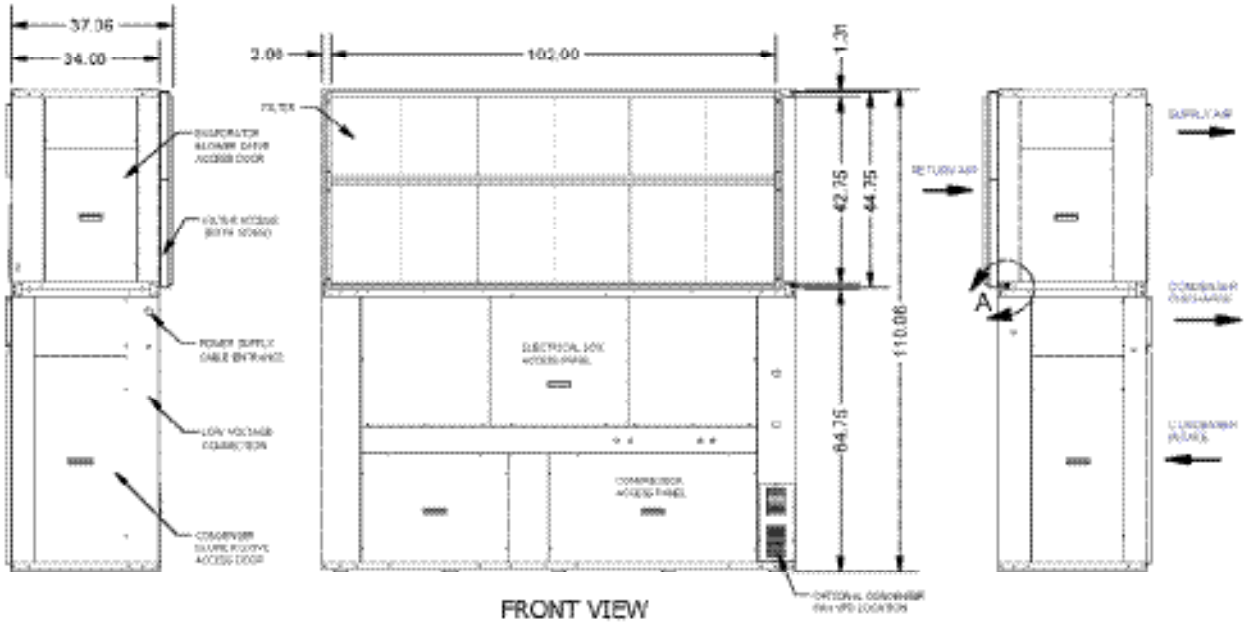
DSV Dimensional Data (Cont'd)

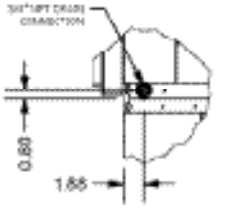
DSV300C REAR DISCHARGE AIR-COOLED UNIT

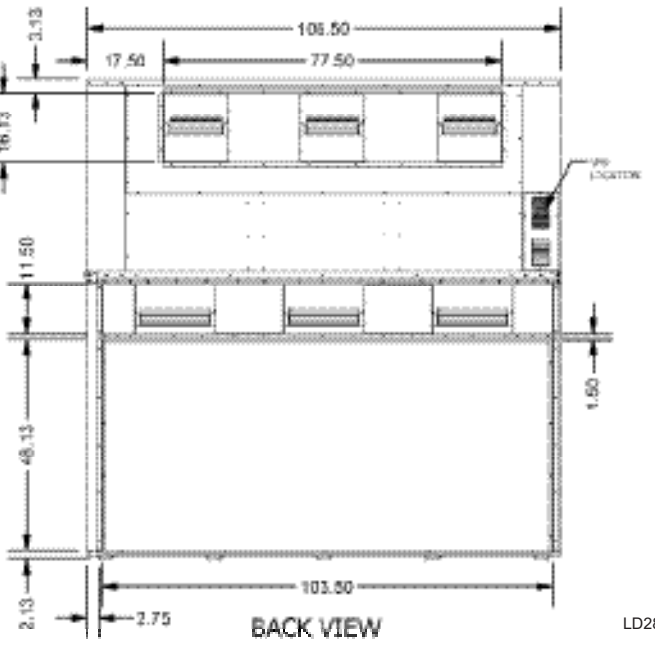
25 TON VERTICAL A/C UNIT
DIMENSIONAL DATA

FRONT RETURN,
REAR DISCHARGE









LD28352

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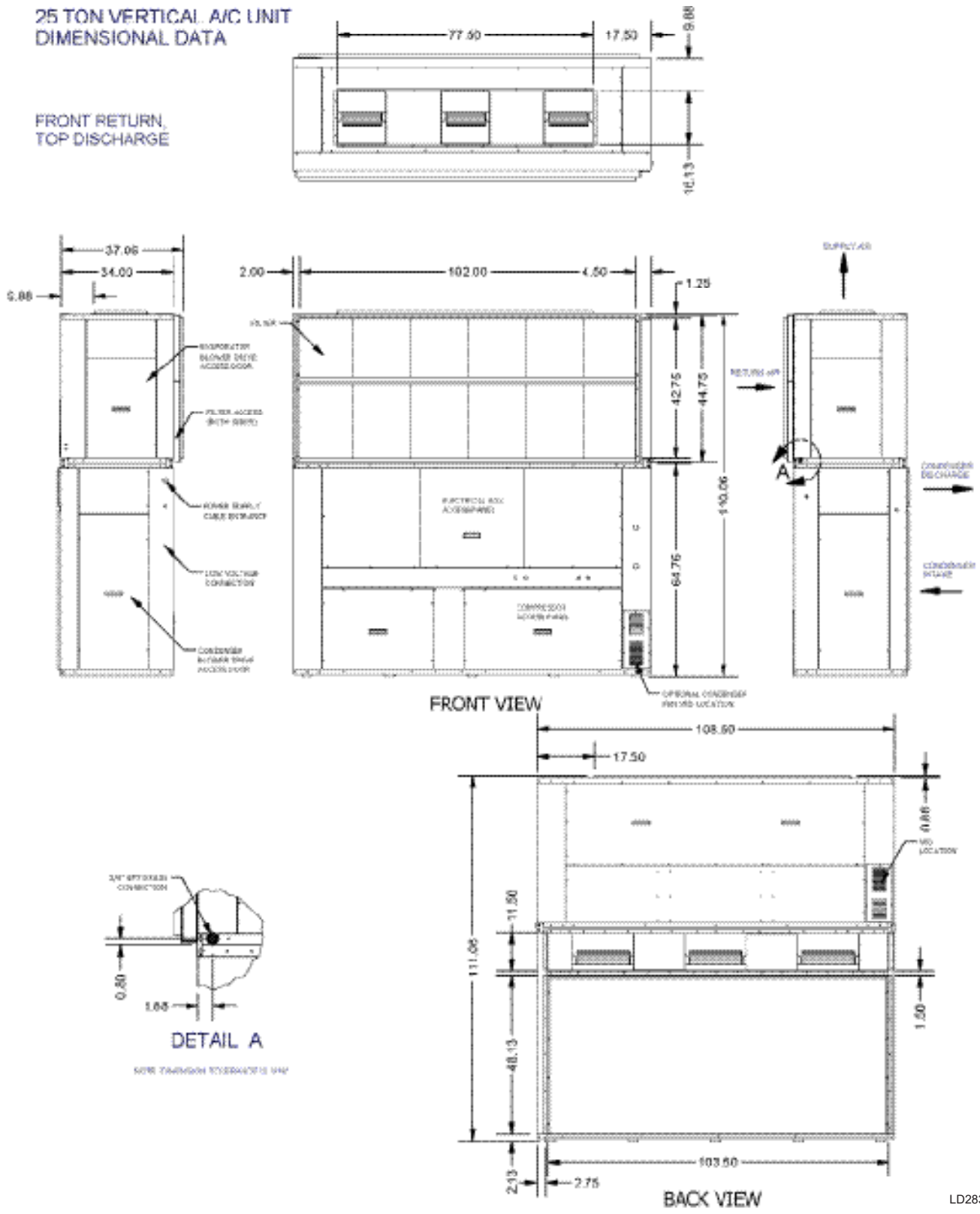
DSV300C VERTICAL DISCHARGE AIR-COOLED UNIT

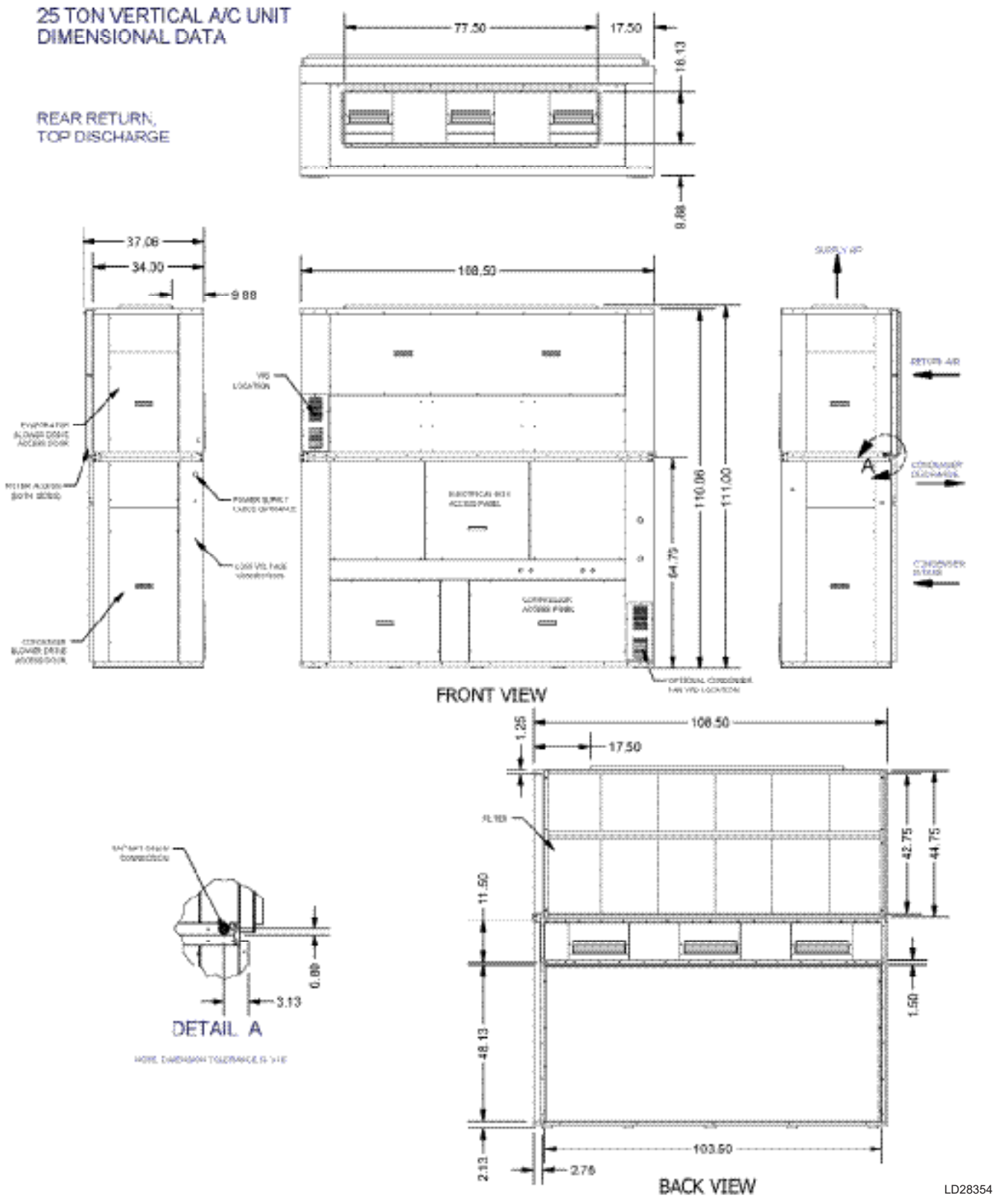


LD28353

Sigma 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



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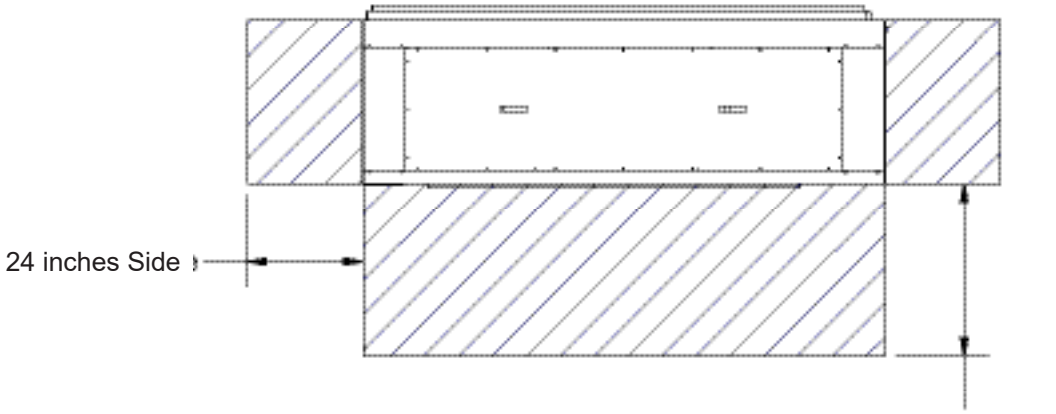
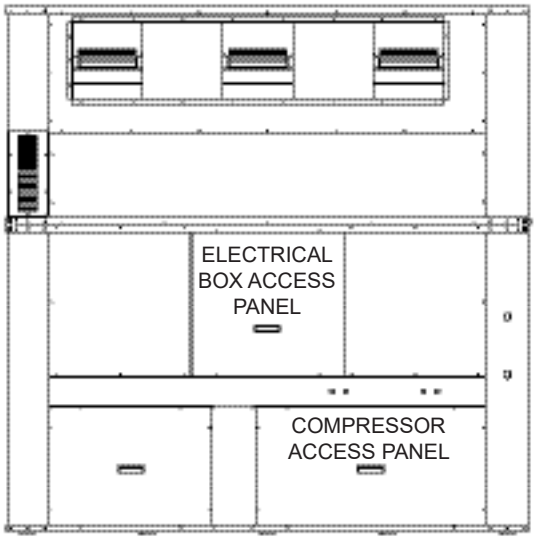
DSV Typical Service Clearances

VERTICAL A/C UNIT
SERVICE CLEARANCES

TOP VIEW





FRONT VIEW

DSV Discharge Plenum

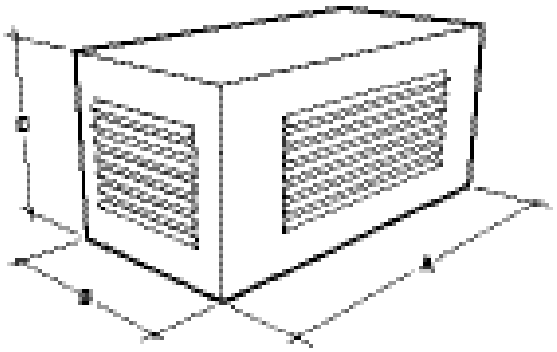


TABLE 29 - PLENUM DIMENSIONS (INCHES)

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

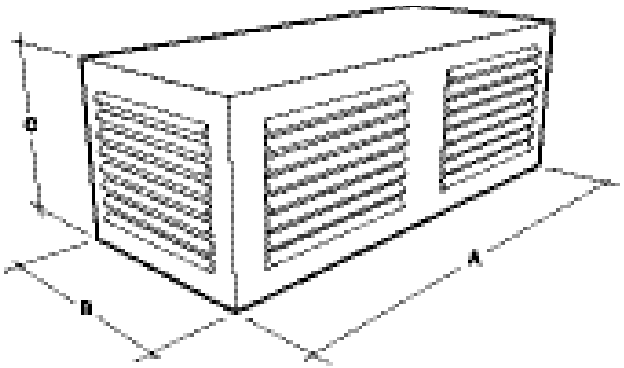


TABLE 30 - PLENUM DIMENSIONS (INCHES)

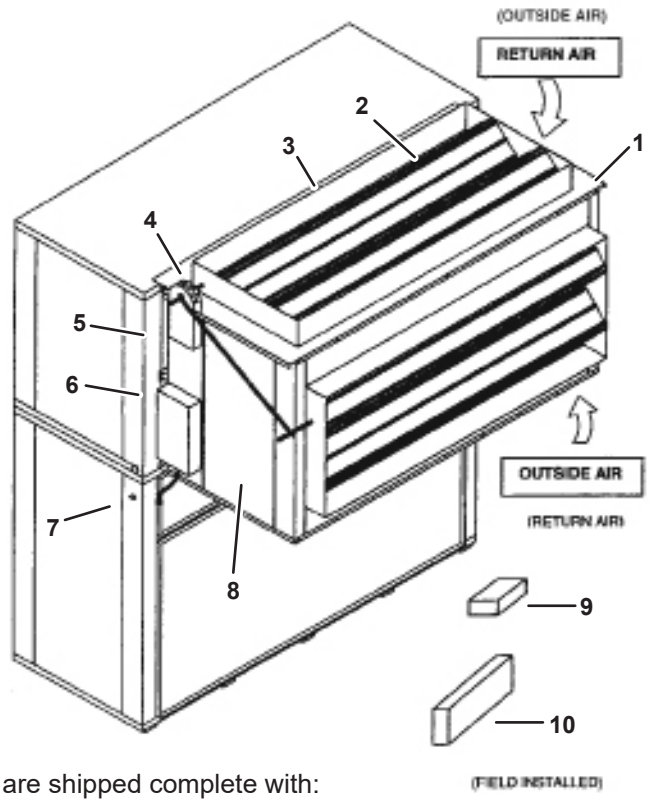
UNIT SIZE	DIMENSIONS			SIDE GRILL	FRONT GRILL
	A	B	C		
12 TON	82.5	34	28	24x20 (2x)	28x20 (2x)
15 TON	86.5	34	28	24x20 (2x)	28x20 (2x)
20 TON	90.5	34	28	24x20 (2x)	32x20 (2x)
25 TON	108.5	34	28	24x20 (2x)	40x20 (2x)

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:

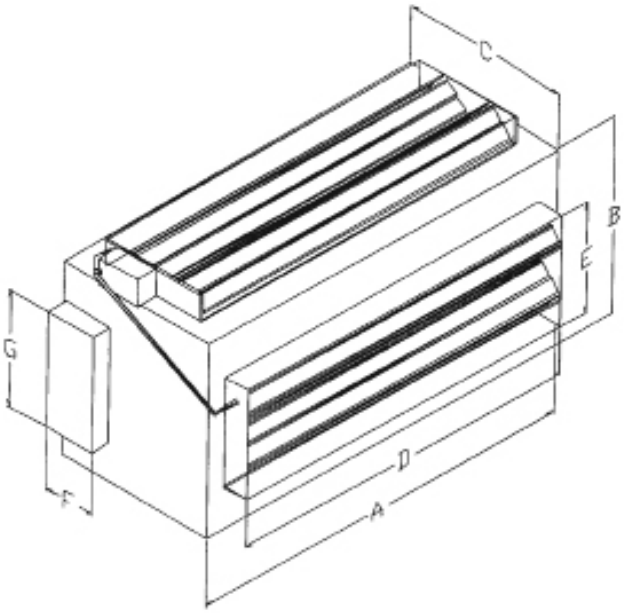
1. 18-gauge galvanized cabinet, fully insulated.
2. Opposed blade, ultra low leakage damper sections.
3. Steel securing strip for unit support*.
4. Sigma M9200 Series return damper actuator.
5. Filters and access.
6. Sigma Equipment Economizer Controller with protective cabinet.
7. One step jack/plug 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

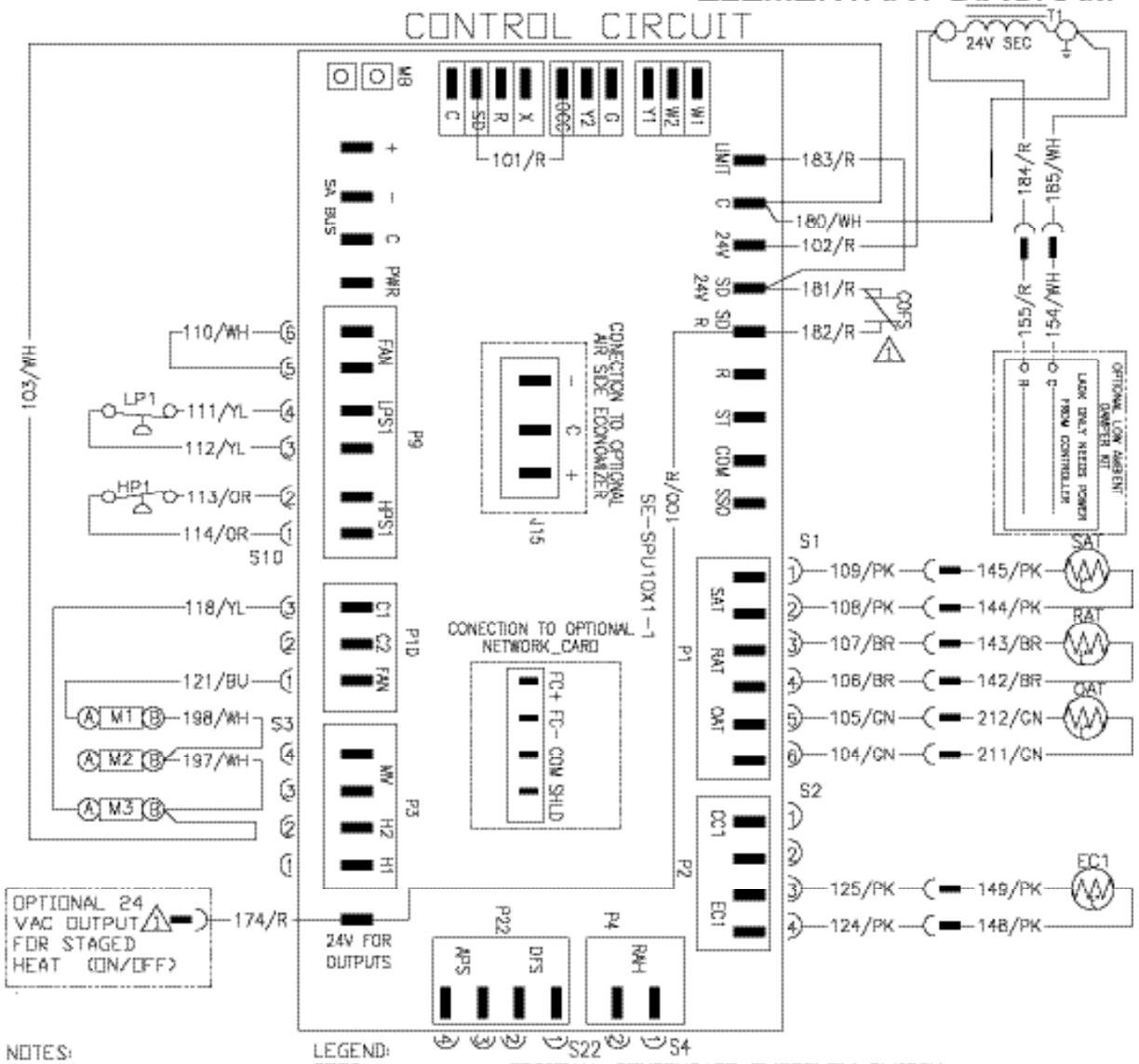


VERTICAL UNIT MODEL NUMBER	ECONOMIZER MODEL NUMBER	MIXING BOX DIM'N			DAMPER DIM'N	
		A	B	C	D	E
DSV060C	VASE-060C-1	49.00	27.75	24.00	40.00	14.00
DSV096C	VASE-120C-1	66.50	36.25	26.50	58.00	19.50
DSV144C	VASE-144C-1	78.00	35.75	28.50	70.00	19.50
DSV180C	VASE-180C-1	82.00	37.75	28.50	74.00	21.50
DSV240C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

1. 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:

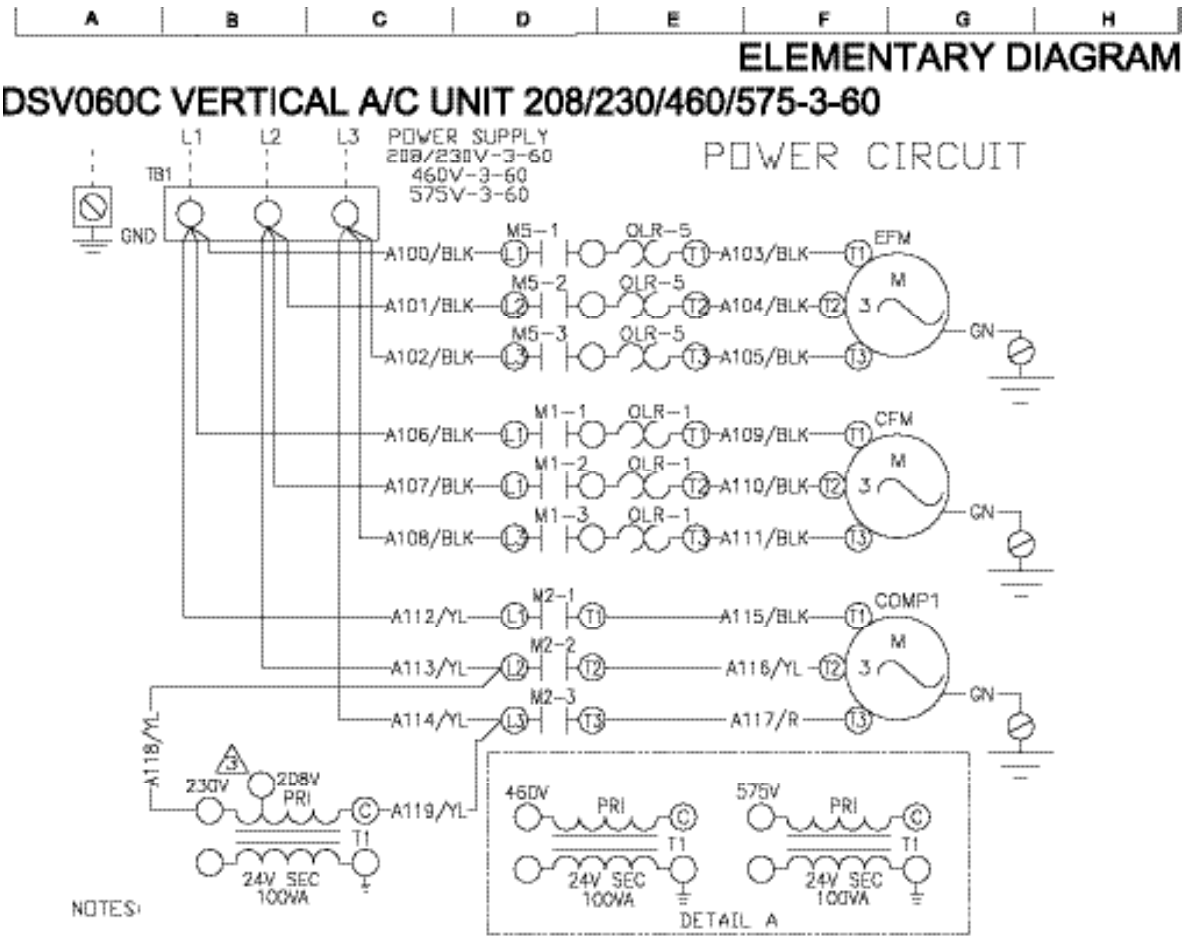
COFS	OPTIONAL CONDENSATE OVERFLOW SWITCH
SE-SPU10D1	1 STAGE SE CONTROL BOARD
SE-SPU10X1	1 STAGE SE CONTROL BOARD WITH COMMUNICATION CARD
HP1	HIGH PRESSURE SWITCH (COMP 1)
LP1	LOW PRESSURE SWITCH (COMP 1)
SAT	STANDARD SUPPLY AIR TEMPERATURE (FIELD INSTALLED)
RAT	STANDARD RETURN AIR TEMPERATURE (FIELD 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
SPU10D1 P1/S1	SOCKET/PLUG CONNECTION,24V, 6 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P2/S2	SOCKET/PLUG CONNECTION,24V, 8 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P3/S3	SOCKET/PLUG CONNECTION,24V, 4 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P4/S4	SOCKET/PLUG CONNECTION,24V, 4 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P5/S5	SOCKET/PLUG CONNECTION,24V, 3 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P9/S9	SOCKET/PLUG CONNECTION,24V, 10 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P10/S10	SOCKET/PLUG CONNECTION,24V, 5 PIN ON 1 STAGE SE CONTROL BOARD
SPU10D1 P22/S22	SOCKET/PLUG CONNECTION,24V, 4 PIN ON 1 STAGE SE CONTROL BOARD

CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

LD28626

STK-2007C REV 1 SHT 1OF1

DSV Wiring Diagrams (Cont'd)



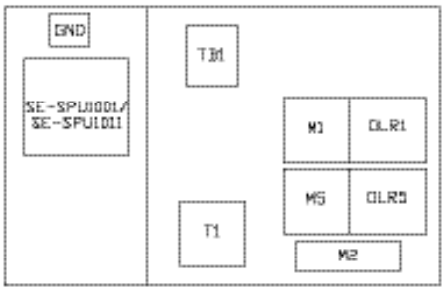
NOTES:

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. 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



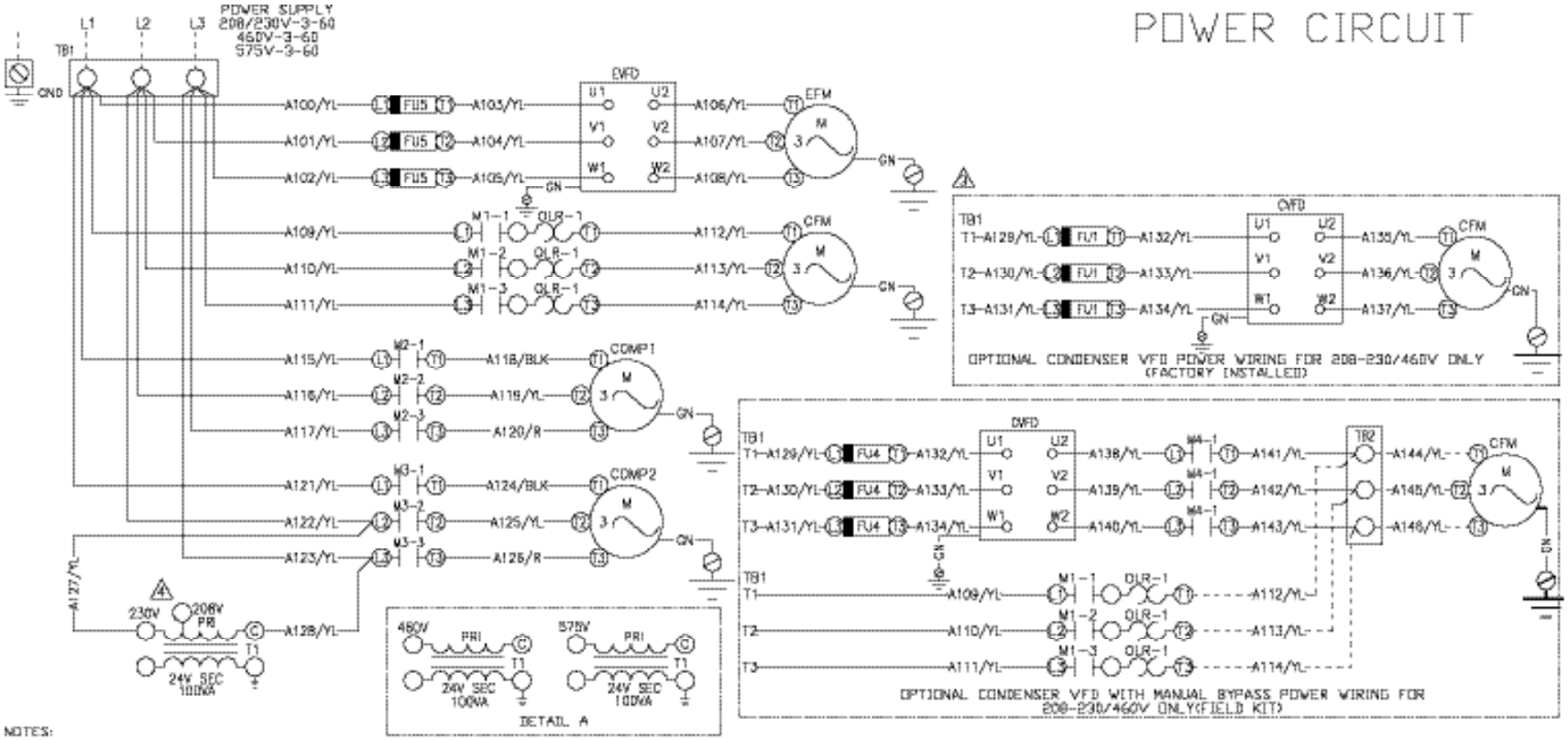
——— FACTORY WIRING AND DEVICES
- - - - - - - - FIELD WIRING AND DEVICES
——— OPTIONAL WIRING AND DEVICES

CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2005C REV 1 SHT 1OF 1

LD28624

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



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 OLR AS MOTOR CONTROL IS HANDELED BY VFD.

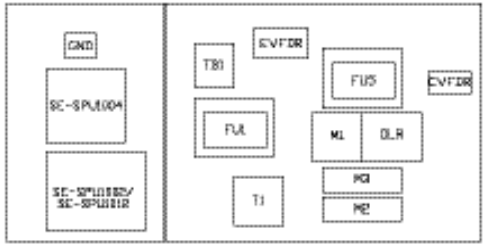
⚠4 FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A127 TO 208 VOLT TERMINAL ON T1. SIMILARLY FOR 460 AND 575 VOLT SEE DETAIL A

5. VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

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

LEGENDS

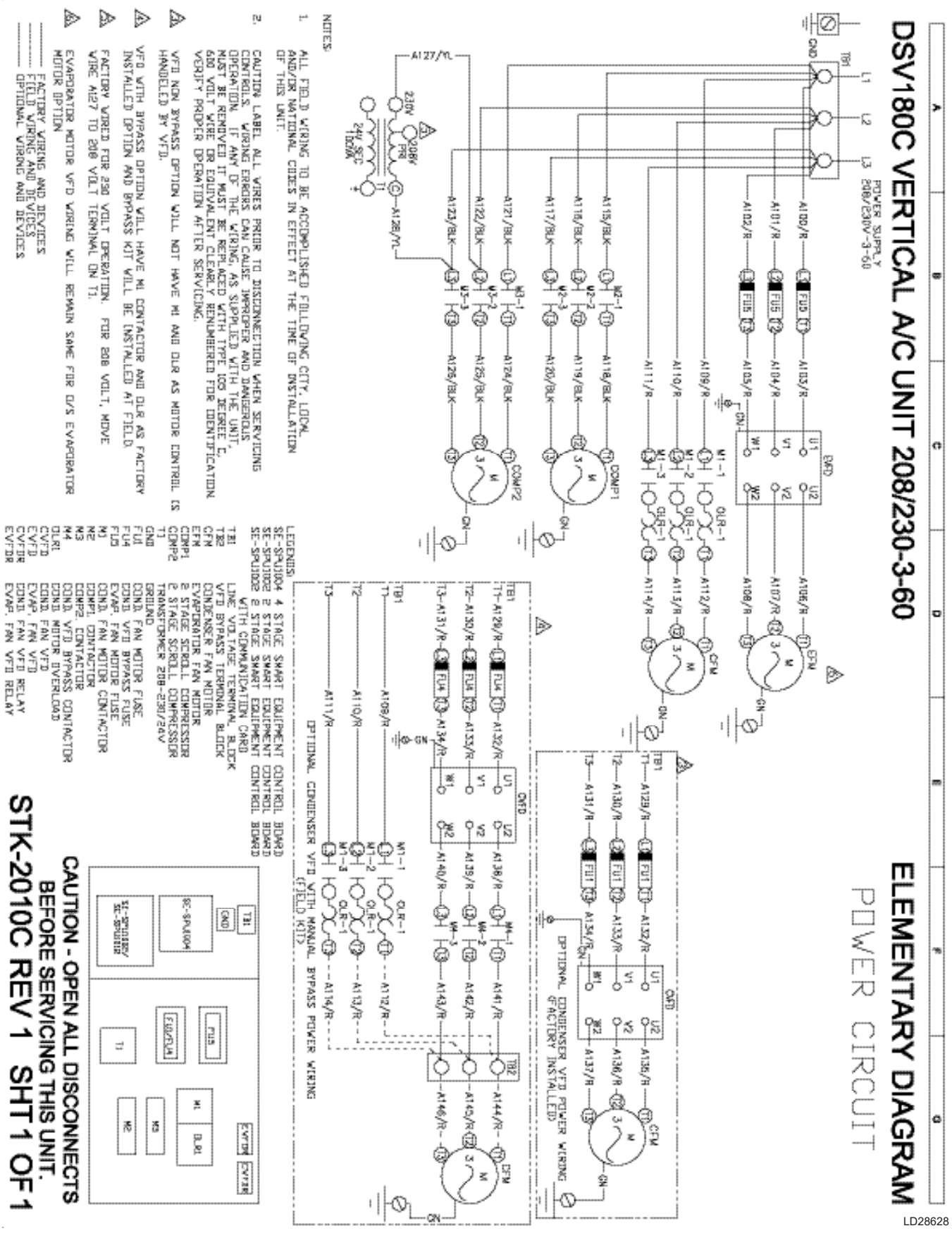
SE-SPU1004	4 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1002	2 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1012	2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
TB1	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE COMPRESSOR
COMP2	1 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER 208-230/24V
GND	GROUND TERMINAL
FU1	EVAP. FAN MOTOR VFD FUSE
FU4	COND. FAN VFD BYPASS FUSE
FU5	EVAP. FAN MOTOR FUSE
M1	COND. FAN MOTOR CONTACTOR
M2	COMP 1 CONTACTOR
M3	COMP 2 CONTACTOR
M4	COND. VFD BYPASS CONTACTOR
OLR1	COND MOTOR OVERLOAD
CVFD	COND FAN VFD
EVFD	EVAP FAN VFD
CVFDR	COND VFD RELAY
EVFDR	EVAP VFD RELAY



CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2006C REV 1 SHT 1 OF 1

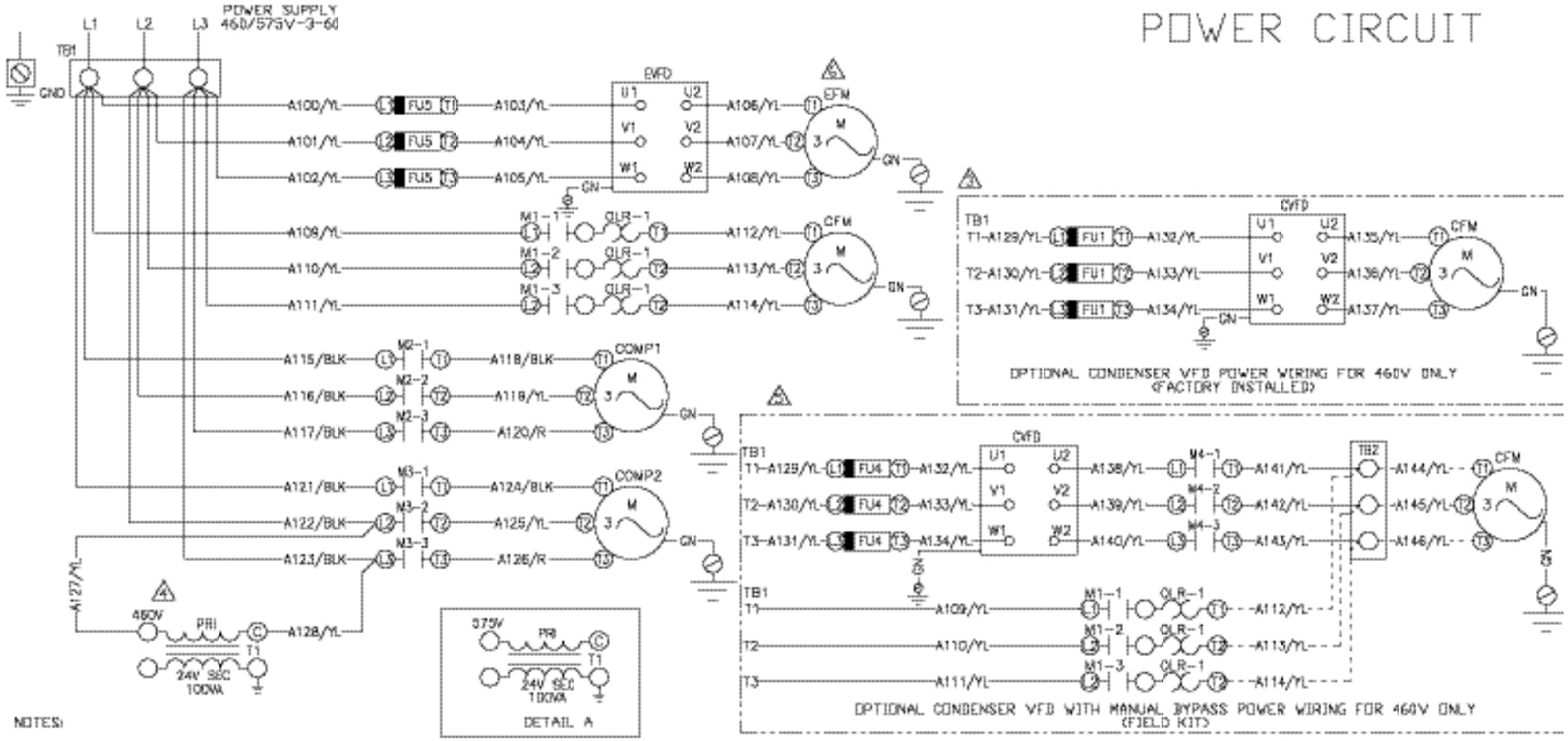
DSV Wiring Diagrams (Cont'd)



DSV180C VERTICAL A/C UNIT 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 RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.

⚠3 VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDELED BY VFD.

⚠4 FACTORY WIRED FOR 460 VOLT OPERATION. FOR 575 VOLT OPERATION SEE DETAIL A

⚠5 VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

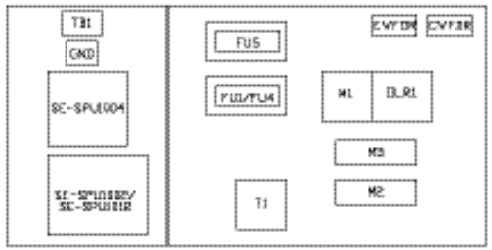
⚠6 EVAPORATOR MOTOR VFD WIRING WILL REMAIN SAME FOR D/S EVAPORATOR MOTOR OPTION

——— 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-SPU1012 2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD

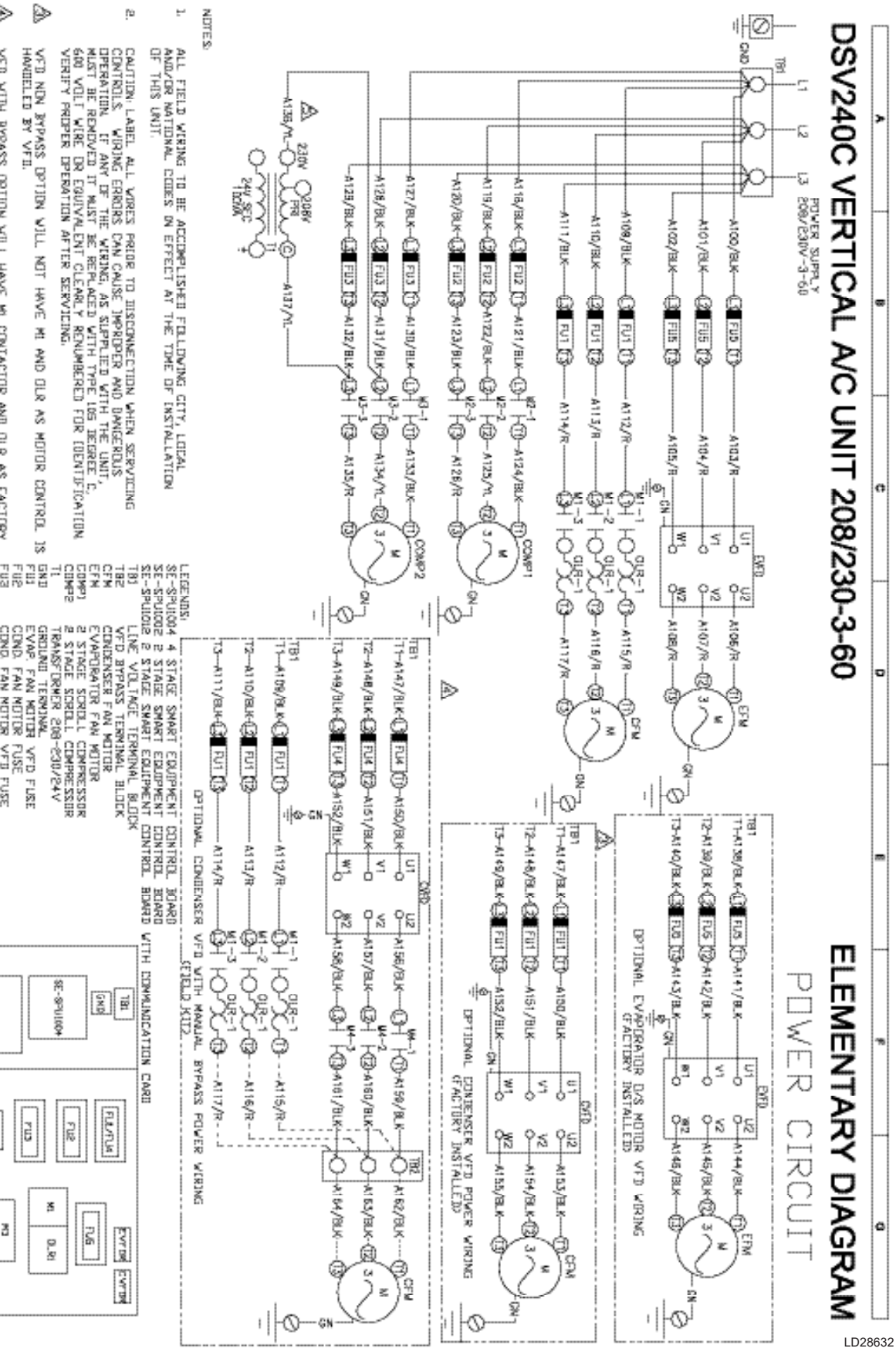
TB1	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE SCROLL COMPRESSOR
COMP2	2 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER
GND	GROUND
FU1	COND. FAN MOTOR FUSE
FU4	COND. VFD BYPASS FUSE
FU5	EVAP. FAN MOTOR FUSE
M1	COND. FAN MOTOR CONTACTOR
M2	COMP 1 CONTACTOR
M3	COMP 2 CONTACTOR
M4	COND. VFD BYPASS CONTACTOR
OLR1	COND. MOTOR OVERLOAD
CVFD	COND. FAN VFD
EVFD	EVAP FAN VFD
CVFDR	COND. 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)



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 OLR AS MOTOR CONTROL IS HANDLED BY VFD.

⚠4 VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

⚠5 FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT, MOVE WIRE A133 TO 208 VOLT TERMINAL ON T1.

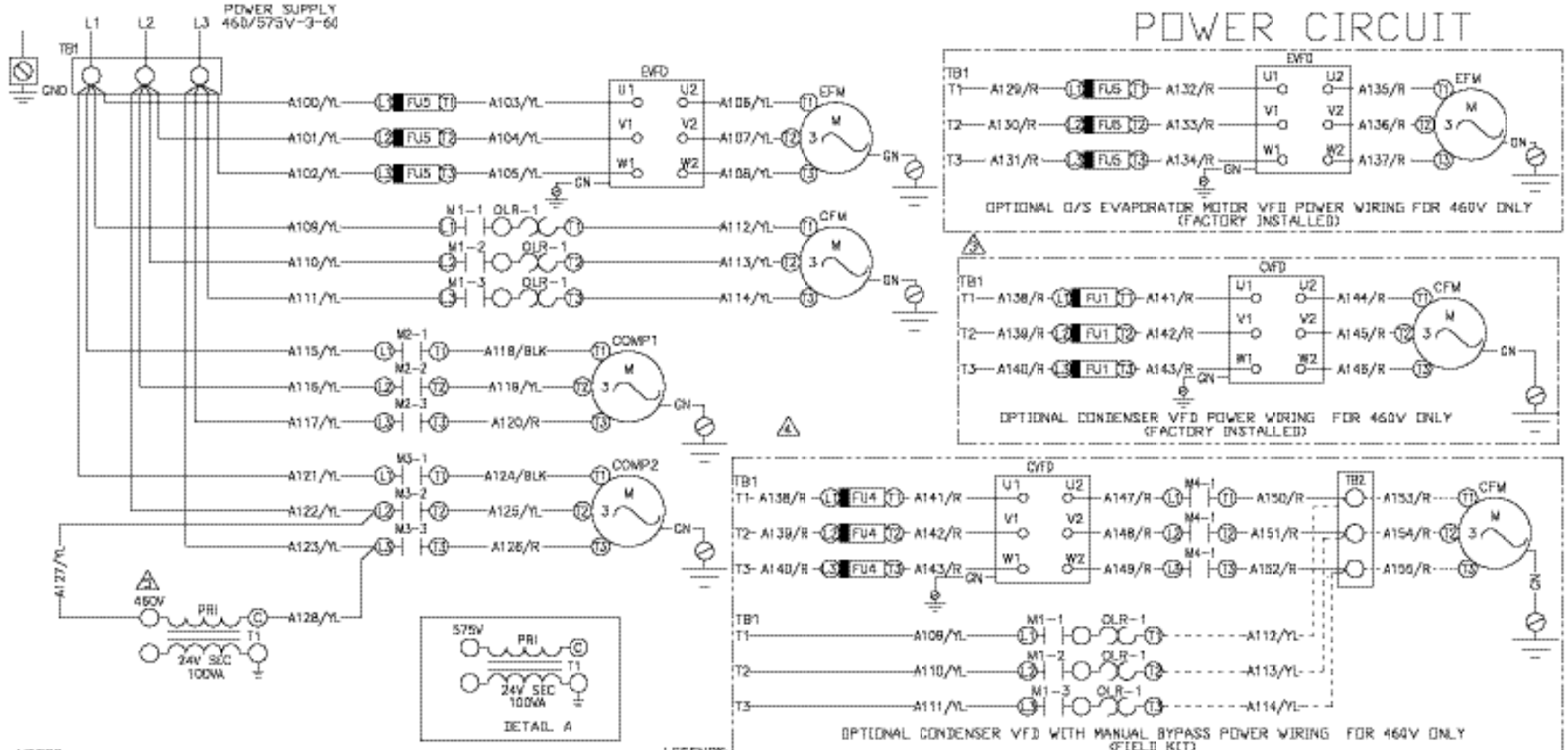
——— FACTORY WIRING AND DEVICES
- - - - - FIELD WIRING AND DEVICES
——— OPTIONAL WIRING AND DEVICES

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
TB1	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE SCROLL COMPRESSOR
COMP2	2 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER 208-230/24V
GND	GROUND TERMINAL
FU1	EVAP. FAN MOTOR VFD FUSE
FU2	COND. FAN MOTOR VFD FUSE
FU3	COND. FAN MOTOR FUSE
FU4	COND. FAN VFD BYPASS FUSE
FU5	EVAP. FAN MOTOR FUSE
M1	COND. FAN MOTOR CONTACTOR
M2	COMP. 1 CONTACTOR
M3	COMP. 2 CONTACTOR
M4	COND. VFD BYPASS CONTACTOR
OLR1	COND. MOTOR OVERLOAD
CVFD	COND. FAN VFD
EVFD	EVAP. FAN VFD
CVFDR	COND. VFD RELAY
EVFDR	EVAP. VFD RELAY

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

ELEMENTARY DIAGRAM



NOTES:

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⚠3 VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDELED BY VFD.

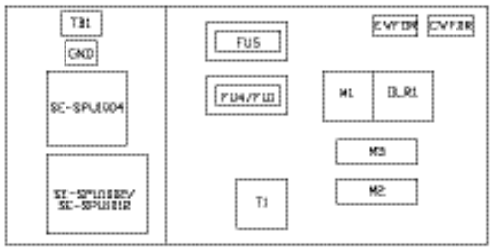
⚠4 VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

⚠5 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

LEGENDS

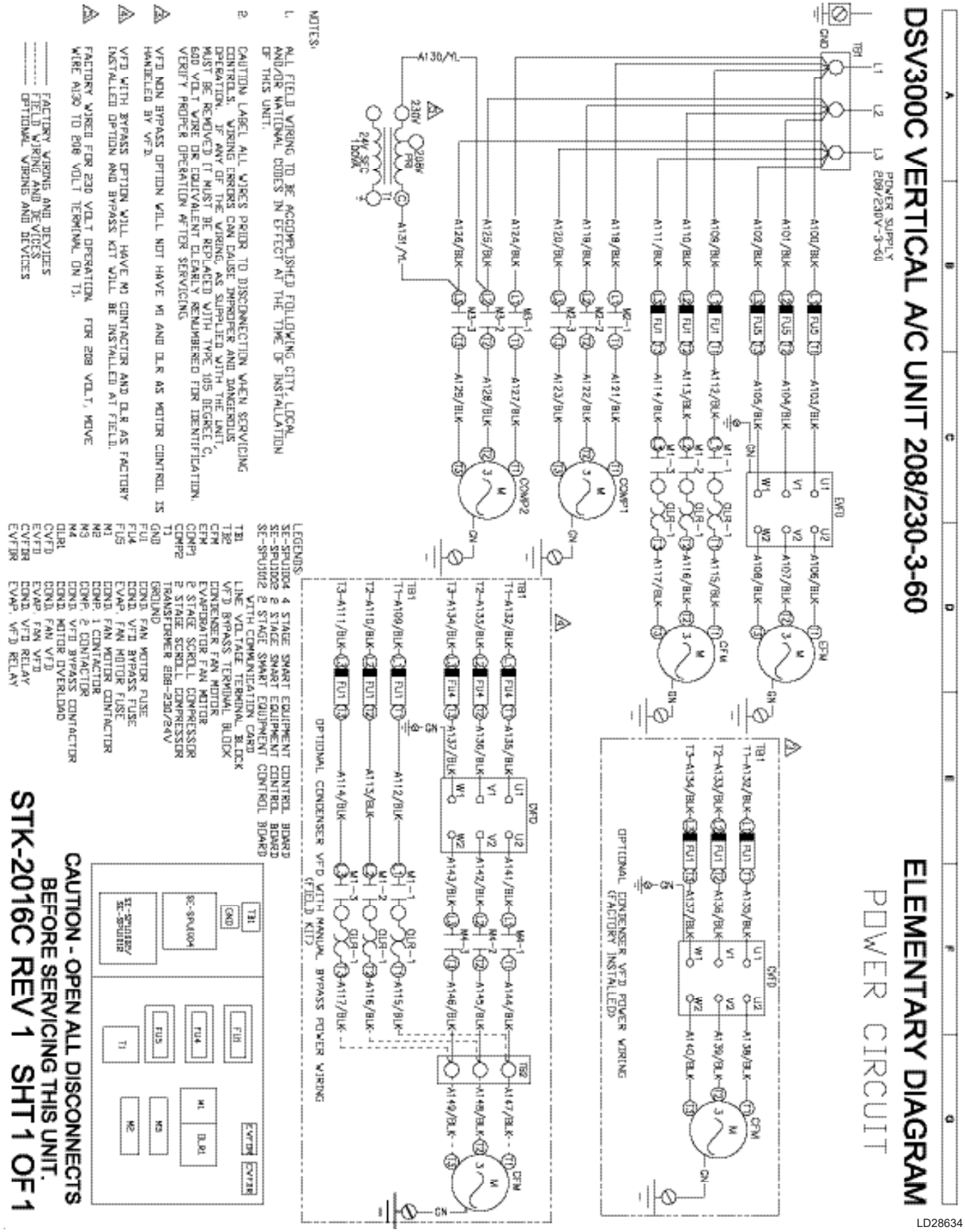
SE-SPU1004	4 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1002	2 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1002	2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
TB1	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE SCROLL COMPRESSOR
COMP2	2 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER
GND	GROUND
FU1	COND. FAN MOTOR FUSE
FU4	COND. FAN VFD BYPASS FUSE
FU5	EVAP. FAN MOTOR FUSE
M1	COND. FAN MOTOR CONTACTOR
M2	COMP1. CONTACTOR
M3	COMP2. CONTACTOR
M4	COND. VFD BYPASS CONTACTOR
OLR1	COND. MOTOR OVERLOAD
CVFD	COND. FAN VFD
EVFD	EVAP. FAN VFD
CVFDR	COND. VFD RELAY
EVFDR	EVAP. VFD RELAY



CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2015C REV 1 SHT 1 OF 1

DSV Wiring Diagrams (Cont'd)



NOTES:

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⚠ VFD NON BYPASS OPTION WILL NOT HAVE M3 AND OLR AS MOTOR CONTROL IS HANDLED BY VFD.

⚠ VFD WITH BYPASS OPTION WILL HAVE M3 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 A130 TO 208 VOLT TERMINAL ON T1.

LEGENDS:

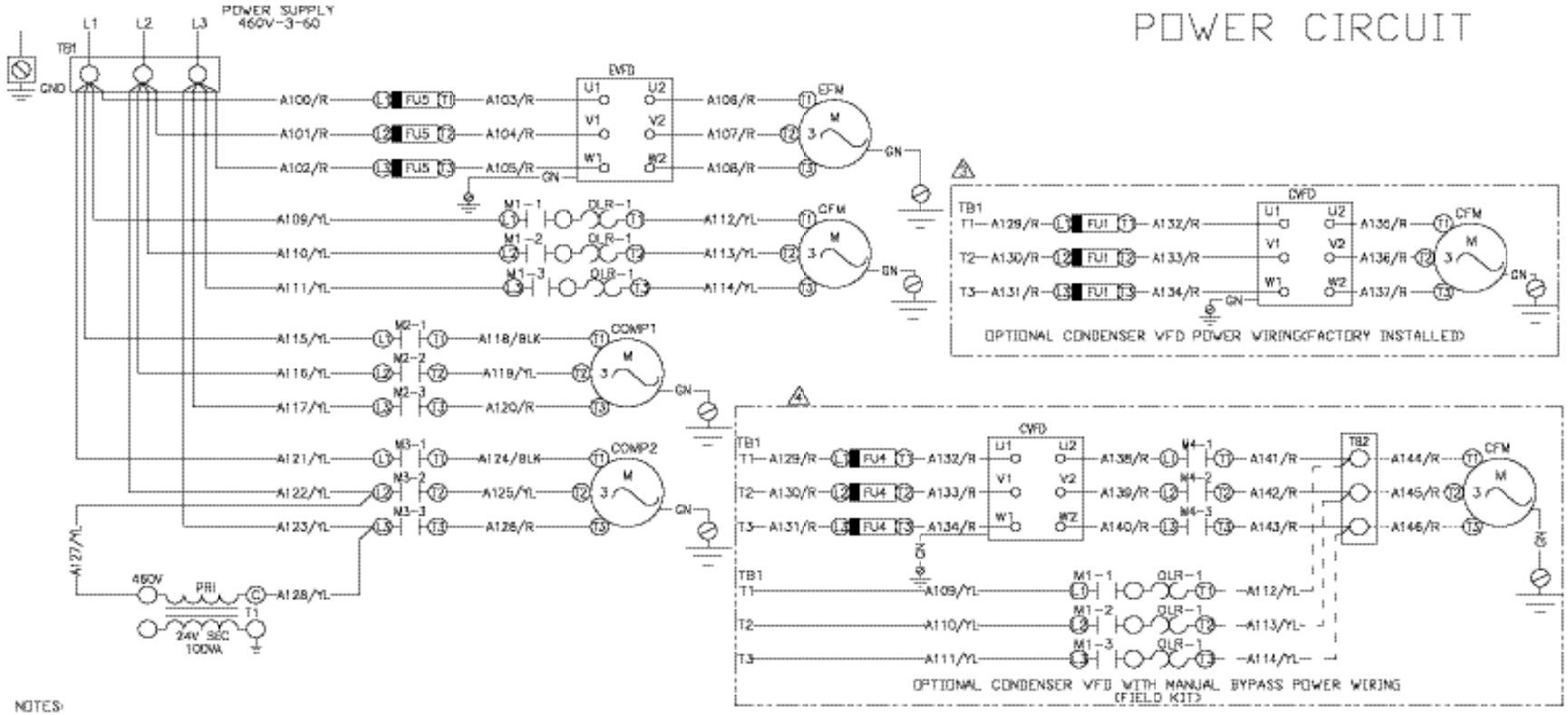
SE-SPU1004	4 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1002	2 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1012	2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
TB1	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE SCROLL COMPRESSOR
COMP2	2 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER 208-230/24V
GND	GROUND
FU1	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. VFD BYPASS CONTACTOR
OLR1	COND. MOTOR OVERLOAD
CVFD	COND. FAN VFD
EVFD	EVAP. FAN VFD
CVFDR	COND. VFD RELAY
EVFDR	EVAP. VFD RELAY

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

DSV300C VERTICAL A/C UNIT 460-3-60

ELEMENTARY DIAGRAM

POWER CIRCUIT



NOTES:

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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.

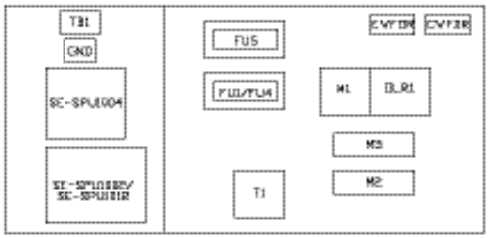
⚠3 VFD NON BYPASS OPTION WILL NOT HAVE M1 AND OLR AS MOTOR CONTROL IS HANDELED BY VFD.

⚠4 VFD WITH BYPASS OPTION WILL HAVE M1 CONTACTOR AND OLR AS FACTORY INSTALLED OPTION AND BYPASS KIT WILL BE INSTALLED AT FIELD.

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

LEGENDS:

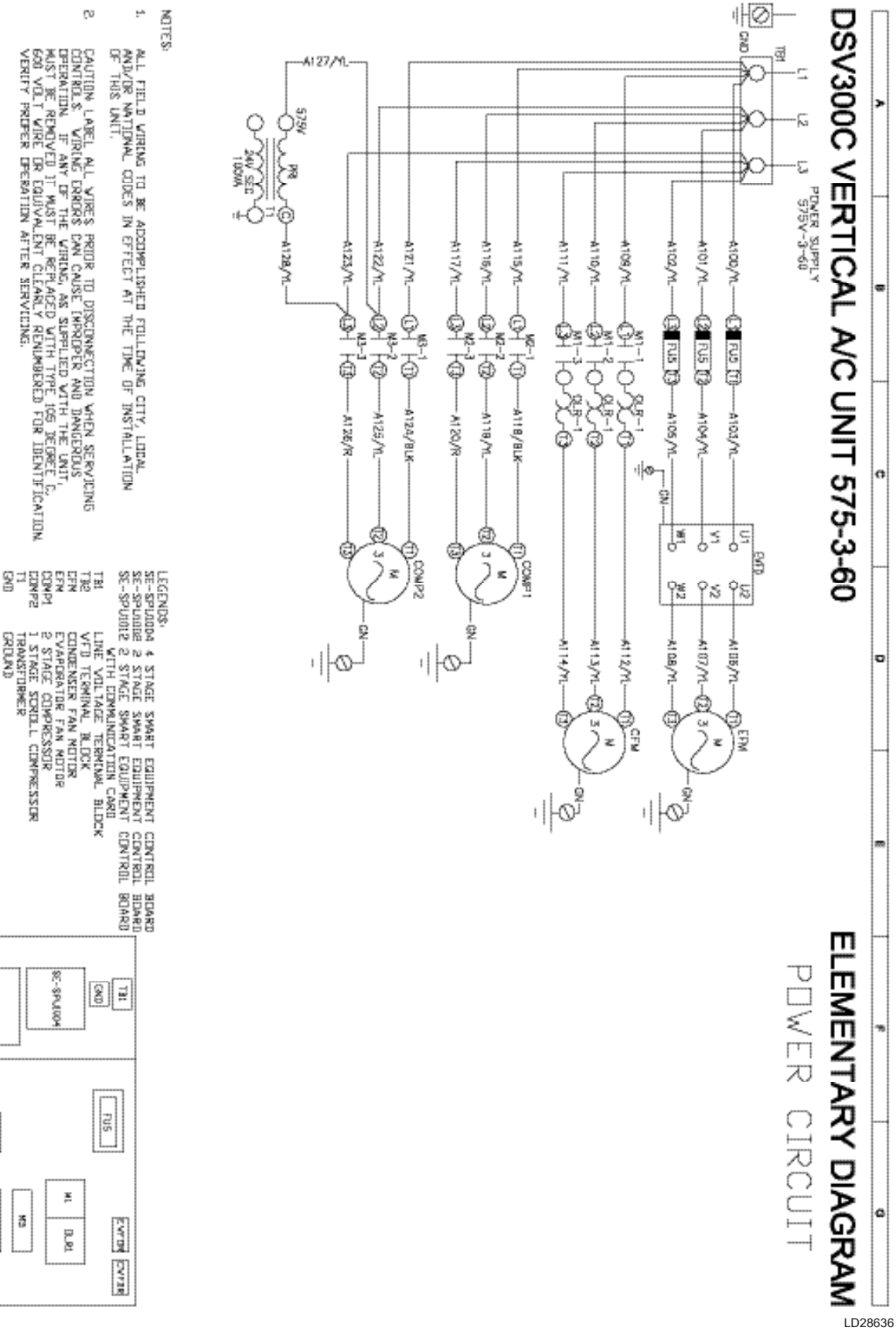
SE-SPU1004	4 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU1002	2 STAGE SMART EQUIPMENT CONTROL BOARD
SE-SPU10L2	2 STAGE SMART EQUIPMENT CONTROL BOARD WITH COMMUNICATION CARD
TBL	LINE VOLTAGE TERMINAL BLOCK
TB2	VFD BYPASS TERMINAL BLOCK
CFM	CONDENSER FAN MOTOR
EFM	EVAPORATOR FAN MOTOR
COMP1	2 STAGE SCROLL COMPRESSOR
COMP2	2 STAGE SCROLL COMPRESSOR
T1	TRANSFORMER
GND	GROUND
FU1	COND. FAN MOTOR FUSE
FU4	COND. FAN VFD BYPASS FUSE
FU5	EVAP. FAN MOTOR FUSE
M1	COND. FAN MOTOR CONTACTOR
M2	COMP. 1 CONTACTOR
M3	COMP. 2 CONTACTOR
M4	COND. VFD BYPASS CONTACTOR
OLR1	COND. MOTOR OVERLOAD
CVFD	COND. FAN VFD
EVFD	EVAP. FAN VFD
CVFDR	COND. VFD RELAY
EVFDR	EVAP. VFD RELAY



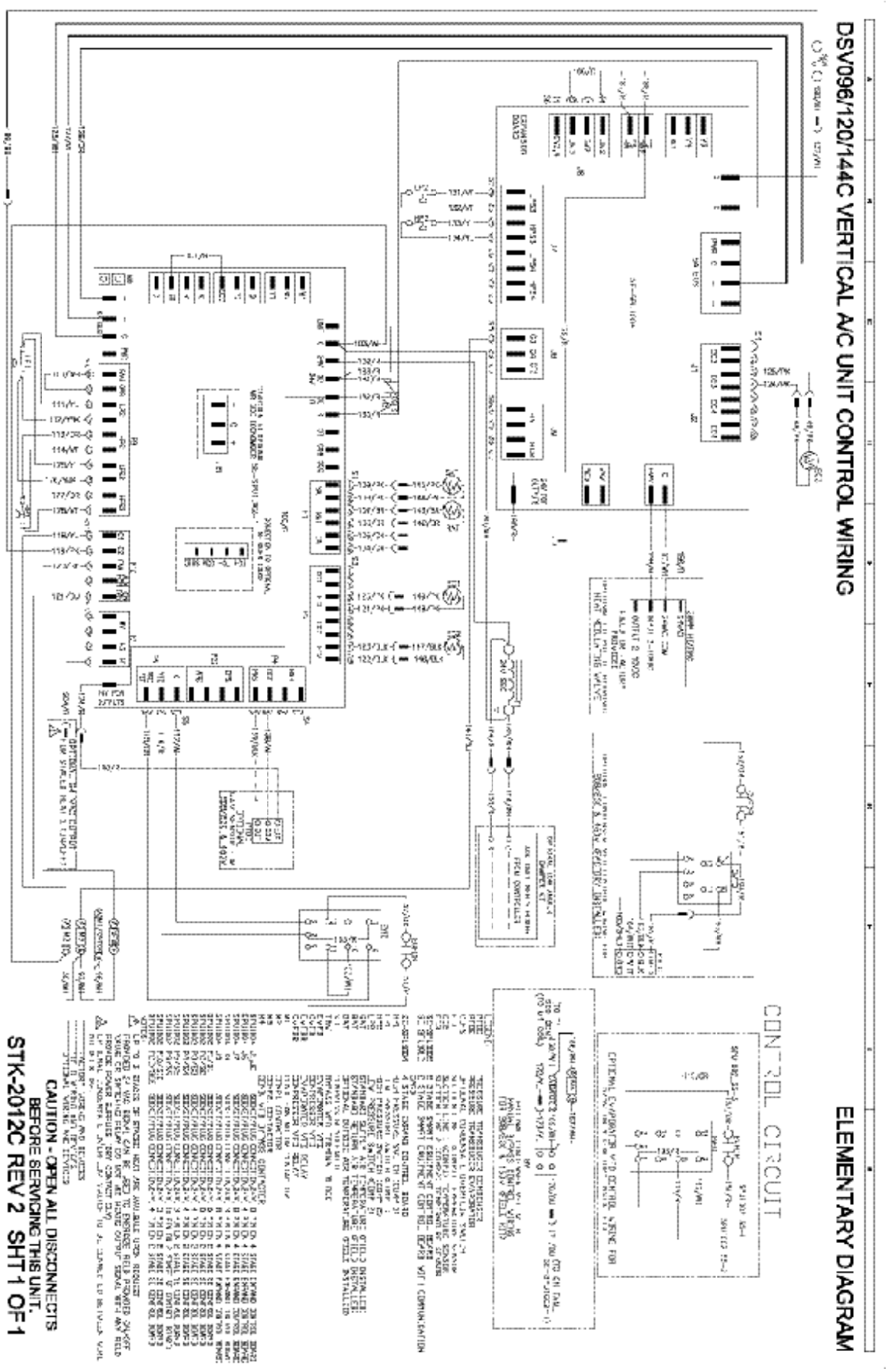
CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2017C REV 1 SHT 1 OF 1

DSV Wiring Diagrams (Cont'd)

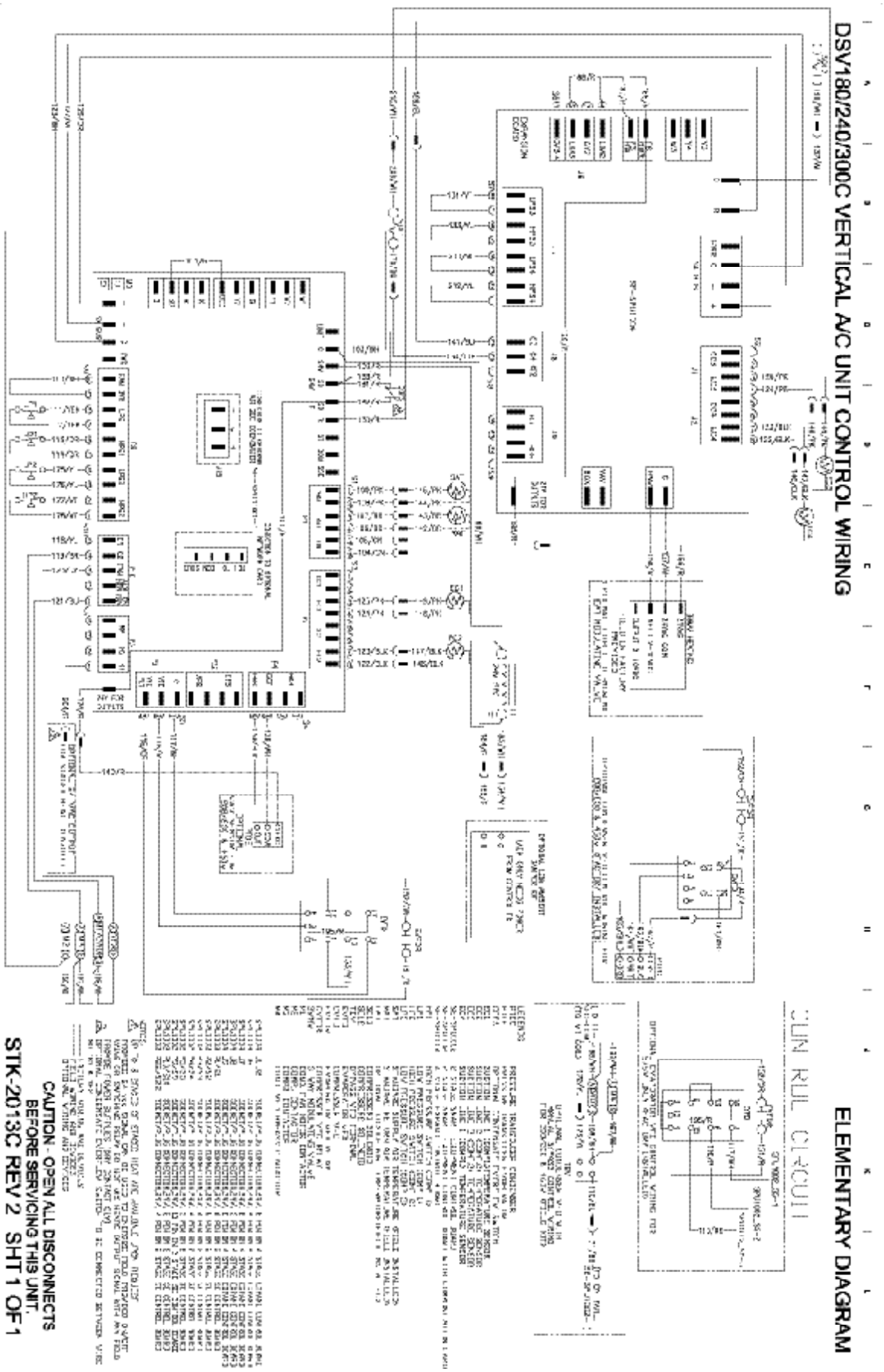


LD28636


DSV096/120/144C VERTICAL A/C UNIT CONTROL WIRING
ELEMENTARY DIAGRAM
CONTROL CIRCUIT
CAUTION - OPEN ALL DISCONNECTS
BEFORE SERVICING THIS UNIT.
STK-2012C REV 2 SHT 1 OF 1

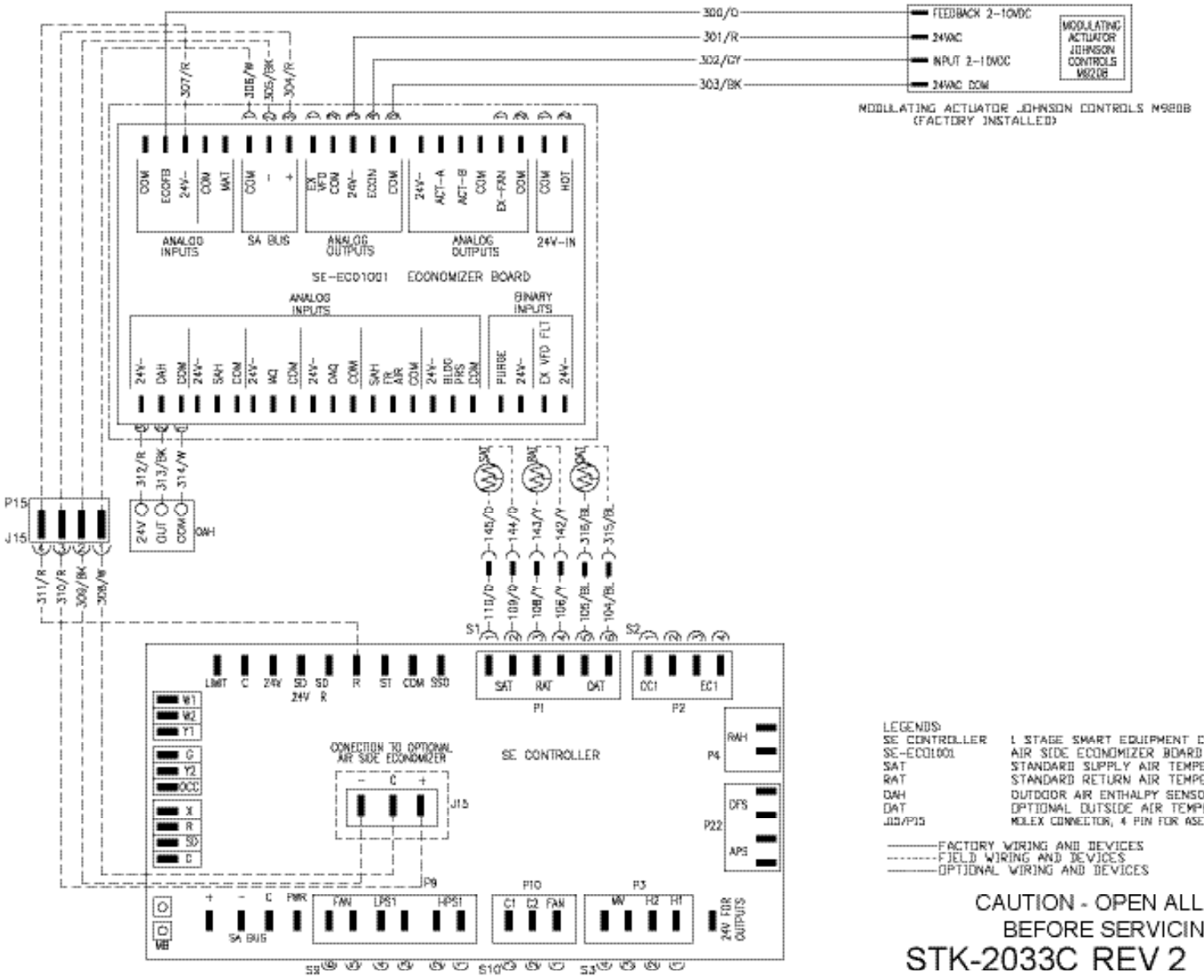
LD28630

DSV Wiring Diagrams (Cont'd)



LD28631

DSV060-300C VERTICAL A/C UNIT ECONOMIZER ELEMENTARY DIAGRAM



LEGENDS

SE CONTROLLER	1 STAGE SMART EQUIPMENT CONTROL BOARD
SE-ECO1001	AIR SIDE ECONOMIZER BOARD
SAT	STANDARD SUPPLY AIR TEMPERATURE (FIELD INSTALLED)
RAT	STANDARD RETURN AIR TEMPERATURE (FIELD INSTALLED)
OAH	OUTDOOR AIR ENTHALPY SENSOR (FIELD INSTALLED)
OAT	OPTIONAL OUTSIDE AIR TEMPERATURE(FIELD INSTALLED)
J15/P15	MOLEX CONNECTOR, 4 PIN FOR ASE HARNESS

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

CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT.

STK-2033C REV 2 SHT OF 1

SIGMA

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-milimeter 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 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.

Specifications (Cont'd)

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.

Network Sensor

The surface-mounted NS Series network sensor with fault code capability is an electronic zone sensor designed to function directly with Sigma 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.

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^2 (20.3 L/s · m^2) 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