

	MEDIUM VOLTAGE SOLID STATE STARTER	
RENEWAL PARTS	New Release	Form 160.00-RP5 (706)

**MEDIUM VOLTAGE 4160V & 2300V, 60Hz & 3300V, 50Hz
SOLID STATE STARTERS for YK and YT CHILLER APPLICATIONS**

CURRENT-GUARD® STARTER



LD11477

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, oils, 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 operating/service personnel. It is expected that this individual possesses 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 this document and any referenced materials. This individual shall also be familiar with and comply with all applicable governmental standards and regulations pertaining to the task in question.



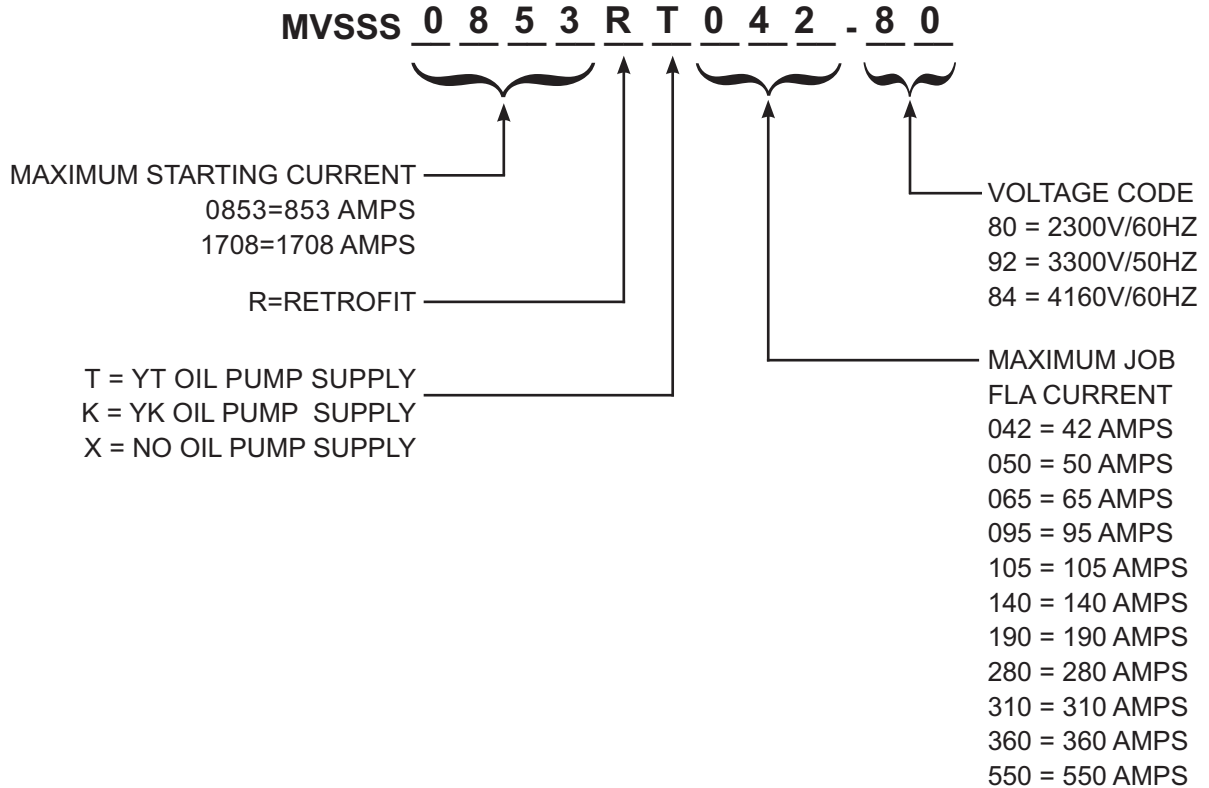
External wiring, unless specified as an optional connection in the manufacturer's product line, is NOT to be connected inside the equipment cabinet. Devices such as relays, switches, transducers and controls may NOT be installed inside the unit. NO external wiring is allowed to be run through the unit. All wiring must be in accordance with YORK's published specifications and must be performed ONLY by qualified YORK personnel. YORK will not be responsible for damages/problems resulting from improper connections to the controls or application of improper control signals. Failure to follow this will void the manufacturer's warranty and cause serious damage to property or injury to persons.

This instruction lists the renewal parts of the YORK Medium Voltage Solid State Starter (MV-SSS). Qualification in this case requires that the individual hold a certificate, proving satisfactory completion of formal training on proper procedures and safety requirements for working on equipment in the medium voltage (600 VAC to 7500 VAC) class. The qualified individual furthermore is to be knowledgeable of, and adhere to, all safe work practices as required by NEC, OSHA, and NFPA70e. Because available fault current is determined largely due to sizing of the upstream transformers, wiring, and protective devices - available fault current and arc-flash hazard levels must be determined by personnel responsible for the electrical systems within the facility where this product is installed. Proper personal protective equipment (PPE) is to be utilized where and when required. This entire publication is to be read thoroughly before servicing this product. Proper lock-out and tag-out procedures are mandatory!



Under no circumstances should any live testing be performed with the main cabinet doors open, exposing medium voltage components! Only the low-voltage access door is permitted to be open during live testing or operation of the unit. The energized safe approach distance for this product is to be determined by NFPA70e. Non-qualified personnel are not to be present within this boundary during energizing, de-energizing, or energized testing (even with cabinet doors closed) on this starter!

UNIT MODEL NUMBER NOMENCLATURE



36" CABINET								
UNIT MODEL REFERENCE CHART								
MODEL #	MAX. FLA	MAX. LRA	45% LRA	CT 1, 2, 3	FU 1, 2, 3	POWER STACK ASSEMBLY P/N		
						2300 VAC	3300 VAC	4160 VAC
MVSSS0853R_042-V	42	1896	853	864:1	3R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_050-V	50	1896	853	864:1	4R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_065-V	65	1896	853	864:1	6R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_095-V	95	1896	853	864:1	9R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_105-V	105	1896	853	864:1	9R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_140-V	140	1896	853	864:1	12R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_190-V	190	1896	853	864:1	12R	031-02578-000	031-02578-000	031-02580-000
MVSSS0853R_280-V	280	1896	853	2640:1	18R	031-02581-000	031-02581-000	031-02583-000
MVSSS0853R_310-V	310	1896	853	2640:1	24R	031-02581-000	031-02581-000	031-02583-000
MVSSS0853R_360-V	360	1896	853	2640:1	24R	031-02581-000	031-02581-000	031-02583-000
MVSSS1708R_360-V	360	3796	1708	2640:1	24R	031-02581-000	031-02581-000	031-02583-000

72" CABINET								
UNIT MODEL REFERENCE CHART								
MODEL #	MAX. FLA	MAX. LRA	45% LRA	CT 1, 2, 3	FU 1, 2, 3	POWER STACK ASSEMBLY P/N		
						2300 VAC	3300 VAC	4160 VAC
MVSSS1708R_550-V	550	3796	1708	2640:1	38R	031-02581-000	031-02581-000	031-02583-000

LIST OF TABLES

TABLE 1 – EXTERIOR COMPONENTS5

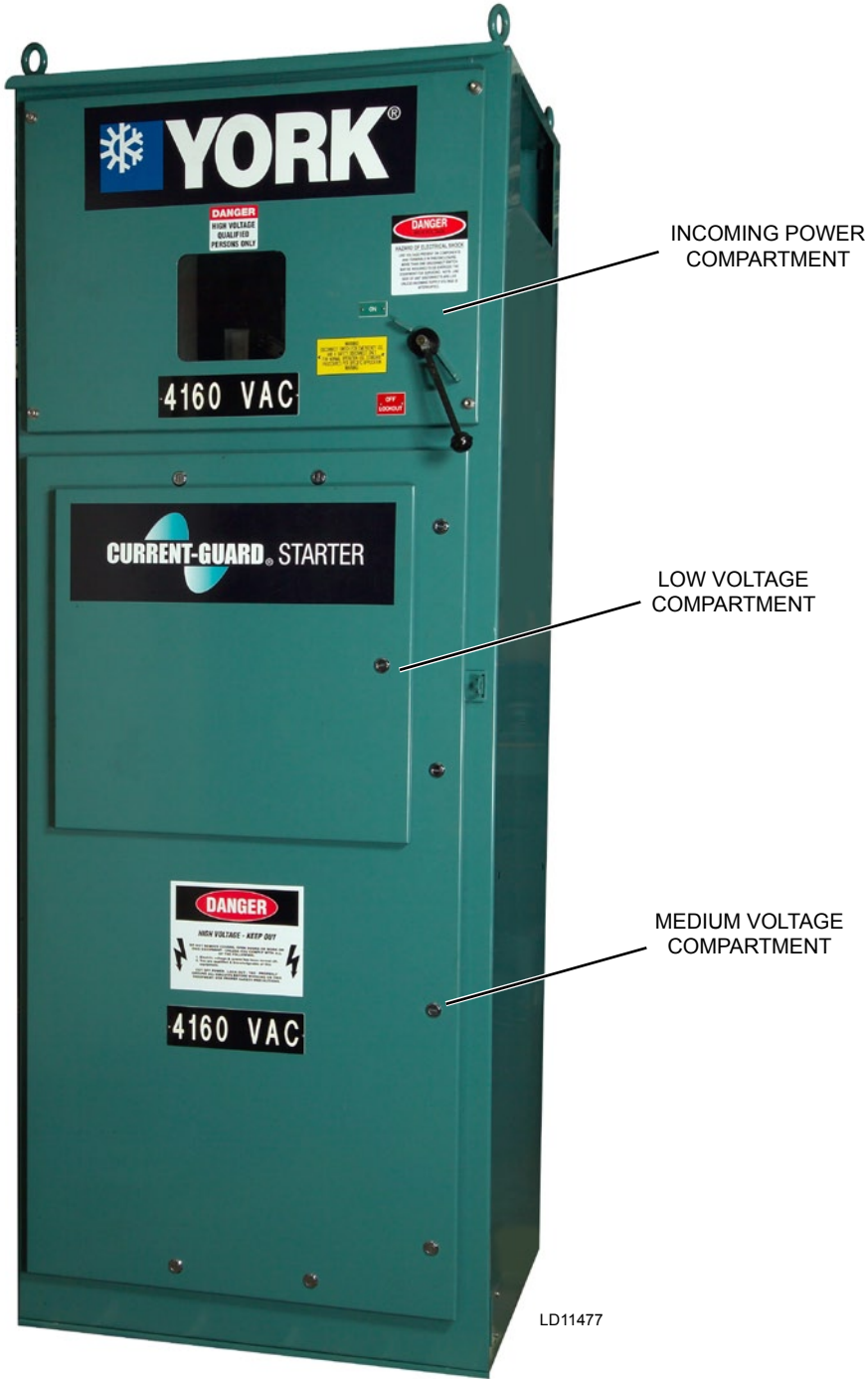
TABLE 2 – INCOMING POWER COMPARTMENT6

TABLE 3 – LOW VOLTAGE COMPARTMENT7

TABLE 4 – MEDIUM VOLTAGE COMPARTMENT8

TABLE 5 – FUSES10

TABLE 6 – ACCESSORIES10



36" CABINET SHOWN

TABLE 1 – EXTERIOR COMPONENTS

ITEM	DESCRIPTION	YORK P/N
1	400A DISCONNECT HANDLE ASSY	031-02595-000
2	600A DISCONNECT HANDLE ASSY	031-02597-000
3	LEXAN DISCONNECT VIEWING WINDOW	031-02594-000

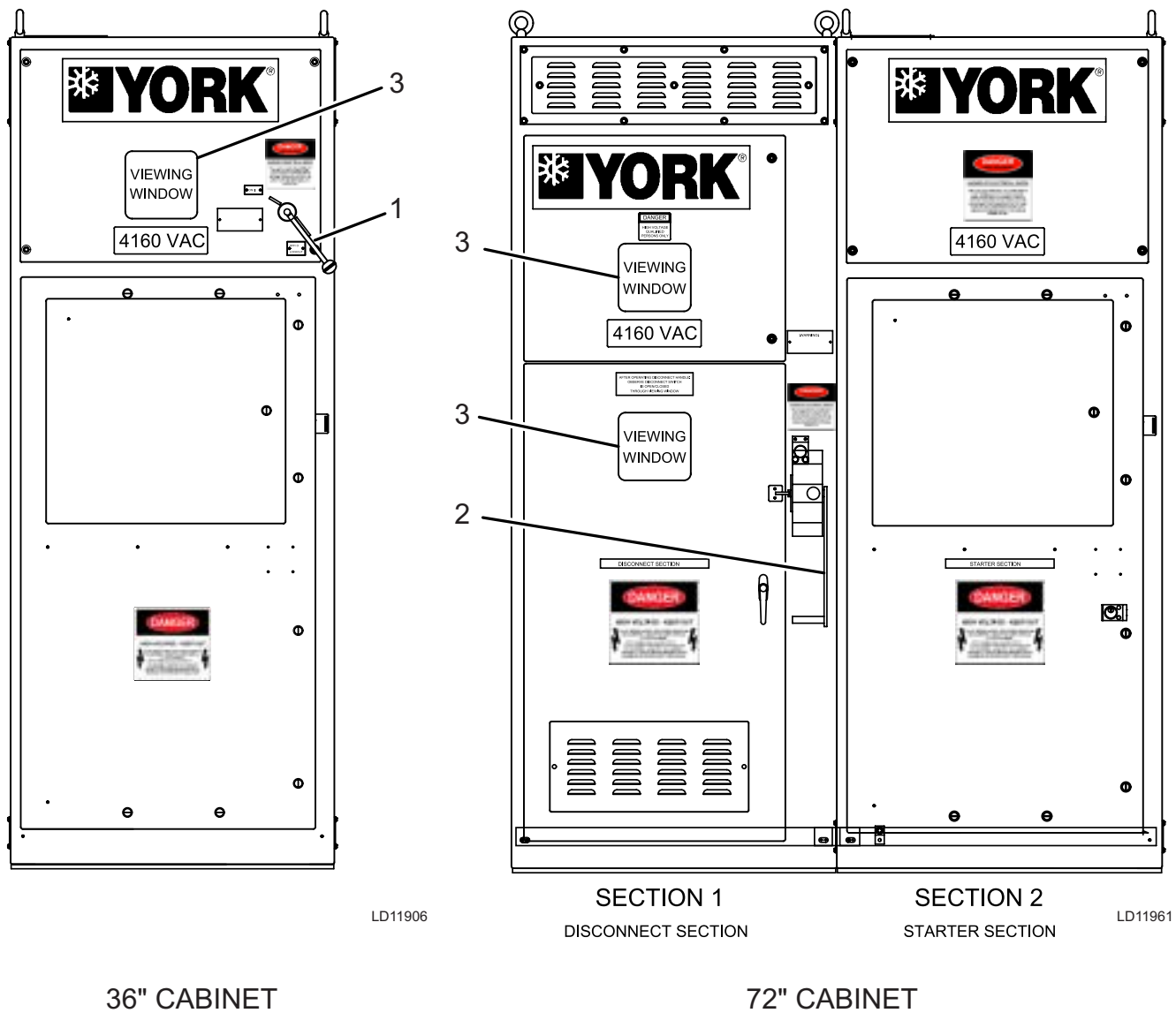


FIG. 1 – EXTERIOR COMPONENTS

TABLE 2 – INCOMING POWER COMPARTMENT

ITEM	DESCRIPTION	YORK P/N
1	400A, 5KV DISCONNECT SWITCH	031-02589-000
2	600A, 5KV DISCONNECT SWITCH	031-02590-000
3	400A, DISCONNECT GUILLOTINE ASSY	031-02596-000
4	INCOMING TERMINATION BUS	031-02592-000
5	400A, DISCONNECT AUX SWITCH	031-02598-000
*	600A, DISCONNECT AUX SWITCH	031-02599-000

* Items are NOT shown.

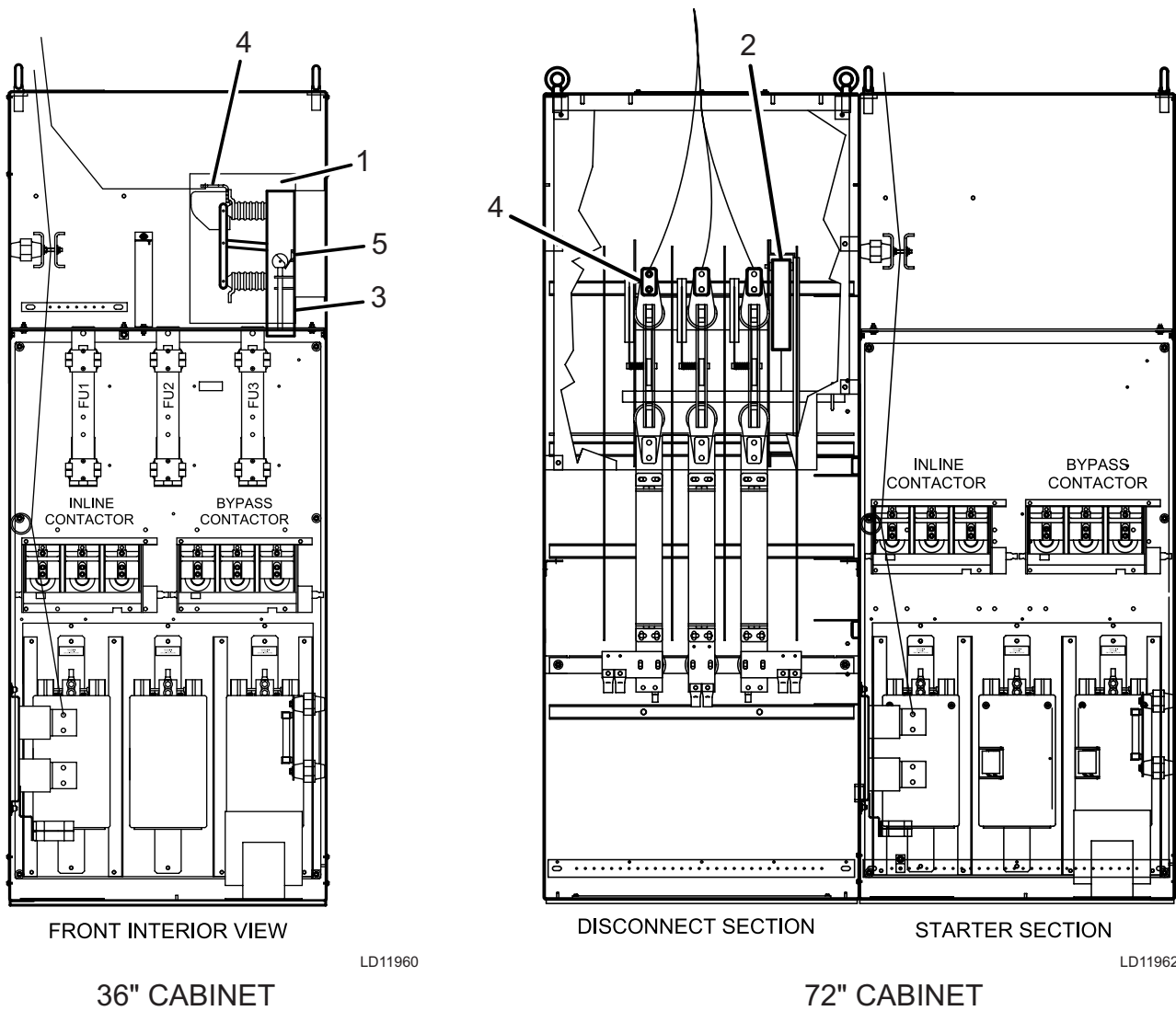


FIG. 2 – INCOMING POWER COMPARTMENT

TABLE 3 – LOW VOLTAGE COMPARTMENT

ITEM	DESCRIPTION	YORK P/N
1	CONTROLLER BOARD	031-02574-000
2	FIBER OPTIC TRANSMITTER BOARD	031-02576-000
3	TEST SWITCH	031-02617-000
4	TEST PLUG, 115VAC, 15A	031-02618-000

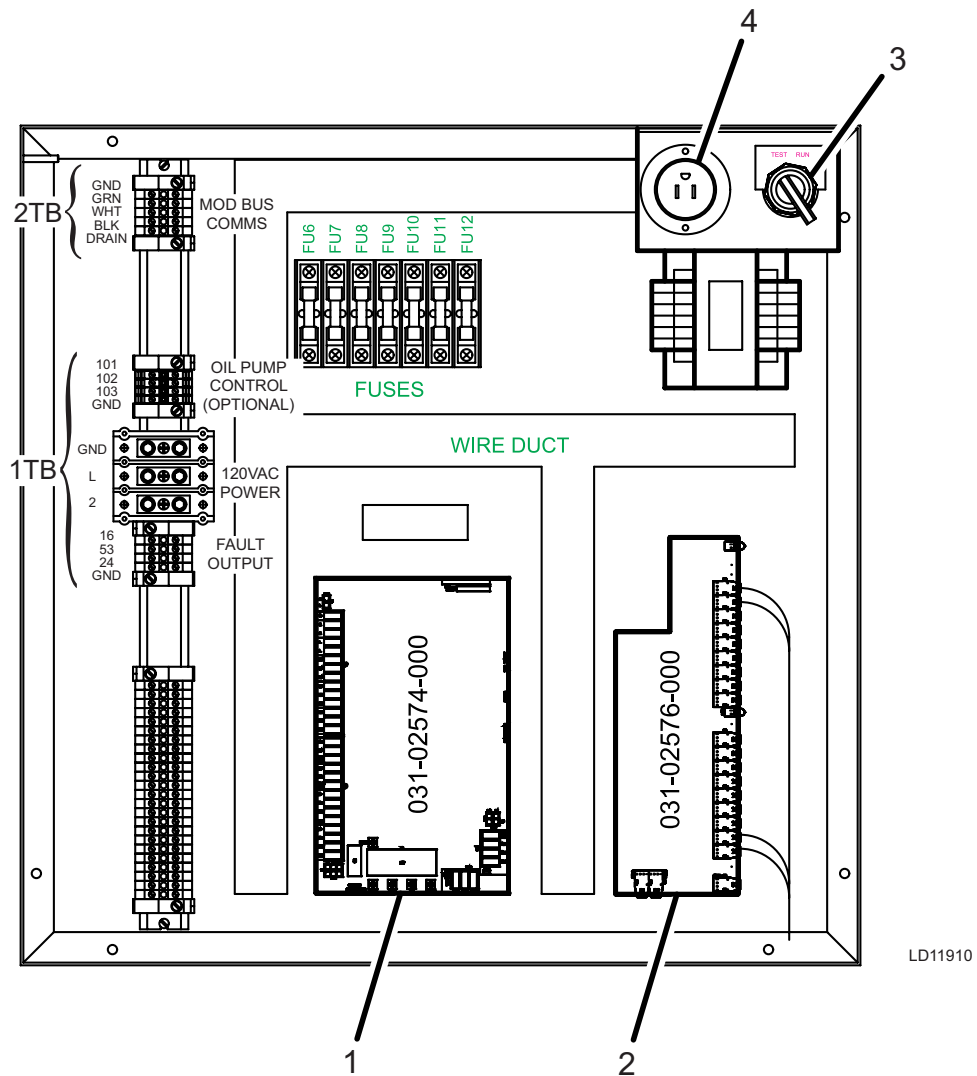


FIG. 3 – LOW VOLTAGE COMPARTMENT

TABLE 4 – MEDIUM VOLTAGE COMPARTMENT

ITEM	DESCRIPTION	YORK P/N
1	GATE DRIVER BOARD	031-02575-000
2	7.2KV RESISTOR DIVIDER BOARD	031-02577-000
3	POWER STACK ASSEMBLY, 2.3KV / 3.3KV, 208A	031-02578-000
3	POWER STACK ASSEMBLY, 5KV, 208A	031-02580-000
4	POWER STACK ASSEMBLY, 2.3KV / 3.3KV, 415A	031-02581-000
4	POWER STACK ASSEMBLY, 5KV, 415A	031-02583-000
5	VACUUM CONTACTOR, 400A, 5KV (IN-LINE OR BYPASS)	031-02584-000
6	VACUUM CONTACTOR, 720A, 5KV (IN-LINE OR BYPASS)	031-02585-000
7	CONTROL TRANSFORMER, 3KVA, 2300V-120V, 60HZ, 1PH	031-02619-000
7	CONTROL TRANSFORMER, 3KVA, 3300V-120V, 50HZ, 1PH	031-02620-000
7	CONTROL TRANSFORMER, 3KVA, 4160V-120V, 60HZ, 1PH	031-02586-000
8	CURRENT TRANSFORMER, 864:1	031-02587-000
8	CURRENT TRANSFORMER, 2640:1	031-02588-000
9	R-FUSE CLIP ASSEMBLY, 1 PH	031-02591-000
10	OUTGOING TERMINATION BUS	031-02593-000

NOTES:

Refer to Unit Model Reference Chart located on page 3 for proper Power Stack Assembly.

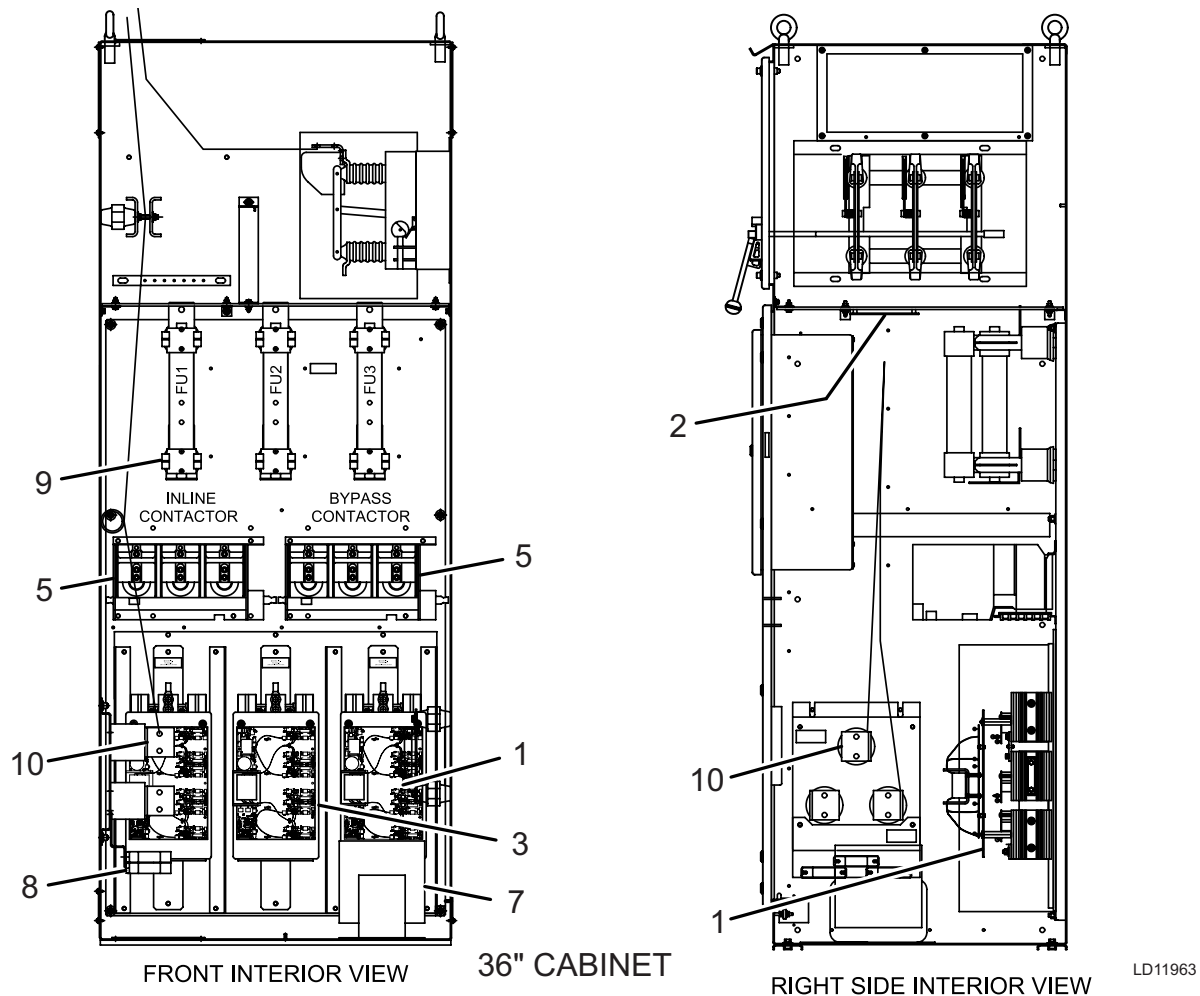


FIG. 4 – MEDIUM VOLTAGE COMPARTMENT

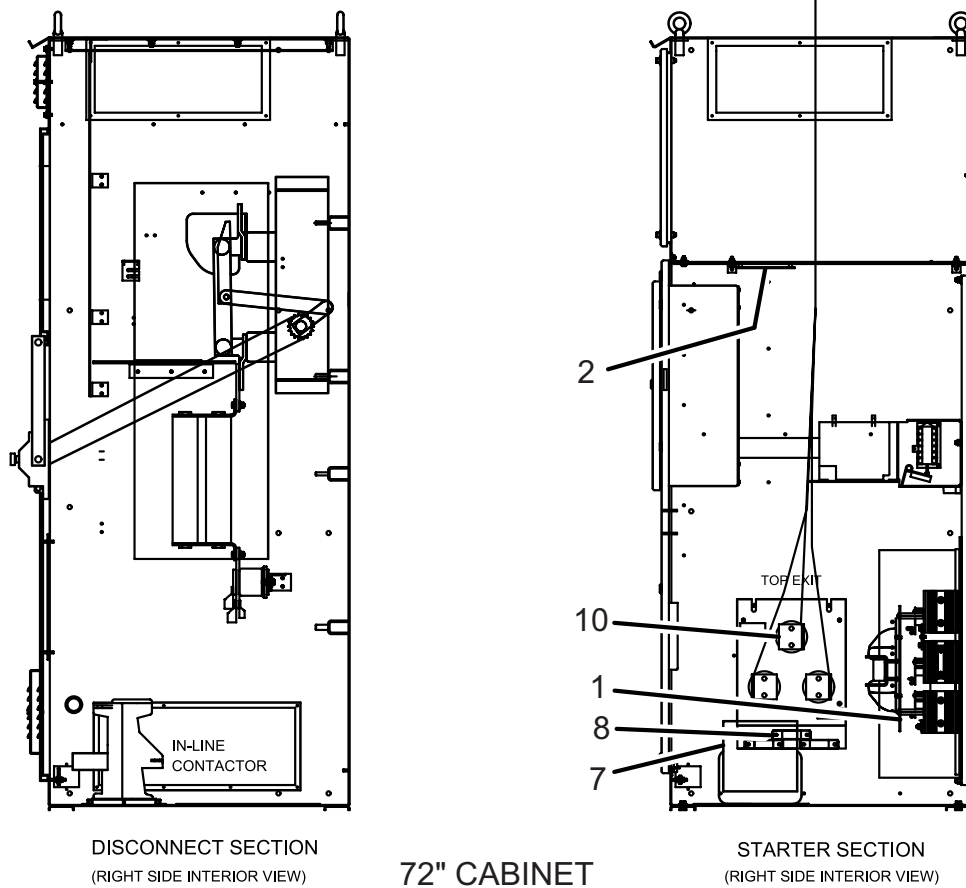
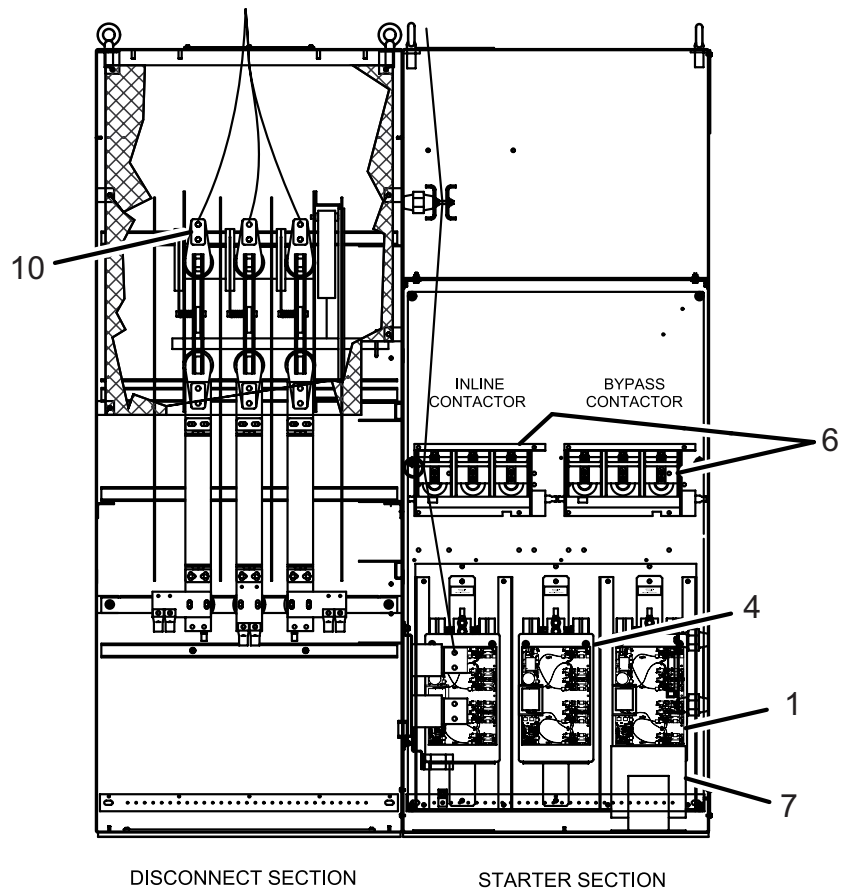


FIG. 4 (CON'T)- MEDIUM VOLTAGE COMPARTMENTS

TABLE 5 – FUSES

ITEM	DESCRIPTION	YORK P/N
1A	FUSE, 3R, 2.3KV	031-02600-000
1A	FUSE, 4R, 2.3KV	031-02601-000
1A	FUSE, 6R, 2.3KV	031-02602-000
1A	FUSE, 9R, 2.3KV	031-02603-000
1A	FUSE, 12R, 2.3KV	031-02604-000
1B	FUSE, 18R, 2.3KV	031-02605-000
1B	FUSE, 24R, 2.3KV	031-02606-000
1A	FUSE, 3R, 3.3/5KV	031-02607-000
1A	FUSE, 4R, 3.3/5KV	031-02608-000
1A	FUSE, 6R, 3.3/5KV	031-02609-000
1A	FUSE, 9R, 3.3/5KV	031-02610-000
1A	FUSE, 12R, 3.3/5KV	031-02611-000
1B	FUSE, 18R, 3.3/5KV	031-02612-000
1B	FUSE, 24R, 3.3/5KV	031-02613-000
2	FUSE, 38R, 3.3/5KV	031 02734 000
3	FUSE, 1E, 4800V (ALL VOLTAGES)	031 02614 000
3	FUSE, 3E, 4800V (ALL VOLTAGES)	031-02615-000
4	FUSE, 10A, 500V	025-27971-000
4	FUSE, 5A, 500V	025-27922-000
4	FUSE, 15A, 500V	025-25584-000
4	FUSE, 20A, 500V	025-28967-000
4	FUSE, 5A, 600V	025-34540-000
4	FUSE, 7A, 600V	025-34136-000

NOTES:

Refer to Unit Model Reference Chart located on page 3 for proper type fuses.

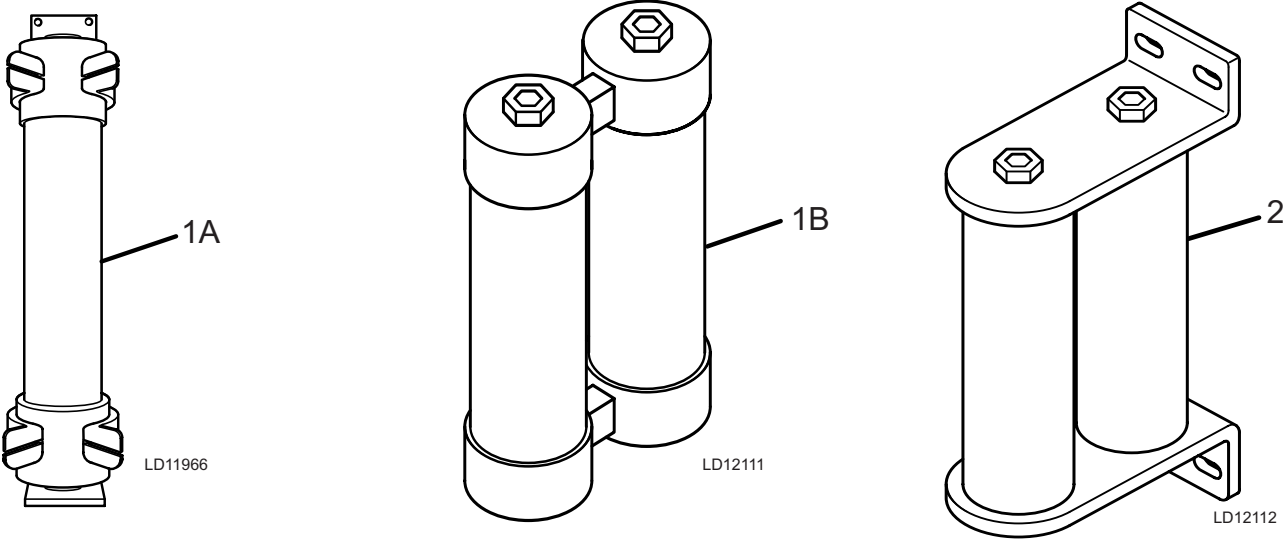
Have all the fuse(s) information "in-hand" when ordering replacements.

TABLE 6 – ACCESSORIES

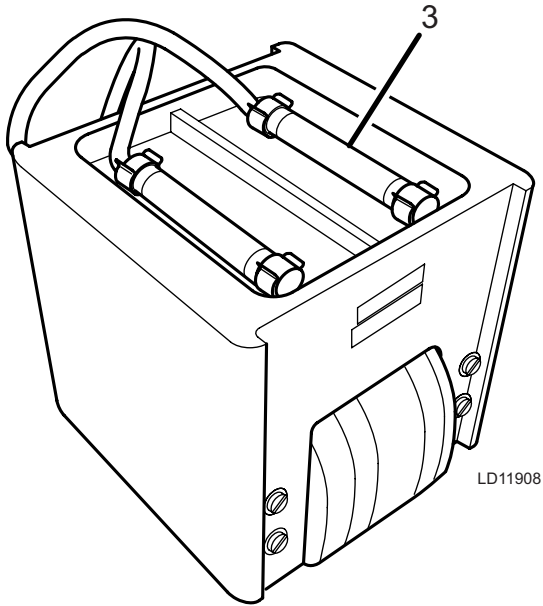
ITEM	DESCRIPTION	YORK P/N
1	KIT, MVSSS HEATER, SPACE, 250 WATTS, 120 VAC	031-02739-000
1A	HEATER, MVSSS SPACE, 250 WATTS, 250 VAC	031-02740-000
1B	THERMOSTAT, MVSSS HEATER	031-02741-000

NOTE:

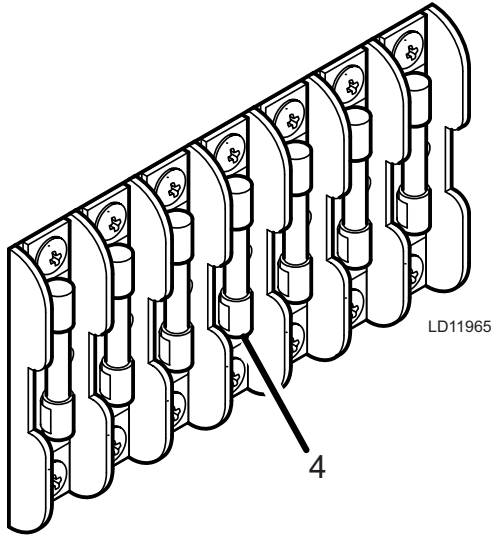
Accessories are NOT shown.



R-TYPE
FUSES



CONTROL
TRANSFORMER
FUSES



FUSES
(OPTIONAL OIL PUMP
FUSES FU 10-12)

FIG. 5 – FUSES



P.O. Box 1592, York, Pennsylvania USA 17405-1592
Copyright © by JOHNSON CONTROLS, INC. 2006
Form 160.00-RP5 (706)
New Release

(717) 771-7890
www.york.com

Subject to change without notice. Printed in USA
ALL RIGHTS RESERVED