

	OPTISPEED™ VARIABLE SPEED DRIVE	
REPLACEMENT PARTS	Supersedes: 160.84-RP3 (817)	Form 160.84-RP3 (622)

MODELS
HYP0490, HYP0490A, HYP0612A
HYP0774, HYP1278A



LD14681

490 AMPS – 50/60 HZ, 380-460 VAC (P/N 371-06569-XXX)
490A AMPS – 50/60 HZ, 380-460 VAC (P/N 371-06755-XXX)
612A AMPS – 50/60 HZ, 380-460 VAC (P/N 371-06336-XXX)
774 AMPS – 50/60 HZ, 380-460 VAC (P/N 371-05992-XXX)
1278A AMPS - 50/60 HZ, 380-460 VAC (P/N 371-06172-XXX)

Issue Date:
 June 10, 2022



IMPORTANT!

READ BEFORE PROCEEDING!

GENERAL SAFETY GUIDELINES

This equipment is a relatively complicated apparatus. During installation, operation maintenance or service, individuals may be exposed to certain components or conditions including, but not limited to: refrigerants, materials under pressure, rotating components, and both high and low voltage. Each of these items has the potential, if misused or handled improperly, to cause bodily injury or death. It is the obligation and responsibility of operating/service personnel to identify and recognize these inherent hazards, protect themselves, and proceed safely in completing their tasks. Failure to comply with any of these requirements could result in serious damage to the equipment and the property in

which it is situated, as well as severe personal injury or death to themselves and people at the site.

This document is intended for use by owner-authorized rigging, installation, and operating/service personnel. It is expected that these individuals possess independent training that will enable them to perform their assigned tasks properly and safely. It is essential that, prior to performing any task on this equipment, this individual shall have read and understood the on-product labels, this document and any referenced materials. This individual shall also be familiar with and comply with all applicable industry and governmental standards and regulations pertaining to the task in question.

SAFETY SYMBOLS

The following symbols are used in this document to alert the reader to specific situations:



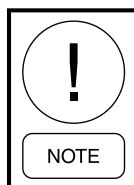
Indicates a possible hazardous situation which will result in death or serious injury if proper care is not taken.



Identifies a hazard which could lead to damage to the machine, damage to other equipment and/or environmental pollution if proper care is not taken or instructions are not followed.



Indicates a potentially hazardous situation which will result in possible injuries or damage to equipment if proper care is not taken.



Highlights additional information useful to the technician in completing the work being performed properly.



External wiring, unless specified as an optional connection in the manufacturer's product line, is not to be connected inside the control cabinet. Devices such as relays, switches, transducers and controls and any external wiring must not be installed inside the micro panel. All wiring must be in accordance with Johnson Controls' published specifications and must be performed only by a qualified electrician. Johnson Controls will NOT be responsible for damage/problems resulting from improper connections to the controls or application of improper control signals. Failure to follow this warning will void the manufacturer's warranty and cause serious damage to property or personal injury.

CHANGEABILITY OF THIS DOCUMENT

In complying with Johnson Controls' policy for continuous product improvement, the information contained in this document is subject to change without notice. Johnson Controls makes no commitment to update or provide current information automatically to the manual or product owner. Updated manuals, if applicable, can be obtained by contacting the nearest Johnson Controls Service office or accessing the Johnson Controls Knowledge Exchange website at <https://docs.johnsoncontrols.com/chillers/>.

It is the responsibility of rigging, lifting, and operating/service personnel to verify the applicability of these documents to the equipment. If there is any question regarding the applicability of these documents, rigging, lifting, and operating/service personnel should verify whether the equipment has been modified and if current literature is available from the owner of the equipment prior to performing any work on the chiller.

HOW TO USE RENEWAL PARTS MANUALS

Johnson Controls offers an assortment of replacements parts for Johnson Controls, YORK and DS units. Each replacement part is manufactured and fitted for a specific model. This Replacement Parts Manual is for standard Johnson Controls units. Chiller units built with special options, modifications, or conversions are not covered in this manual.

This Replacement Parts Manual provides Johnson Controls chiller replacement parts by part numbers, descriptions, quantities and drawing figures. To determine the correct replacement part, locate the item on drawing figure and refer to the parts list for the part number, description and quantity.

NOTE: Provide a unit model number, unit serial number and part number when requesting a quotation or placing an order. Failure to include this information may delay processing of your request.

Model and Serial Number Locations:

- **Unit** - Namplate on side of Control Panel
- **Compressor** - Namplate on Compressor Housing
- **VSD** - Namplate on VSD Panel

Contact the following sources to order parts.

For North America, contact the following:

- YORK Chiller Parts Center Baltimore
Telephone: +1 800 932 1701
Email: chillerparts@jci.com
- YORK Chiller Parts Center Houston
Telephone: +1 833 278 7991
Email: chillerpartsHouston@jci.com
- YORK Chiller Parts Center NOLA
Telephone: +1 833 283 3738
Email: chillerpartsNOLA@jci.com
- YORK Chiller Parts Center Toronto
Telephone: +1 905 488 3642 or +1 905 488 3641
Email: chillerpartstoronto@jci.com

For parts availability and ordering YORK HVAC Parts within North America and Europe, use the following link:

[Parts Navigator \(solutionnavigator.com\)](https://solutionnavigator.com)

SYSTEM NOMENCLATURE

Y M C 2 - S 0756 A B

YORK _____
Magnetic Bearing _____
Centrifugal Chiller _____
S = Single Stage _____
T = Two Stage _____

Mod Level
A = Refrigerant R-134a
B = Refrigerant R-513a
Capacity in KW

COMPRESSOR NOMENCLATURE

M2 B - 197 F A C D

Motor _____
Motor Design Level _____
Impeller Tip Diameter (mm) _____
Rotation _____
F = Forward
R = Reverse

Down Discharge
Gas Path Revision Level
Impeller Design Revision Level

VESSEL NOMENCLATURE

E A 25 14 271 B R 1 1 F C R

Vessel _____
E = Evaporator
C = Condenser
Heat Exchanger Mod Level _____
Nominal Inside Diameter (Inches) _____
Nominal Length (Feet) _____
Marketing Tube Number _____
Tube Code _____
B = 3/4" Code 1
C = 3/4" Code 2
D = 3/4" Code 3
E = 3/4" Code 4
2 = 1" Code 1
3 = 1" Code 2
4 = 1" Code 3
5 = 1" Code 4

Vessel Refrigerant Pressure Code
R = Code 180
S = Code 235
T = Code 300
U = Code 350
V = Code 400

Inlet from Front View
R = Right
L = Left
Waterbox Type
C = Compact
M = Marine
Water Connection Type
F = Flanges
G = Grooved Standard
A = Victaulic AGS
Number of Passes
Water Side Pressure Code
1 = 150 psi
3 = 300 psi

VARIABLE SPEED DRIVE NOMENCLATURE

HYP 0774 X H C 15 D - 40 A

Hyp _____
Amps _____
0490, 0612, 0774, 1278
X = Factory Mount
R = Retrofit Model
H = YMC² Chiller
C = Condenser Cooled
E = Evaporator Cooled

Mod Level
40 = 380V 60Hz
50 = 400V 50Hz
46 = 460V 60Hz
68 = 415V 50Hz
D = Disconnect Switch
B = Circuit Breaker
Liquid DWP
15 = 150 psi
30 = 300 psi

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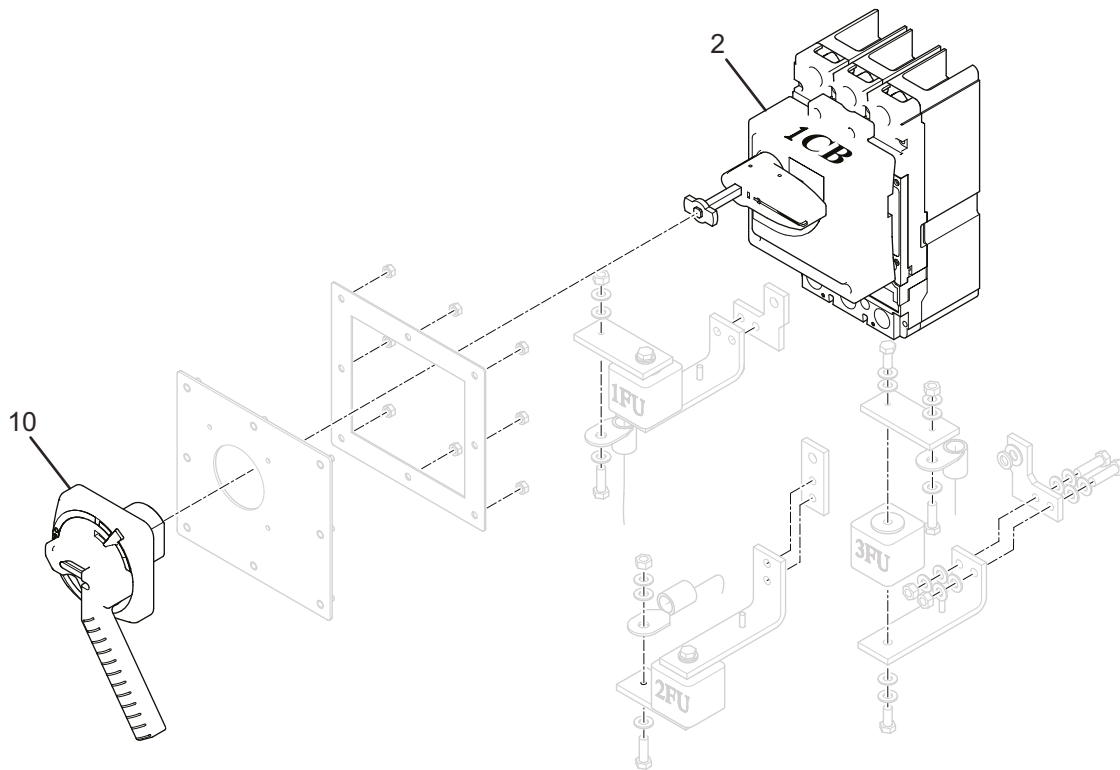
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SECTION 1 - 0490 AMP VARIABLE SPEED DRIVE

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TABLE 1 - INPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
2	Circuit Breaker	224-37879-000	839940	1	1
10	Circuit Breaker Handle	024-35429-000	736285		
29	Damping Resistor Kit (includes 2 resistors & bracket)	025-45521-000	873884	3	7
2	Disconnect Switch	024-37442-000	839733	1	2
21	Disconnect Switch Handle	024-36614-000	736390		
17	Disconnect Switch Lug Kit	025-42181-000	680131		
41	Ground Lug	025-35173-000	117722	1	5
22	Input Current Transducer (DCCT)	025-42748-000	740133	3	3
9	Input Filter Assembly	371-05614-341	839967	1	4
1	Input Filter Capacitor for Assembly	025-44490-000	839745	6	4
1	Input Filter Capacitor with Resistor	025-43928-000	740379	1	5
7	Input Filter Resistor for Assembly	025-42616-000	740130	4	4/5
8	Input Inductor (1L & 2L) 340 lbs (154 Kg)	025-44458-000	835714	1	6
13	Input Power Wiring (wiring between 1FU - 3FU and 1L/2L)	571-06569-231	1059326	1	6
40	Input Voltage Isolator Board	031-02022-000	65064	1	5
15	Voltage Transient Board (Fuses are not included)	031-02453-000	743895	1	5



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FIGURE 1 - CIRCUIT BREAKER (CB)

0490 AMP VARIABLE SPEED DRIVE

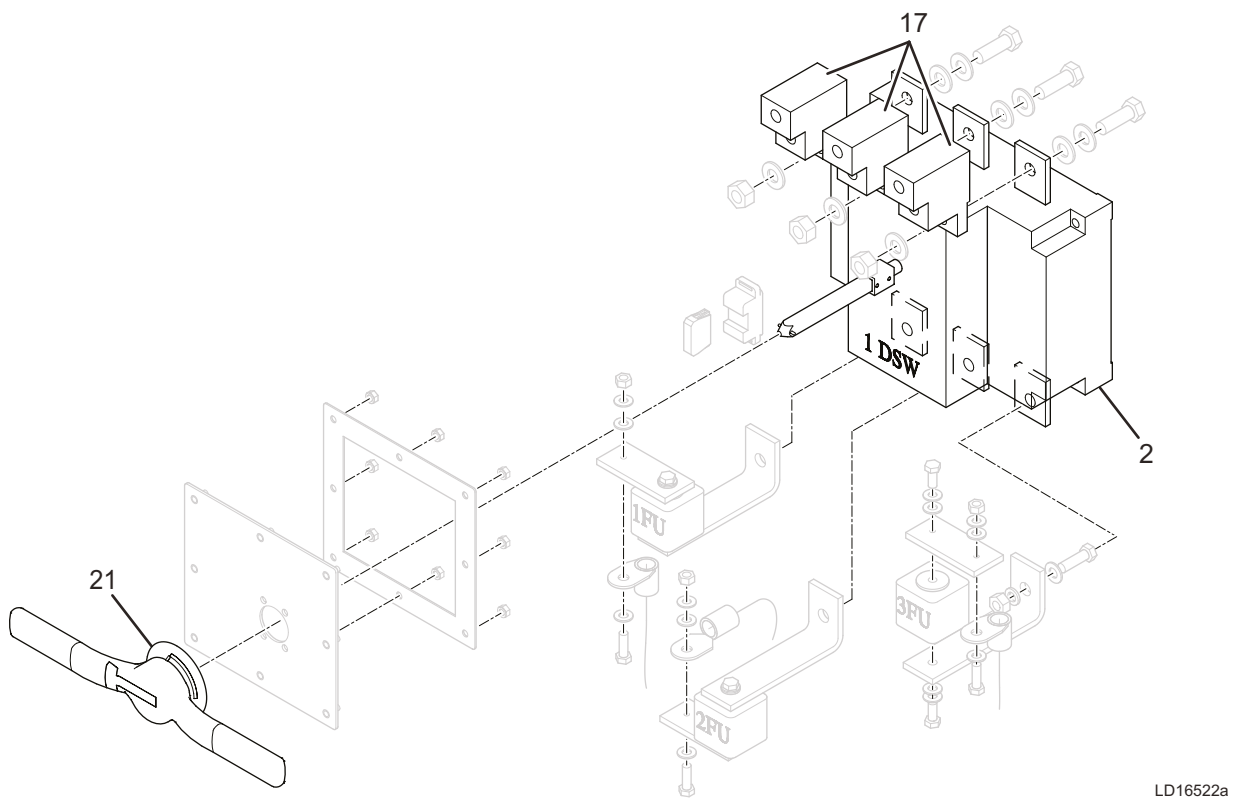


FIGURE 2 - DISCONNECT SWITCH (DS)

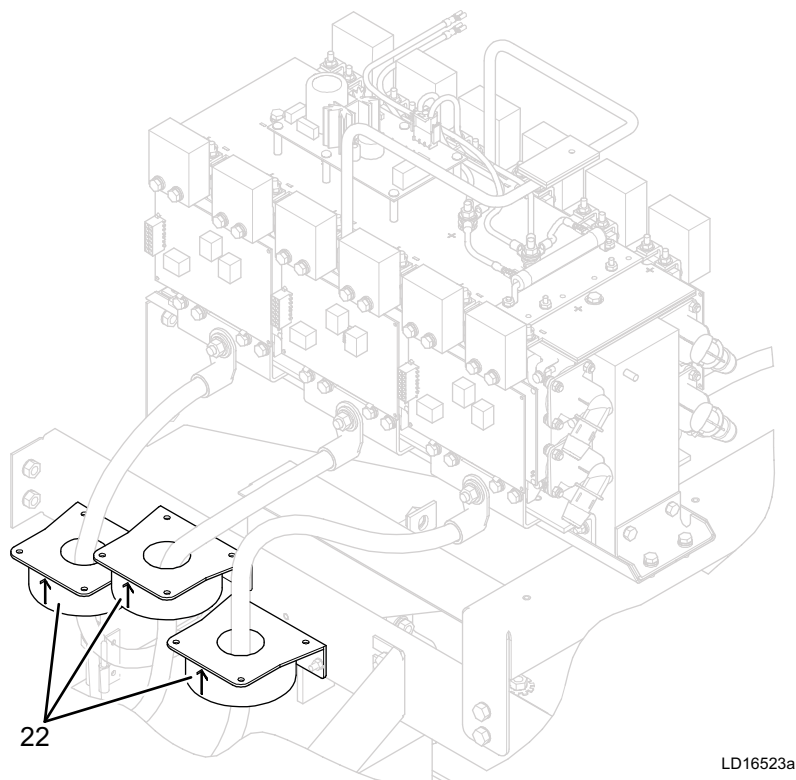


FIGURE 3 - INPUT CURRENT TRANSDUCER (DCCT)

0490 AMP VARIABLE SPEED DRIVE

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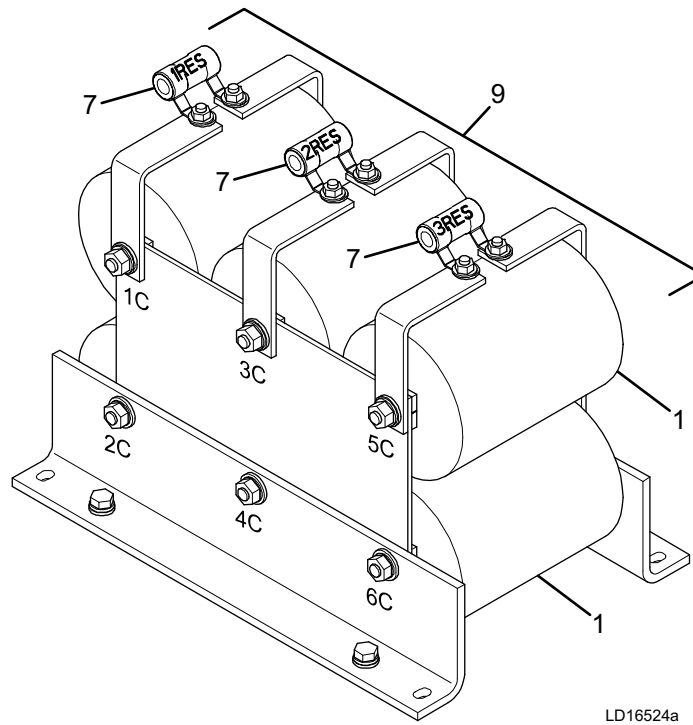


FIGURE 4 - INPUT FILTER CAPACITOR ASSEMBLY

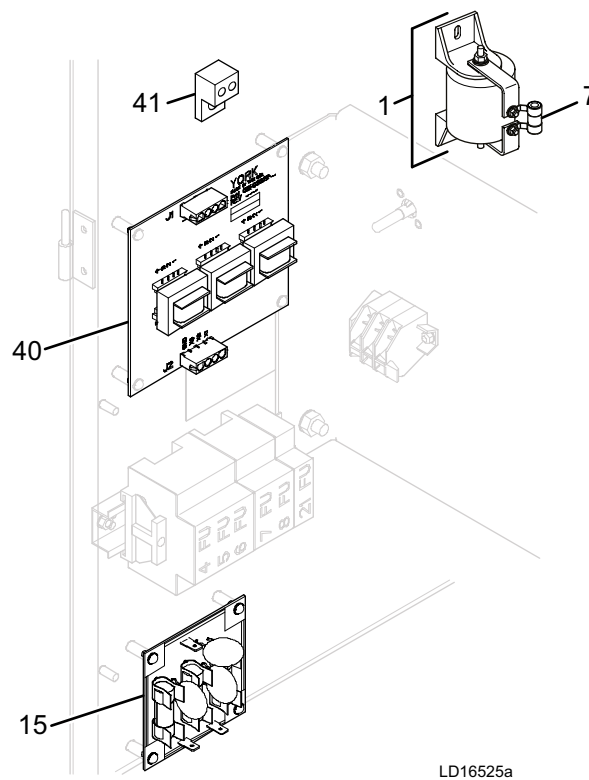
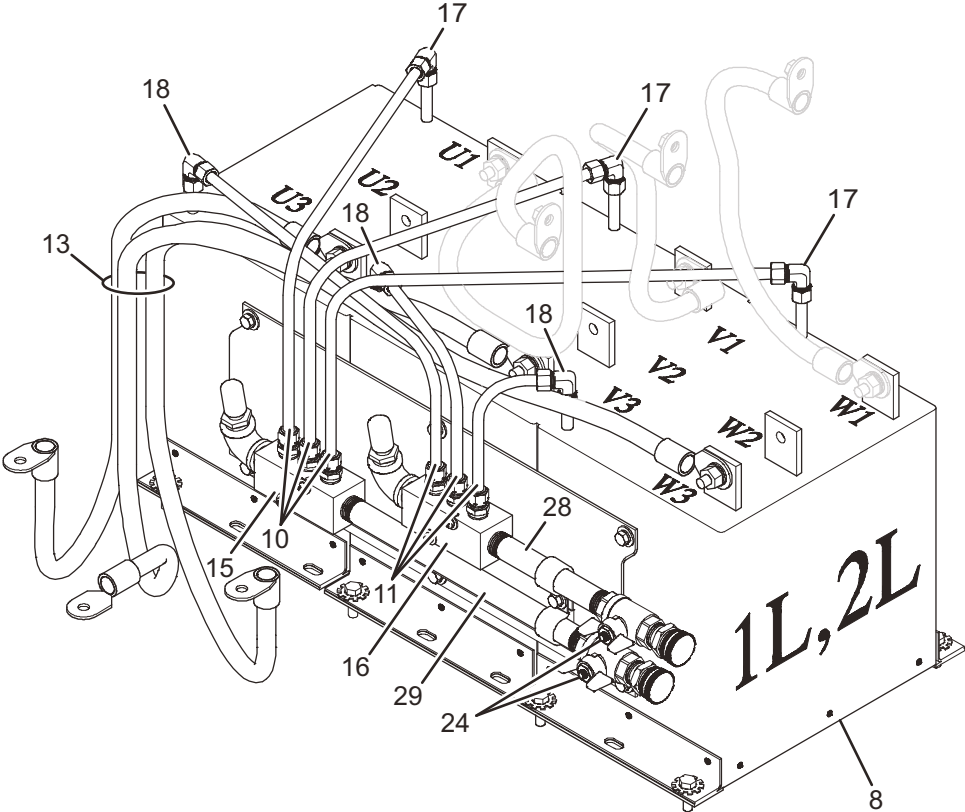


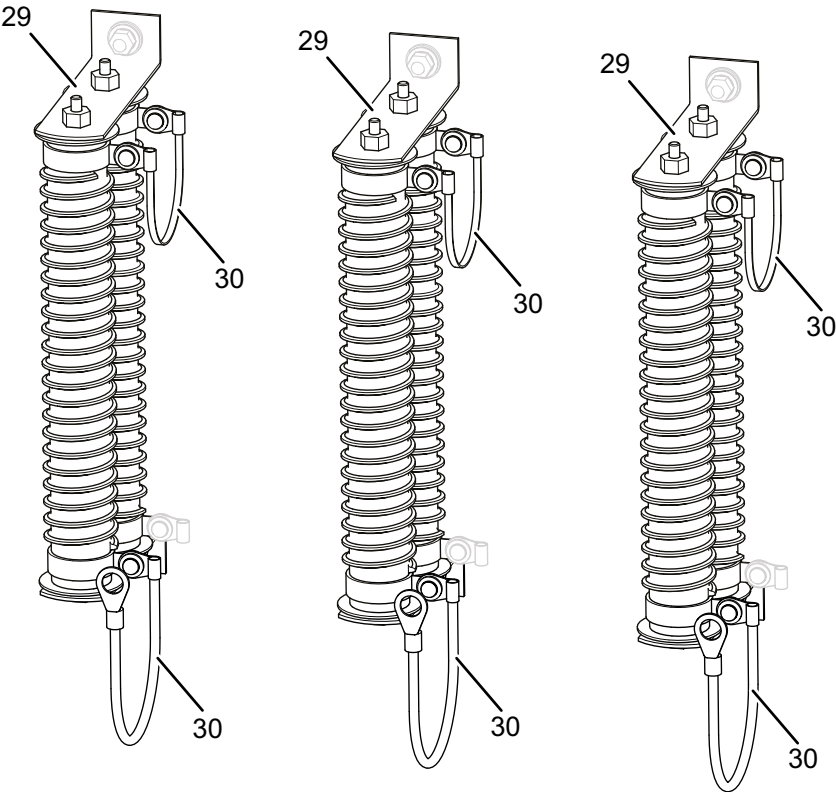
FIGURE 5 - LEFT SIDE OF VSD ENCLOSURE

0490 AMP VARIABLE SPEED DRIVE



LD16526a

FIGURE 6 - INPUT INDUCTOR (L1, L2)



LD16538a

FIGURE 7 - RESISTOR ASSEMBLY

0490 AMP VARIABLE SPEED DRIVE

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TABLE 2 - FUSE COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
117	Fuse 1 AMP (4FU-6FU & 22FU-24FU)	025-43326-000	740259	6	8/9
105	Fuse 5 AMP Voltage Transient Board Fuses (16FU-18FU)	025-38523-000	739590	3	8
119	Fuse 5 AMP (19FU)	025-35901-000	739233	1	9
122	Fuse 6 AMP (15FU)	025-35902-000	264466	1	9
12	Fuse 15 AMP 400-460 VAC 60 Hz, 400-415 VAC 50 Hz (7FU & 8FU)	025-35907-000	117822	2	8
118	Fuse 20 AMP (14FU & 21FU)	025-35908-000	117823	2	8/9
34	1 Pole Fuse Holder 30A	025-39951-000	359985	4	8/9
33	2 Pole Fuse Holder 30A	025-44520-000	740518	1	8
27	3 Pole Fuse Holder 30A	025-39952-000	343433	2	8/9
4	Input Power Fuse (1FU-3FU set of three)	371-05614-601	1053040	1	10

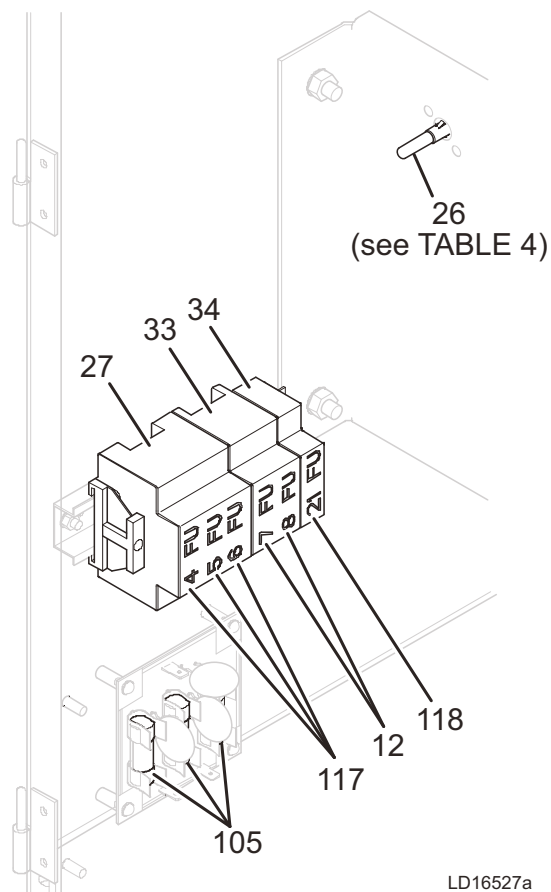


FIGURE 8 - FUSES AND FUSE HOLDERS (4FU-8FU & 21FU)

0490 AMP VARIABLE SPEED DRIVE

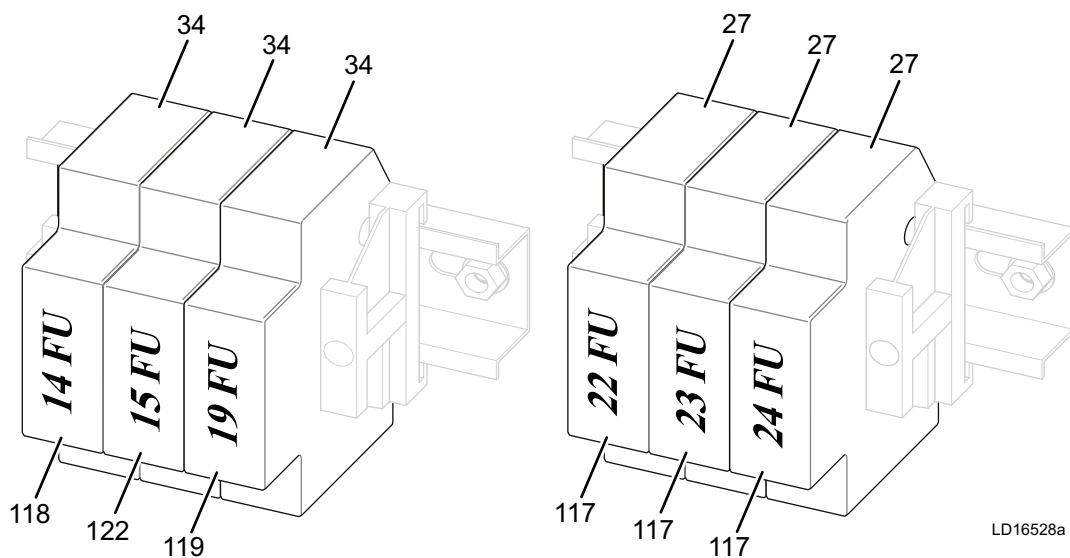


FIGURE 9 - FUSES AND FUSE HOLDERS (14FU, 15FU, 19FU & 22FU-24FU))

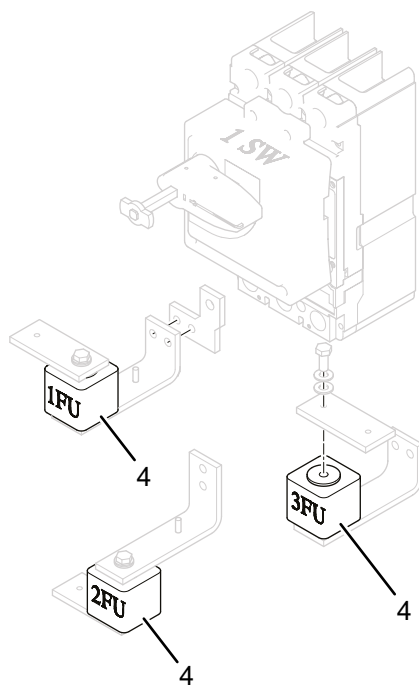


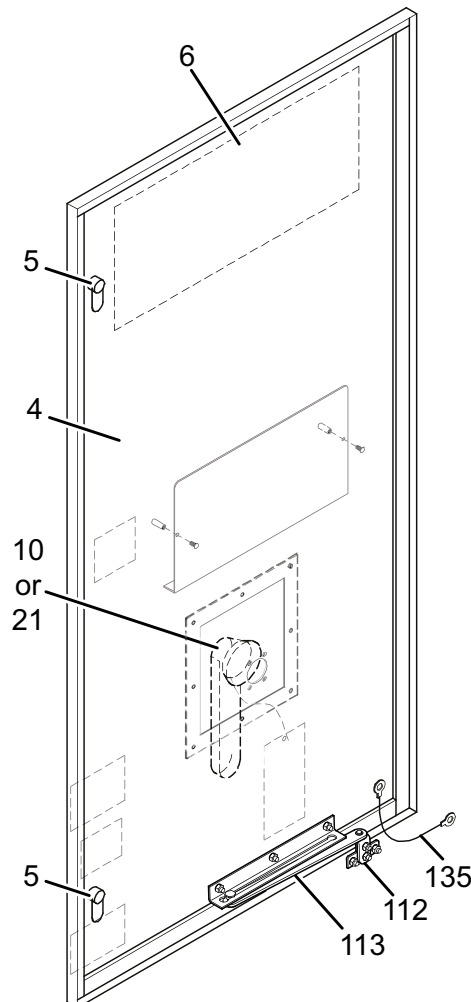
FIGURE 10 - INPUT POWER FUSES (1FU-3FU)

0490 AMP VARIABLE SPEED DRIVE

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TABLE 3 - DOOR COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
10	Circuit Breaker Door Mounting Kit	024-35429-000	736285	1	11
21	Disconnect Switch Handle	024-36614-000	736390	1	11
135	Door Ground Strap	525-32508-001	806677	2	11
4	Door Kit Left 60 Hz (Including all labels and latches)	371-05614-651	1053049	1	11
	Door Kit Left 50 Hz (Including all labels and latches)	371-05614-653	1053050		
	Door Kit Right 60 Hz (Including all labels and latches)	371-05614-656	1053051		
	Door Kit Right 50 Hz (Including all labels and latches)	371-05614-658	1053052		
5	Door Latch	029-25614-000	743380	4	11
113	Door Stop	029-23420-000	119865	1	11
112	Door Stop Mounting Plate	371-05614-553	840001	1	11
6	Label Front Door JCI Logo	035-23036-000	745608	1	11



LD14665a

FIGURE 11 - DOOR COMPONENTS

0490 AMP VARIABLE SPEED DRIVE

TABLE 4 - COOLING SYSTEM COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Coolant Drain Valve	022-12207-000	839729	1	13
2	Coolant Drain Valve Cap	023-25526-000	839731	1	13
3	Coolant Hose Barb Straight Kit (hose barb & hose)	371-05571-626	921624	2	12
4	Coolant Hose Barb Elbow Kit (hose barb & hose)	371-05571-631	921625	2	12
5	Coolant Hose Clamp 1"	023-08856-000	617439	26	12/13
6	Coolant Hose Clamp 2"	021-32226-000	730939	4	13
7	Coolant Hose External 1 1/2"	028-16373-000	742214	17"	13
8	Coolant Hose External 3/4 " ID by the foot (To the power panel)	028-16692-000	864411	70"	13
9	Coolant Hose Internal 3/4 " ID by the foot	028-16768-000	1056103	-	12/16
10	Coolant Hose on Inductor 3/8 "	325-44864-607	1053032	-	6/16
11	Coolant Hose on Inductor 1/2 "	325-44864-618	1053041	-	6/16
12	Coolant Manifold Supply Kit	371-06569-636	1110655	1	12
13	Coolant Manifold Return Kit	371-06569-641	1110656	1	12
14	Coolant Manifold Clamp	028-16554-000	839771	2	12
15	Coolant Manifold on Inductors 3/8"	325-44864-603	1053030	2	6/16
16	Coolant Manifold on Inductors 1/2"	325-44864-615	1053038	2	6/16
17	Coolant Manifold on Inductors Fittings Elbow 3/8"	325-44864-609	1053034	6	6/16
18	Coolant Manifold on Inductors Fittings Elbow 1/2"	325-44864-616	1053039	6	6/16
19	Coolant Pump	026-33890-000	3590	1	13
20	Coolant Pump Flange Set	023-20283-000	733193	1	13
21	Coolant Reservoir Fill Plug	028-16378-000	742218	1	13
22	Coolant Reservoir Hose Clamp	021-19150-000	564227	1	13
23	Coolant Reservoir 3" PVC with Fill Plug Kit	371-05614-671	1053053	1	13
24	Coolant Valves on Inductors	325-44864-605	1053031	4	6
25	Elbow 45°	028-16369-000	742210	1	13
26	Enclosure Temperature Sensor with connector	571-05182-283	807091	2	8/18
27	Flow Restrictor	028-16620-000	839778	2	12
	Inhibitor	013-04129-000	729086	5 gal	-
28	Input Inductor Drain Pipe Kit (5")	325-44458-601	1053028	1	6
29	Input Inductor Drain Pipe Kit (12")	325-44458-603	1053029	1	6
30	Internal Cooling Fan	025-32557-000	738735	1	12
31	Internal Cooling Coil	026-46734-000	839767	1	12
32	Output Inductor Drain Pipe Kit (1.25")	325-44864-611	1053036	1	16
33	Output Inductor Drain Pipe Kit (8")	325-44864-613	1053037	1	16
34	Relay, Control Fan / Pump	024-30441-000	664298	1	12
42	Shell and Tube Heat Exchanger 3", 150/300 PSI	026-37572-000	104160	1	13
*	Shell and Tube Heat Exchanger Head Gaskets (set of two) 3"	371-03716-001	772263	1	-

NOTE: Items with an * are NOT represented.

0490 AMP VARIABLE SPEED DRIVE

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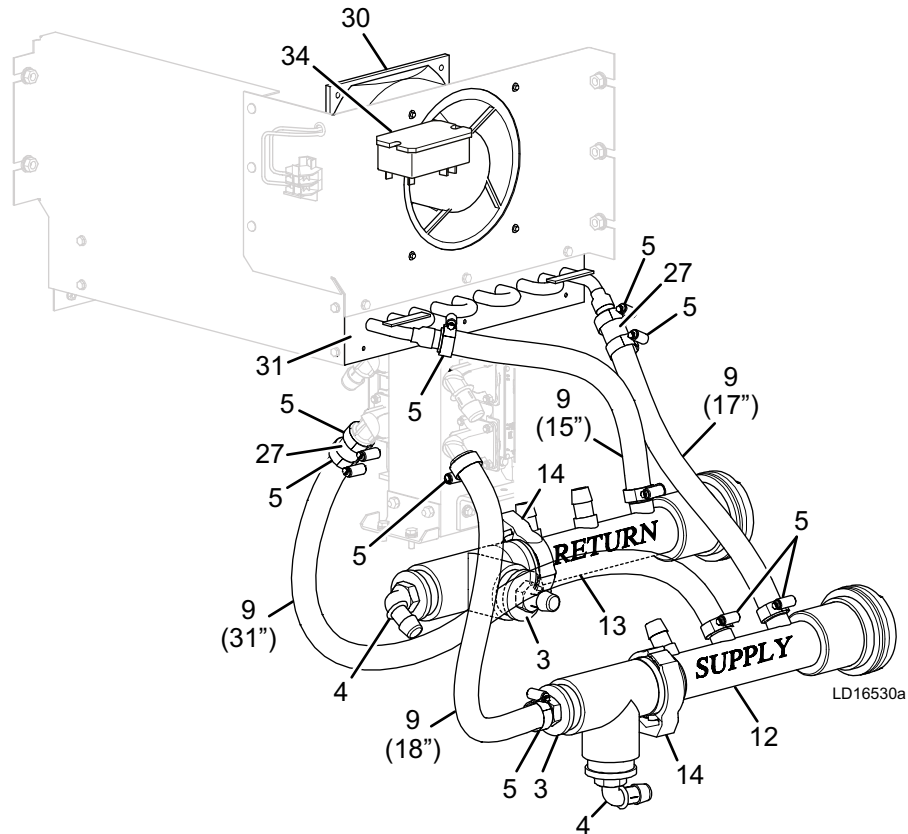


FIGURE 12 - COOLING SYSTEM COMPONENTS

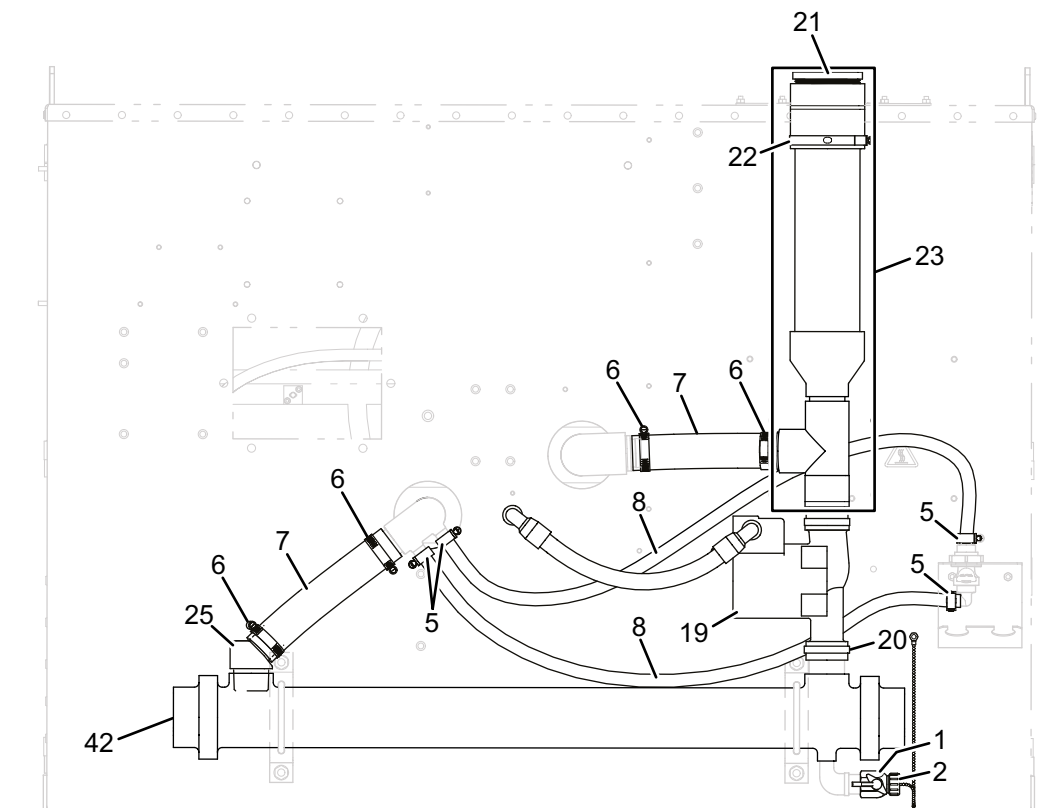


FIGURE 13 - COOLING SYSTEM COMPONENTS

0490 AMP VARIABLE SPEED DRIVE

TABLE 5 - POWER ASSEMBLY COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Bus Bleeder Resistor (ea.)	371-06165-001	840018	1	14
2	Bus Plate Assembly Kit	371-06619-601	1110657	1	14
3	Bus Snubber Capacitor (ea.)	025-42835-000	740149	12	14
5	Inverter Gate Driver Board	031-02901-004	839195	3	14
*	Inverter Power Complete Kit (all phases)	371-05904-611	1053057	-	-
*	Inverter Power Wiring (wiring between Inverter & L3)	571-06569-233	1059328	1	-
6	Power Supply Board	031-02903-002	839200	1	14
7	Power Unit Mounting Foot Front	071-05508-312	749269	1	14
8	Power Unit Mounting Foot Rear	071-05508-310	749268	1	14
9	Rectifier Gate Driver Board	031-02901-003	839194	3	14
*	Rectifier Power Complete Kit (all phases)	371-05904-616	1053060	-	-
*	Rectifier Power Wiring (wiring between 1L/2L and rectifier)	571-06569-232	1059327	1	-
10	VSD Rectifier/Inverter Power Unit Complete Kit, Weight 54lbs (119 Kg)	371-06619-621	1110658	1	14
11	Wiring Ground	571-05526-241	807110	2	14

NOTE: Items with an * are NOT represented.

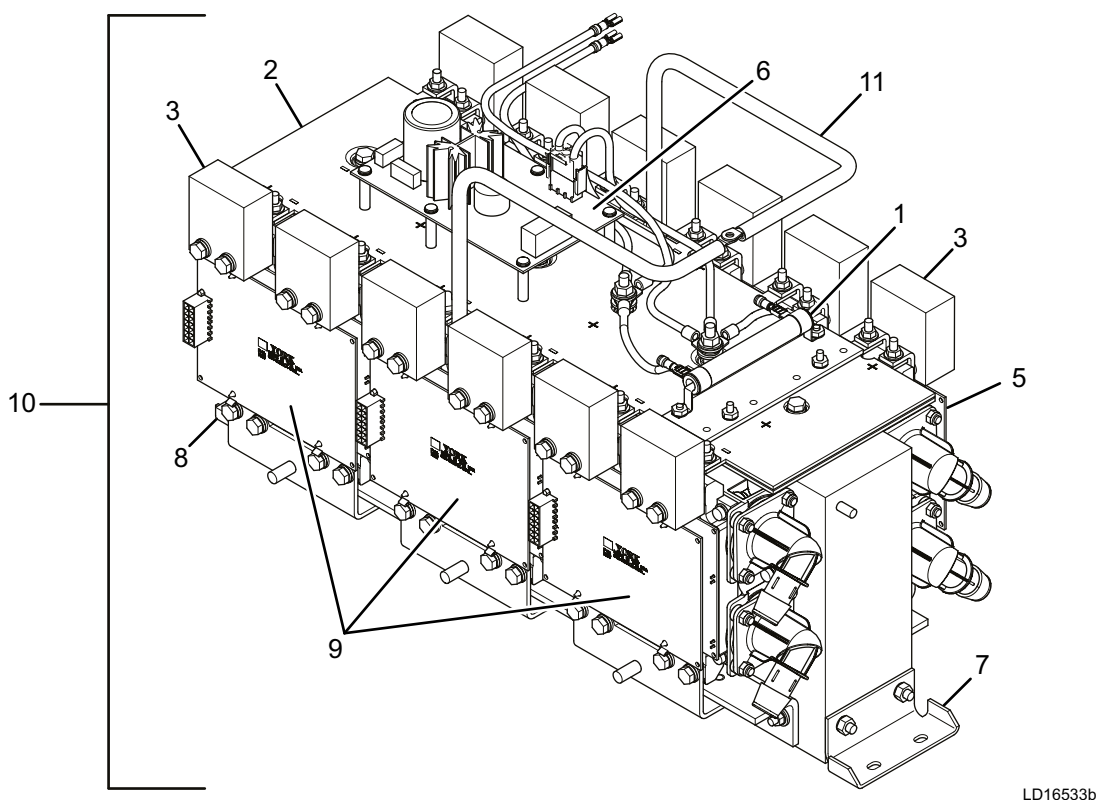


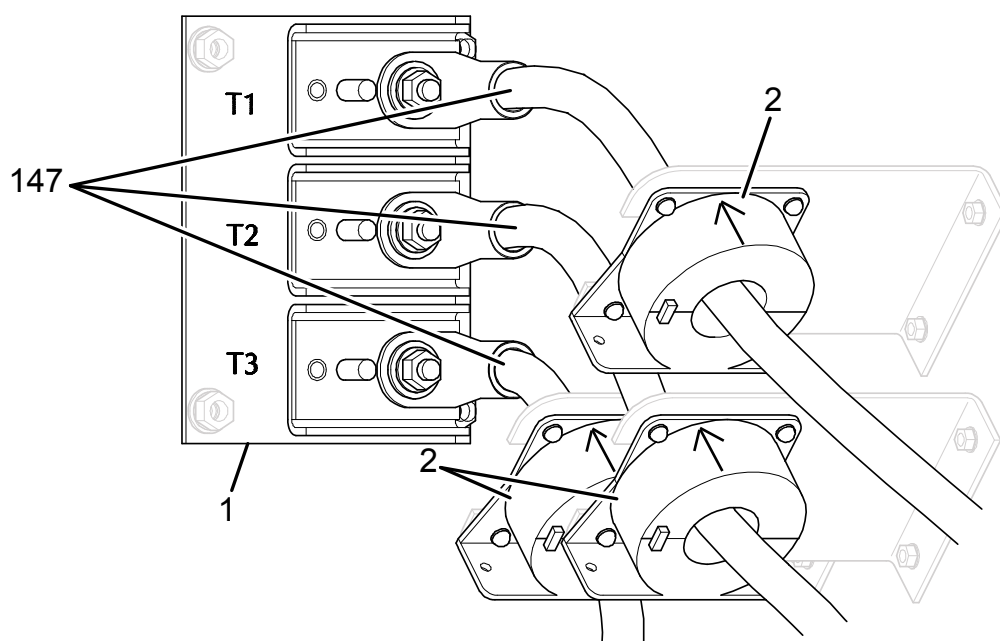
FIGURE 14 - POWER ASSEMBLY COMPONENTS

0490 AMP VARIABLE SPEED DRIVE

1

TABLE 6 - OUTPUT COMPONENTS

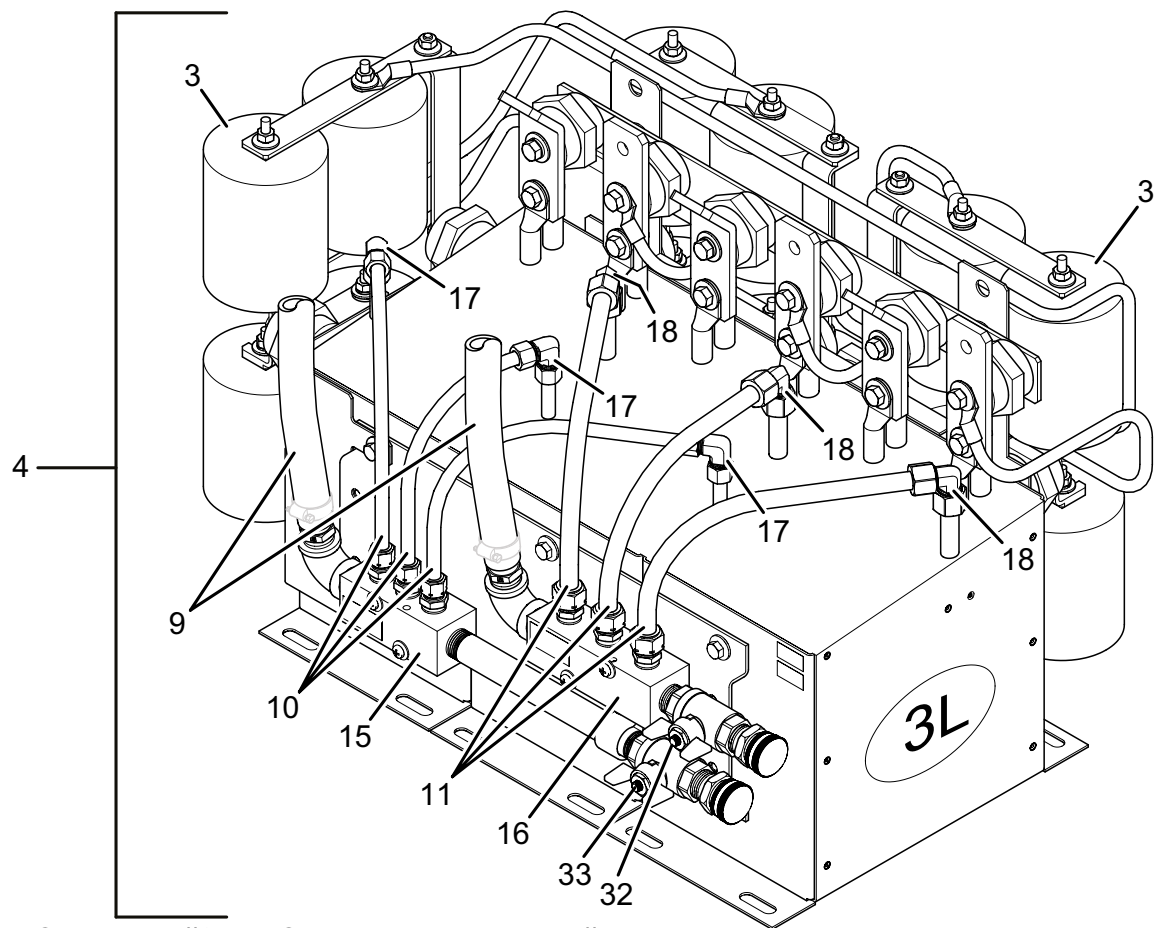
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Motor Connection Plate	371-05614-357	839971	1	15
2	Output Current Transducer (DCCT)	025-45590-000	1045992	3	15
3	Output Harmonic Filter Capacitor 0490	025-45337-000	913762	12	16
4	Output Harmonic Filter Assembly 224 lbs (102 Kg)	025-46349-000	1059278	1	16
147	Output Power Wiring (wiring between 3L and motor connection plate)	571-06569-234	1059329	1	15
5	Output Voltage Isolator Board	031-02022-001	743845	1	18



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FIGURE 15 - OUTPUT COMPONENTS

0490 AMP VARIABLE SPEED DRIVE



NOTE: Item #9 is NOT included with item #4

LD17769

FIGURE 16 - HARMONIC FILTER

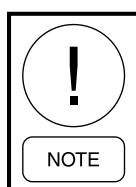
0490 AMP VARIABLE SPEED DRIVE

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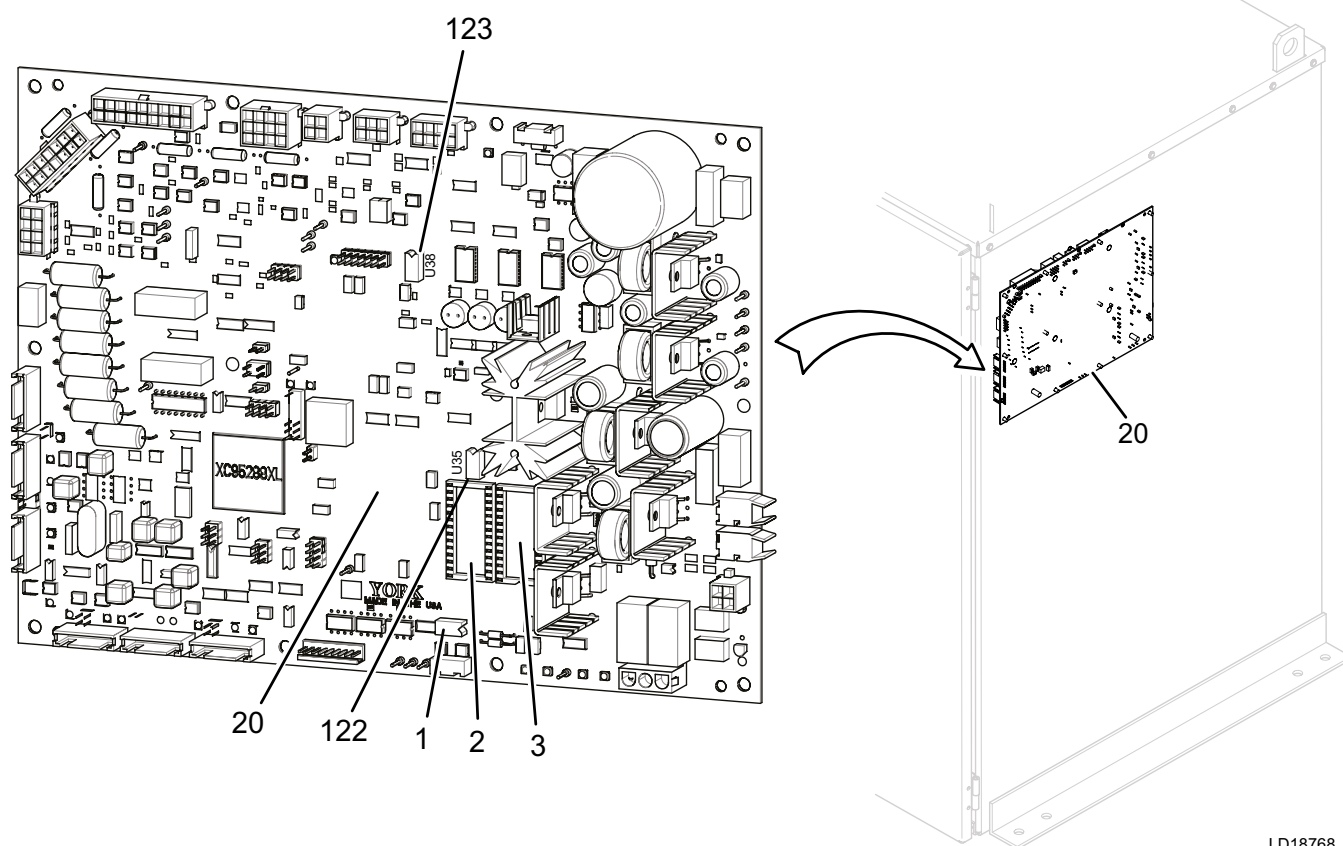
TABLE 7 - DRIVE LOGIC BOARD AND COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
3	BRAM Chip U36	031-02482-000	5323419	1	17
2	BRAM Chip U37	031-02483-000	5323418	1	17
122	PROM Chip U35 (for 031-02911-00X board)	031-03048-001	744215	1	17
123	PROM Chip U38 (for 031-02911-00X board)	031-03049-001	744216	1	17
1	U66 485 Communications Driver	031-02074-000	120352	-	17
20	VSD Logic Board	031-02911-003	1135023	1	17
*	VSD Logic Board Kit (includes all software)	331-02911-603	1053043	-	-

NOTE: Items with an * are NOT represented.



PROM Chips U35 and U38 must be ordered as a set.



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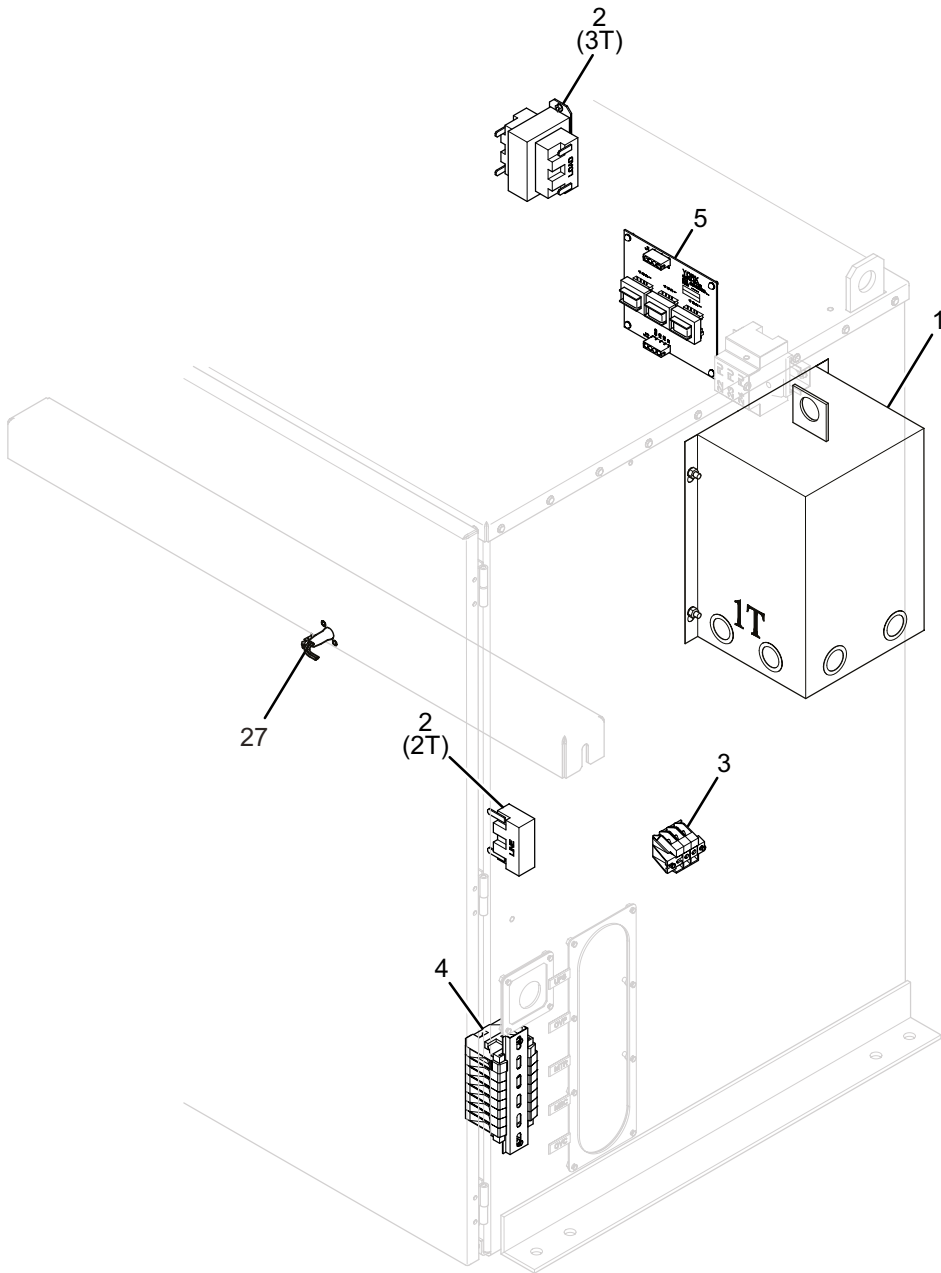
FIGURE 17 - DRIVE LOGIC BOARD AND COMPONENTS

0490 AMP VARIABLE SPEED DRIVE

TABLE 8 - MISCELLANEOUS COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Control Transformer 480 VAC 3KVA	025-31499-000	738608	1	18
	Control Transformer 380/400/415 VAC 3KVA	025-32983-000	117599		
2	Control Transformer 24 VAC 75 VA (2T/3T)	025-27911-000	1312	2	18
3	Terminal Block 3-pole	025-44853-003	839753	2	5/18
4	Terminal Block 8-pole	025-45041-000	839762	1	18
*	Suppressor (Used on 1R)	031-00808-000	618876	1	-

NOTE: Items with an * are NOT represented.



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FIGURE 18 - MISCELLANEOUS COMPONENTS

0490 AMP VARIABLE SPEED DRIVE**1****TABLE 9 - WIRING HARNESSES AND CONNECTORS**

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
Line Voltage Isolator Board	031-02022-000	J1	025-19671-000 (737534)	025-22215-000 (62701)
Line Voltage Isolator Board	031-02022-000	J2	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J1	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J2	025-21417-000 (737658)	025-22215-000 (62701)
Input DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Input DC Current Transformer (Complete Cable)				Assembly # 571-05614-211 (840019)
Output DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Output DC Current Transformer (complete Cable)	-	-		Assembly # 571-05614-213 (840020)
VSD Logic Board	031-02911-003	J1	025-21159-000 (737640)	025-22215-000 (62701)
VSD Logic Board	031-02911-003	J2	025-42614-000 (740129)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J3	025-35964-000 (739253)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J4	025-28384-000 (737920)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J5	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J6	025-28382-000 (737916)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J7	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J8 - J13	Assembly # 571-05614-241 (840026)	N/A
VSD Logic Board	031-02911-003	J14	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J15	025-29130-000 (738262)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J17	025-21136-000 (737636)	025-19674-000 (737537)

0490 AMP VARIABLE SPEED DRIVE

TABLE 9 - WIRING HARNESSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
VSD Logic Board	031-02911-003	J18	Assembly # 571-05614-227 (840022)	N/A
VSD Logic Board	031-02911-003	J19	025-21137-000 (737637)	025-19674-000 (737537)
VSD Logic Board	031-02911-003	J25	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-003	J36	Assembly # 571-05614-291 (840034)	N/A
IGBT Gate Driver Board - Inverter	031-02901-004	J1	025-42614-000 (740129)	025-28386-000 (737925)
IGBT Gate Driver Board - Rectifier	031-02901-003	J1	025-42614-000 (740129)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-001	J1	025-29185-000 (62736)	025-19674-000 (737537)
Gate Driver Power Supply Board	031-02903-001	J2	025-44494-000 (839746)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-001	J7	025-19671-000 (737534)	025-11083-000 (737290)
Gate Driver Power Supply Board	031-02903-001	J8	025-19672-000 (737535)	025-22215-000 (62701)
Ambient Temperature at Sensor	-	-	025-29130-000 (738262)	025-28386-000 (737925)
Ambient Temperature at Cable	-	-	025-32564-000 (738737)	025-30999-000 (738540)
CPC CONNECTORS				
CPC CONNECTORS	HOUSING PART NUMBER (SAP PART NUMBER)		PIN PART NUMBER (SAP PART NUMBER)	COMPLETE CABLE (SAP PART NUMBER)
Magnet Bearing Controller	025-37873-000 (739490)		025-40463-000 (873883)	571-05614-291 (840034)
Motor Monitoring	025-44974-000 (828162)		025-40463-000 (873883)	571-05614-286 (840033)
OptiView Communication	025-37873-000 (739490)		025-40463-000 (873883)	571-05614-227 (840022)
OptiView Power	025-44974-000 (828162)		025-37875-000 (739491)	571-05614-236 (840025)
UPS	025-44974-000 (828162)		025-37875-000 (739491)	571-05614-235 (840024)

Note: All items in Table 9 are NOT shown

0490 AMP VARIABLE SPEED DRIVE

1

TABLE 10 - POWER WIRING SECTION

SECTION	PART NUMBER	SAP NUMBER
Damping Resistors Complete Set of Wiring (2L1E-2L3E, 3L1A-3L3A, and braided wires)	571-06569-251	1059330
Input Power Wiring Circuit Breaker (Wiring between circuit breaker and 1L)	571-06569-231	1059326
Input Power Wiring Disconnect Switch (Wiring between disconnect switch and 1L)	571-06569-231	1059326
Inverter Power Wiring (Wiring between Inverter and 3L)	571-06569-233	1059328
Output Power Wiring (Wiring between 3L and motor connection plate)	571-06569-234	1059329
Rectifier Power Wiring (Wiring between 1L, 2L and rectifier)	571-06569-232	1059327

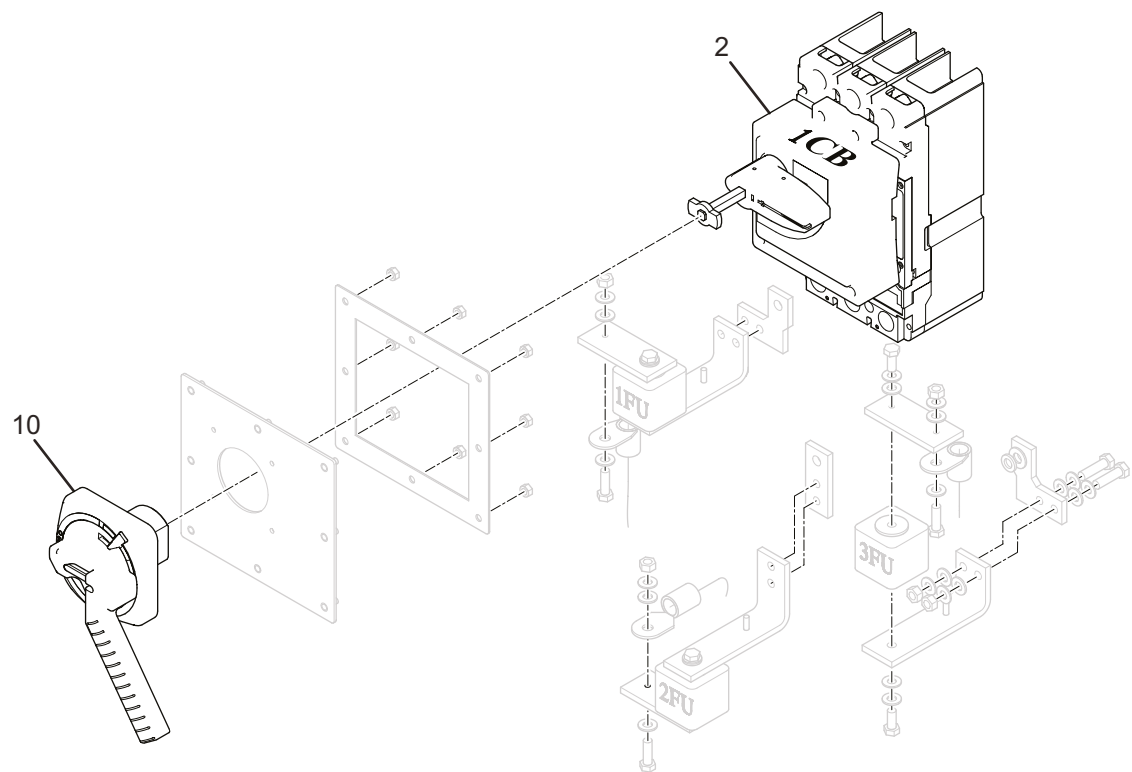
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SECTION 2 - 0490A AMP VARIABLE SPEED DRIVE

TABLE 11 - INPUT COMPONENTS

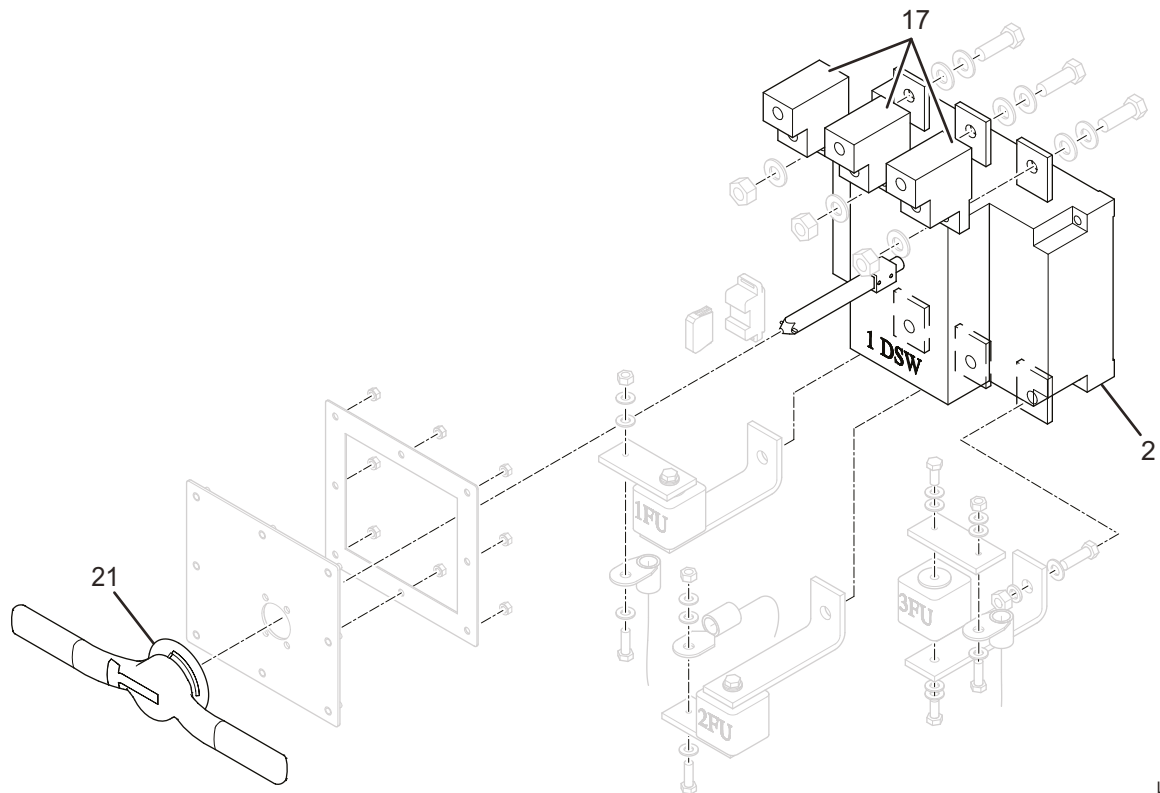
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
2	Circuit Breaker	224-39359-000	5170051	1	19
10	Circuit Breaker Handle	024-38125-000	1088783		
1	Common Mode Capacitor with Resistor	371-05614-531	839995	1	23
6	Capacitor used in Assembly 371-05614-531	025-43928-000	740379	1	23
7	Resistor used in Assembly 371-05614-531	025-42616-000	740130	1	23
29	Damping Resistor Kit (includes 2 resistors & bracket)	025-47571-000	5170004	3	23,24
2	Disconnect Switch	024-37442-000	839733	1	20
21	Disconnect Switch Handle	024-36614-000	736390		
17	Disconnect Switch Lug Kit	025-42181-000	680131		
41	Ground Lug	025-35173-000	117722	1	23
22	Input Current Transducer (DCCT)	025-42748-000	740133	3	21
9	Input Filter Assembly	371-05614-341	839967	1	22
1	Capacitor used in Assembly 371-05614-341	025-44490-000	839745	6	22
7	Resistor used in Assembly 371-05614-341	025-42616-000	740130	3	22
24	Input Line Inductor (1L) 165 LBS.	325-47565-601	N/A	1	21
25	Input Load Inductor (2L) 315 LBS.	325-47564-601	N/A	1	21
40	Input Voltage Isolator Board	031-02022-000	65064	1	23
42	Pre-Charge Contactor	024-30985-000	735841	1	21
43	Pre-Charge Resistors	025-46179-000	1160773	3	21
26	Supply Contactor	024-38524-000	1160772	1	21
34	Supply Contactor Pilot Relay	024-30441-000	664298	1	29
15	Voltage Transient Board (Fuses are not included)	031-02453-000	743895	1	23
30	Wiring For Damping Resistors	571-06755-251	5170128	1	24

0490A AMP VARIABLE SPEED DRIVE



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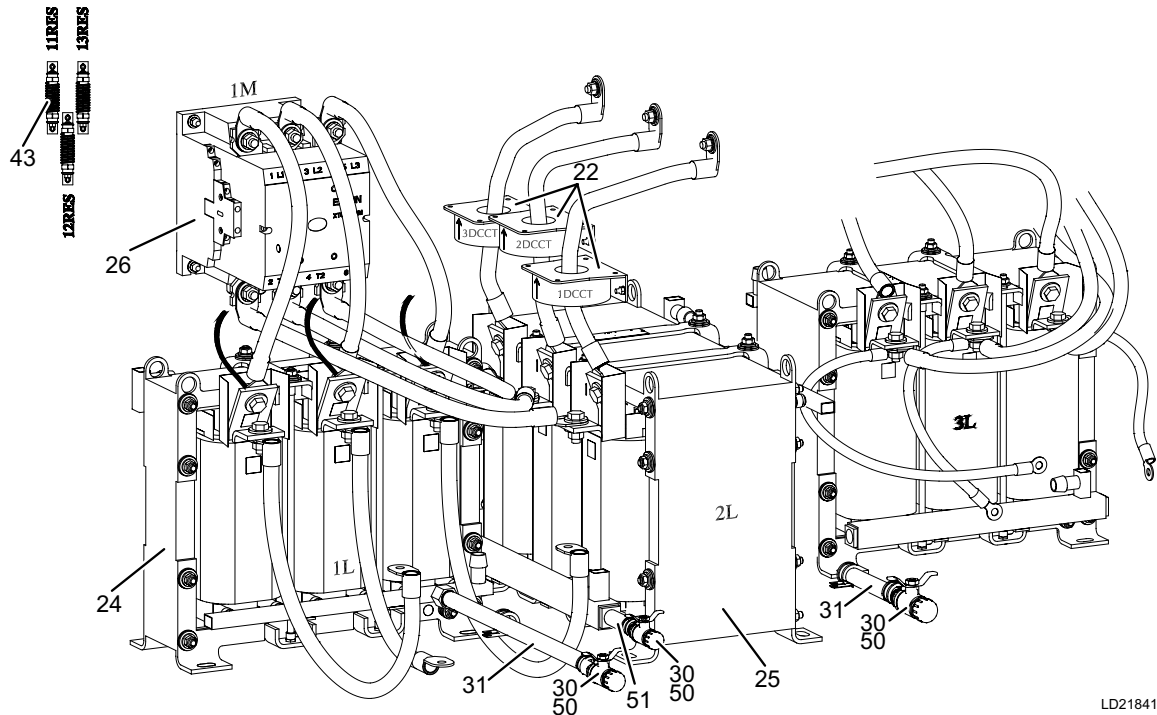
FIGURE 19 - CIRCUIT BREAKER (CB)



LD16522a

FIGURE 20 - DISCONNECT SWITCH (DS)

0490A AMP VARIABLE SPEED DRIVE



For Items 30, 31, 50 & 51 See Table 14

FIGURE 21 - INPUT CURRENT TRANSDUCER (DCCT), INPUT INDUCTOR (L1, L2)

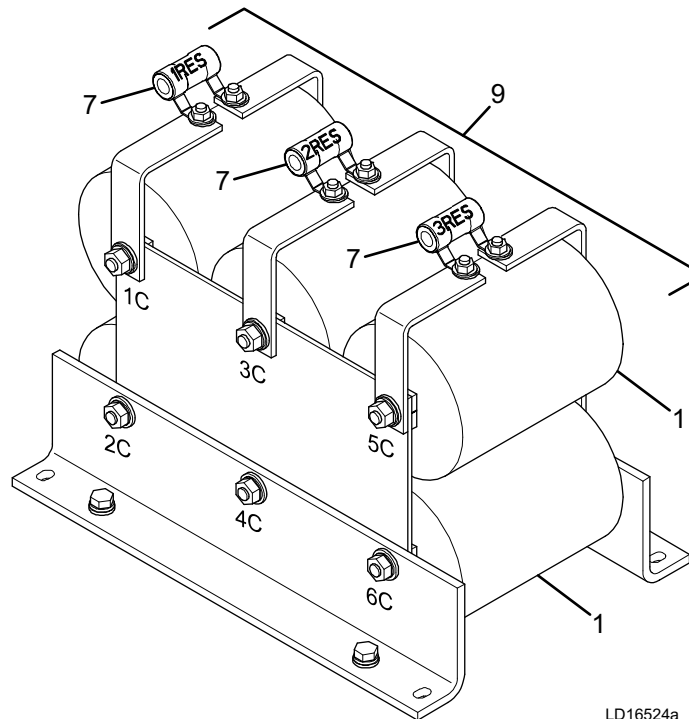


FIGURE 22 - INPUT FILTER CAPACITOR ASSEMBLY

0490A AMP VARIABLE SPEED DRIVE

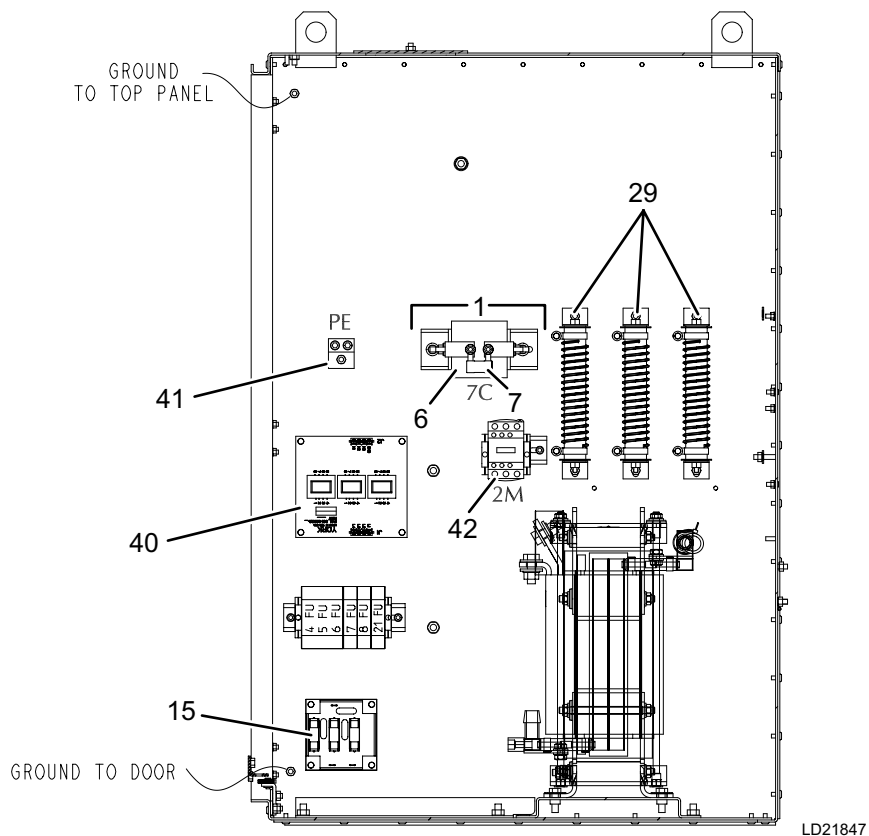


FIGURE 23 - LEFT SIDE OF VSD ENCLOSURE

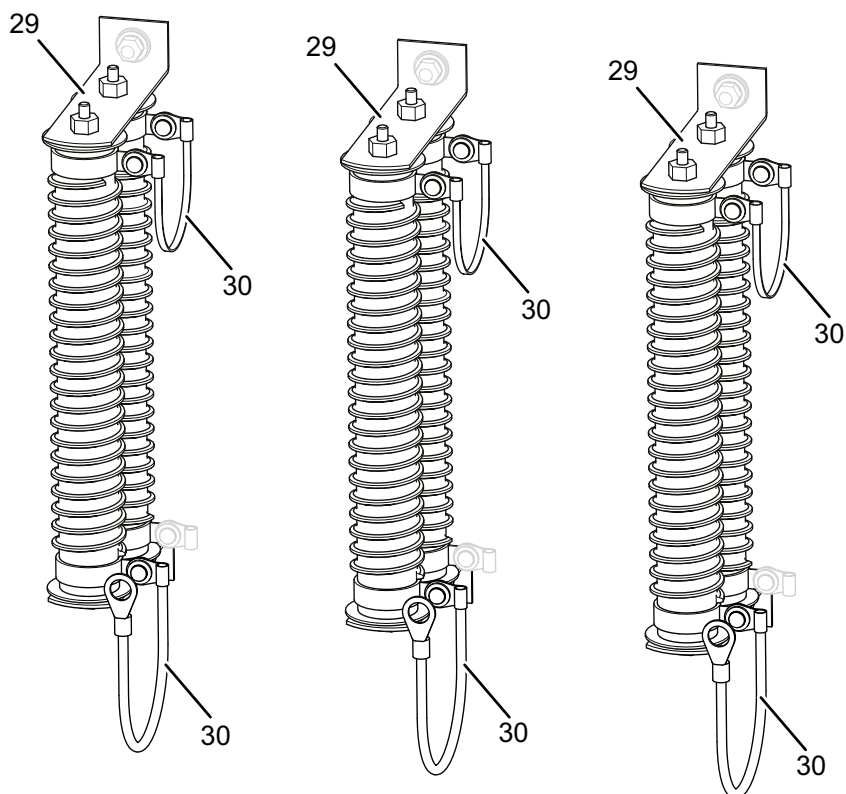


FIGURE 24 - RESISTOR ASSEMBLY

0490A AMP VARIABLE SPEED DRIVE

TABLE 12 - FUSE COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
117	Fuse 1 AMP (4FU-6FU & 22FU-24FU)	025-43326-000	740259	6	25,26
122	Fuse 5 AMP (15FU)	025-35901-000	739233	1	26
105	Fuse 5 AMP Voltage Transient Board Fuses (16FU-18FU)	025-38523-000	739590	3	25
119	Fuse 6 AMP (19FU)	025-35902-000	264466	1	26
123	Fuse 10 AMP (30FU)	025-35905-000	739234	1	26
12	Fuse 15 AMP (7FU & 8FU)	025-35907-000	117822	2	25
118	Fuse 20 AMP (14FU & 21FU)	025-35908-000	117823	2	25,26
34	1 Pole Fuse Holder 30A	025-39951-000	359985	4	25,26
33	2 Pole Fuse Holder 30A	025-44520-000	740518	1	25
27	3 Pole Fuse Holder 30A	025-39952-000	343433	3	25,26
4	Input Power Fuse (1FU-3FU set of three)	371-06755-601	N/A	1	27

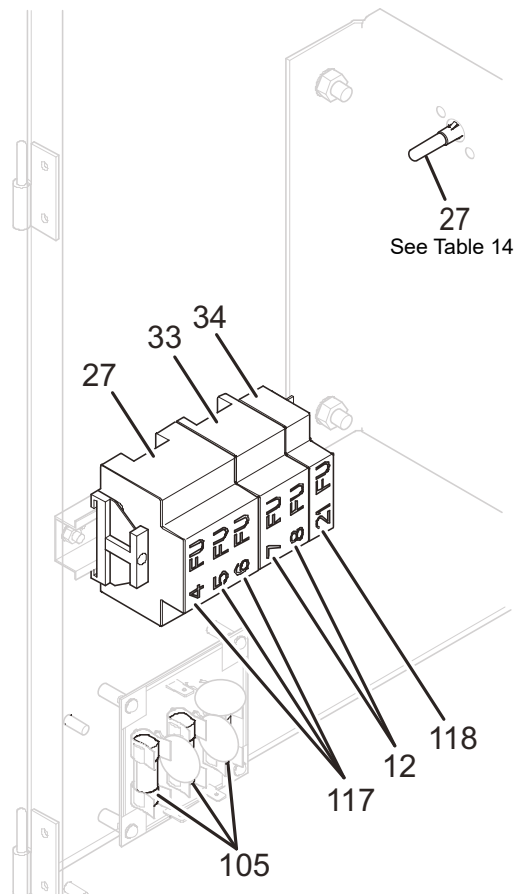


FIGURE 25 - FUSES AND FUSE HOLDERS (4FU-8FU, 16FU-18FU & 21FU)

0490A AMP VARIABLE SPEED DRIVE

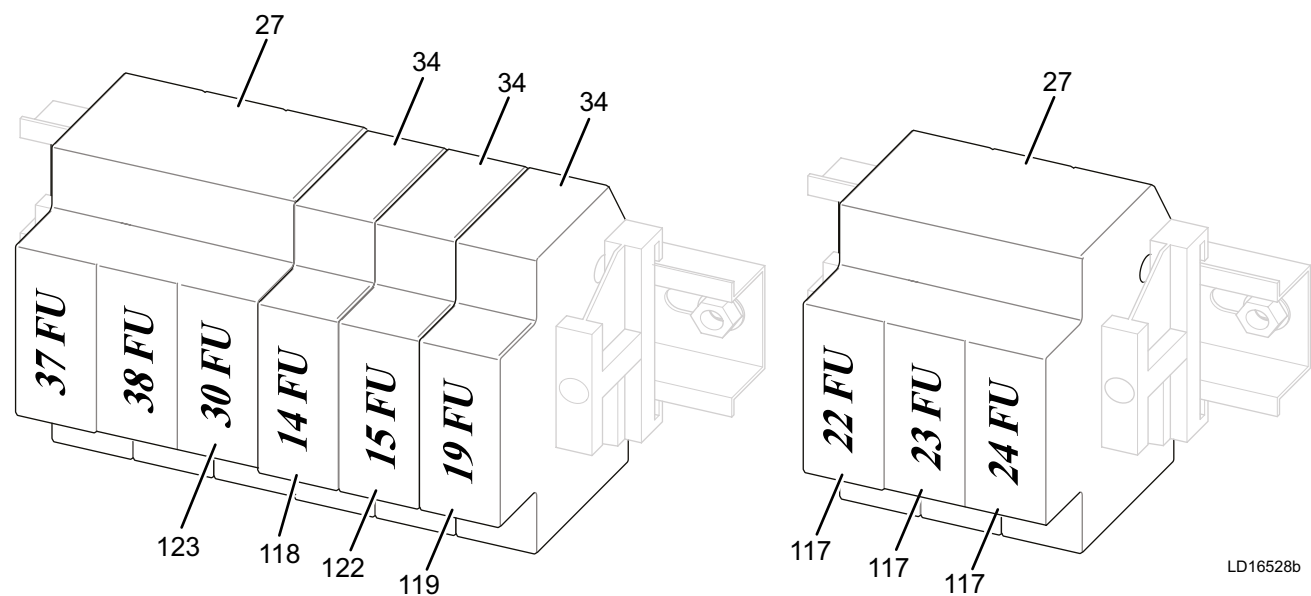


FIGURE 26 - FUSES AND FUSE HOLDERS (14FU, 15FU, 19FU & 22FU-24FU, 30FU, 37FU, 38FU)

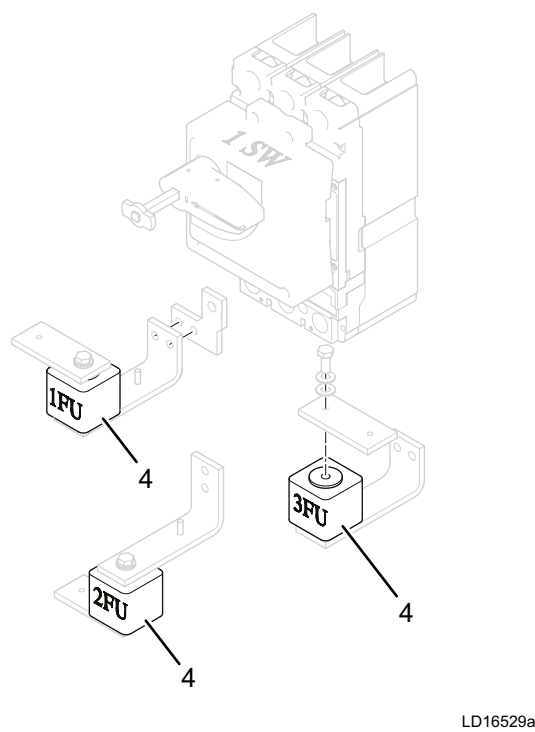
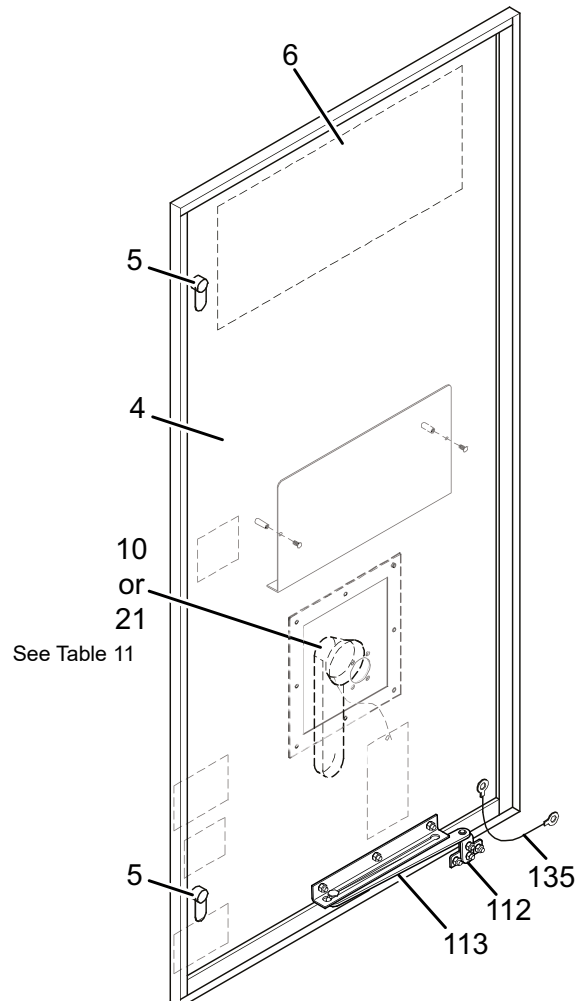


FIGURE 27 - INPUT POWER FUSES (1FU-3FU)

0490A AMP VARIABLE SPEED DRIVE

TABLE 13 - DOOR COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
135	Door Ground Strap	525-32508-001	806677	2	28
N/A	Door Kit Left for CE Requirements (Including all labels and latches)	371-06755-653	N/A	1	-
N/A	Door Kit Left Without CE Requirements (Including all labels and latches)	371-06755-651	N/A	1	-
N/A	Door Kit Right for CE Requirements (Including all labels and latches)	371-06755-658	N/A	1	-
N/A	Door Kit Right Without CE Requirements (Including all labels and latches)	371-06755-656	N/A	1	-
5	Door Latch	029-25614-000	743380	4	28
113	Door Stop	029-23420-000	119865	1	28
112	Door Stop Mounting Plate	371-05614-553	840001	1	28
6	Label Front Door JCI Logo	035-23036-000	745608	1	28



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FIGURE 28 - DOOR COMPONENTS

0490A AMP VARIABLE SPEED DRIVE

TABLE 14 - COOLING SYSTEM COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Coolant Drain Valve	022-10090-000	692414	1	30
2	Coolant Drain Valve Cap	023-25526-000	839731	1	30
3	Coolant Hose Barb Elbow	028-16005-000	742183	3	29
4	Coolant Hose Barb Straight	028-16001-000	742180	1	29
5	Coolant Hose Clamp 7/8"	021-17547-000	730066	4	30
26	Coolant Hose Clamp 1" (Also used on the inductors)	023-08856-000	617439	20	29,31
6	Coolant Hose Clamp 1 1/2"	021-32226-000	730939	4	30
8	Coolant Hose External 1/2" ID by the foot (To the power panel)	028-16692-000	864411		30
9	Coolant Hose Internal 3/4" ID by the foot	028-16768-000	1056103		29, 31
7	Coolant Hose 1 1/2" ID by the foot	028-16373-000	742214		30
45	Coolant Manifold Return Kit	371-06755-641	N/A	1	29
15	Coolant Manifold Clamp Return	028-16554-000	839771	1	29
46	Coolant Manifold Supply Kit	371-06755-636	N/A	1	29
16	Coolant Manifold Clamp Supply	028-16632-000	913766	1	29
19	Coolant Pump	026-47723-000	1160779	1	30
20	Coolant Pump Flange Set	023-20283-000	733193	1	30
21	Coolant Reservoir Fill Plug	028-16378-000	742218	1	30
22	Coolant Reservoir Clamp	021-19150-000	564227	1	30
23	Coolant Reservoir 3" PVC with Fill Plug Kit	371-05614-671	1053053	1	30
25	Elbow 45° at Heat Exchanger	028-16559-000	839776	1	30
27	Enclosure Temperature Sensor with connector	571-05182-283	807091	2	25, 34
N/A	Inhibitor	013-04129-000	729086	5	-
	Inductor Drain Valve Kit L1 (Valve, Nipple, Instructions)	325-47563-605	N/A	1	
	Inductor Drain Valve Kit L2 (Valve, Nipple, Instructions)	325-47564-605	N/A	1	
	Inductor Drain Valve Kit L3 (Valve, Nipple, Instructions)	325-47565-605	N/A	1	
30	Inductor Drain Valve	022-13187-001	N/A	3	21
50	Inductor Drain Valve Cap	022-13187-002	5241701	3	21
31	Inductor Nipple 8 inch	023-26292-800	5169608	2	21
51	Inductor Nipple 1.125 inch	023-13880-006	5169606	1	21
30	Internal Cooling Fan	025-32557-000	738735	2	29
31	Internal Cooling Coil	026-49357-000	5170006	1	29
36	Power Panel Coolant Return	022-12386-000	913757	1	30
35	Power Panel Coolant Supply	022-12384-000	864392	1	30
34	Relay, Control Fan / Pump	024-30441-000	664298	1	29
42	Shell and Tube Heat Exchanger, 150/300 PSI with Head Gaskets (100 LBs.)	026-37572-000	104160	1	30
N/A	Shell and Tube Heat Exchanger Head Gaskets (set of two)	371-03716-001	772263	1	-
40	Shell and Tube Heat Exchanger Nipple	023-18209-000	60695	1	30

NOTE: Items with an * are NOT represented.

[illegible]

FIGURE 29 - COOLING SYSTEM COMPONENTS



FIGURE 30 - COOLING SYSTEM COMPONENTS

0490A AMP VARIABLE SPEED DRIVE

TABLE 15 - POWER ASSEMBLY COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Bus Bleeder Resistor (ea.)	025-44011-000	839742	1	31
4	Bus Bleeder Resistor Assembly (ea.) includes resistor and mounting assembly	371-06165-001	840018	1	31
2	Bus Plate Assembly Kit (for power assembly)	371-06619-601	1110657	1	31
3	Bus Snubber Capacitor (ea.)	025-42835-000	740149	12	31
9	Gate Driver Board (for rectifier and inverter)	031-02901-004	839195	6	31
5	Inverter Power Module Kit (All three phases)	371-05904-611	1053057	1	31
6	Power Supply Board	031-02903-002	839200	1	31
7	Power Unit Mounting Foot Front	071-05508-312	749269	1	31
8	Power Unit Mounting Foot Rear	071-05508-310	749268	1	31
16	Rectifier Power Module Kit (All three phases)	371-06969-616	N/A	1	31
10	VSD Rectifier/Inverter Power Unit Complete Kit (105 LBs)	071-06969-621	N/A	1	31
11	Wiring Ground	571-05526-241	807110	2	31

NOTE: Items with an * are NOT represented.

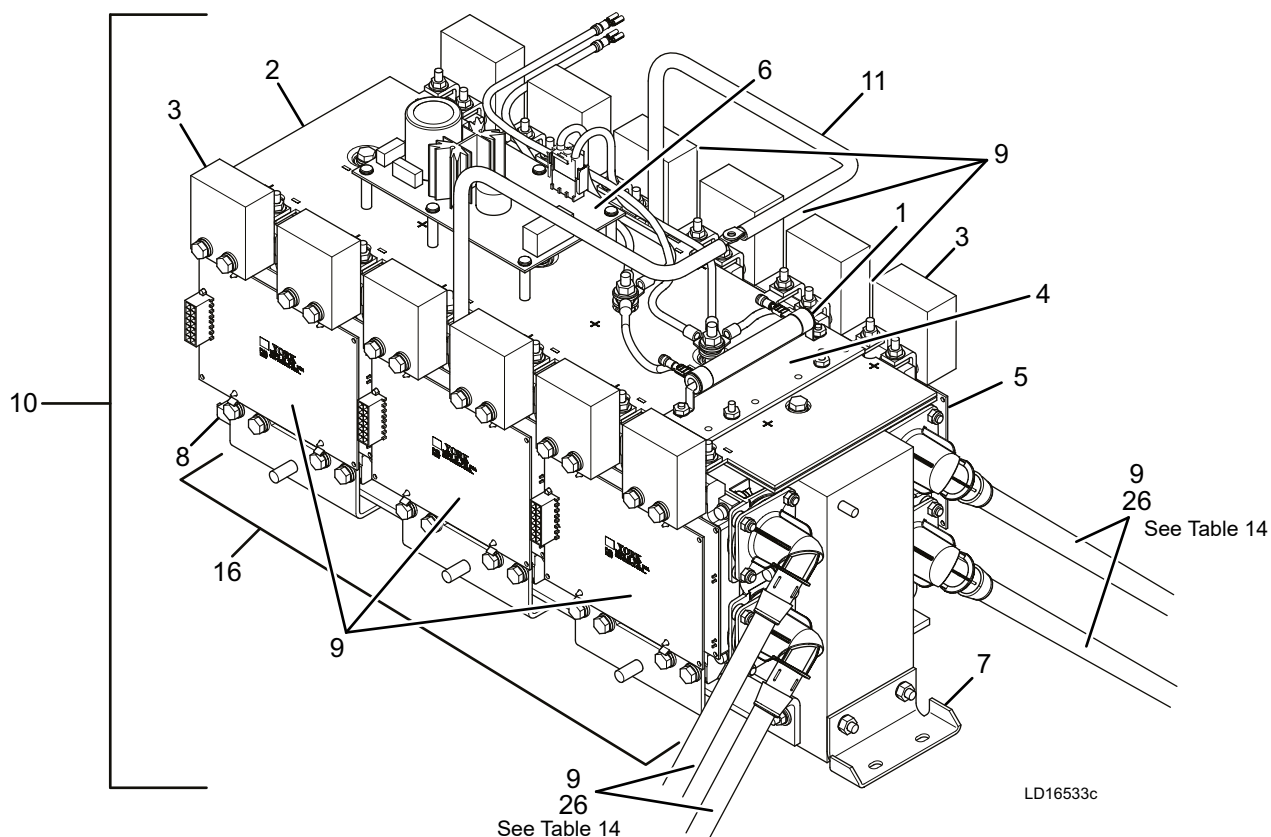


FIGURE 31 - POWER ASSEMBLY COMPONENTS

0490A AMP VARIABLE SPEED DRIVE

TABLE 16 - OUTPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Motor Terminal Assembly	371-05614-357	839971	1	32
2	Output Current Transducer (DCCT)	025-45590-000	1045992	3	32
4	Output Capacitor Assembly	371-06755-538	5170086	1	32
5	Output Capacitor (used in assembly 371-06755-538)	025-45337-000	913762	12	32
6	Output Capacitor Assembly Bleeder Resistor (used in assembly 371-06755-538)	025-42616-000	740130	3	32
7	Output Capacitor Assembly Power Wire (used in assembly 371-06755-538)	571-06755-238	5170126	1	32
8	Output Inductor (357 LBs.) Kit (inductor, hoses, wiring, and inhibitor)	325-47565-601	N/A	1	32
5	Output Voltage Isolator Board	031-02022-001	743845	1	34
147	Output Power Wiring (Wiring between 3L & motor connection plate)	571-06755-236	5170124	1	32

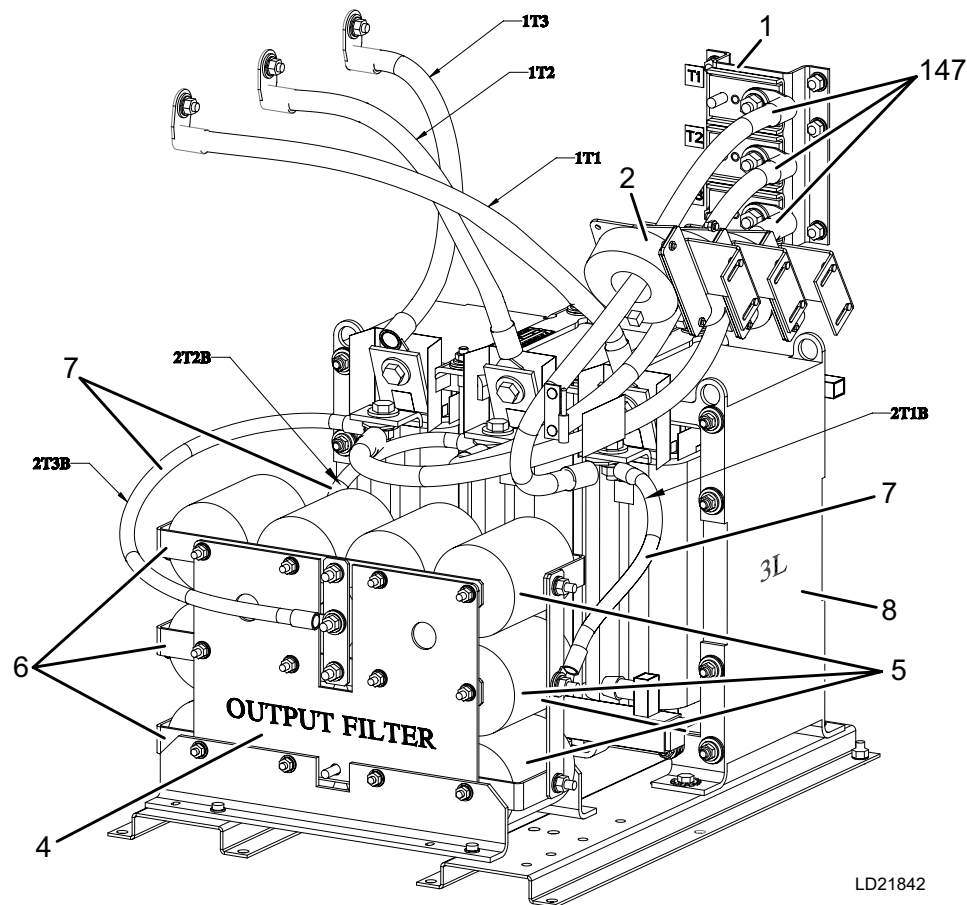


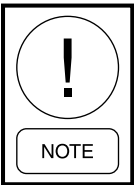
FIGURE 32 - OUTPUT COMPONENTS AND HARMONIC FILTER

0490A AMP VARIABLE SPEED DRIVE

TABLE 17 - DRIVE LOGIC BOARD AND COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
122	PROM Chip U35 (for 031-02911-00X board)	031-03048-001	744215	1	33
123	PROM Chip U38 (for 031-02911-00X board)	031-03049-001	744216	1	33
1	U66 485 Communications Driver	031-02074-000	743866	1	33
20	VSD Logic Board Kit (includes all software)	331-02911-610	5171297	1	33
2	BRAM Chip U36	031-02482-000	5323419	1	33
3	BRAM Chip U37	031-02483-000	5323418	1	33

NOTE: Items with an * are NOT represented.



PROM Chips U35 and U38 must be ordered as a set.

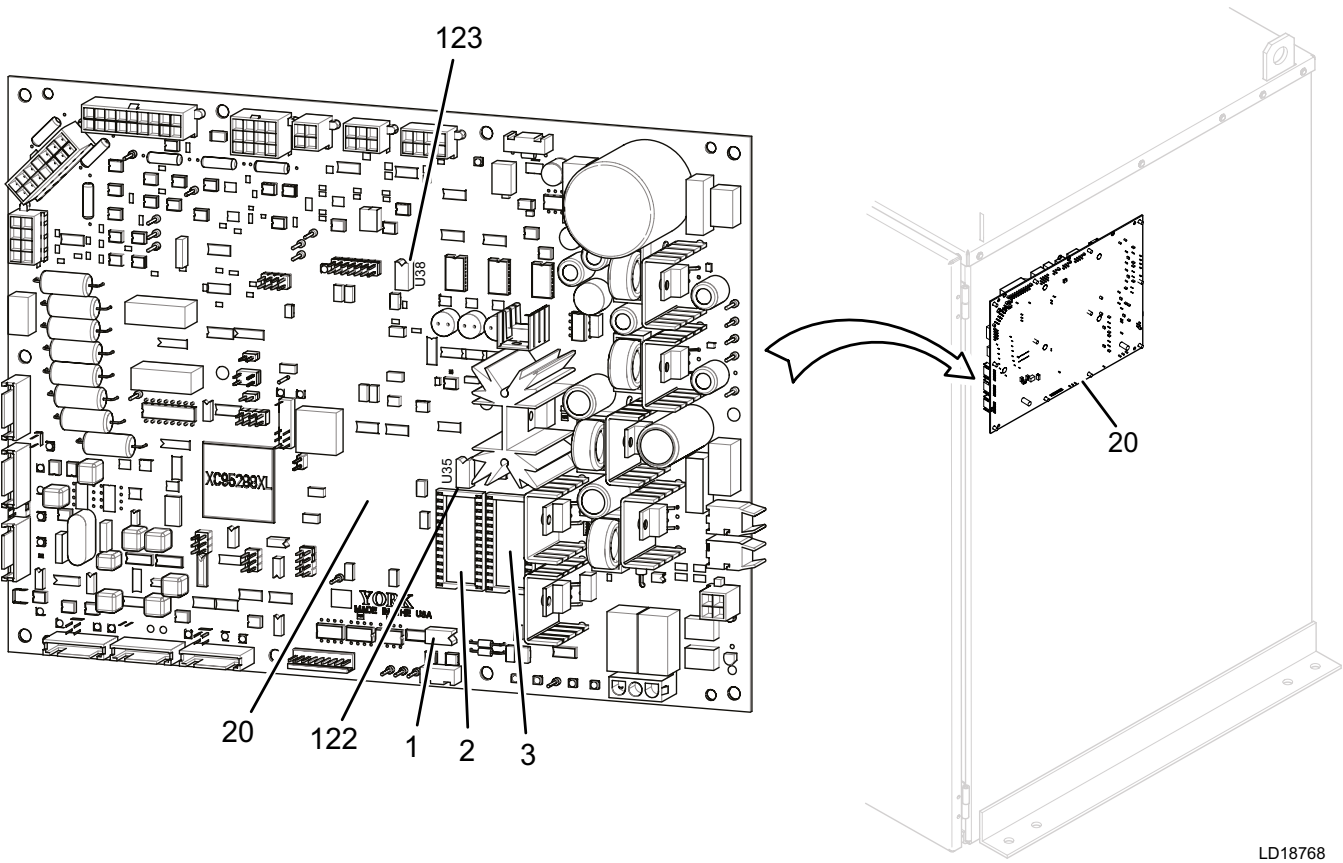


FIGURE 33 - DRIVE LOGIC BOARD AND COMPONENTS

0490A AMP VARIABLE SPEED DRIVE

TABLE 18 - MISCELLANEOUS COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Control Transformer 460 VAC 60 Hz 3KVA (25 LBs.)	025-31499-000	738608	1	34
	Control Transformer 380/400/415 VAC 50Hz 380 VAC 60 Hz 3KVA (25 LBs.)	025-32983-000	117599	1	
	Control Transformer 400 VAC 50/60 Hz 3KVA (25 LBs.)	025-40114-006	739755	1	
2	Control Transformer 24 VAC 75 VA (2T/3T)	025-27911-000	1312	2	34
N/A	Suppressor for contactors and relays	031-00808-000	618876	4	-
5	Terminal Block 2-pole	025-44853-002	839752	1	29
3	Terminal Block 3-pole	025-44853-003	839753	1	34
4	Terminal Block Assembly	025-45041-000	839762	1	34
N/A	Terminal Block 1-pole used in part number 025-45041-000	025-31476-000	618185	7	-
N/A	Ground Terminal Block used in part number 025-45041-000	025-31444-000	618180	1	-
N/A	End Clamp used in part number 025-45731-000	025-29189-000	117471	1	-
N/A	120 VAC Power Plug	025-47414-000	5000684	1	-

NOTE: Items with an * are NOT represented.

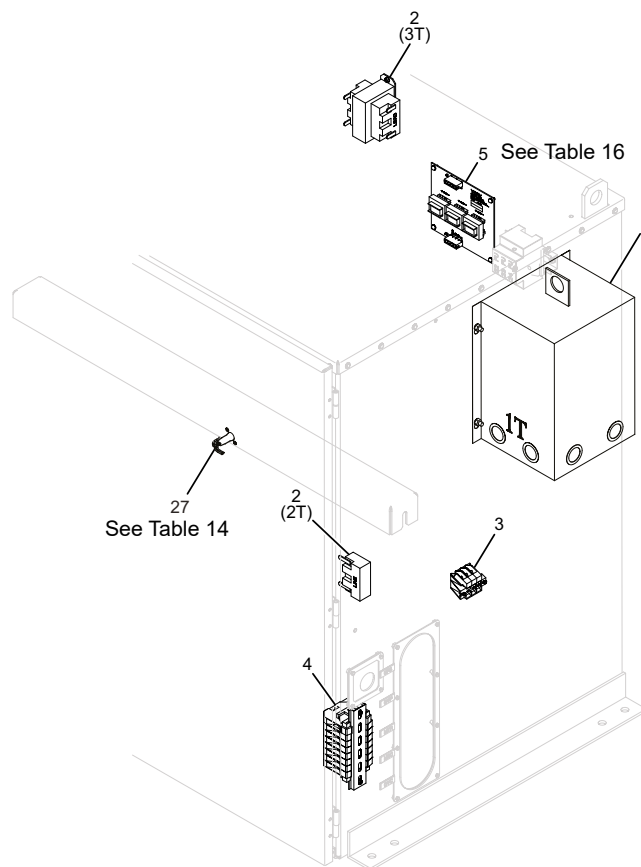


FIGURE 34 - MISCELLANEOUS COMPONENTS

0490A AMP VARIABLE SPEED DRIVE

TABLE 19 - WIRING HARNESSES AND CONNECTORS

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
Line Voltage Isolator Board	031-02022-000	J1	025-19671-000 (737534)	025-22215-000 (62701)
Line Voltage Isolator Board	031-02022-000	J2	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J1	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J2	025-21417-000 (737658)	025-22215-000 (62701)
Input DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Input DC Current Transformer (Complete Cable)				Assembly # 571-05614-211 (840019)
Output DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Output DC Current Transformer (complete Cable)	-	-		Assembly # 571-06755-212 (5170118)
VSD Logic Board	031-02911-010	J1	025-21159-000 (737640)	025-22215-000 (62701)
VSD Logic Board	031-02911-010	J2	025-42614-000 (740129)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J3	025-35964-000 (739253)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J4	025-28384-000 (737920)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J5	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J6	025-28382-000 (737916)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J7	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J8 - J13	Assembly # 571-06755-240 (5170127)	N/A
VSD Logic Board	031-02911-010	J14	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J15	025-29130-000 (738262)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J17	025-21137-000 (737637)	025-19674-000 (737537)

0490A AMP VARIABLE SPEED DRIVE

TABLE 19 - WIRING HARNESSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
VSD Logic Board	031-02911-010	J18	Assembly # 571-06755-227 (5242481)	N/A
VSD Logic Board	031-02911-010	J19	025-21137-000 (737637)	025-19674-000 (737537)
VSD Logic Board	031-02911-010	J25	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-010	J36	Assembly # 571-06755-286 (5310232)	N/A
IGBT Gate Driver Board - Inverter	031-02901-004	J1	025-42614-000 (740129)	025-28386-000 (737925)
IGBT Gate Driver Board - Rectifier	031-02901-004	J1	025-42614-000 (740129)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-001	J1	025-29185-000 (62736)	025-19674-000 (737537)
Gate Driver Power Supply Board	031-02903-001	J2	025-44494-000 (839746)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-001	J7	025-19671-000 (737534)	025-11083-000 (737290)
Gate Driver Power Supply Board	031-02903-001	J8	025-19672-000 (737535)	025-22215-000 (62701)
Ambient Temperature at Sensor	-	-	025-29130-000 (738262)	025-28386-000 (737925)
Ambient Temperature at Cable	-	-	025-32564-000 (738737)	025-30999-000 (738540)
CPC CONNECTORS				
CPC CONNECTORS	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)	COMPLETE CABLE (SAP PART NUMBER)	
Magnet Bearing Controller	025-37873-000 (739490)	025-40463-000 (873883)	571-06755-291 (5310233)	
Motor Monitoring	025-44974-000 (828162)	025-40463-000 (873883)	571-06755-286 (5310232)	
OptiView Communication	025-37873-000 (739490)	025-40463-000 (873883)	571-06755-227 (5242481)	
OptiView Power	025-44974-000 (828162)	025-37875-000 (739491)	571-06755-216 (5310231)	
UPS	025-44974-000 (828162)	025-37875-000 (739491)	571-06755-215 (5310230)	

Note: All items in Table 19 are NOT shown

0490A AMP VARIABLE SPEED DRIVE

TABLE 20 - POWER WIRING SECTION

SECTION	PART NUMBER	SAP NUMBER
Damping Resistors Complete Set of Wiring	571-06755-251	5170128
Input Power Wiring (from input power fuses to input of 1L)	571-06755-237	5170125
Input Power Wiring (from output of 1L to input of supply contactor)	571-06755-232	5170120
Input Power Wiring (from output of supply contactor to L2)	571-06755-233	5170121
Rectifier Power Wiring (from output of L2 to rectifier)	571-06755-234	5170122
Inverter Power Wiring (from Inverter to 3L)	571-06755-235	5170123
Output Power Wiring (from 3L to the motor terminal block)	571-06755-236	5170124

SECTION 3 - 0612A AMP VARIABLE SPEED DRIVE

TABLE 21 - INPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
4	Circuit Breaker	224-38969-000	1160805	1	35
12	Circuit Breaker Handle	026-46045-000	741273	1	35
13	Damping Resistor Kit (includes 2 resistors & bracket)	025-46537-000	1160777	3	41
4	Disconnect Switch	024-36613-000	736389	1	36
12	Disconnect Switch Handle	024-36614-000	736390	1	36
5	Disconnect Switch Lug Kit	025-43345-000	740272	1	36
2	Ground Lug	025-32835-000	738755	3	39
21	Input Current Transducer (DCCT)	025-42748-000	740133	3	37
5	Input Filter Assembly	371-06336-348	1160814	1	38
3	Input Filter Capacitor for Assembly	025-42834-000	740148	9	38
25	Input Filter Capacitor with Resistor	371-06336-349	1160815	1	39
6	Input Filter Resistor for Assembly	025-42616-000	740130	4	38,39
4	Input Inductor (1L & 2L) 545 lbs.(247 Kg)	025-46193-000	641006	1	40
35	Input Power Wiring (from input power fuses to 1L/2L) with Circuit Breaker	571-06336-231	1160836	1	35
	Input Power Wiring (from input power fuses to 1L/2L) with Disconnect Switch	571-06336-236	1160841		36
18	Input Voltage Isolator Board	031-02022-000	65064	1	39
35	Pre-Charge Contactor	024-30985-000	735841	1	39
37	Pre-Charge Resistors	025-46179-000	1160773	3	39
27	Supply Contactor	024-38524-000	1160772	1	42
26	Voltage Transient Board (Fuses are not included)	031-02453-000	743895	1	39
43	Resistor DV/DT Network (50 Hz only)	025-46678-000	1113967	3	37
44	Silicon Pad use with item 43 (1 each)	025-15299-000	-	3	37
45	Capacitor DV/DT Network (50 Hz only)	025-39806-000	251765	3	37

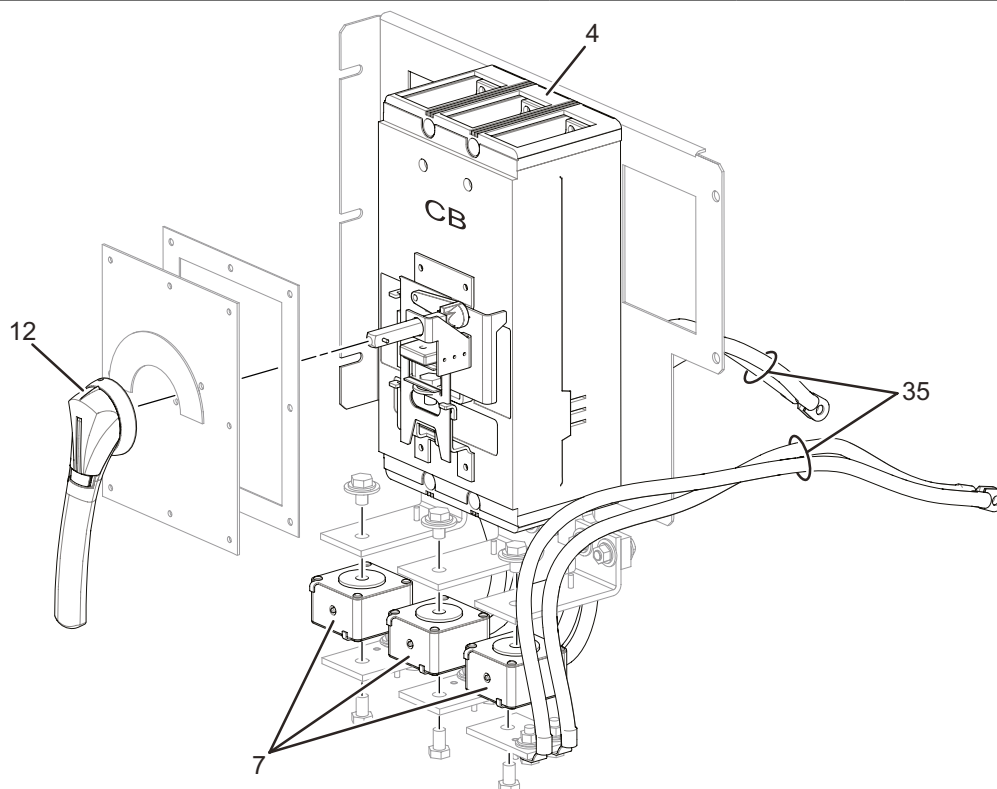
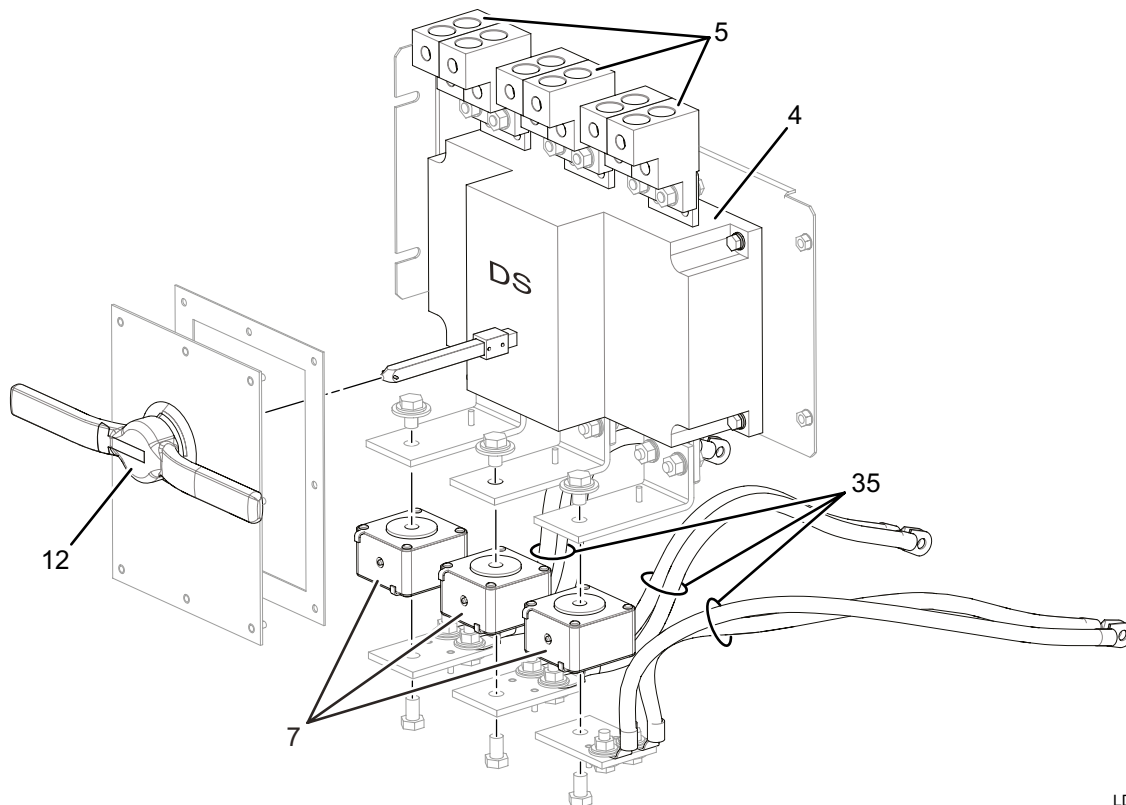


FIGURE 35 - CIRCUIT BREAKER (CB)

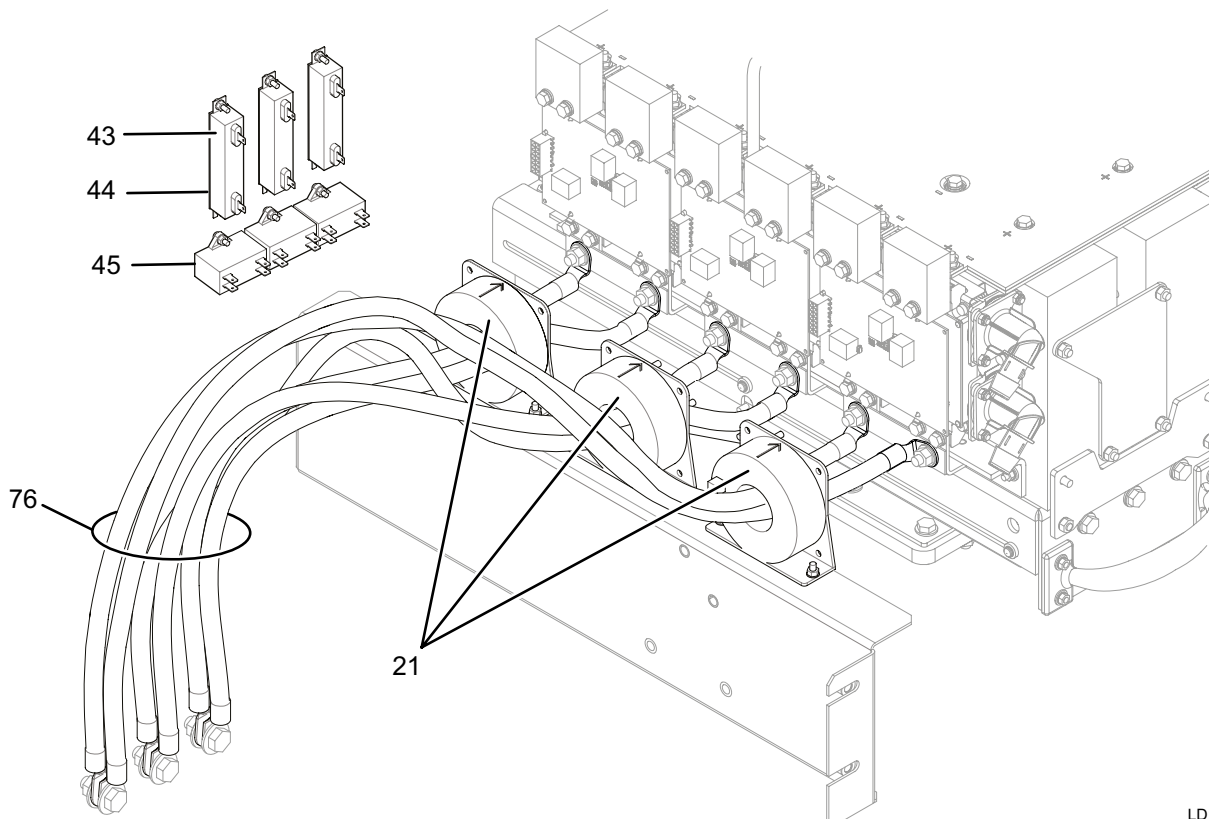
LD18757

0612A AMP VARIABLE SPEED DRIVE



LD18758

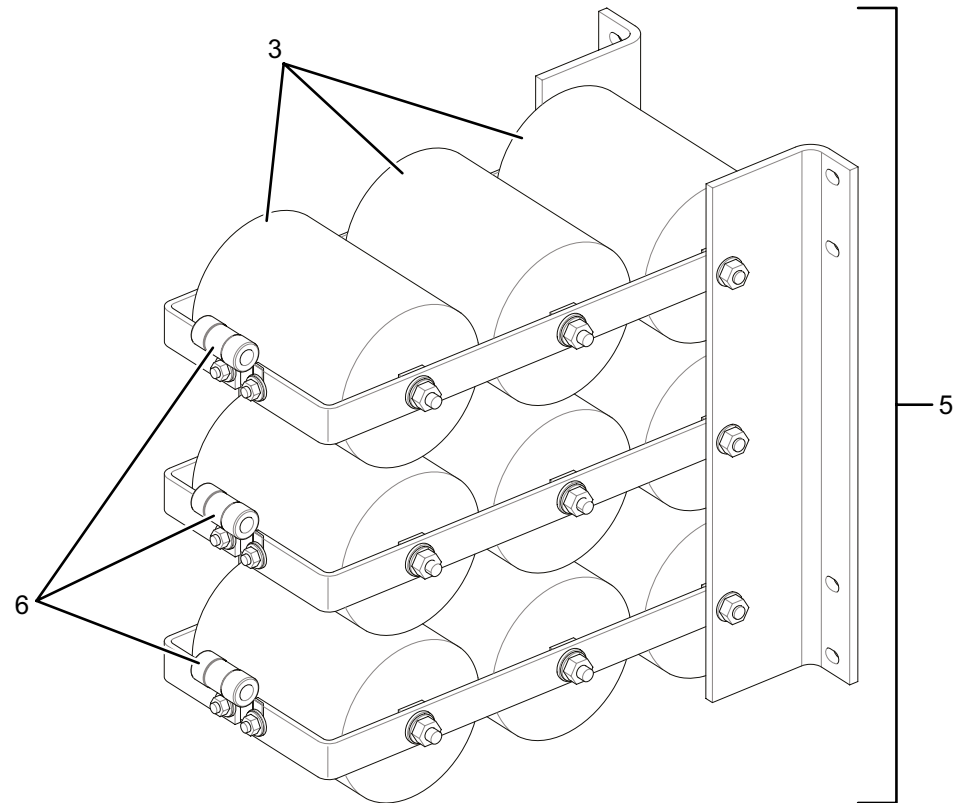
FIGURE 36 - DISCONNECT SWITCH (DS)



LD18759

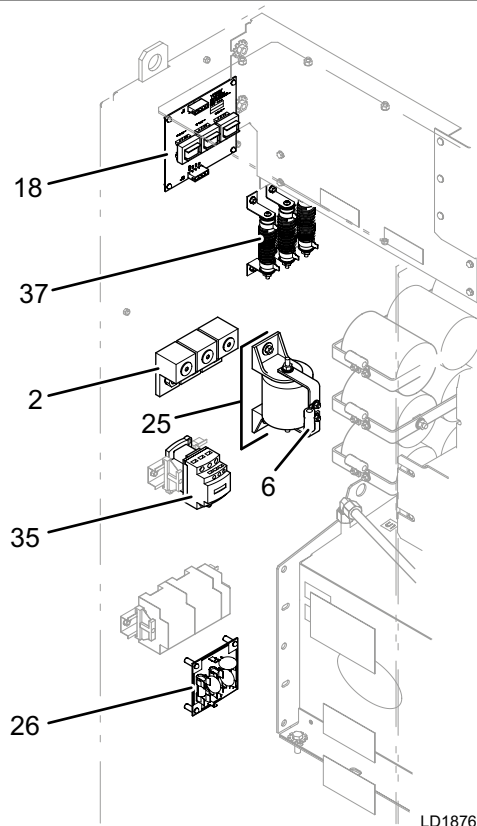
FIGURE 37 - INPUT CURRENT TRANSDUCER (DCCT)

0612A AMP VARIABLE SPEED DRIVE



LD18761

FIGURE 38 - INPUT FILTER CAPACITOR ASSEMBLY



LD18762

FIGURE 39 - LEFT SIDE OF VSD ENCLOSURE

0612A AMP VARIABLE SPEED DRIVE

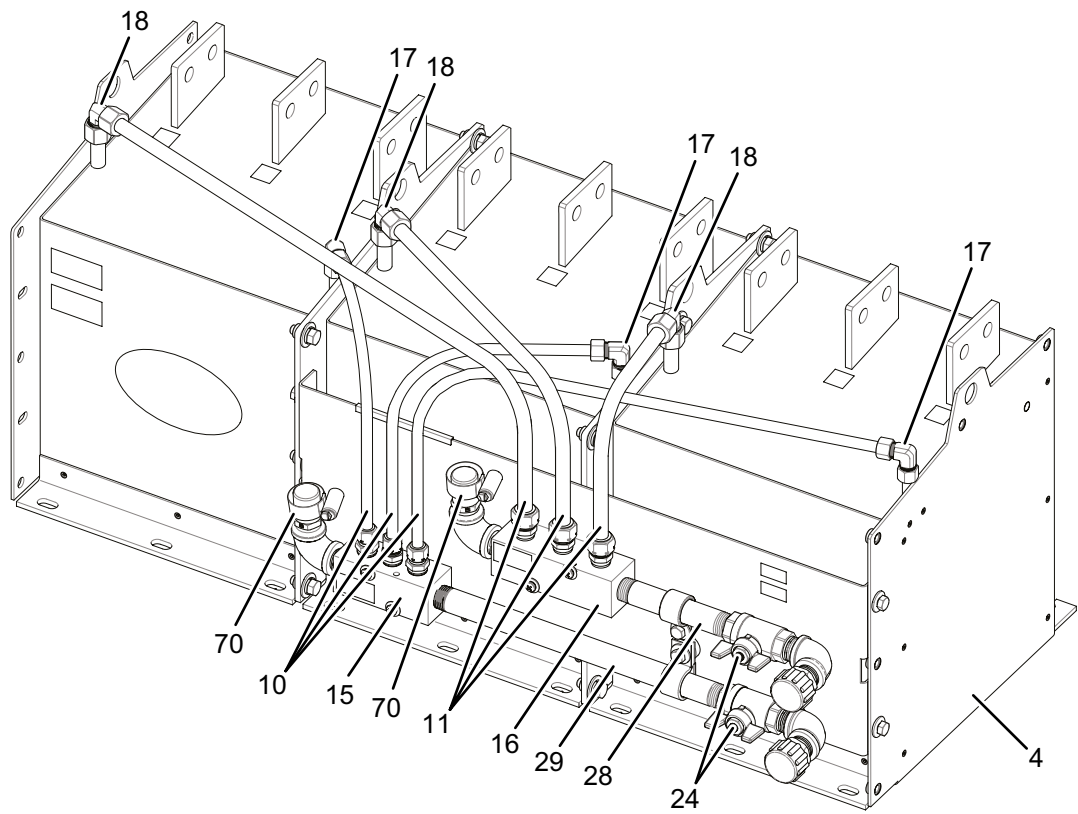


FIGURE 40 - INPUT INDUCTOR (L1, L2)

LD18754

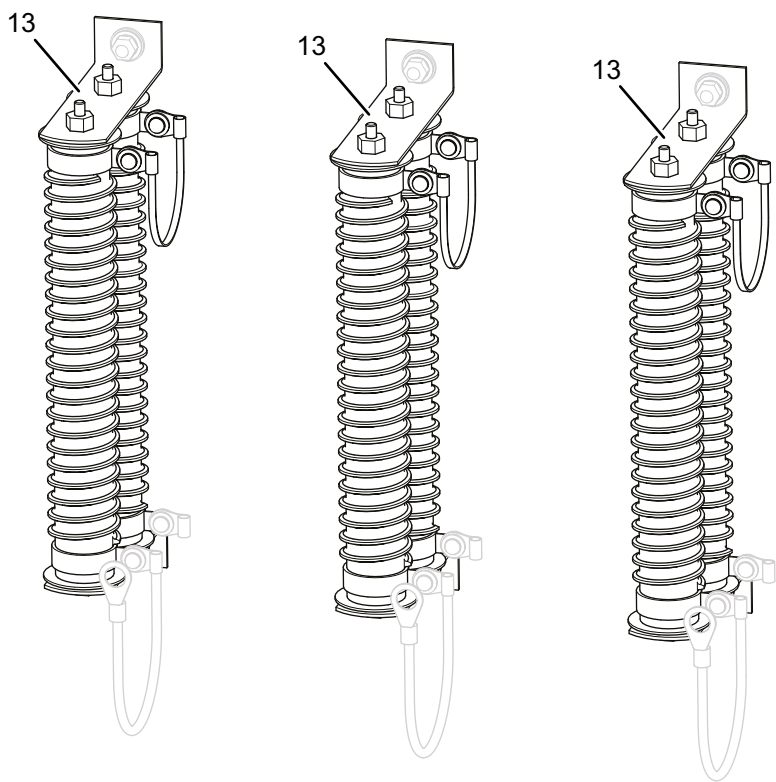
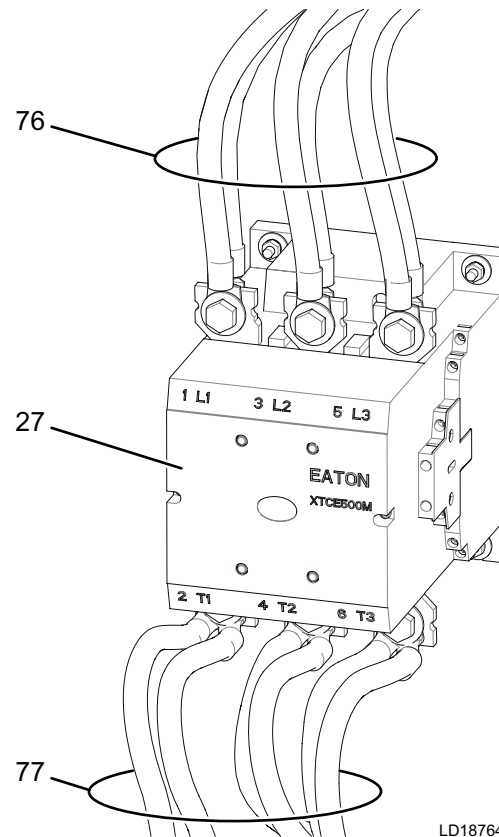


FIGURE 41 - RESISTOR ASSEMBLY

LD18763

0612A AMP VARIABLE SPEED DRIVE



LD18764

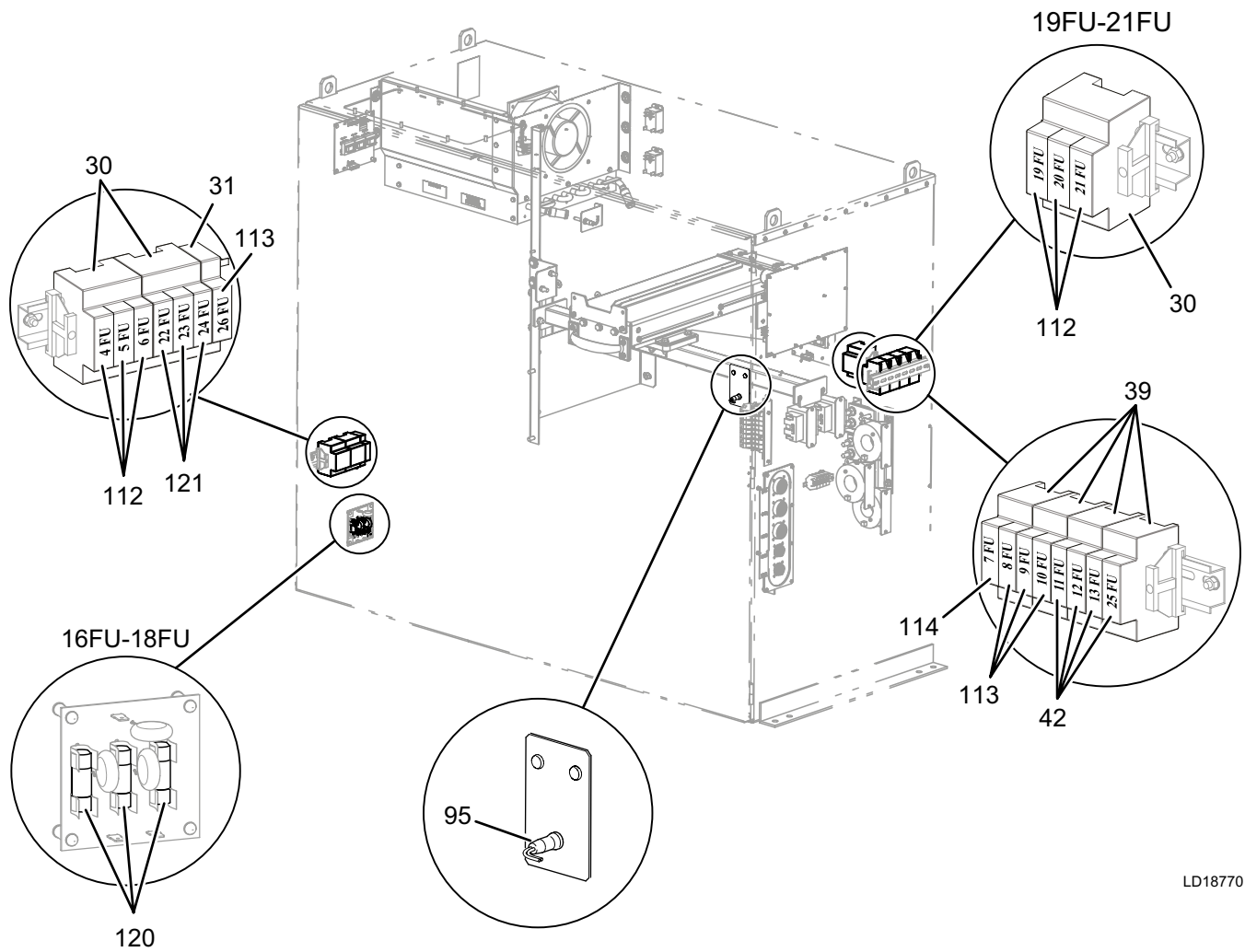
FIGURE 42 - SUPPLY CONTACTOR

0612A AMP VARIABLE SPEED DRIVE

TABLE 22 - FUSE COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
112	Fuse 1 AMP (4FU-6FU & 19FU-21FU)	025-43326-000	740259	6	43
120	Fuse 5 AMP Voltage Transient Board Fuses (16FU-18FU)	025-38523-000	739590	3	43
114	Fuse 7 AMP (13FU)	025-35903-000	117821	1	43
42	Fuse 10 AMP (7FU-10FU) 460 VAC 60Hz	025-35905-000	739234	4	43
	Fuse 12 AMP (7FU-10FU) 400 VAC, 415 VAC 50 HZ, 60 HZ	025-35906-000	652698		
113	Fuse 20 AMP (11FU, 12FU, 25FU, 26FU)	025-35908-000	117823	4	43
121	Fuse 30 AMP (22FU-24FU)	025-35910-000	739236	3	43
31	1 Pole Fuse Holder 30A	025-39951-000	359985	1	43
39	2 Pole Fuse Holder 30A	025-44520-000	740518	4	43
30	3 Pole Fuse Holder 30A	025-39952-000	343433	3	43
7	Input Power Fuse (1FU-3FU set of three)	371-06336-601	1150616	1	35,36

0612A AMP VARIABLE SPEED DRIVE



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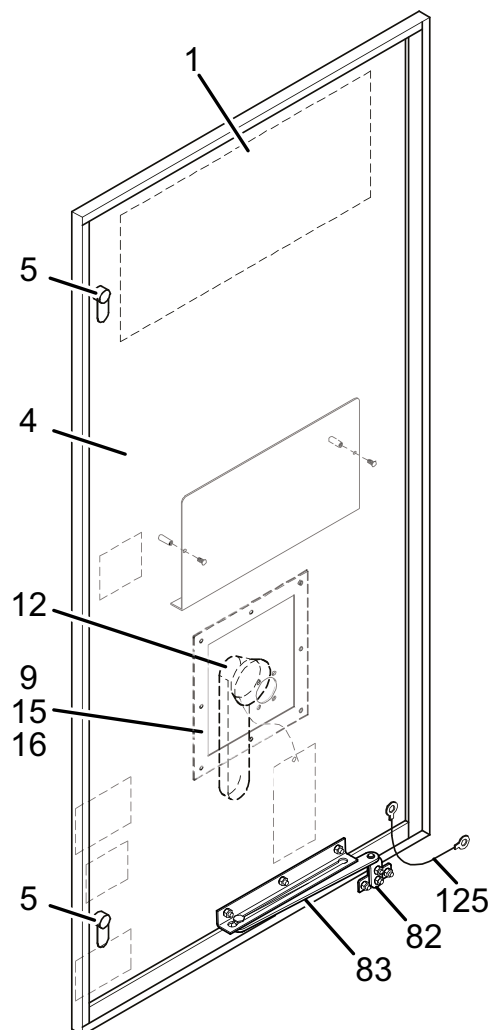
LD18770

FIGURE 43 - FUSES AND FUSE HOLDERS

0612A AMP VARIABLE SPEED DRIVE

TABLE 23 - DOOR COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
12	Circuit Breaker Handle	026-46045-000	741273	1	44
12	Disconnect Switch Handle	024-36614-000	736390	1	44
125	Door Ground Strap, 6"	525-32508-001	806677	2	44
4	Door Kit Left, 50 Hz (Includes labels and Latches)	371-06336-653	1200556	1	44
	Door Kit Right, 50 Hz (Includes labels and Latches)	371-06336-658	1200558		
	Door Kit Left, 60 Hz (Includes labels and Latches)	371-06336-651	1200555		
	Door Kit Right 60 Hz (Includes labels and Latches)	371-06336-656	1200557		
5	Door Latch	029-25614-000	743380	4	44
83	Door Stop	029-23420-000	119865	1	44
82	Door Stop Mounting Plate	371-05614-553	840001	1	44
15	Gasket, Circuit Breaker, Door Adapter Plate	028-16384-000	742241	1	44
9	Gasket, Disconnect Switch,	028-16384-000	742241	1	44
1	Label Front Door JCI Logo	035-23036-000	745608	1	44
16	Label, Circuit Breaker Handle	035-23233-000	745662	1	44



LD18765

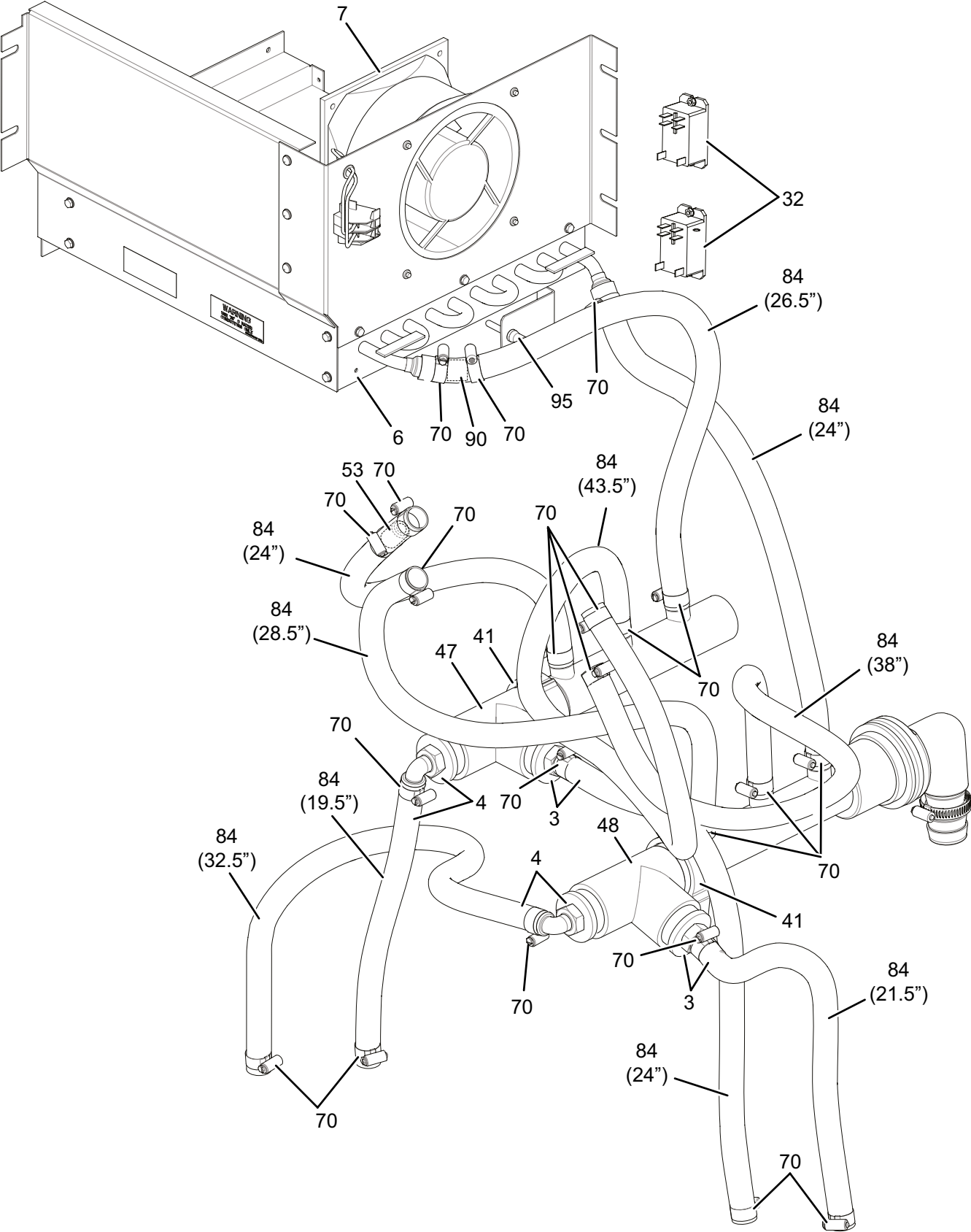
FIGURE 44 - DOOR COMPONENTS

0612A AMP VARIABLE SPEED DRIVE**TABLE 24 - COOLING SYSTEM COMPONENTS**

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
51	Coolant Drain Valve	022-12207-000	839729	1	46
52	Coolant Drain Valve Cap	023-25526-000	839731	1	46
3	Coolant Hose Barb Straight Kit (hose barb & hose)	371-05571-626	921624	2	45
4	Coolant Hose Barb Elbow Kit (hose barb & hose)	371-05571-631	921625	2	45
70	Coolant Hose Clamp 1"	023-08856-000	617439	26	40, 45, 46, 49
71	Coolant Hose Clamp 2"	021-32226-000	730939	4	45, 46
74	Coolant Hose External 1 1/2"	028-16373-000	742214	2.13 ft	46
75	Coolant Hose External 1/2 " ID by the foot (To the power panel)	028-16692-000	864411	5.69 ft	46
84	Coolant Hose Internal 3/4 " ID by the foot	028-16379-000	742219	23.5 ft	45
10	Coolant Hose on Inductor 3/8 "	325-44864-607	1053032	-	40, 49
11	Coolant Hose on Inductor 1/2 "	325-44864-618	1053041	-	40, 49
48	Coolant Manifold Supply Kit	371-06336-636	1200553	1	45
47	Coolant Manifold Return Kit	371-06336-641	1200554	1	45
41	Coolant Manifold Clamp	028-16554-000	839771	2	45
15	Coolant Manifold on Inductors 3/8"	325-44864-603	1053030	2	40, 49
16	Coolant Manifold on Inductors 1/2"	325-44864-615	1053038	2	40, 49
17	Coolant Manifold on Inductors Fittings Elbow 3/8"	325-44864-609	1053034	6	40, 49
18	Coolant Manifold on Inductors Fittings Elbow 1/2"	325-44864-616	1053039	6	40, 49
64	Coolant Pump	026-47723-000	1160779	1	46
55	Coolant Pump Flange Set	023-20283-000	733193	2	46
21	Coolant Reservoir Fill Plug	028-16630-000	843247	1	46
86	Coolant Reservoir Hose Clamp	021-33315-000	865765	1	46
59	Coolant Reservoir 3" PVC with Fill Plug Kit	371-06336-671	1200559	1	46
24	Coolant Valves on Inductors	325-44864-605	1053031	4	40, 49
62	Elbow 45°	028-16559-000	839776	1	46
95	Enclosure Temperature Sensor with connector	571-05182-283	807091	2	43, 45
53	Flow Restrictor, .750OD x .281 x 1"	028-16835-000	1160780	1	45
90	Flow Restrictor, .750OD x .188 x 1"	028-16836-000	1160781	1	45
*	Inhibitor	013-04129-000	729086	5 gal	-
28	Input Inductor Drain Pipe Kit (5")	325-44458-601	1053028	1	40
29	Input Inductor Drain Pipe Kit (12")	325-44458-603	1053029	1	40
7	Internal Cooling Fan	025-32557-000	738735	1	45
6	Internal Cooling Coil	026-46734-000	839767	1	45
32	Output Inductor Drain Pipe Kit (1.25")	325-44864-611	1053036	1	49
33	Output Inductor Drain Pipe Kit (8")	325-44864-613	1053037	1	49
32	Relay, Control Fan / Pump	024-30441-000	664298	2	45
45	Shell and Tube Heat Exchanger 3", 150/300 PSI	026-37572-000	104160	1	46
*	Shell and Tube Heat Exchanger Head Gaskets (set of two) 3"	371-03716-001	772263	1	-

NOTE: Items with an * are NOT represented.

0612A AMP VARIABLE SPEED DRIVE



LD18766

FIGURE 45 - INTERNAL COOLING SYSTEM COMPONENTS

JOHNSON CONTROLS

0612A AMP VARIABLE SPEED DRIVE

TABLE 25 - POWER ASSEMBLY COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
2	Bus Bleeder Resistor (ea.)	371-06165-002	873892	1	47
1	Bus Plate Assembly Kit	371-06336-681	1200560	1	47
19	Bus Snubber Capacitor (ea.)	025-42835-000	740149	12	47
*	Inverter Power Complete Kit (all phases)	371-06336-611	1150619	1	47
21	Inverter/Rectifier Gate Driver Board	031-02901-004	839195	6	47
23	Power Supply Board	031-02903-002	839200	1	47
25	Power Unit Mounting Foot Rear	071-05558-310	749268	1	47
28	Power Unit Mounting Plate Front	071-05558-326	1104681	1	47
*	Rectifier Power Complete Kit (all phases)	371-06336-616	1150620	1	47
22	VSD Rectifier/Inverter Power Unit Complete Kit 98 lbs (45 Kg)	371-06336-621	1150961	1	47
14	Wiring Ground	571-05526-241	807110	2	47

NOTE: Items with an * are NOT represented.

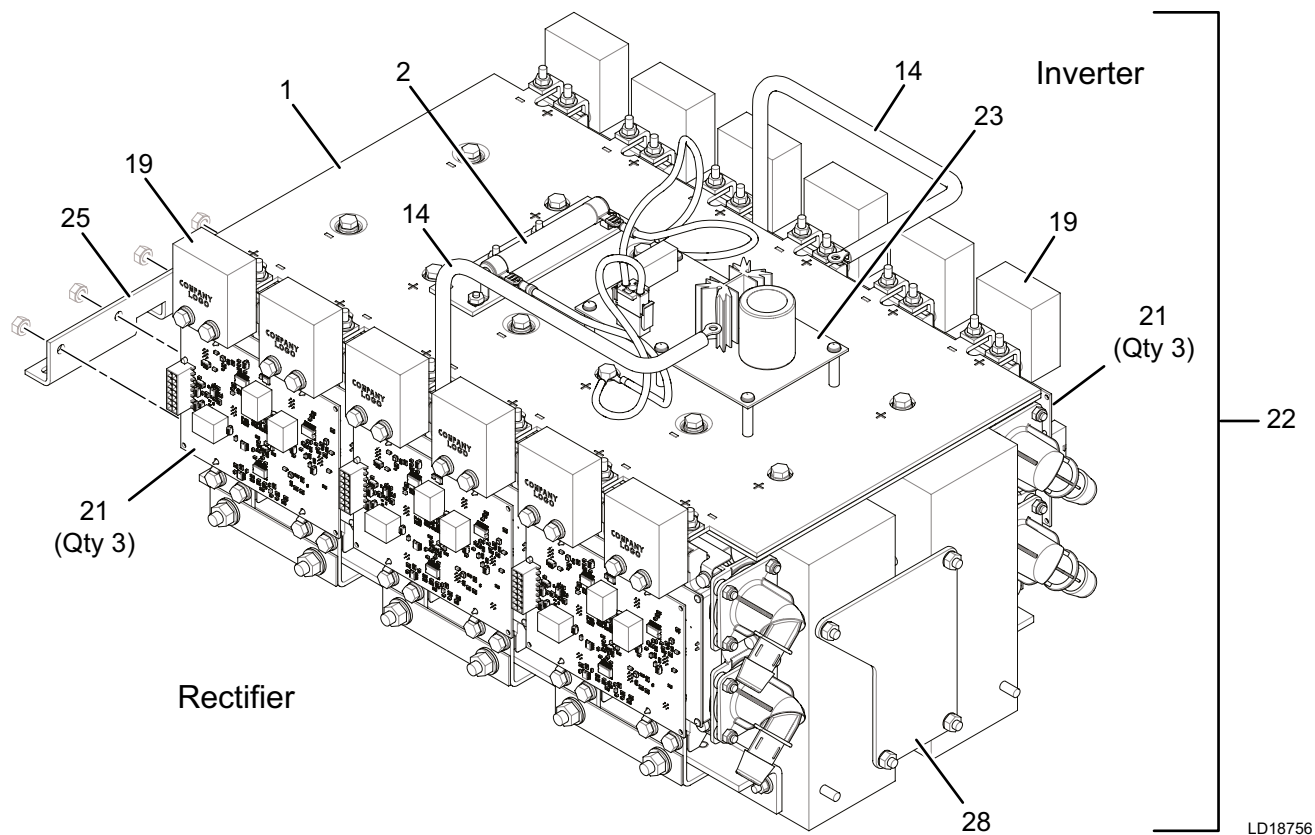
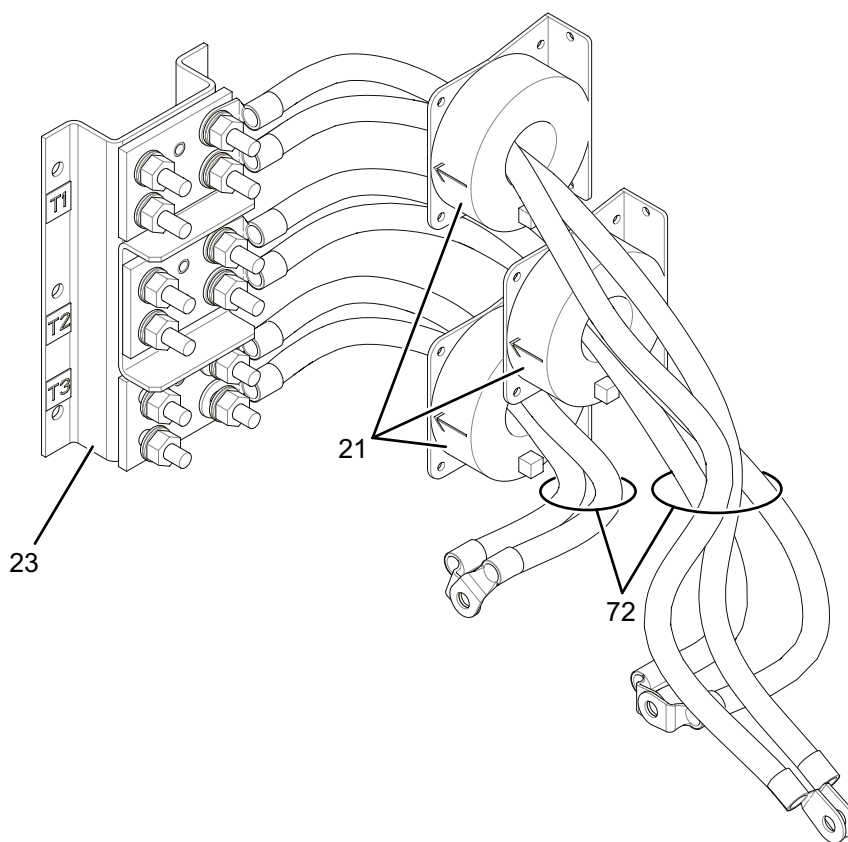


FIGURE 47 - POWER ASSEMBLY COMPONENTS

0612A AMP VARIABLE SPEED DRIVE

TABLE 26 - OUTPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
23	Motor Connection Plate	371-06336-366	1160819	1	48
21	Output Current Transducer (DCCT)	025-45590-000	1045992	3	48
3	Output Harmonic Filter Capacitor	025-46876-000	1160778	18	49
5	Output Harmonic Filter Assembly 222 lbs (101 Kg)	025-46194-000	1160775	1	49
72	Output Power Wiring (wiring between 3L and motor connection plate)	571-06336-235	1160840	1	48
36	Output Voltage Isolation Board	031-02022-001	743845	1	51



LD18760

FIGURE 48 - OUTPUT COMPONENTS

0612A AMP VARIABLE SPEED DRIVE

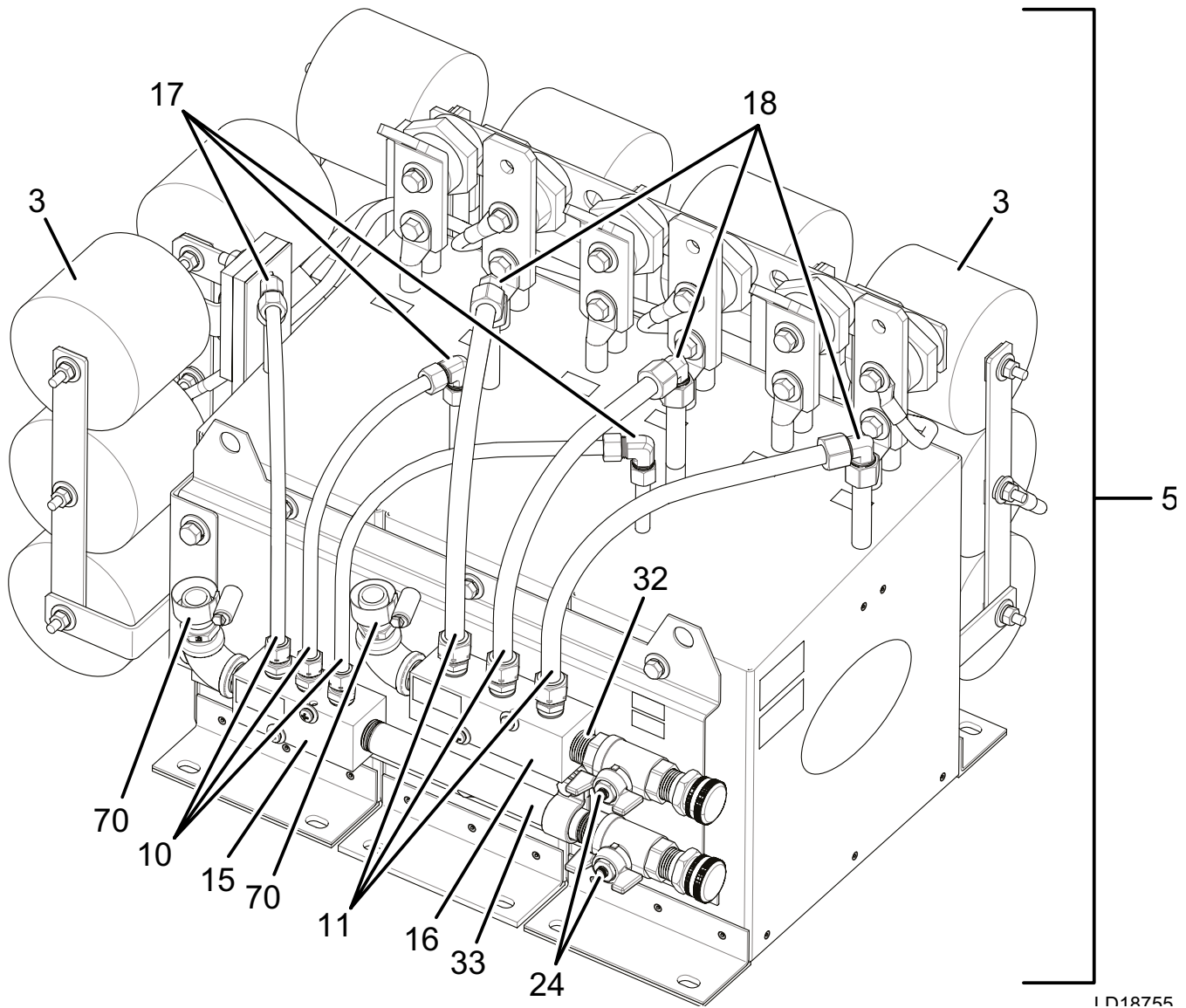


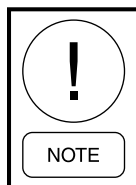
FIGURE 49 - OUTPUT HARMONIC FILTER COMPONENTS

0612A AMP VARIABLE SPEED DRIVE

TABLE 27 - DRIVE LOGIC BOARD AND COMPONENTS

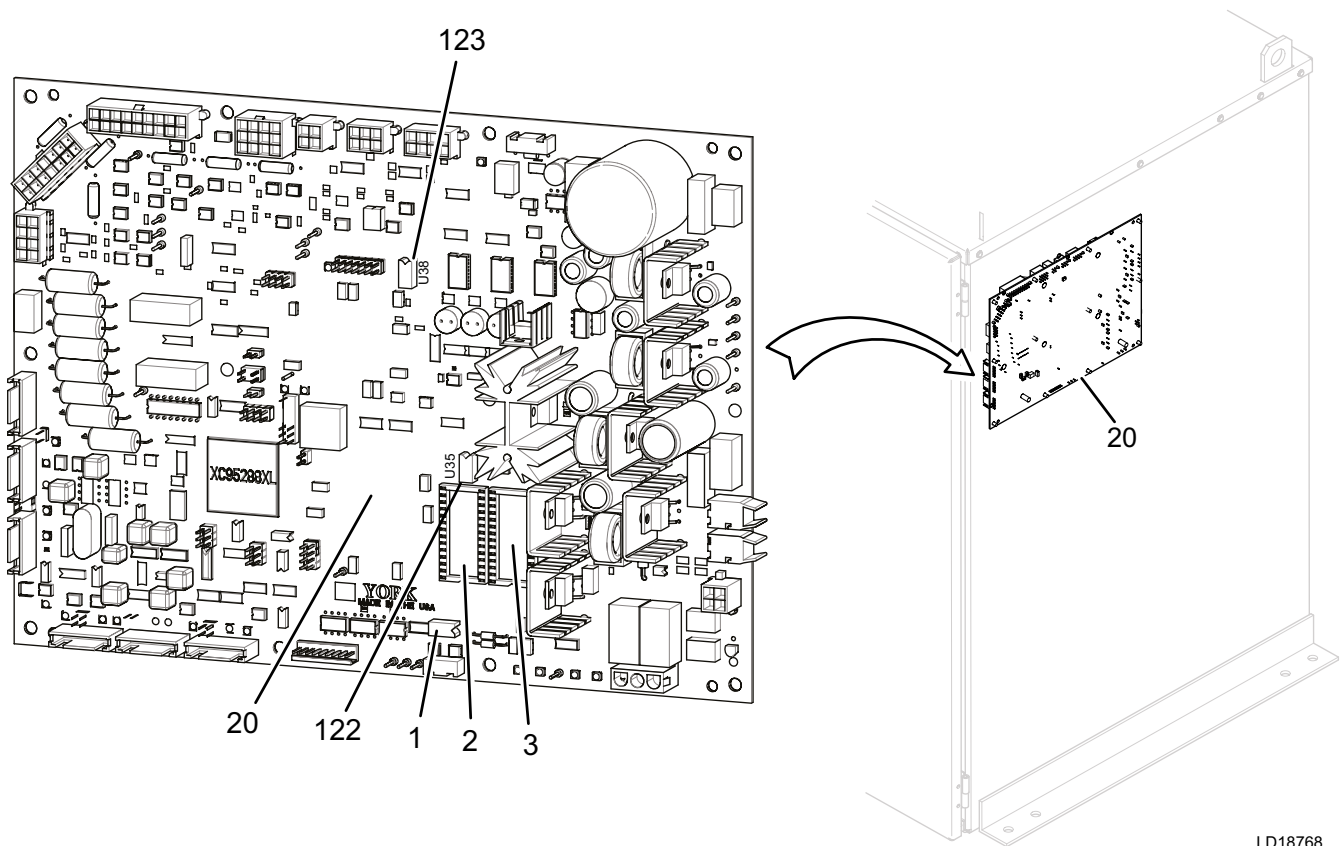
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
3	BRAM Chip U36	031-02482-000	5323419	1	50
2	BRAM Chip U37	031-02483-000	5323418	1	50
122	PROM Chip U35 (for 031-02911-00X board)	031-03048-001	744215	1	50
123	PROM Chip U38 (for 031-02911-00X board)	031-03049-001	744216	1	50
1	U66 485 Communications Driver	031-02074-000	120352	-	50
20	VSD Logic Board	031-02911-009	1135023	1	50
*	VSD Logic Board Kit (includes all software)	331-02911-609	1150615	-	-

NOTE: Items with an * are NOT represented.



PROM Chips U35 and U38 must be ordered as a set.

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LD18768

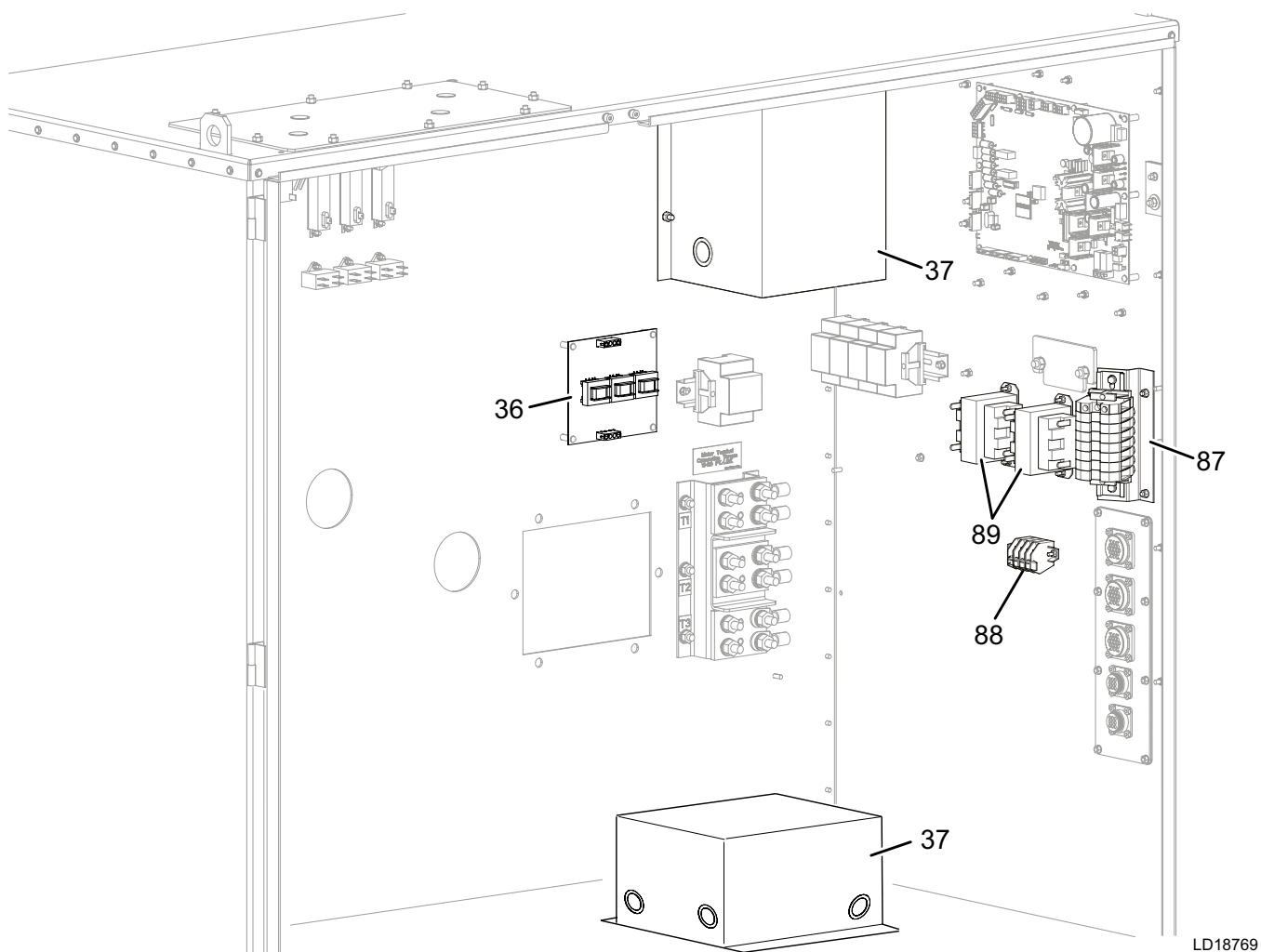
FIGURE 50 - DRIVE LOGIC BOARD AND COMPONENTS

0612A AMP VARIABLE SPEED DRIVE

TABLE 28 - MISCELLANEOUS COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
37	Control Transformer 240/480 VAC 2KVA	025-29627-002	117496	2	51
	Control Transformer 380/400/415 VAC 2KVA	025-29627-003	738308	2	
89	Control Transformer 24 VAC 75 VA (2T/3T)	025-27911-000	1312	2	51
88	Terminal Block 4-pole	025-44853-004	839754	1	51
87	Terminal Block 8-pole	025-45041-000	-	1	51
*	Suppressor used on 1M, 2M	025-46473-000	1072517	-	-
*	Suppressor used on 1R, 2R	031-00808-000	618876	-	-

NOTE: Items with an * are NOT represented.



LD18769

FIGURE 51 - MISCELLANEOUS COMPONENTS

0612A AMP VARIABLE SPEED DRIVE

TABLE 29 - WIRING HARNESSES AND CONNECTORS

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
Line Voltage Isolator Board	031-02022-000	J1	025-19671-000 (737534)	025-22215-000 (62701)
Line Voltage Isolator Board	031-02022-000	J2	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J1	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J2	025-21417-000 (737658)	025-22215-000 (62701)
Input DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Input DC Current Transformer (Complete Cable)				Assembly # 571-06336-211 (1160833)
Output DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Output DC Current Transformer (complete Cable)	-	-		Assembly # 571-06336-213 (1160834)
VSD Logic Board	031-02911-009	J1	025-21417-000 (737658)	025-22215-000 (62701)
VSD Logic Board	031-02911-009	J2	025-42614-000 (740129)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J3	025-35964-000 (739253)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J4	025-28384-000 (737920)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J5	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J6	025-28382-000 (737916)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J7	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J8 - J13	Assembly # 571-06336-241 (1160844)	N/A
VSD Logic Board	031-02911-009	J14	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J15	025-29130-000 (738262)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J16	025-19671-000 (737534)	025-22215-000 (62701)
VSD Logic Board	031-02911-009	J17	025-21136-000 (737636)	025-19674-000 (737537)

0612A AMP VARIABLE SPEED DRIVE

TABLE 29 - WIRING HARNESSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
VSD Logic Board	031-02911-009	J18	Assembly # 571-06336-227 (1160835)	N/A
VSD Logic Board	031-02911-009	J19	025-21137-000 (737637)	025-19674-000 (737537)
VSD Logic Board	031-02911-009	J25	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-009	J36	Assembly # 571-06336-291 (1160853)	N/A
IGBT Gate Driver Board - Inverter	031-02901-004	J1	025-42614-000 (740129)	025-28386-000 (737925)
IGBT Gate Driver Board - Rectifier	031-02901-004	J1	025-42614-000 (740129)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-002	J1	025-29185-000 (62736)	025-19674-000 (737537)
Gate Driver Power Supply Board	031-02903-002	J2	025-44494-000 (839746)	025-28386-000 (737925)
Gate Driver Power Supply Board	031-02903-002	J7	025-19671-000 (737534)	025-11083-000 (737290)
Gate Driver Power Supply Board	031-02903-002	J8	025-19672-000 (737535)	025-22215-000 (62701)
Ambient Temperature at Sensor	-	-	025-29130-000 (738262)	025-28386-000 (737925)
Ambient Temperature at Cable	-	-	025-32564-000 (738737)	025-30999-000 (738540)
CPC CONNECTORS				
CPC CONNECTORS	HOUSING PART NUMBER (SAP PART NUMBER)		PIN PART NUMBER (SAP PART NUMBER)	COMPLETE CABLE (SAP PART NUMBER)
Magnet Bearing Controller	025-37873-000 (739490)		025-40463-000 (873883)	571-06336-291 (1160853)
Motor Monitoring	025-44974-000 (828162)		025-40463-000 (873883)	571-06336-286 (1160852)
OptiView Communication	025-37873-000 (739490)		025-40463-000 (873883)	571-06336-227 (1160835)
OptiView Power	025-44974-000 (828162)		025-37875-000 (739491)	571-06336-238 (1160843)
UPS	025-44974-000 (828162)		025-37875-000 (739491)	571-06336-237 (1160842)

Note: All items in Table 29 are NOT shown

0612A AMP VARIABLE SPEED DRIVE

TABLE 30 - POWER WIRING SECTION

ITEM	SECTION	PART NUMBER	SAP NUMBER	FIGURE
119	Damping Resistors Wiring (wiring between L1 - L2 and the damping resistors)	571-06336-252	1160846	-
	Input Filter Wiring (Wiring between L1, L2 and capacitor assembly 3L1A - 3L3A)	571-06336-251	1160845	
35	Input Power Wiring Circuit Breaker (Wiring between circuit breaker and 1L)	571-06336-231	1160836	35
	Input Power Wiring Disconnect Switch (Wiring between disconnect switch and 1L)	571-06336-236	1160841	36
73	Inverter Power Wiring (Wiring between inverter and 3L)	571-06336-234	1160839	-
72	Output Power Wiring (Wiring between 3L and motor connection plate)	571-06336-235	1160840	48
76	Rectifier Power Wiring (Wiring between 1M and rectifier)	571-06336-233	1160838	37, 42
77	Power Wiring (Wiring between 2L and 1M)	571-06336-232	1160837	42

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SECTION 4 - 0774 AMP VARIABLE SPEED DRIVE

TABLE 31 - INPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
11	Circuit Breaker	224-37855-000	913802	1	52
29	Circuit Breaker Handle	026-46045-000	741273	1	52
10	Circuit Breaker Insulator	071-04459-310	748934	1	*
75	Damping Resistor Kit (includes 2 resistors & bracket)	025-44857-000	913761	6	55
11	Disconnect Switch	024-36974-000	704473	1	53
29	Disconnect Switch Handle	024-36614-000	736390	1	53
43	Disconnect Switch Lug Kit	025-43345-000	740272	1	53
24	Ground Lug	025-32835-000	738755	4	55
2	Input Current Transducer (DCCT)	025-42749-000	740134	3	54
5	Input Filter Assembly	371-05992-341	913807	1	55
3	Input Filter Capacitor for Assembly	025-42834-000	740148	9	55
1	Input Filter Capacitor with Resistor	025-43928-000	740379	1	55
6	Input Filter Resistor for Assembly	025-42616-000	740130	4	55
6	Input Line Inductor (1L) 227 lbs (103 Kg)	025-42768-000	740137	1	56
12	Input Load Inductor (2L) 291 lbs (132 Kg)	025-44855-000	838276	1	64
37	Input Voltage Isolator Board	031-02022-000	65064	1	55
36	Input Power Wiring Circuit Breaker (wiring between circuit breaker & 1L)	571-05992-231	913818	1	52
36	Input Power Wiring Disconnect Switch (wiring between disconnect switch & 1L)	571-05992-201	913816	1	53
8	Voltage Transient Board (Fuses are not included)	031-02453-000	743895	1	52
103	Input Filter Contactor	024-38736-000	1072516	1	55
67	Resistor DV/DT Network (50 Hz only)	025-46678-000	1113967	3	56
68	Capacitor DV/DT Network (50 Hz only)	025-39806-000	251765	3	56
70	Silicon Pad use with item 67 (1 each)	028-15299-000	742121	3	56

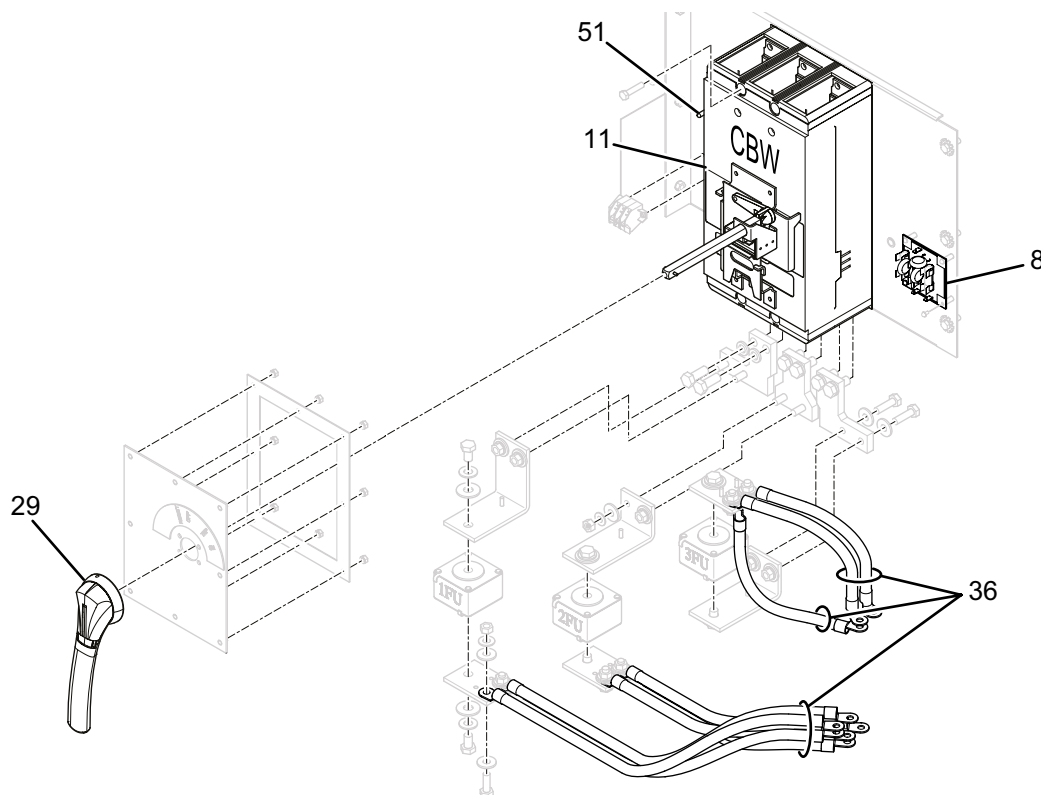
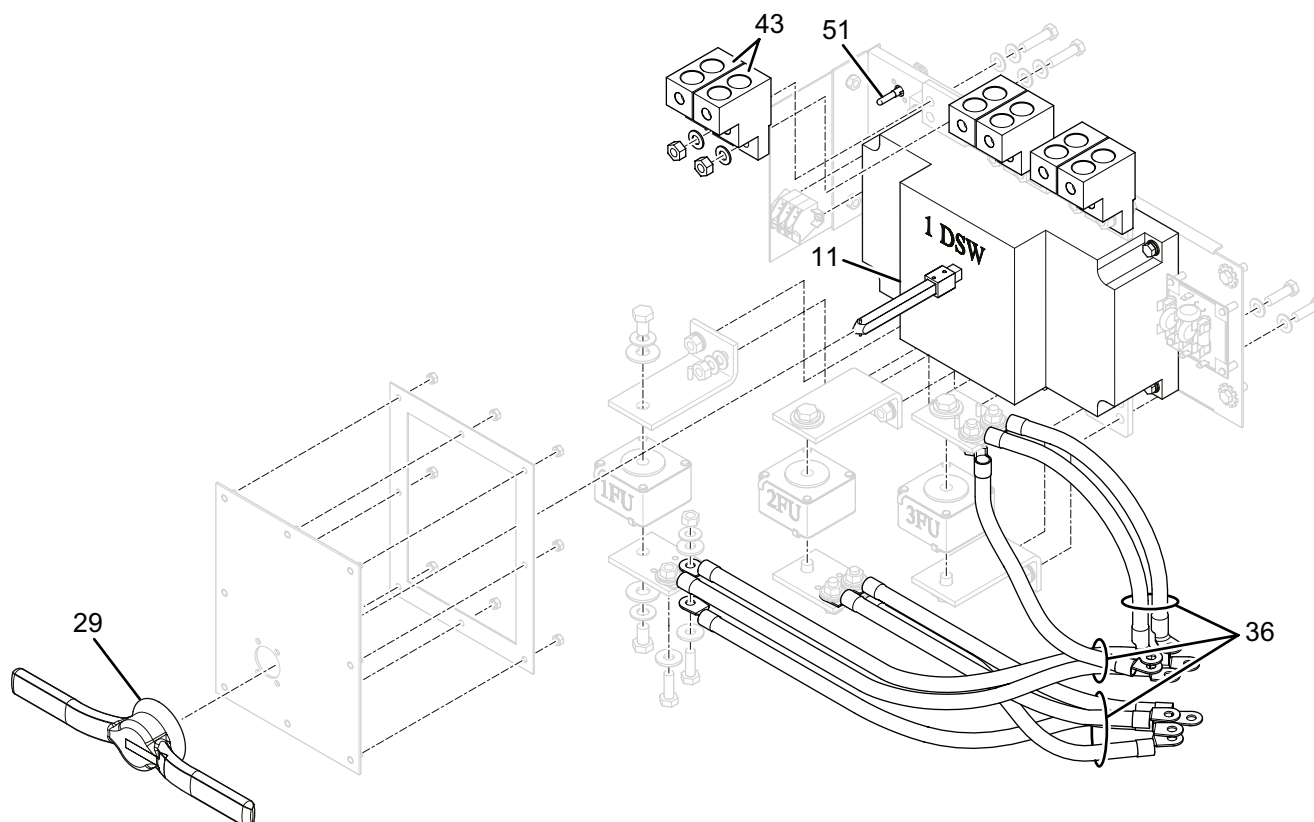


FIGURE 52 - CIRCUIT BREAKER (CB)

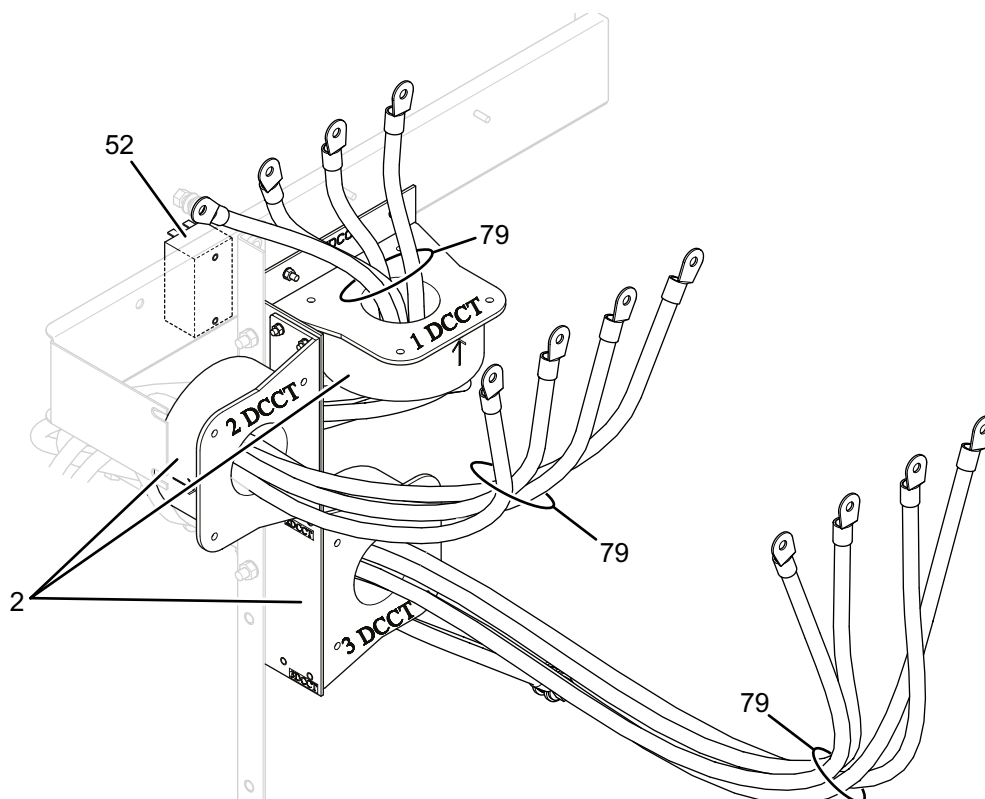
LD17774

0774 AMP VARIABLE SPEED DRIVE



LD17773

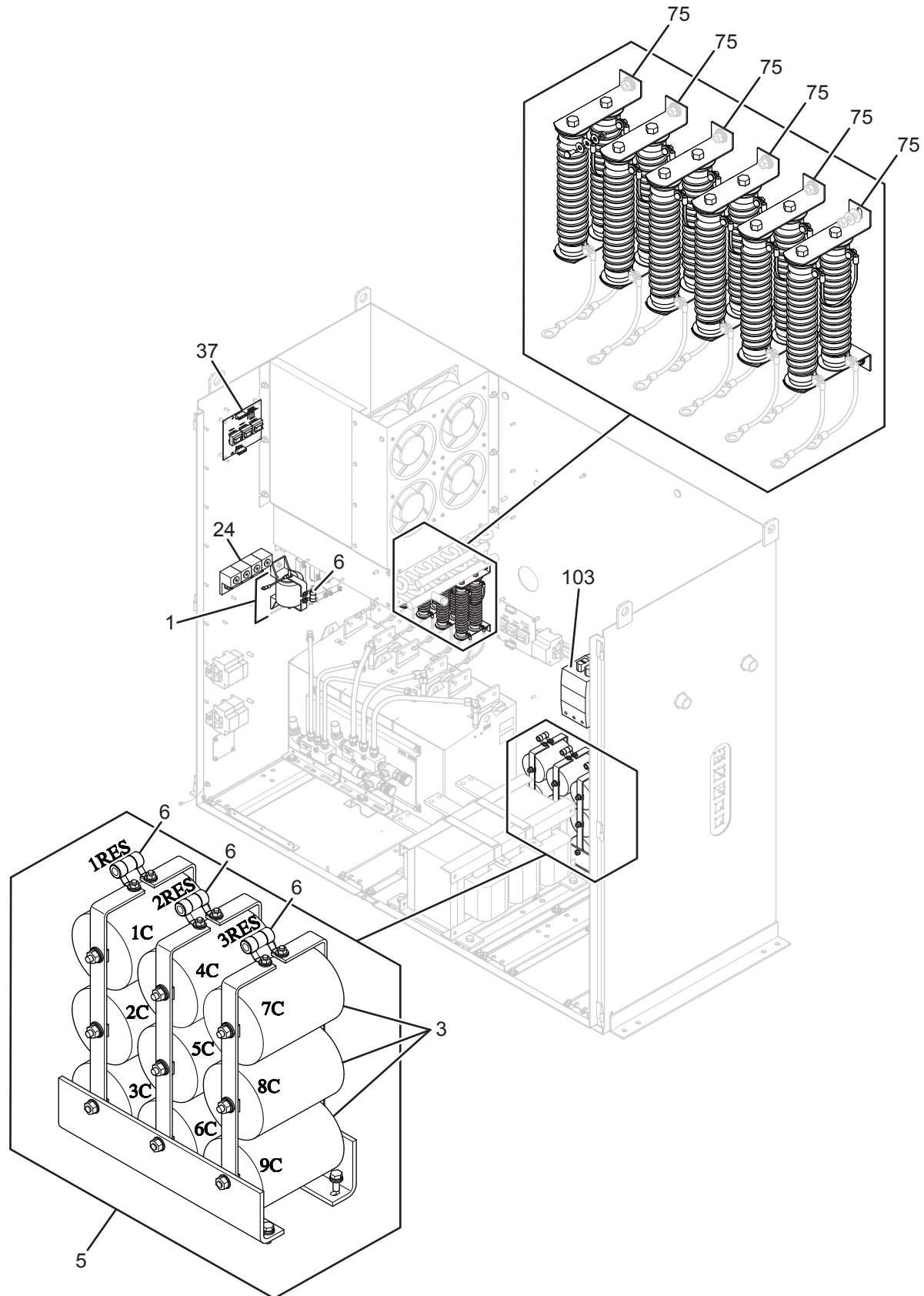
FIGURE 53 - DISCONNECT SWITCH (DS)



LD17775

FIGURE 54 - CURRENT TRANSDUCER (DCCT)

0774 AMP VARIABLE SPEED DRIVE



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FIGURE 55 - INPUT FILTER COMPONENTS

LD17776

0774 AMP VARIABLE SPEED DRIVE

TABLE 32 - FUSE COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
86	Fuse 1 AMP (4FU-6FU & 19FU-21FU)	025-43326-000	740259	6	56,57
26	Fuse 5 AMP Voltage Transient Board Fuses (16FU-18FU)	025-38523-000	739590	3	56
88	Fuse 7 AMP (13FU-15FU)	025-35903-000	117821	3	58
57	Fuse 10 AMP 460 VAC 60 Hz (7FU-10FU)	025-35905-000	739234	4	56
	Fuse 12 AMP 400 VAC 60 Hz, & 400, 415 VAC 50Hz (7FU-10FU)	025-35906-000	652698		
87	Fuse 20 AMP (11FU, 12FU & 27FU)	025-35908-000	117823	3	56,58
35	2 Pole Fuse Holder	025-43899-000	740368	3	56,58
32	1 Pole Fuse Holder 30A	025-39951-000	359985	1	56
31	3 Pole Fuse Holder 30A	025-39952-000	343433	3	56-58
24	Input Power Fuse (1FU-3FU)	025-42615-000	913760	3	56
*	Input Power Fuse (1FU-3FU set of three)	371-05992-601	1109088	1	-

NOTE: Items with an * are NOT represented.

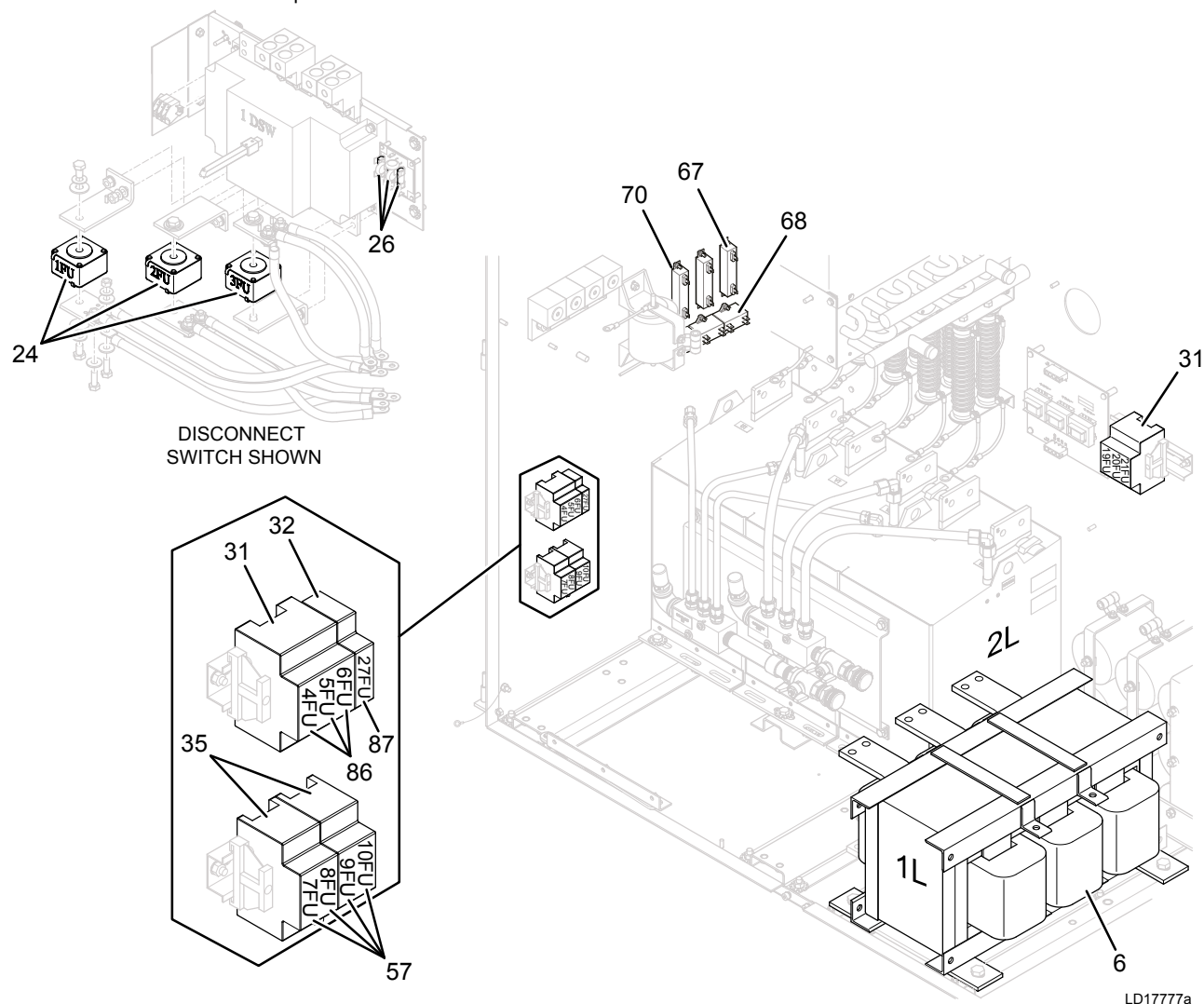
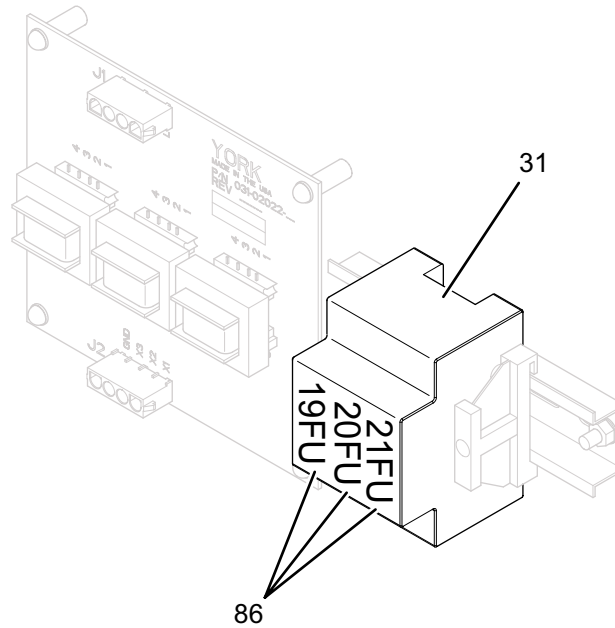


FIGURE 56 - FUSES AND FUSE HOLDERS (1FU-10FU, 19FU-21FU & 27FU)

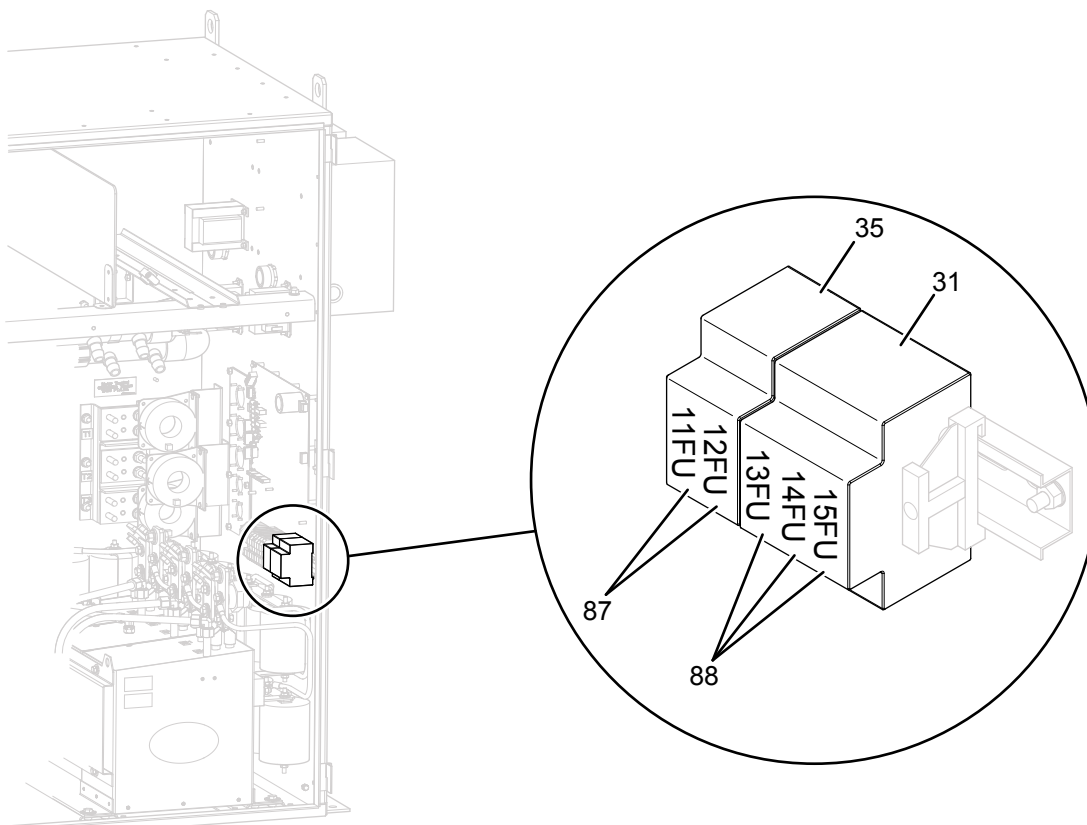
0774 AMP VARIABLE SPEED DRIVE



LD17780

FIGURE 57 - AUXILIARY FUSES (19FU-21FU)

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LD18019

FIGURE 58 - FUSES AND FUSE HOLDERS (11FU-15FU)

0774 AMP VARIABLE SPEED DRIVE

TABLE 33 - DOOR COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
29	Circuit Breaker Door Mounting Kit	026-46045-000	741273	1	59
	Disconnect Switch Handle	024-36614-000	736390		
105	Door Ground Strap	525-32508-001	806677	2	59
4	Door Kit Left 60 Hz (Including all labels & latches)	371-05992-651	1109091	1	59
	Door Kit Left 50 Hz (Including all labels & latches)	371-05592-653	1109092		
	Door Kit Right 60 Hz (Including all labels & latches)	371-05992-656	1109093		
	Door Kit Right 50 Hz (Including all labels & latches)	371-05592-658	1109094		
3	Door Latch	029-25614-000	743380	4	59
19	Door Stop Mounting Plate	371-05614-553	840001	1	59
97	Door Stop Assembly	029-23420-000	119865	1	59
52-1	Label Front Door JCI Logo	035-23036-000	745608	1	59

NOTE: Items with an * are NOT represented.

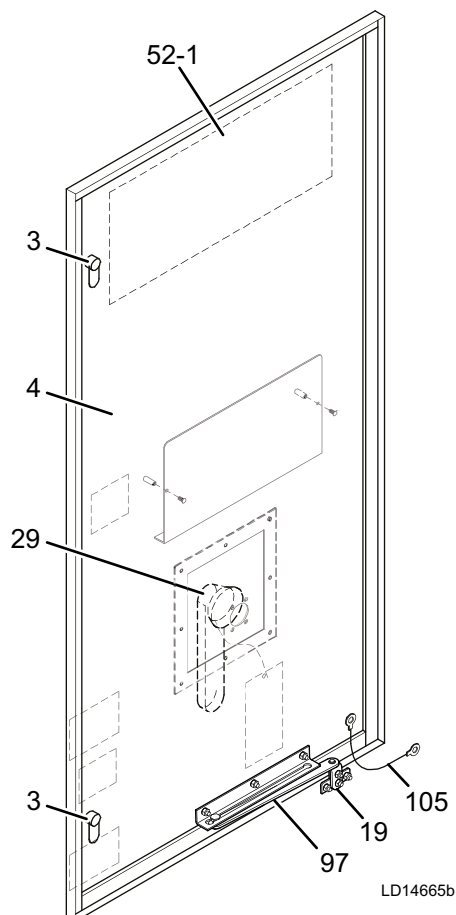


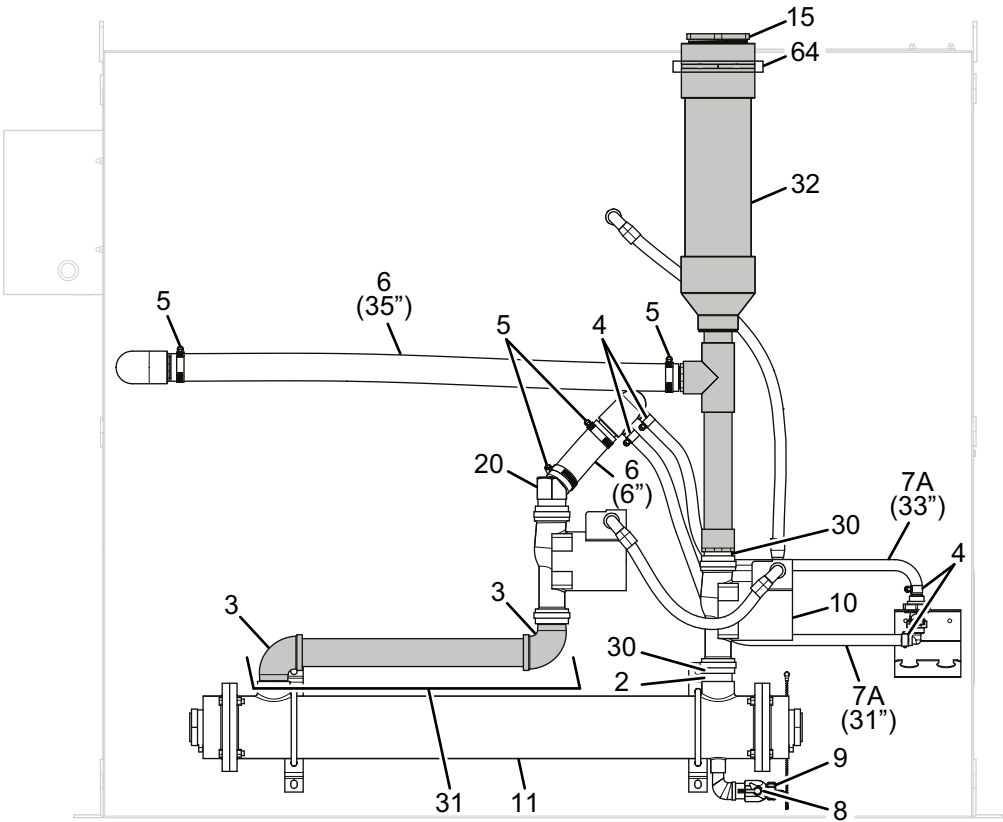
FIGURE 59 - DOOR COMPONENTS

0774 AMP VARIABLE SPEED DRIVE**TABLE 34 - COOLING SYSTEM COMPONENTS**

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
8	Coolant Drain Valve	022-12207-000	839729	1	60
9	Coolant Drain Valve Cap	023-25526-000	839731	1	60
1	Coolant Hose Barb Straight Kit (hose barb & hose)	371-05992-626	-	-	66
2	Coolant Hose Barb Elbow Kit (hose barb & hose)	371-05992-631	-	-	63
4	Coolant Hose Clamp 1"	023-08856-000	617439	50	60,63,64
5	Coolant Hose Clamp 2"	021-32226-000	730939	4	60
6	Coolant Hose External 1 1/2"	028-16373-000	742214	38"	60
7A	Coolant Hose External 3/4 " ID by the foot (To the power panel)	028-16692-000	864411	64"	60
7B	Coolant Hose Internal 3/4 " ID by the foot	028-16768-000	1056103	50"	63
70	Coolant Hose on Inductor 3/8 "	325-44864-607	1053032		64
71	Coolant Hose on Inductor 1/2 "	325-44864-618	1053041		64
32	Coolant Manifold Kit	371-05992-672	1109098	1	61,63
31	Coolant Manifold Supply Kit	371-05992-636	1109089	1	61,63
30	Coolant Manifold Return Kit	371-05992-671	1109097	1	61,63
45	Coolant Manifold Clamp	028-16632-000	913766	5	63,64
49	Coolant Manifold Bracket	371-05182-399	772961	2	63
72	Coolant Manifold on Inductors 3/8"	325-44864-603	1053030	2	64
73	Coolant Manifold on Inductors 1/2"	325-44864-615	1053038	2	64
74	Coolant Manifold on Inductors Fittings Elbow 3/8"	325-44864-609	1053034	6	64
75	Coolant Manifold on Inductors Fittings Elbow 1/2"	325-44864-616	1053039	6	64
10	Coolant Pump	026-33890-000	3590	1	60
30	Coolant Pump Flange Set	023-20283-000	733193	2	60
32	Coolant Reservoir 4" PVC with Fill Plug Kit	371-05992-672	1109098	1	60
15	Coolant Reservoir Fill Plug	028-16630-000	843247	1	
64	Coolant Reservoir Hose Clamp	021-33315-000	865765	1	
76	Coolant Valves on Inductors	325-44864-605	1053031	4	64
20	Elbow 45°	028-16559-000	839776	1	60
3	Elbow 90°	023-17785-000	617581	2	60
51	Enclosure Temperature Sensor with connector	571-05182-283	807091	1	53,61
62	Flow Restrictor	028-16619-000	913765	4	63,65
*	Inhibitor Per Gallon	013-04129-000	729086	6 Gallon	-
14	Internal Cooling Coil	026-45982-000	741251	1	62,63
19	Internal Cooling Fan	025-32557-000	738735	4	62
2	Nipple Pipe Stl Sch 40, 1-1/2 X 2.00" Lg.	023-18209-000	60695	1	60
52	Relay, Control Fan / Pump	024-30441-000	664298	1	61
11	Shell & Tube Heat Exchanger, 150 PSI Condenser 4"	026-46071-000	913763	1	60
	Shell & Tube Heat Exchanger, 300 PSI Condenser 4"	026-46434-000	913764		
*	Shell & Tube Heat Exchanger Head Gaskets (set of two) 4"	371-03716-002	1109087	1	-
31	Shell and Tube Heat Exchanger Outlet Assembly Kit	371-05992-662	1109096	1	60
60	Tee Adapter 'A'	371-05992-406	843294	1	63,65
61	Tee Adapter 'B'	371-05992-408	843295	1	63,65

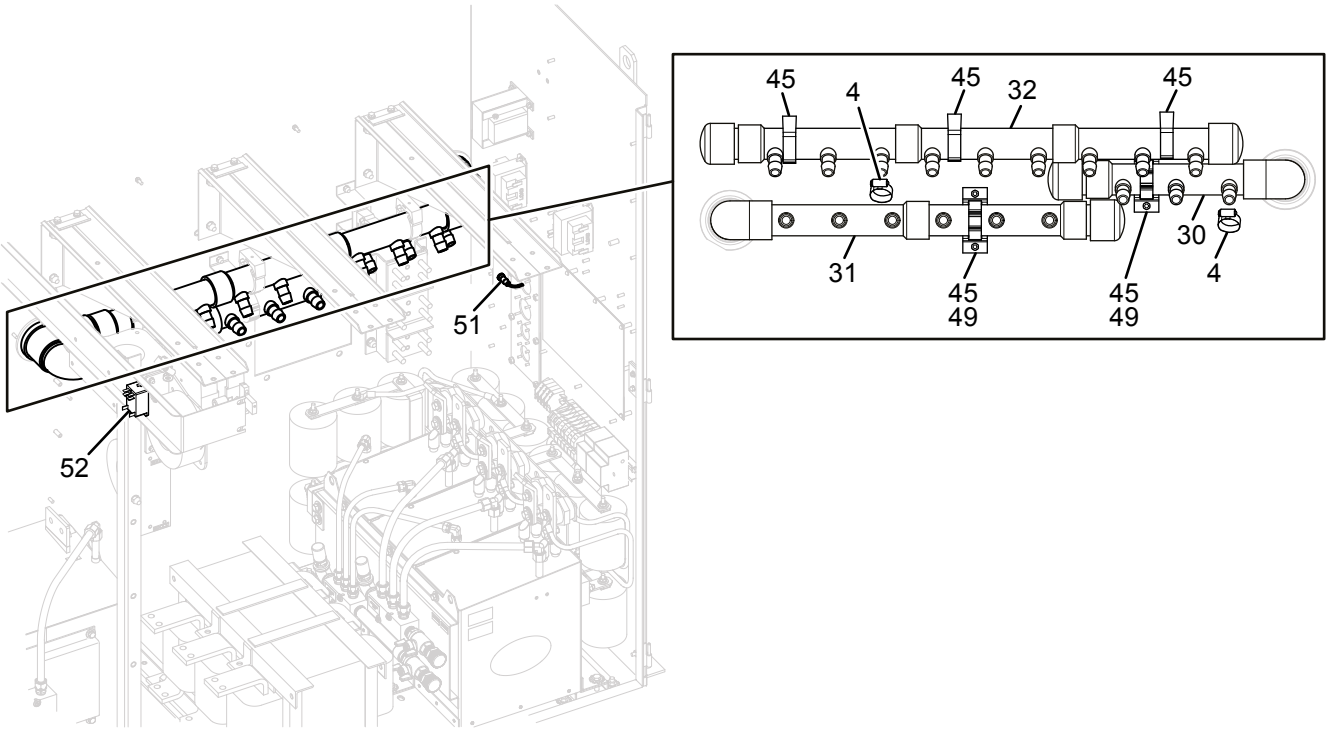
NOTE: Items with an * are NOT represented.

0774 AMP VARIABLE SPEED DRIVE



LD18020

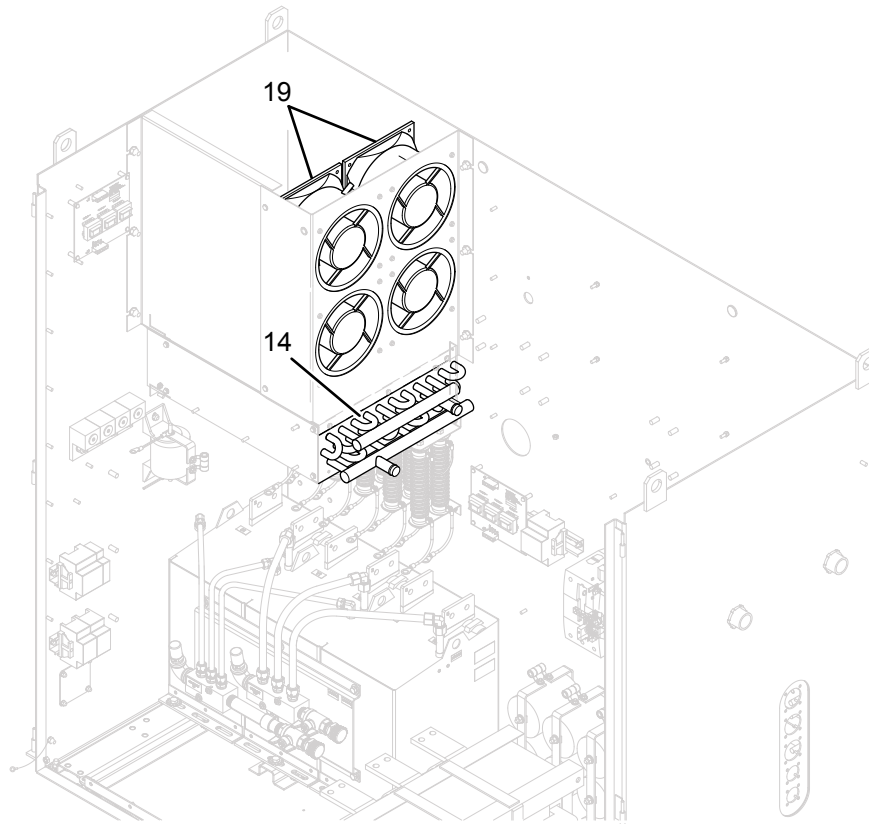
FIGURE 60 - EXTERNAL COOLING SYSTEM



LD18021

FIGURE 61 - INTERNAL COOLING SYSTEM

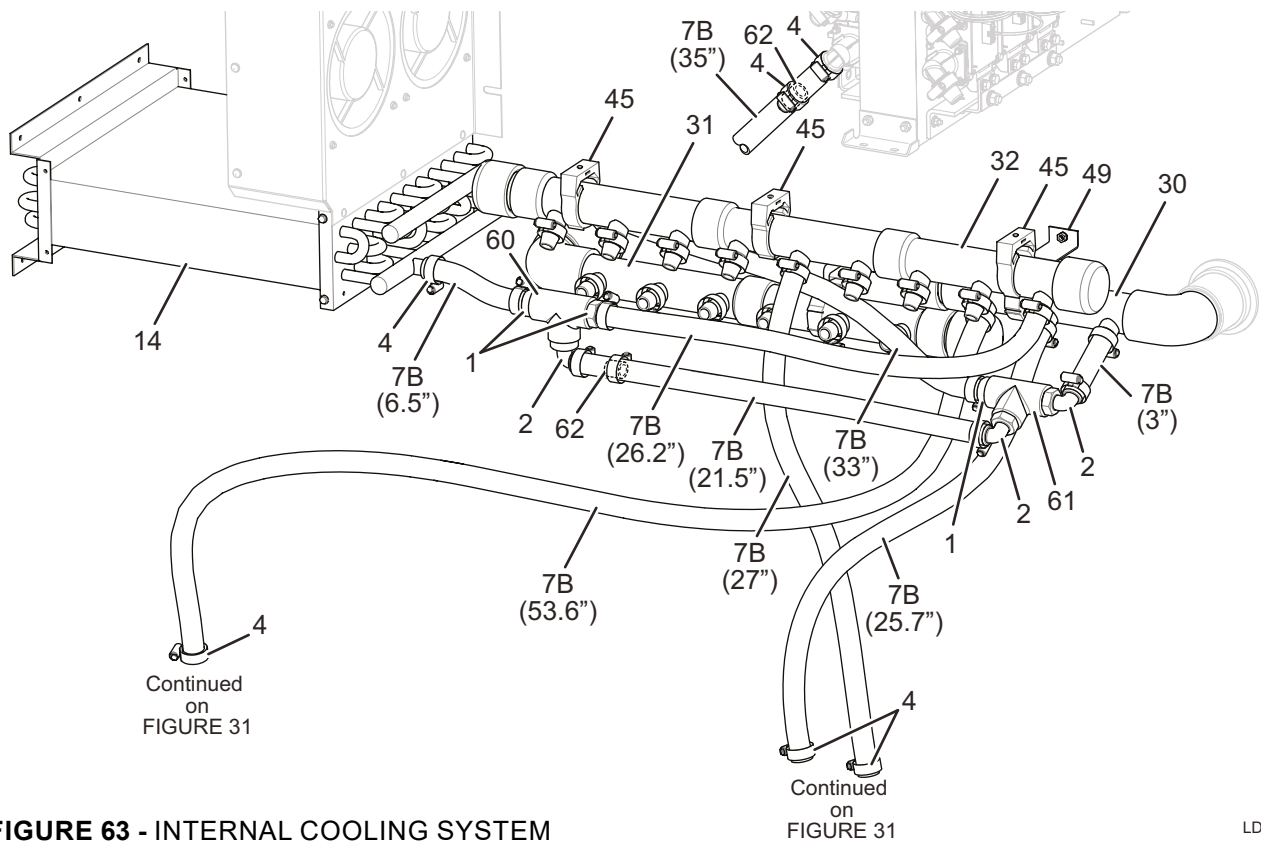
0774 AMP VARIABLE SPEED DRIVE



LD18023

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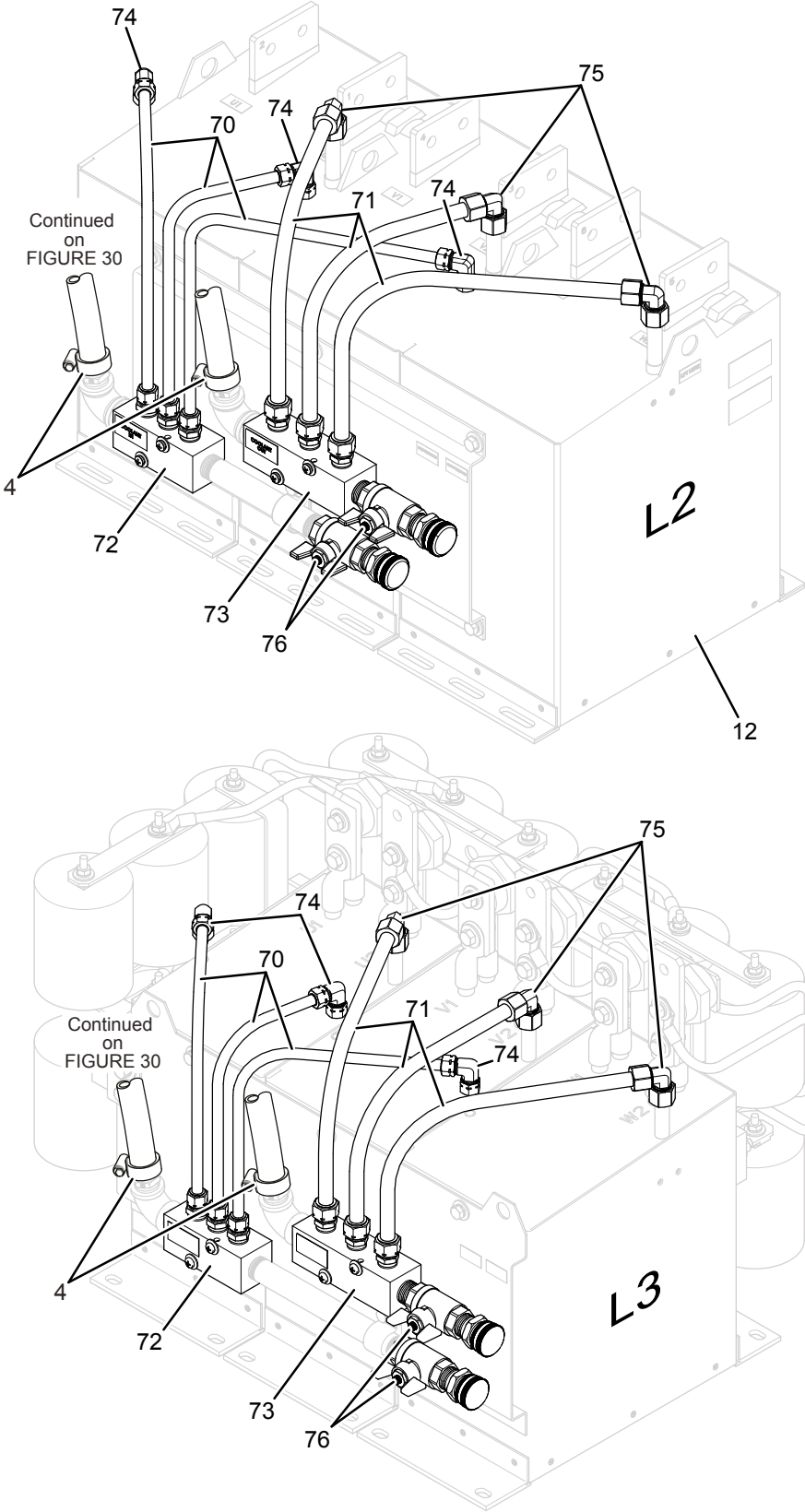
FIGURE 62 - INTERNAL COOLING SYSTEM



LD18025

FIGURE 63 - INTERNAL COOLING SYSTEM

0774 AMP VARIABLE SPEED DRIVE



LD16671

FIGURE 64 - INDUCTOR COOLING

0774 AMP VARIABLE SPEED DRIVE

TABLE 35 - POWER ASSEMBLY COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
25	Bus Bleeder Resistor (ea.)	025-45188-000	843241	3	66
6	Bus Plate Assembly Kit	371-05526-601	774036	3	66
70	Bus Plate (Positive or Negative)	071-05182-485	843250	2	65
23	Bus Snubber Capacitor (ea.)	025-42835-000	740149	21	66
29	IGBT Gate Driver Board	031-02762-001	744086	3	66
71	Insulator sheet between Bus Plates	071-05992-385	843267	1	65
1	Inverter Power Module Kit (one phase)	371-05999-611	1109099	3	66
83	Inverter Power Wiring (wiring between Inverter & L3)	571-05992-241	913821	1	67
2	Power Unit Mounting Foot Front	071-05508-312	749269	3	66
3	Power Unit Mounting Foot Rear	071-05508-310	749268	3	66
7	Rectifier Power Module Kit (one phase)	371-05526-616	774039	3	66
79	Rectifier Power Wiring (wiring between 1L,2L&rectifier)	571-05992-221	913817	1	54
69	Spacer between Bus Plates	371-05182-490	843274	3	65
4	VSD Rectifier/Inverter Power Unit Complete Kit (IGBT, Capacitors, Heatsink, Coolant) 50 lbs. (23 Kg)	371-05999-621	1109100	3	66
13	Wiring Ground	571-05526-241	807110	6	65

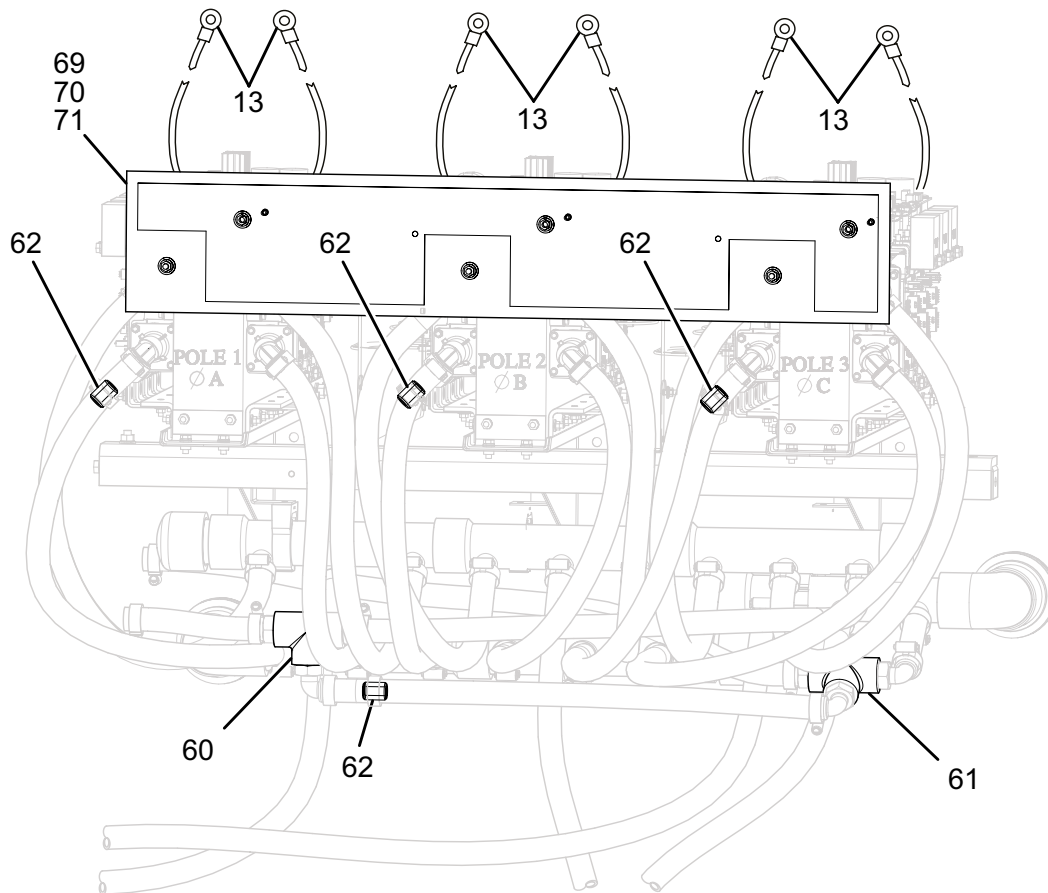
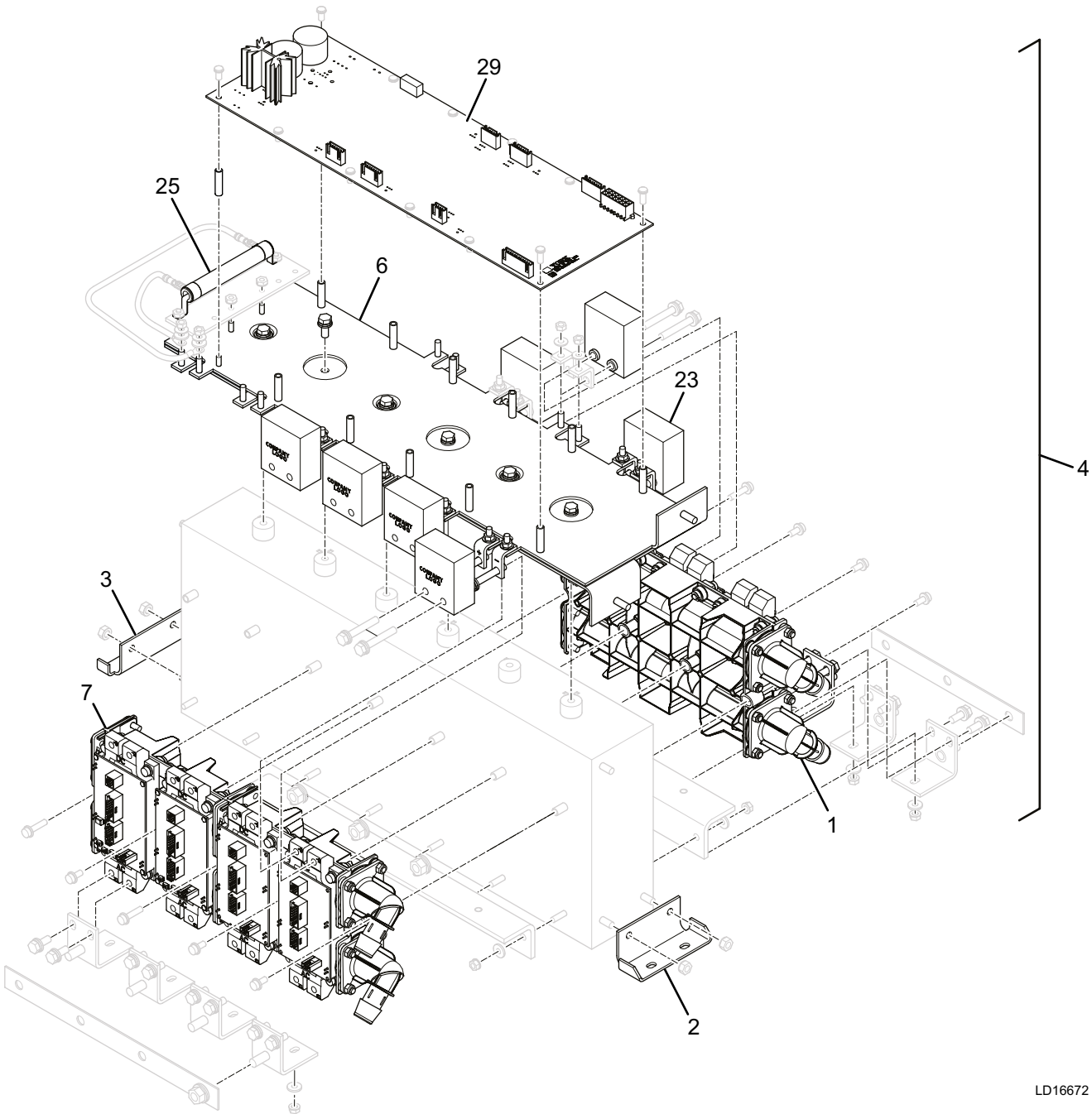


FIGURE 65 - POWER ASSEMBLY COMPONENTS

0774 AMP VARIABLE SPEED DRIVE



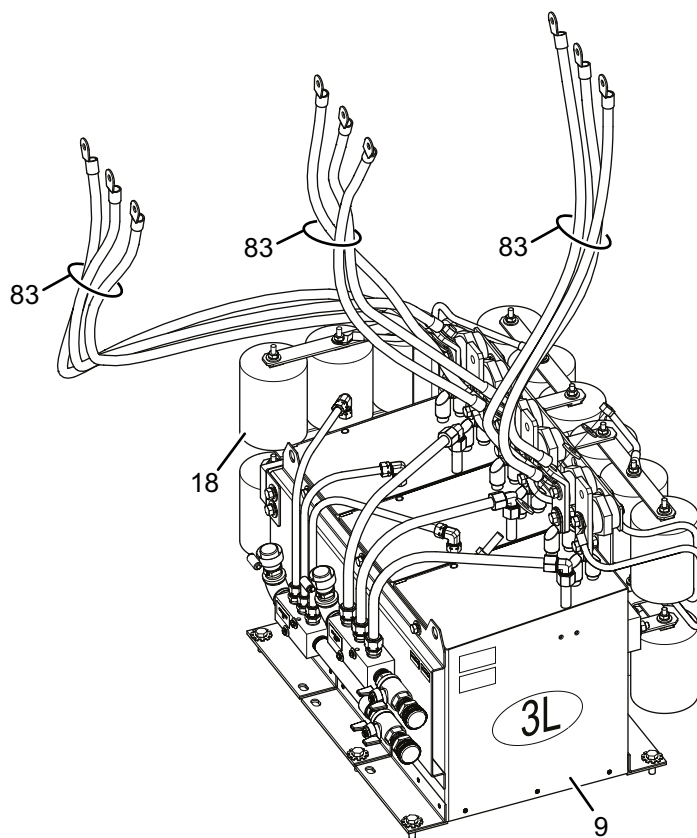
LD16672

FIGURE 66 - POWER POLE ASSEMBLY

0774 AMP VARIABLE SPEED DRIVE

TABLE 36 - OUTPUT COMPONENTS

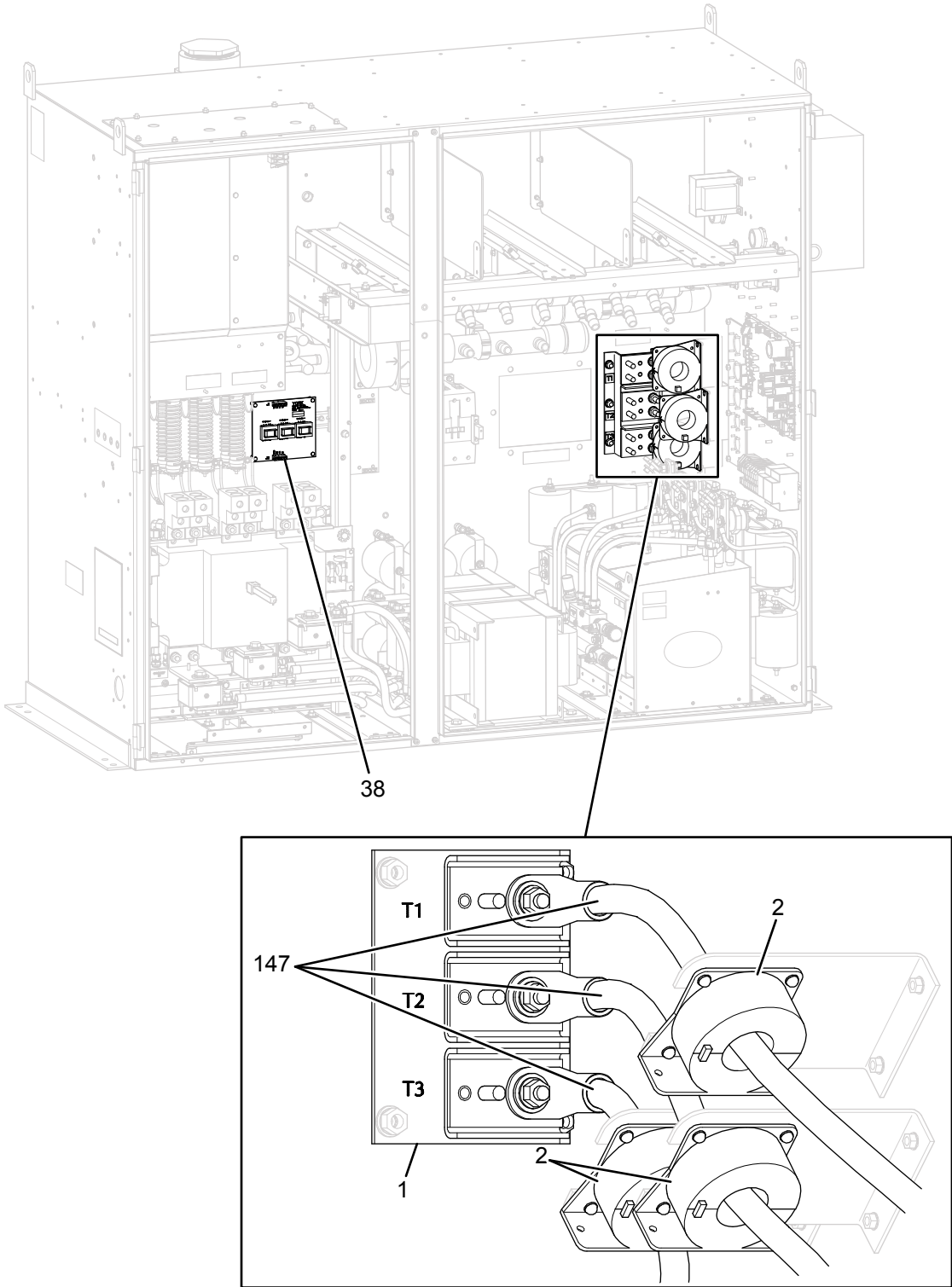
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
1	Motor Connection Plate	371-05992-366	843288	1	68
2	Output Current Transducer (DCCT)	025-45590-000	1045992	3	68
18	Output Harmonic Filter Capacitor	025-45337-000	913762	18	67
9	Output Harmonic Filter Assembly 381 lbs (173 Kg)	025-44856-000	838277	1	67
147	Output Power Wiring (wiring between 3L & motor connection plate)	571-05992-236	913819	1	68
38	Output Voltage Isolator Board	031-02022-001	743845	1	68



LD16534

FIGURE 67 - OUTPUT HARMONIC FILTER COMPONENTS #1

0774 AMP VARIABLE SPEED DRIVE



LD16670

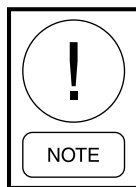
FIGURE 68 - OUTPUT HARMONIC FILTER COMPONENTS #2

0774 AMP VARIABLE SPEED DRIVE

TABLE 37 - DRIVE LOGIC BOARD AND COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
3	BRAM Chip U36	031-02482-000	5323419	1	69
2	BRAM Chip U37	031-02483-000	5323418	1	69
122	PROM Chip U35 (for 031-02911-00X board)	031-03048-001	744215	1	69
123	PROM Chip U38 (for 031-02911-00X board)	031-03049-001	744216	1	69
1	U66 485 Communications Driver	031-02074-000	120352	-	69
20	VSD Logic Board Kit (includes all software)	331-02911-604	1109086	1	66

NOTE: Items with an * are NOT represented.



PROM Chips U35 and U38 must be ordered as a set.

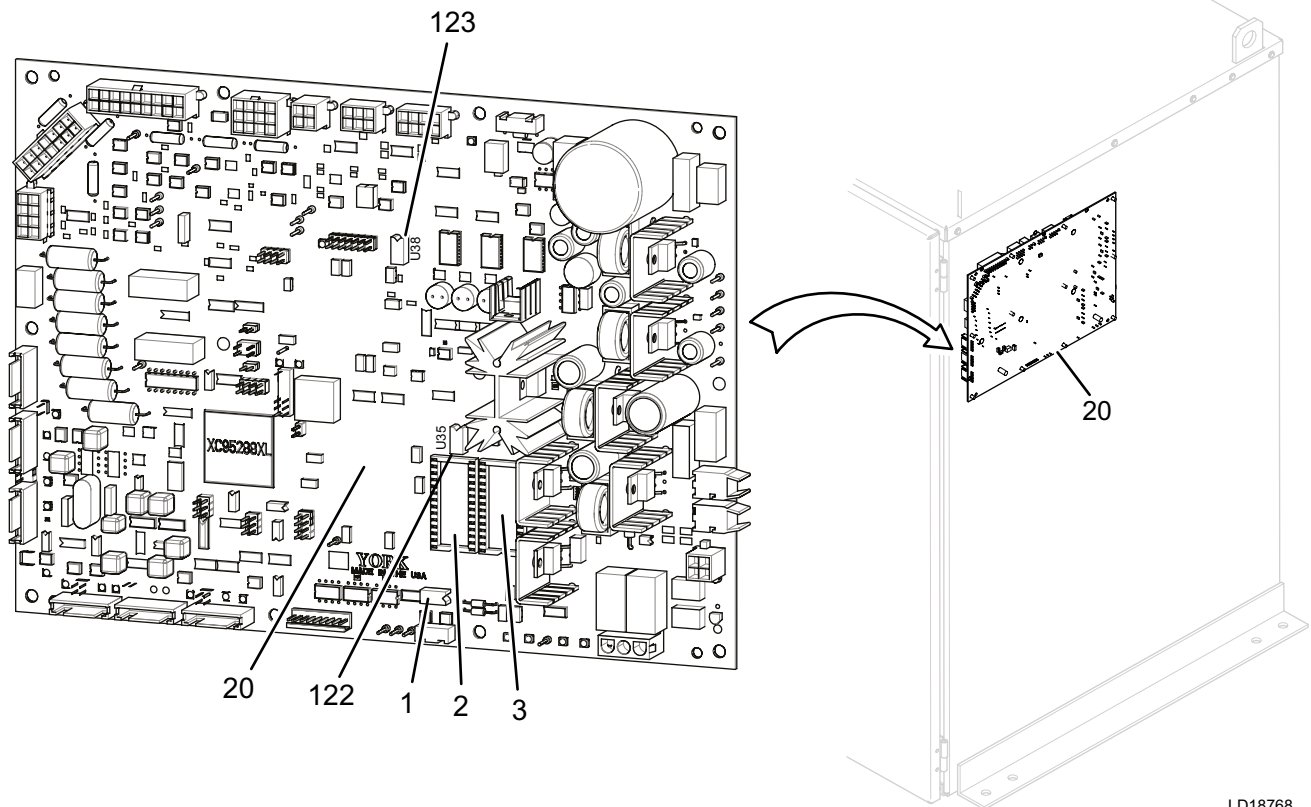


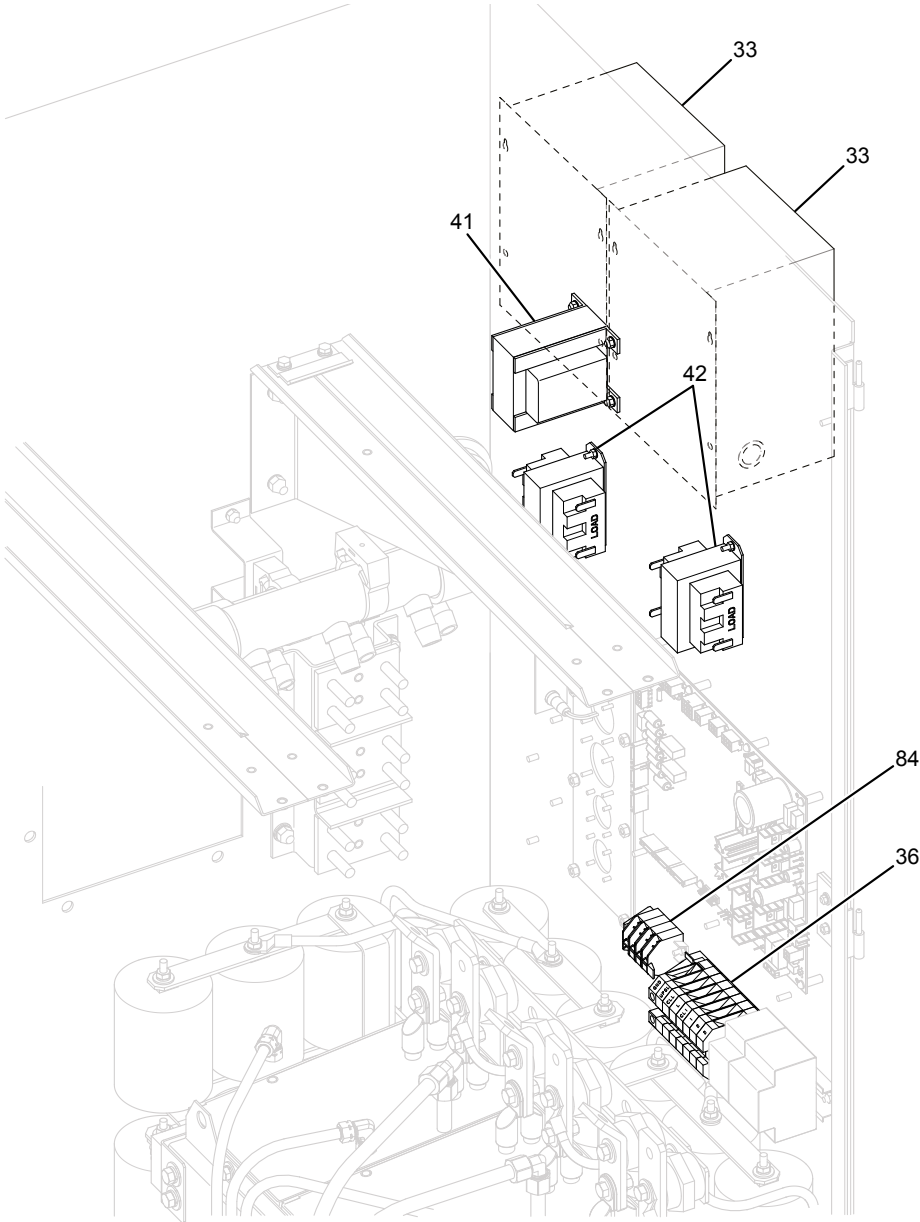
FIGURE 69 - DRIVE LOGIC BOARD AND COMPONENTS

0774 AMP VARIABLE SPEED DRIVE

TABLE 38 - MISCELLANEOUS COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP PART NUMBER	QUANTITY	FIGURE
33	Control Transformer 480VAC 3KVA	025-29627-002	117496	2	70
	Control Transformer 380/400/415VAC 3KVA	025-29627-003	738308	2	
42	Control Transformer 24 VAC 75 VA	025-27911-000	1312	2	70
41	Control Transformer	025-43339-000	740269	1	70
84	Terminal Block 4-pole	025-44853-004	839754	1	70
36	Terminal Block 8-pole	025-45041-000	839762	1	70
*	Suppressor used on 1M	025-46473-000	1072517	-	-
*	Suppressor used on 1R	031-00808-000	618876	-	-

NOTE: Items with an * are NOT represented.



LD17779

FIGURE 70 - MISCELLANEOUS COMPONENTS

0774 AMP VARIABLE SPEED DRIVE

TABLE 39 - WIRING HARNESSES AND CONNECTORS

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
Line Voltage Isolator Board	031-02022-000	J1	025-19671-000 (737534)	025-22215-000 (62701)
Line Voltage Isolator Board	031-02022-000	J2	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J1	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J2	025-21417-000 (737658)	025-22215-000 (62701)
Input DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Output DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
VSD Logic Board	031-02911-004	J1	025-19672-000 (737535)	025-22215-000 (62701)
VSD Logic Board	031-02911-004	J2	025-42614-000 (740129)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J3	025-35964-000 (739253)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J4	025-28384-000 (737920)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J5	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J6	025-28382-000 (737916)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J7	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J8 and J11	Assembly # 571-05992-205 (994025)	N/A
VSD Logic Board	031-02911-004	J9 and J12	Assembly # 571-05992-207 (994026)	N/A
VSD Logic Board	031-02911-004	J10 and J13	Assembly # 571-05992-209 (994027)	N/A
VSD Logic Board	031-02911-004	J14	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J15	025-29130-000 (738262)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J17	025-21136-000 (737636)	025-19674-000 (144774)

0774 AMP VARIABLE SPEED DRIVE

TABLE 39 - WIRING HARNESSSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
VSD Logic Board	031-02911-004	J18	Assembly # 571-05992-227 (994032)	N/A
VSD Logic Board	031-02911-004	J19	025-21137-000 (737637)	025-19674-000 (737537)
VSD Logic Board	031-02911-004	J25	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-004	J36	Assembly # 571-05992-291 (994037)	N/A
IGBT Gate Driver Board	031-02762-001	J1	025-21136-000 (737636)	025-32506-000 (738721)
IGBT Gate Driver Board	031-02762-001	J2	025-42614-000 (740129)	025-28386-000 (737925)
IGBT Gate Driver Board	031-02762-001	J3	025-19671-000 (737534)	025-19673-000 (737536)
IGBT Gate Driver Board	031-02762-001	J4	025-19672-000 (737535)	025-22215-000 (62701)
IGBT Gate Driver Board - Inverter	031-02762-001	J5 and J6	Assembly # 571-05999-201 (843306)	N/A
IGBT Gate Driver Board - Rectifier	031-02762-001	J7 and J8	Assembly # 571-05526-211 (807107)	N/A
IGBT Gate Driver Board - Rectifier	031-02762-001	J9 and J11	Assembly # 571-05526-221 (807107)	N/A
IGBT Gate Driver Board - Inverter	031-02762-001	J10	Assembly # 571-05999-231 (843307)	N/A
Rectifier Resistor Board	031-02764-001	J1 and J4	Assembly # 571-05526-221 (807108)	N/A
Rectifier Resistor Board	031-02764-001	J2 and J3	Assembly # 571-05526-211 (807107)	N/A
Inverter Resistor Board	031-02765-001	J1	Assembly # 571-05999-231 (843307)	N/A
Inverter Resistor Board	031-02765-001	J2 and J3	Assembly # 571-05999-201 (843306)	N/A

0774 AMP VARIABLE SPEED DRIVE

TABLE 39 - WIRING HARNESSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	POSITION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)
Ambient Temperature at Sensor	-	-	025-29130-000 (738262)	025-28386-000 (737925)
Ambient Temperature at Cable	-	-	025-32564-000 (738737)	025-30999-000 (738540)
CPC CONNECTORS				
CPC CONNECTORS DESCRIPTION	HOUSING PART NUMBER (SAP PART NUMBER)	PIN PART NUMBER (SAP PART NUMBER)	COMPLETE CABLE (SAP PART NUMBER)	
Magnet Bearing Controller	025-37873-000 (739490)	025-40463-000 (873883)	571-05992-291 (994037)	
Motor Monitoring	025-44974-000 (828162)	025-40463-000 (873883)	571-05992-286 (994036)	
OptiView Communication	025-37873-000 (739490)	025-40463-000 (873883)	571-05992-227 (994032)	
OptiView Power	025-44974-000 (828162)	025-37875-000 (739491)	571-05992-217 (994031)	
UPS	025-44974-000 (828162)	025-37875-000 (739491)	571-05992-216 (994030)	

Note: All items in Table 39 are NOT shown

TABLE 40 - POWER WIRING SECTION

DESCRIPTION	PART NUMBER	SAP NUMBER
Damping resistors (4L1-4L3)	571-05992-251	913822
Damping resistors 3 sets of wires (2L1G-2L3G, 3L1-3L3, 3L1E-3L3E, and braided wires)	571-05992-252	913823
Input Power Wiring Circuit Breaker (Wiring between circuit breaker and 1L)	571-05992-231	913818
Input Power Wiring Disconnect Switch (Wiring between disconnect switch and 1L)	571-05992-201	913816
Inverter Power Wiring (Wiring between Inverter and 3L)	571-05992-241	913821
Output Power Wiring (Wiring between 3L & motor connection plate)	571-05992-236	913819
Rectifier Power Wiring (Wiring between 1L, 2L and rectifier)	571-05992-221	913817

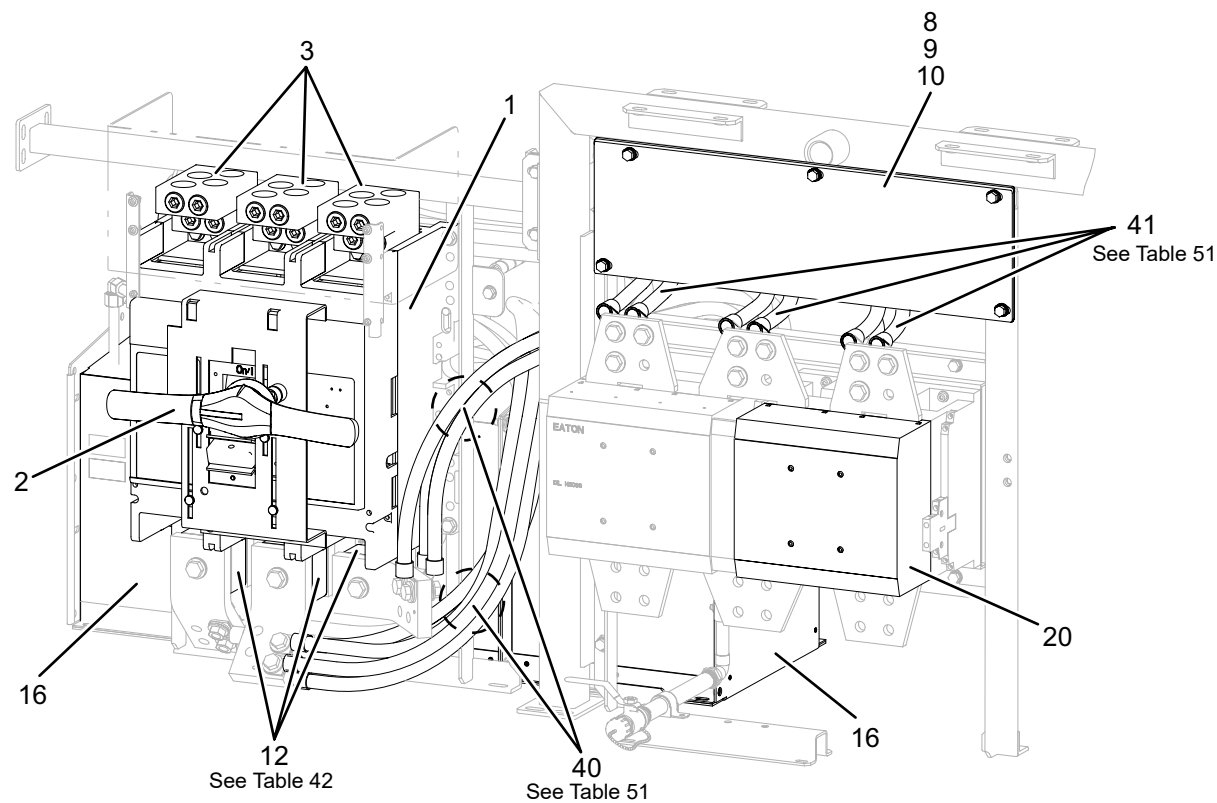
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SECTION 5 - 1278A AMP VARIABLE SPEED DRIVE

TABLE 41 - INPUT COMPONENTS

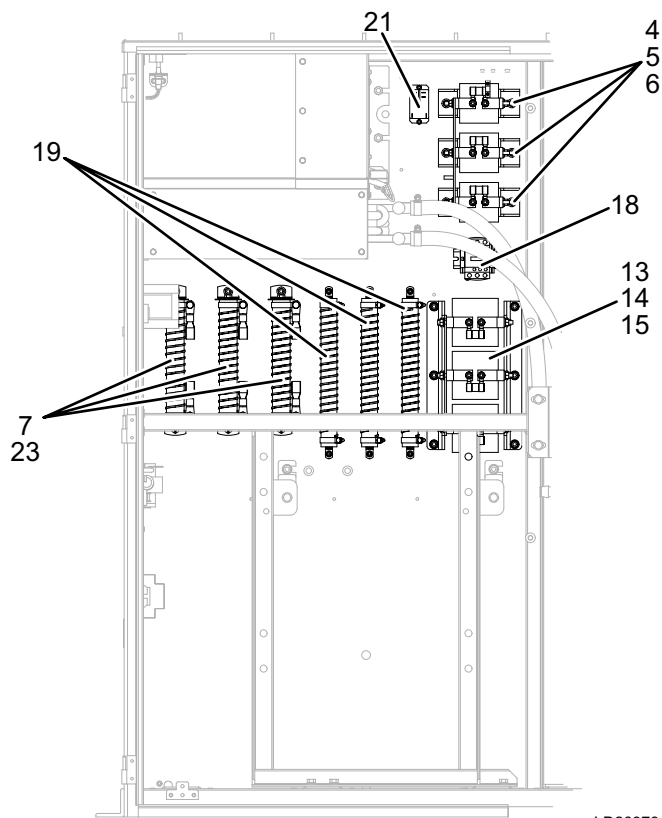
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Circuit Breaker (104 LBs.)	224-38096-001	5162143	1	71
2	Circuit Breaker Handle	026-46955-000	5145917	1	71
3	Circuit Breaker Lug Kit	025-45999-000	5145911	1	71
4	Common Mode Capacitor with Resistor	371-06172-563	5146023	3	72
5	Capacitor used in Assembly 371-06172-563	025-43928-000	740379	3	72
6	Resistor used in Assembly 371-06172-563	025-42616-000	740130	3	72
7	Damping Resistor Kit (includes 3 resistors & bracket)	025-47440-000	5145914	3	72
8	EMI Filter Kit used on CE units	371-06172-620	-	1	71
9	Capacitor Used in EMI Filter	025-39806-000	251765		71
10	Resistor Used in EMI Filter	025-47732-000	5238321		71
11	Ground Lug	025-32835-000	738755	6	73
12	Input Current Transducer (DCCT)	025-42749-000	740134	3	77
13	Input Filter Assembly	371-06172-553	5146019	1	72
14	Capacitor used in Assembly 371-06172-553	025-45338-000	5145907	9	72
15	Resistor used in Assembly 371-06172-553	025-42616-000	740130	3	72
16	Input Inductor (1L & 2L) 640 LBs.	025-45497-000	5145908	1	71
17	Input Voltage Isolator Board	031-02022-000	65064	1	73
18	Pre-Charge Contactor	024-30985-000	735841	1	72
19	Pre-Charge Resistors	025-32502-000	738717	3	72
20	Supply Contactor (71 LBs.)	024-38486-000	5145903	1	71
21	Supply Contactor Pilot Relay	024-30441-000	664298	1	72
22	Voltage Transient Board (Fuses are not included)	031-02453-000	743895	1	73
23	Wiring For Damping Resistors Braided Wire	571-06172-254	5146076	12	72

1278A AMP VARIABLE SPEED DRIVE



LD20976

FIGURE 71 - INPUT COMPONENTS



LD20979

FIGURE 72 - INPUT COMPONENTS

1278A AMP VARIABLE SPEED DRIVE

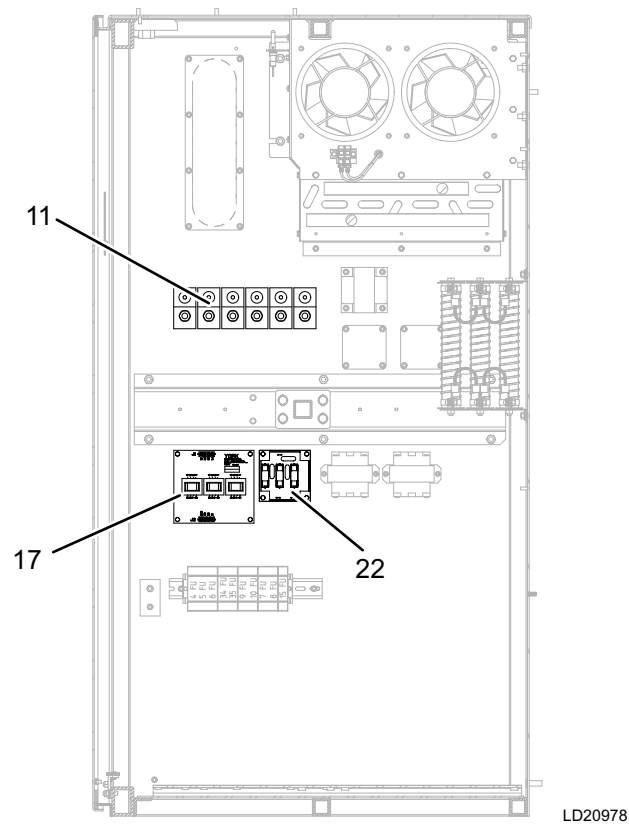
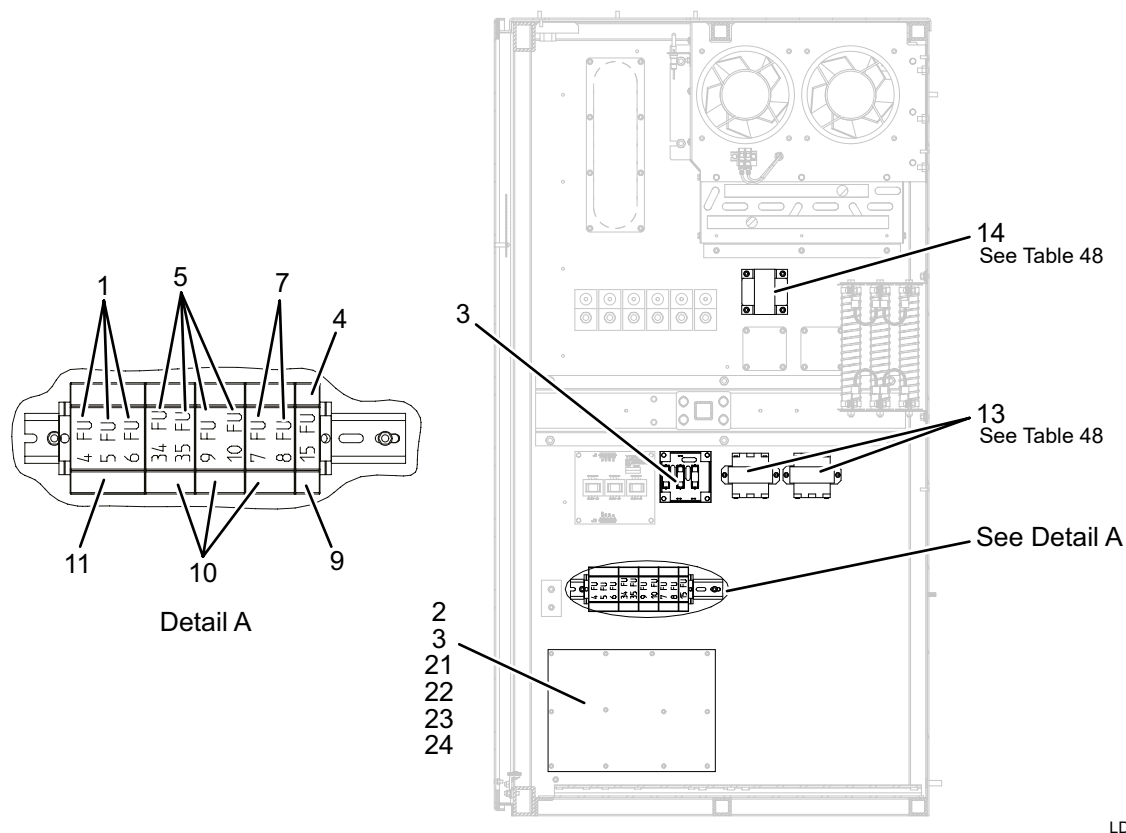


FIGURE 73 - INPUT COMPONENTS

1278A AMP VARIABLE SPEED DRIVE

TABLE 42 - FUSE COMPONENTS

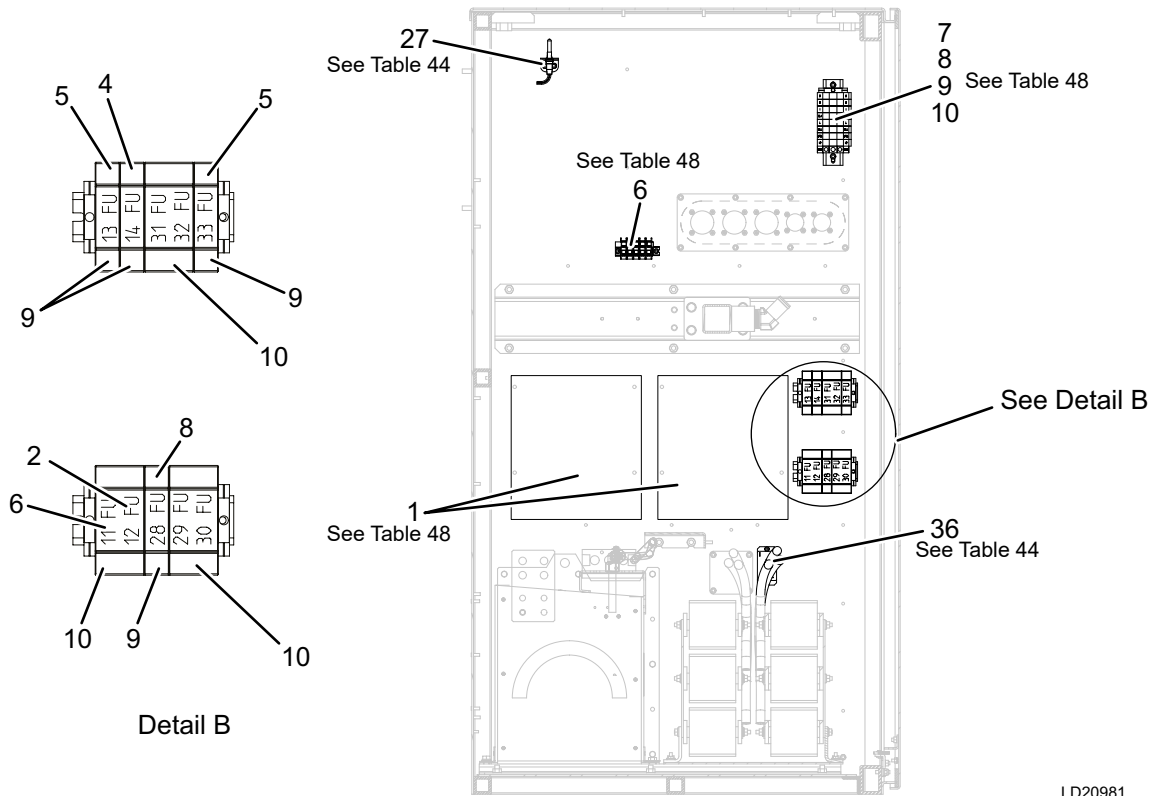
ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Fuse 1 AMP (4FU-6FU & 22FU-24FU)	025-43326-000	740259	6	74,76
2	Fuse 4 AMP (12FU)	025-35911-000	739237	1	75
3	Fuse 5 AMP Voltage Transient Board Fuses (16FU-18FU)	025-38523-000	739590	3	74
4	Fuse 7 AMP (14FU, & 15 FU)	025-35903-000	117821	2	74,75
5	Fuse 10 AMP (9FU, 10FU, 13FU & 33FU-35FU)	025-35905-000	739234	6	74,75
6	Fuse 12 AMP (11FU)	025-35906-000	652698	1	75
7	Fuse 15 AMP (7FU & 8FU)	025-35907-000	117822	2	74
8	Fuse 30 AMP (19FU-21FU, 28FU)	025-35910-000	739236	4	75, 76
9	1 Pole Fuse Holder 30A	025-39951-000	359985	5	74,75
10	2 Pole Fuse Holder	025-43899-000	740368	6	74,75
11	3 Pole Fuse Holder 30A	025-39952-000	343433	3	74,76
12	Input Power Fuse (1FU-3FU set of three)	371-06172-601	5231931	1	71



LD20980

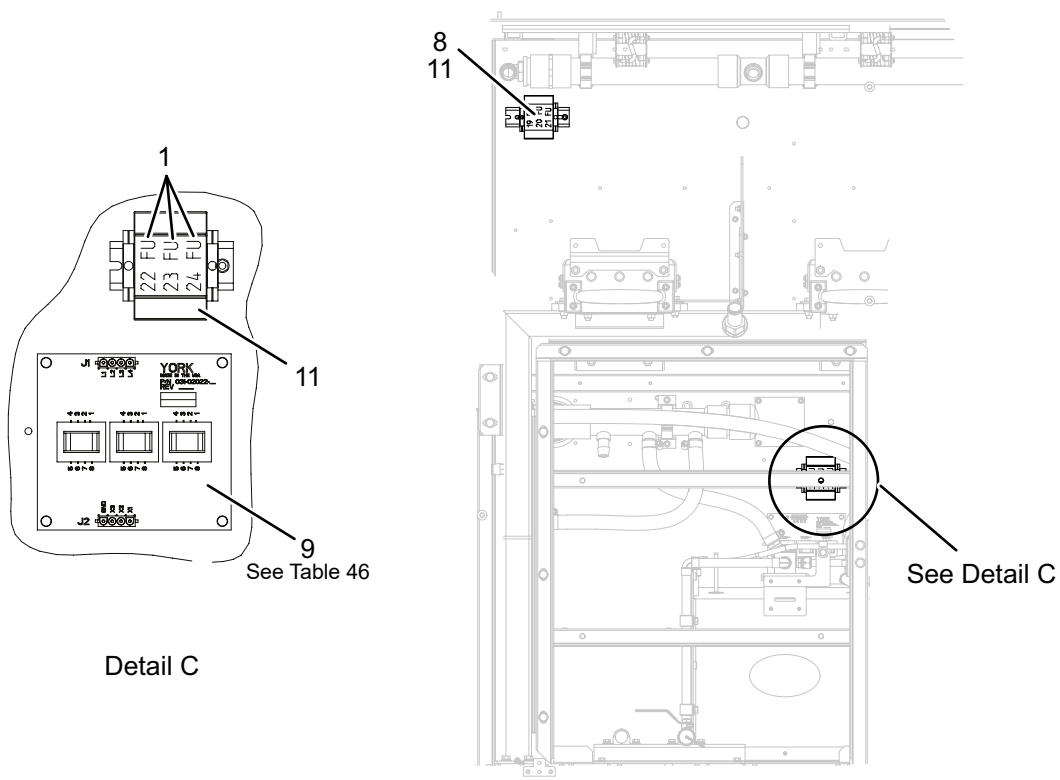
FIGURE 74 - FUSE COMPONENTS

1278A AMP VARIABLE SPEED DRIVE



LD20981

FIGURE 75 - FUSE COMPONENTS



LD20982

FIGURE 76 - FUSE COMPONENTS

1278A AMP VARIABLE SPEED DRIVE

TABLE 43 - DOOR COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Door Ground Strap (for left and right door)	571-05526-241	807110	2	77
2	Door Ground Strap (for center door)	525-32508-001	806677	1	77
N/A	Door Kit Center for CE Requirements (Including all labels and latches)	371-06172-655	-	1	
N/A	Door Kit Center Without CE Requirements (Including all labels and latches)	371-06172-654	-	1	
N/A	Door Kit Left for CE Requirements (Including all labels and latches)	371-06172-653	-	1	
N/A	Door Kit Left Without CE Requirements (Including all labels and latches)	371-06172-651	-	1	
N/A	Door Kit Right for CE Requirements (Including all labels and latches)	371-06172-658	-	1	
N/A	Door Kit Right Without CE Requirements (Including all labels and latches)	371-06172-656	-	1	
3	Door Latch	029-25614-000	743380	12	
4	Door Latching Assembly	371-06172-460	5119471		77
5	Door Stop	029-23420-000	119865	3	77
6	Door Stop Mounting Plate	371-05614-553	840001	3	77
N/A	Label Front Door JCI Logo	035-23036-000	745608	1	

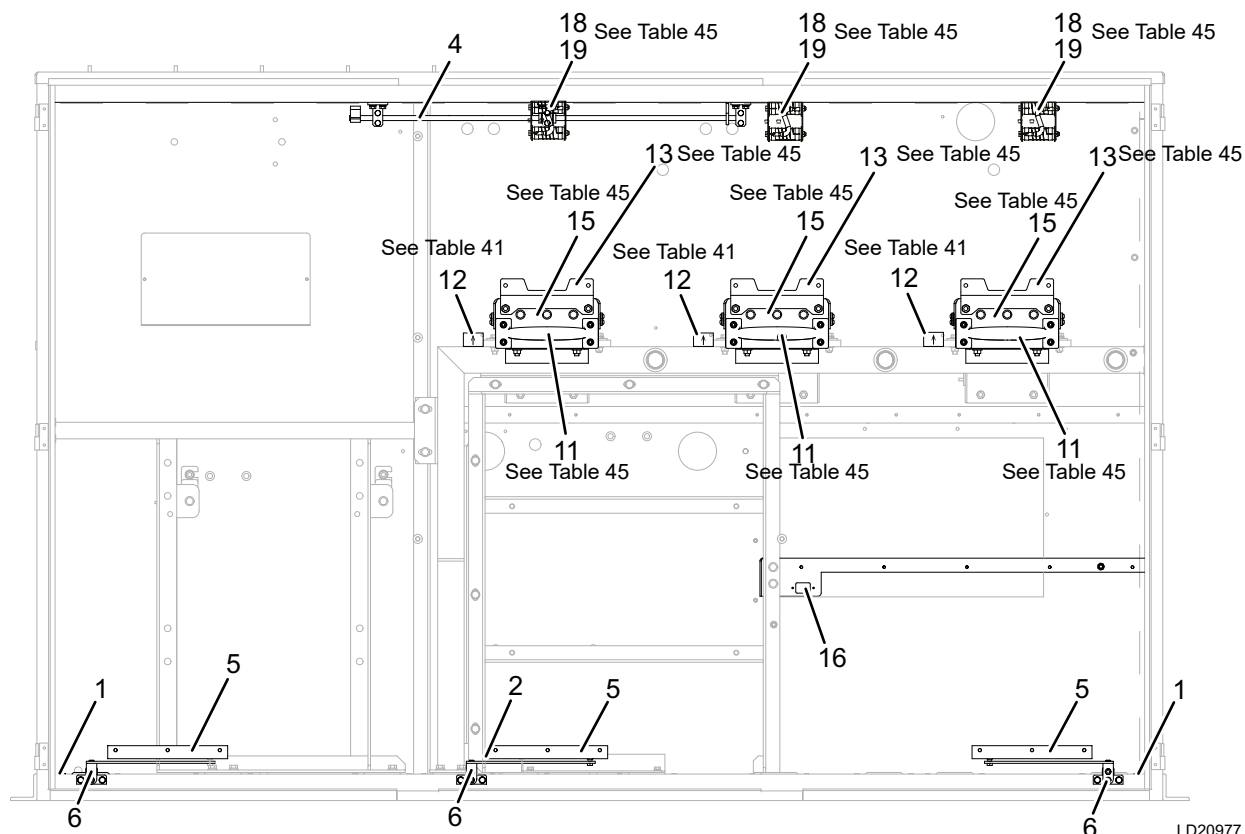


FIGURE 77 - DOOR COMPONENTS

1278A AMP VARIABLE SPEED DRIVE**TABLE 44 - COOLING SYSTEM COMPONENTS**

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Coolant Drain Valve	022-10090-000	692414	1	83
2	Coolant Drain Valve Cap	023-25526-000	839731	1	83
3	Coolant Hose Barb Elbow	028-16005-000	742183	4	81
4	Coolant Hose Barb Straight	023-25889-000	5145899	2	83
5	Coolant Hose Clamp 7/8"	021-17547-000	730066	4	83
6	Coolant Hose Clamp 1"	023-08856-000	617439	15	78,80,81,84
7	Coolant Hose Clamp 1 1/2"	021-32226-000	730939	4	83
8	Coolant Hose Clamp 1 3/4"	021-33561-000	5145892	12	82
39	Coolant Hose 3/4 " ID by the foot	028-16692-000	864411		83
9	Coolant Hose 3/4 " ID by the foot	028-16768-000	1056103		80,81,83
10	Coolant Hose 1 " ID by the foot	028-16767-000	5145929	-	82
11	Coolant Hose 1 1/2" ID by the foot	028-16373-000	742214		83
12	Coolant Hose on Inductor 3/8 "	325-44864-607	1053032	-	79,80
13	Coolant Hose on Inductor 1/2 "	325-44864-618	1053041	-	79,80
14	Coolant Manifold Supply Kit	371-06172-636	-	1	82
15	Coolant Manifold Return Kit	371-06172-637	-	1	81
16	Coolant Manifold Clamp	028-16632-000	913766	3	81,82
17	Coolant Manifold on Inductors 3/8"	325-44864-603	1053030	2	79,80
18	Coolant Manifold on Inductors 1/2"	325-44864-615	1053038	2	79,80
19	Coolant Manifold on Inductors Fittings Elbow 3/8"	325-44864-609	1053034	6	79,80
20	Coolant Manifold on Inductors Fittings Elbow 1/2"	325-44864-616	1053039	6	79,80
21	Coolant Pump	026-47264-000	5145919	2	83
22	Coolant Pump Flange Set	023-25772-000	5145897	2	83
23	Coolant Reservoir Fill Plug	028-16630-000	843247	1	83
24	Coolant Reservoir 4" PVC with Fill Plug Kit	371-06172-671	-	1	83
25	Elbow 45° at Power Assembly	023-25898-000	5145900	3	82
26	Elbow 45° at Heat Exchanger	028-16559-000	839776	1	83
27	Enclosure Temperature Sensor with connector	571-05182-283	807091	2	75,78
28	Flow Restrictor	028-16620-000	839778	1	81
N/A	Inhibitor	013-04129-000	729086	9 gal	-
30	Inductor Drain Valve	022-12690-000	5145893	2	79,80
31	Inductor Nipple	023-26292-900	5238320	2	79,80
32	Internal Cooling Fan	025-32557-000	738735	2	78
33	Internal Cooling Coil	026-45982-000	839767	1	78
34	Power Panel Coolant Return	022-12386-000	913757	1	83
35	Power Panel Coolant Supply	022-12384-000	864392	1	83
36	Relay, Control Fan / Pump	024-30441-000	664298	1	75
37	Shell and Tube Heat Exchanger, 150/300 PSI with Head Gaskets (100 LBs.)	026-46973-000	5145918	1	83
38	Shell and Tube Heat Exchanger Header	371-06172-457	5146002	1	83
N/A	Shell and Tube Heat Exchanger Head Gaskets (set of two)	026-50220-000	-	1	-
40	Shell and Tube Heat Exchanger Nipple	023-18902-000	-		83

1278A AMP VARIABLE SPEED DRIVE

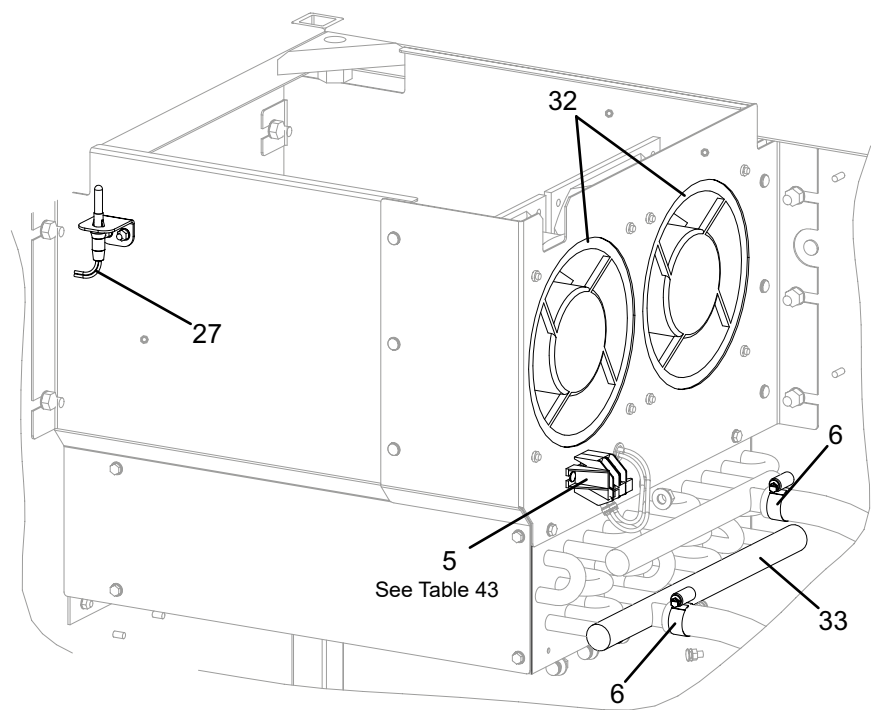


FIGURE 78 - COOLING SYSTEM COMPONENTS

LD21491

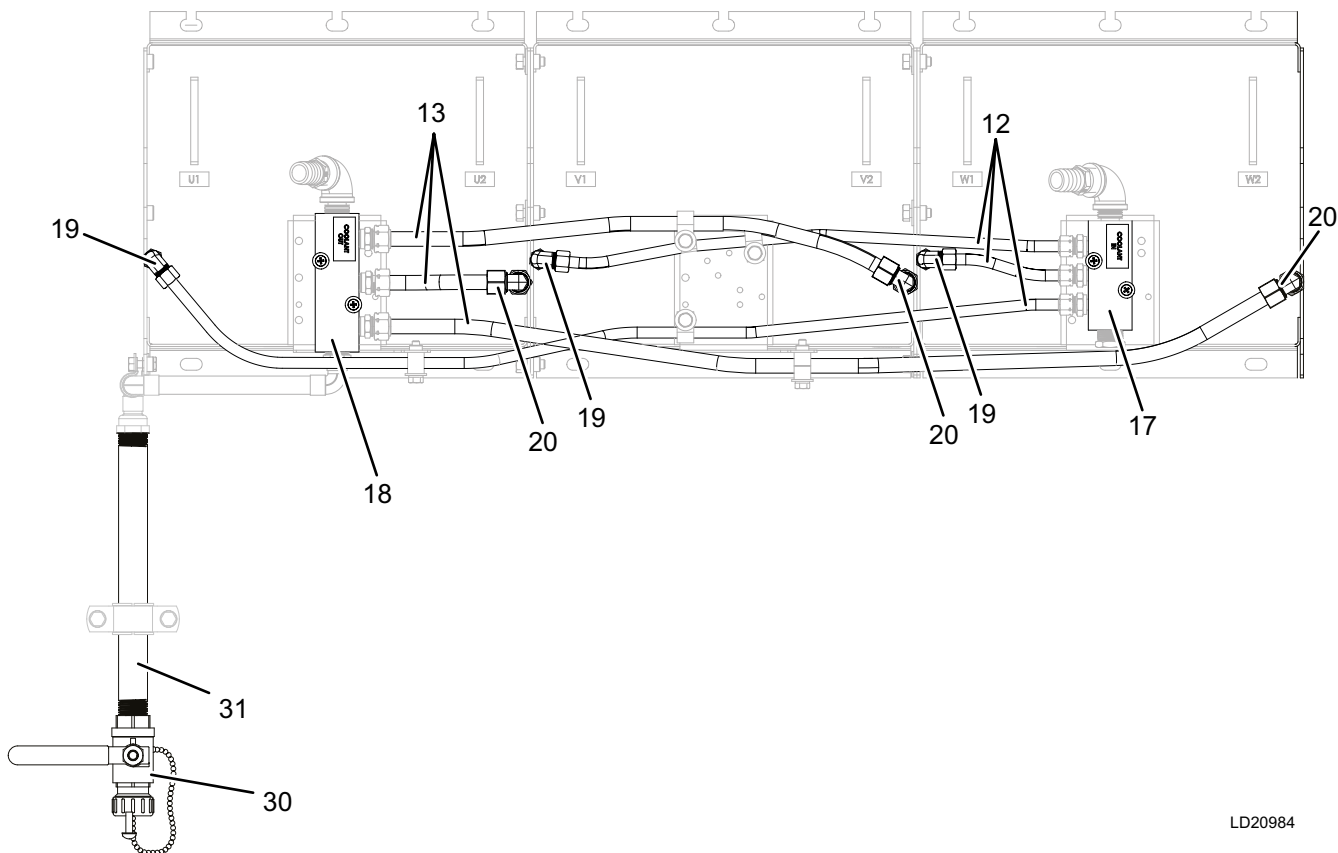
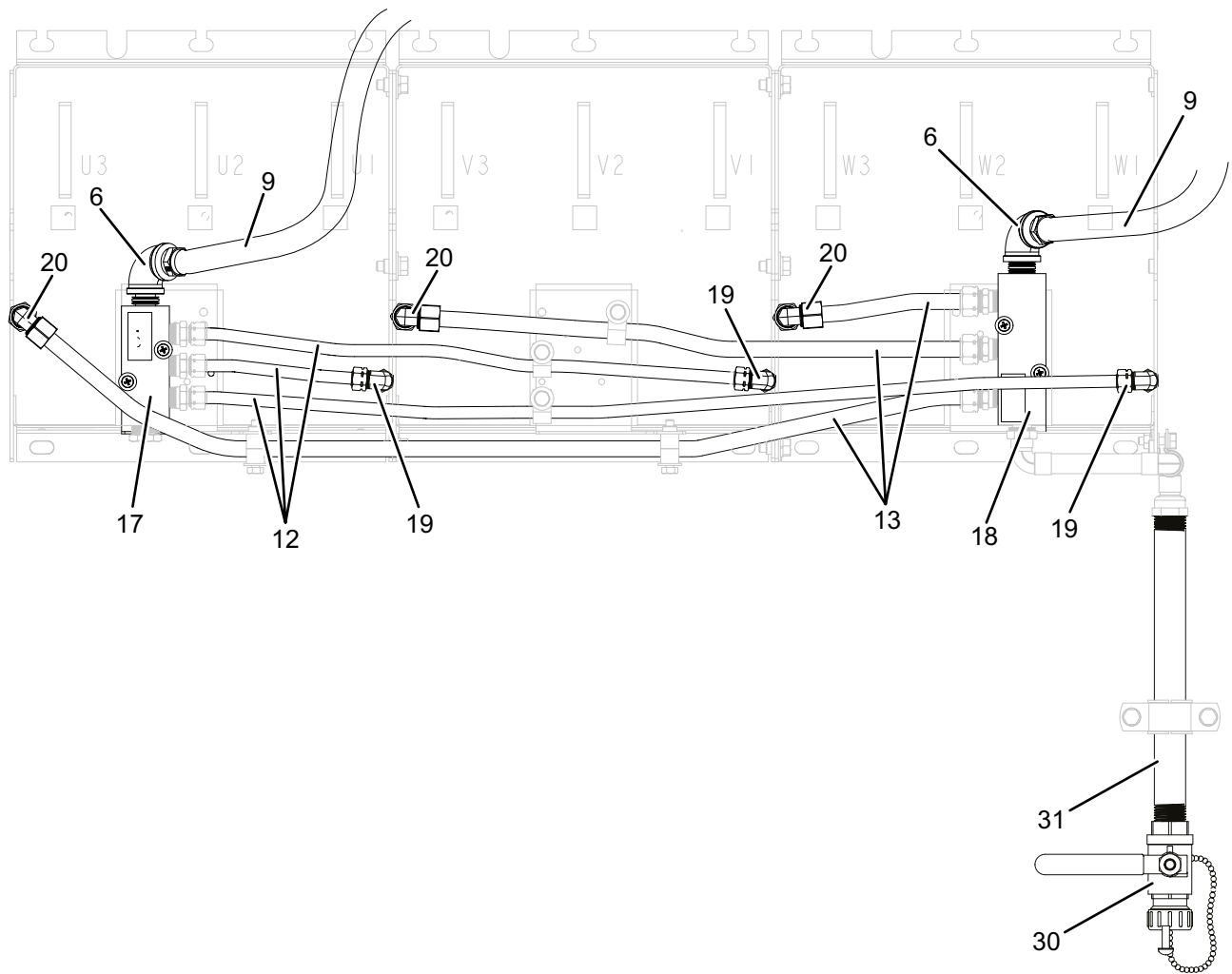


FIGURE 79 - COOLING SYSTEM COMPONENTS (OUTPUT INDUCTOR)

LD20984

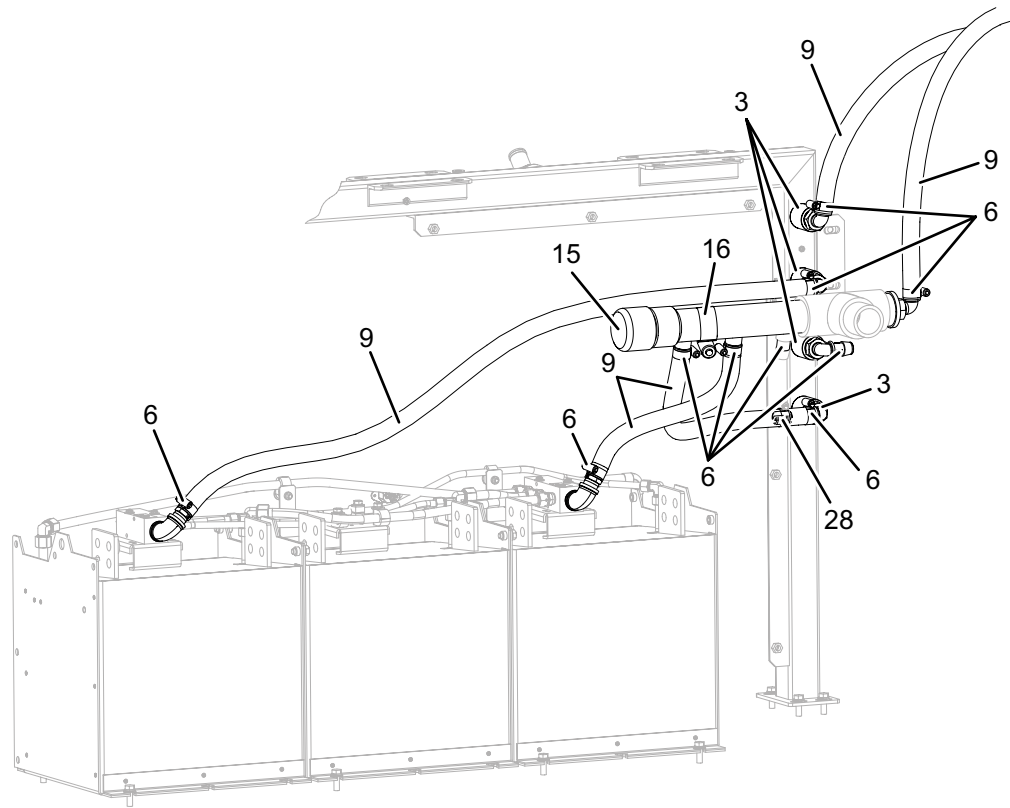
1278A AMP VARIABLE SPEED DRIVE



LD20983

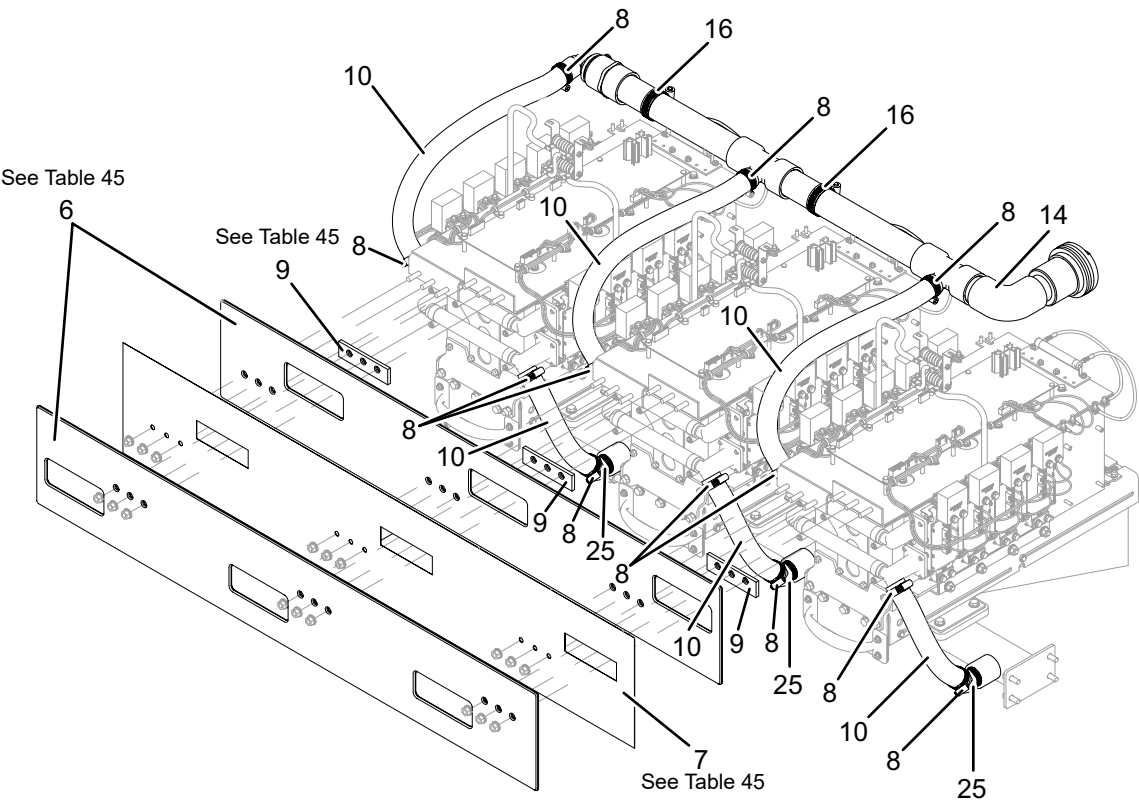
FIGURE 80 - COOLING SYSTEM COMPONENTS (INPUT INDUCTOR)

1278A AMP VARIABLE SPEED DRIVE



LD20986

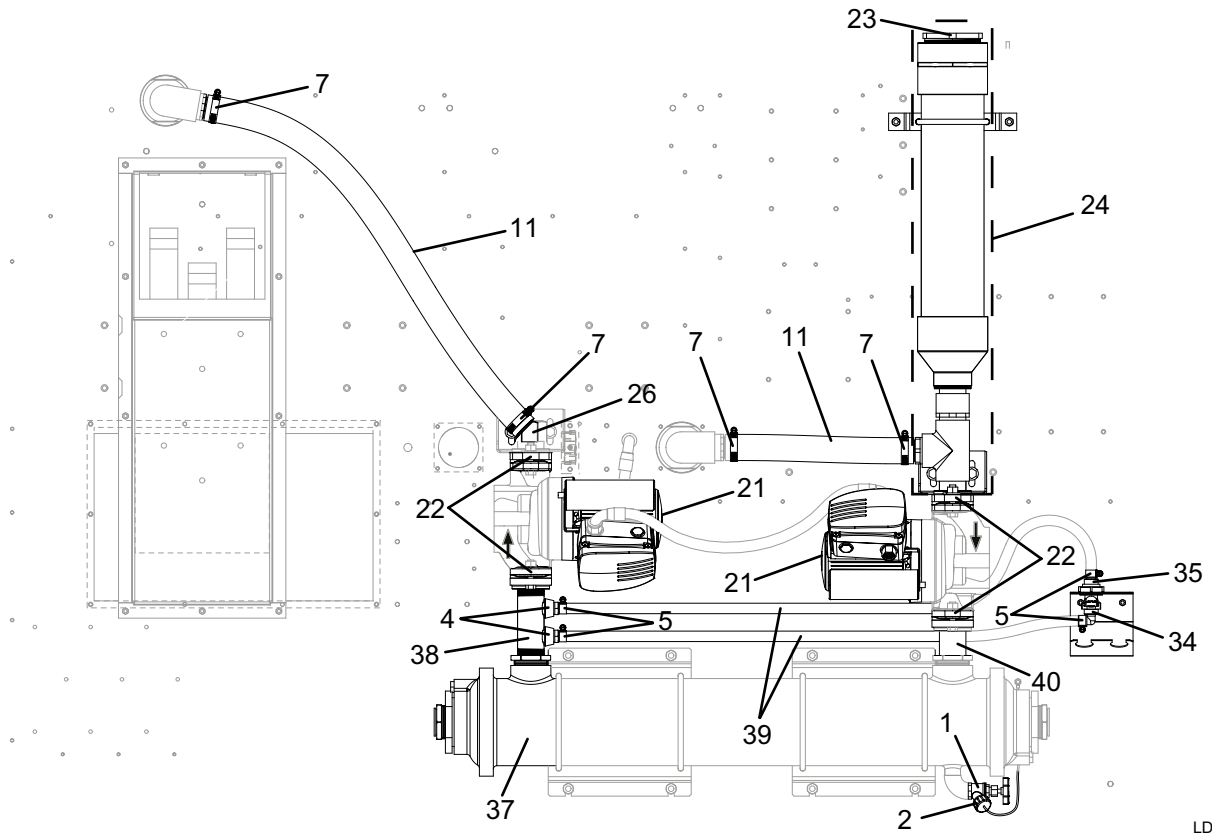
FIGURE 81 - COOLING SYSTEM COMPONENTS



LD21501

FIGURE 82 - COOLING SYSTEM COMPONENTS

1278A AMP VARIABLE SPEED DRIVE



LD21492

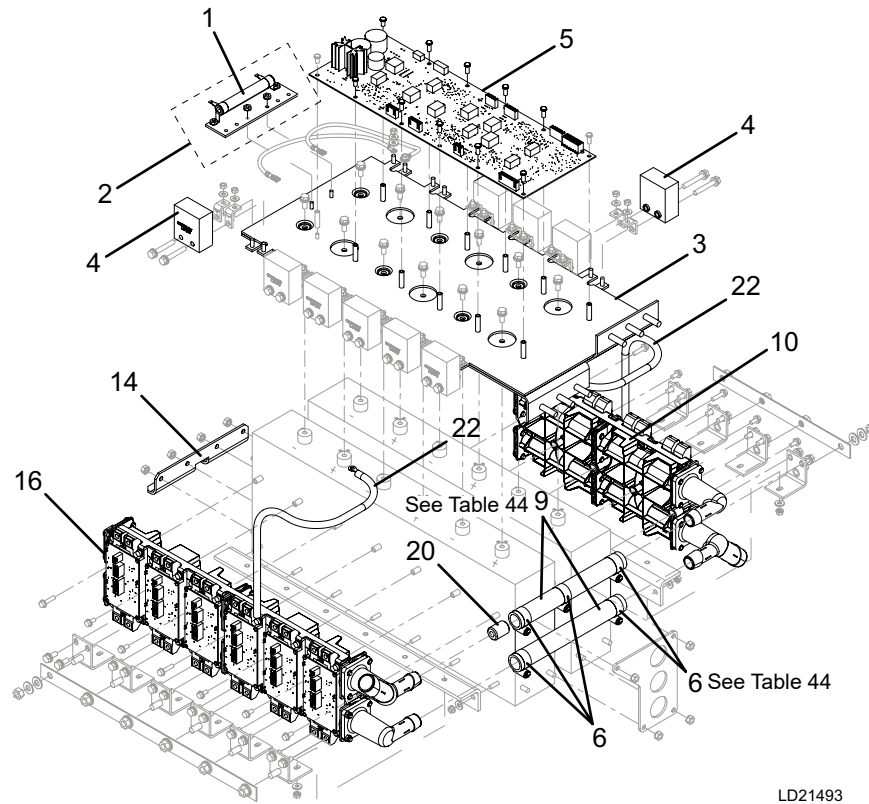
FIGURE 83 - COOLING SYSTEM COMPONENTS (BACK OF VSD)

1278A AMP VARIABLE SPEED DRIVE

TABLE 45 - POWER ASSEMBLY COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Bus Bleeder Resistor (ea.)	025-45188-000	843241	3	84
2	Bus Bleeder Resistor Assembly (ea.) includes resistor and mounting assembly	371-06165-002	873892	3	84
3	Bus Plate Assembly Kit (for power assembly)	371-05558-601	-	3	84
4	Bus Snubber Capacitor (ea.)	025-42835-000	740149	30	84
5	Gate Driver Board	031-02762-002	998197	3	84
6	Interconnecting Bus Bars (26 LBs.)	071-06172-578	5145956	2	82
7	Interconnecting Bus Bars Insulator	071-06172-579	5145957	1	82
9	Interconnecting Bus Bars Spacer	071-06172-577	5145955	3	82
8	Interconnecting Bus Bars kit (includes 3 items above)	371-06172-600	-	1	82
10	Inverter Power Module Kit (Does Not Include Inhibitor)	371-05558-611	5227808	3	84
N/A	Inverter Power Wiring (from Inverter to 3L)	571-06172-240	5146070	1	-
11	Power Unit Handle	029-26547-000	1109105	3	77
13	Power Unit Mounting Foot Front	071-06172-487	5119416	3	77
14	Power Unit Mounting Foot Rear	071-05558-340	5113877	3	84
15	Power Unit Shelf Assembly	371-06172-480	5119474	3	77
16	Rectifier Power Module Kit (Does Not Include Inhibitor)	371-05558-616	5227809	3	84
N/A	Input Power Wiring (from output of supply contactor to rectifier)	571-06172-234	5146069		-
18	Resistor Assembly	025-47447-000	5145915	3	77
19	Resistor Assembly Cable	571-06172-252	5146075	3	77
20	Restrictor	028-16787-000	5113875	3	84
N/A	VSD Rectifier/Inverter Power Unit Complete Kit (Does Not Include Inhibitor) (105 LBs)	371-05558-621	5231930	1	-
22	Wiring Ground	571-05558-243	998300	6	84

1278A AMP VARIABLE SPEED DRIVE



LD21493

FIGURE 84 - POWER ASSEMBLY COMPONENTS

1278A AMP VARIABLE SPEED DRIVE

TABLE 46 - OUTPUT COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Motor Connection Bus Bars	071-06972-000	5119424	3	85
2	Motor Connection Bus Bars Standoff	025-45833-000	5119323	6	85
3	Output Current Transducer (DCCT)	025-42749-000	740134	3	85
4	Output Capacitor Assembly (50 LBs.)	371-06172-538	5146013	1	85
5	Output Capacitor (used in assembly 371-06172-538)	025-45338-000	5145907	24	85
6	Output Capacitor Assembly Bleeder Resistor (used in assembly 371-06172-538)	025-42616-000	740130	3	85
7	Output Capacitor Assembly Power Wire (used in assembly 371-06172-538)	571-06172-250	5146074	1	85
8	Output Inductor Assembly (496 LBs.)	025-45311-000	740314	1	85
9	Output Voltage Isolator Board	031-02022-001	743845	1	76

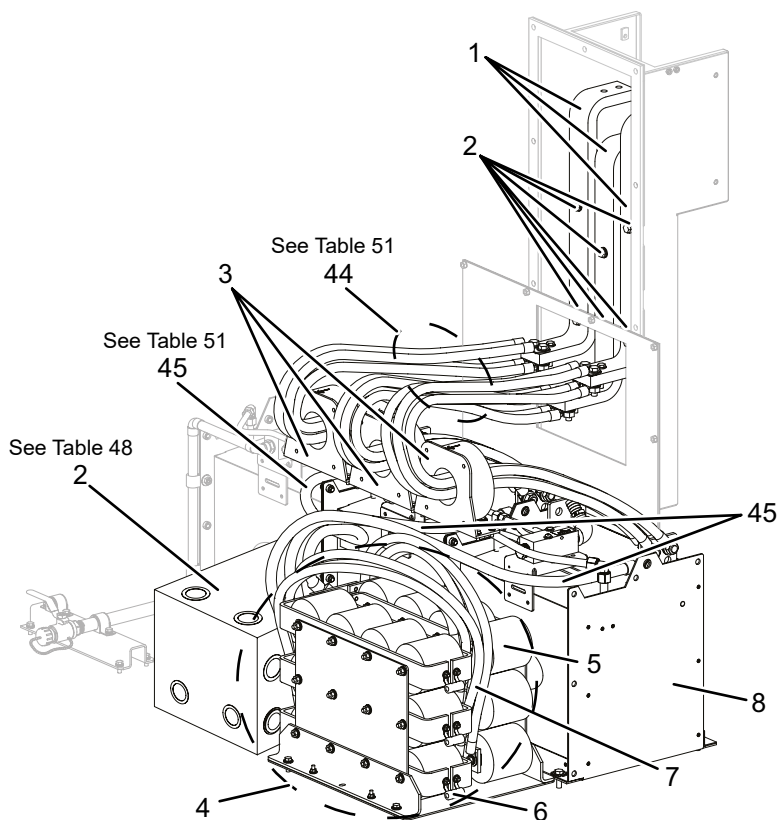


FIGURE 85 - OUTPUT COMPONENTS

1278A AMP VARIABLE SPEED DRIVE

TABLE 47 - DRIVE LOGIC BOARD AND COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
21	PROM Chip U35 (for 031-02911-00X board)	031-03048-001	744215	1	74
22	PROM Chip U38 (for 031-02911-00X board)	031-03049-001	744216	1	74
23	U66 485 Communications Driver	031-02074-000	743866	1	74
24	VSD Logic Board Kit (includes all software)	331-02911-605	5227806		74
3	BRAM Chip U36	031-02482-000	5323419	1	74
2	BRAM Chip U37	031-02483-000	5323418	1	74

TABLE 48 - MISCELLANEOUS COMPONENTS

ITEM NUMBER	DESCRIPTION	YORK PART NUMBER	SAP	QUANTITY	FIGURE
1	Control Transformer 460 VAC 60Hz 2KVA	025-29627-002	117496	2	78
	Control Transformer 380/400/415 VAC 50 Hz 380 VAC 60 Hz 2KVA	025-29627-003	738308	2	78
	Control Transformer 400 VAC 60Hz 2KVA	025-40114-005	739754	2	78
2	Control Transformer 460 VAC 60 Hz 3KVA (25 LBs.)	025-31499-000	738608	1	88
	Control Transformer 380/400/415 VAC 50Hz 380 VAC 60 Hz 3KVA (25 LBs.)	025-32983-000	117599	1	
	Control Transformer 400 VAC 60 Hz 3KVA (25 LBs.)	025-40114-006	739755	1	
13	Control Transformer 24 VAC 75 VA (3T/4T)	025-27911-000	1312	2	77
14	Control Transformer 175 VA (5T)	025-43339-000	740269	1	77
5	Terminal Block 2-pole	025-44853-002	839752	1	81
6	Terminal Block 5-pole	025-44853-005	839755	1	78
7	Terminal Block Assembly 9-pole	025-45731-000	5145909	1	78
8	Terminal Block 1-pole used in part number 025-45731-000	025-31476-000	618185	8	78
9	Ground Terminal Block used in part number 025-45731-000	025-31444-000	618180	1	78
10	End Clamp used in part number 025-45731-000	025-29189-000	117471	1	78
16	120 VAC Power Plug	025-47414-000	5000684	1	80

1278A AMP VARIABLE SPEED DRIVE

TABLE 49 - WIRING HARNESSES AND CONNECTORS

BOARD NAME	BOARD PART NUMBER	CONNECTOR POSITION	HOUSING PART NUMBER (SAP)	PIN PART NUMBER (SAP)
Line Voltage Isolator Board	031-02022-000	J1	025-19671-000 (737534)	025-22215-000 (62701)
Line Voltage Isolator Board	031-02022-000	J2	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J1	025-21417-000 (737658)	025-22215-000 (62701)
Output Voltage Isolator Board	031-02022-001	J2	025-21417-000 (737658)	025-22215-000 (62701)
Input DC Current Transducer	-	-	025-43356-000 (740274)	025-43357-000 (740275)
Input DC Current Transducer Complete Cable			Assembly # 571-06172-204 (5146056)	
Output DC Current Transducer	-	-	025-43356-000 (740247)	025-43357-000 (740275)
Output DC Current Transducer Complete Cable			Assembly # 571-06172-205 (5146057)	
VSD Logic Board	031-02911-005	J1	025-21756-000 (737664)	025-22215-000 (62701)
VSD Logic Board	031-02911-005	J2	025-42614-000 (740129)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J3	025-35964-000 (739253)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J4	025-28384-000 (737920)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J5	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J6	025-28382-000 (737916)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J7	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J8 and J11	Assembly # 571-06172-201 (5146053)	N/A
VSD Logic Board	031-02911-005	J9 and J12	Assembly # 571-06172-202 (5146054)	N/A
VSD Logic Board	031-02911-005	J10 and J13	Assembly # 571-06172-203 (5146055)	N/A
VSD Logic Board	031-02911-005	J14	025-28959-000 (738246)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J15	025-29130-000 (738262)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J16	025-19671-000 (737534)	025-22215-000 (62701)

1278A AMP VARIABLE SPEED DRIVE

TABLE 49 - WIRING HARNESSES AND CONNECTORS (CONT'D)

BOARD NAME	BOARD PART NUMBER	CONNECTOR POSITION	HOUSING PART NUMBER (SAP)	PIN PART NUMBER (SAP)
VSD Logic Board	031-02911-005	J17	025-21136-000 (737636)	025-19674-000 (737537)
VSD Logic Board	031-02911-005	J18	Assembly # 571-06172-206 (5146058)	N/A
VSD Logic Board	031-02911-005	J19	025-21137-000 (737637)	025-19674-000 (737537)
VSD Logic Board	031-02911-005	J25	025-35966-000 (550505)	025-28386-000 (737925)
VSD Logic Board	031-02911-005	J36	Assembly # 571-06172-208 (5146060)	N/A
IGBT Gate Driver Board	031-02762-002	J1	025-21137-000 (737637)	025-19674-000 (737537)
IGBT Gate Driver Board	031-02762-002	J2	025-42614-000 (740129)	025-28386-000 (737925)
IGBT Gate Driver Board	031-02762-002	J3	025-19671-000 (737534)	025-19673-000 (2156)
IGBT Gate Driver Board	031-02762-002	J4	025-21159-000 (737640)	025-2215-000 (62701)
IGBT Gate Driver Board	031-02762-002	J5 and J6	Assembly # 571-05558-201 (998293)	
IGBT Gate Driver Board	031-02762-002	J7 and J8	Assembly # 571-05558-211 (998294)	
IGBT Gate Driver Board	031-02762-002	J11	Assembly # 571-05558-221 (998296)	
IGBT Gate Driver Board	031-02762-002	J10	Assembly # 571-05558-231 (998298)	
Ambient Temperature at Sensor	-	-	025-29130-000 (738262)	025-28386-000 (737925)
Ambient Temperature at Cable	-	-	025-32564-000 (738737)	025-30999-000 (738540)

1278A AMP VARIABLE SPEED DRIVE

TABLE 50 - CPC CONNECTORS

CPC CONNECTORS	HOUSING PART NUMBER (SAP)	PIN PART NUMBER (SAP)	COMPLETE CABLE (SAP)
Magnet Bearing Controller	025-37873-000 (739490)	025-40463-000 (873883)	571-06172-208 (5146060)
Motor Monitoring	025-44974-000 (828162)	025-40463-000 (873883)	571-06172-207 (5146059)
OptiView Communication	025-37873-000 (739490)	025-40463-000 (873883)	571-06172-206 (5146058)
OptiView Power	025-44974-000 (828162)	025-37875-000 (739491)	N/A
UPS	025-44974-000 (828162)	025-37875-000 (739491)	N/A

TABLE 51 - POWER WIRING (ALL POWER WIRING KITS INCLUDE WIRE FOR ALL THREE PHASES)

ITEM NUMBER	SECTION	YORK PART NUMBER	SAP	FIGURE
40	Input Power Wiring (from input power fuses to input of 1L/2L)	571-06172-224	5146065	74
41	Input Power Wiring (from output of 1L/2L to input of supply contactor)	571-06172-229	5146067	74
N/A	Input Power Wiring (from output of supply contactor to rectifier)	571-06172-234	5146069	-
N/A	Inverter Power Wiring (from Inverter to 3L)	571-06172-240	5146070	-
44	Output Power Wiring (from 3L to motor bus bar connections)	571-06172-245	5146072	88
45	Output Power Wiring (from 3L to the output capacitor assy.)	571-06172-248	5146073	88

NOTES



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