



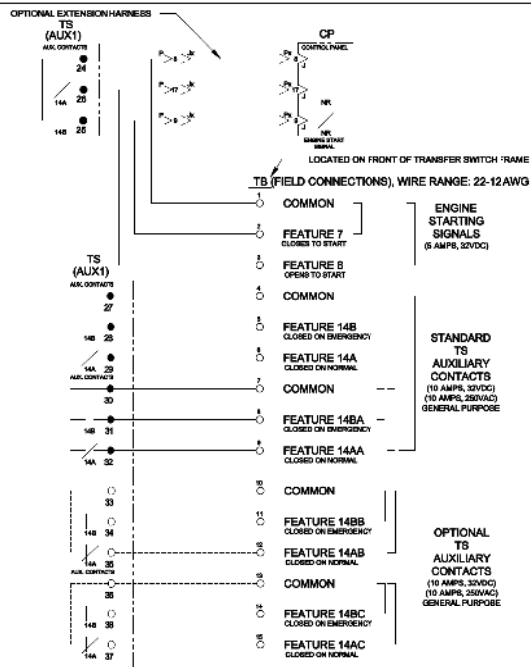
### Transfer Switch Details

#5	ATS	AMPS: 2000	QTY: 3
Product	: Series 300	Catalog Number	: G03AUSB32000NGXM
Service Voltage / Hz	: 480V/60Hz	Optional Accessories	: 11BE,44G,119M
Bypass Isolation	: Not Applicable	Product Description	: 300 Series, Automatic Service Entrance Transfer Switch
No. of Switched Poles: 4	: 4	Neutral Configuration	: Switched [B]
Withstand Rating:	: See WCR Table Below	No. of Cables & Lug Size	: See Applicable Outline Drawing
Frame = G, Switch Rating = 2000, Series = 300			
Enclosure	: 3R(M)-UL Type 3R secure double door enclosure (See Disclaimer 3)	Service	: Three Phase, 4-wire
Extended Warranty	: Not Included	Markings	:

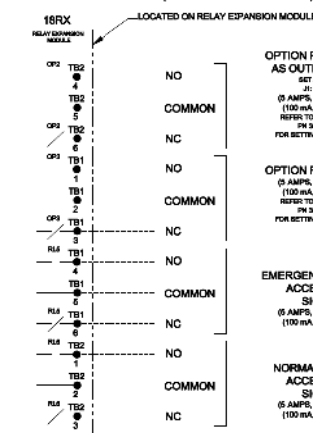
#	ACCESSORY DESCRIPTIONS	
	Accessory Code	Description
1	11BE	Adds the following features to the Group G controller: (1) Serial RS-485 Modbus Communications (2) Multi-Schedule Engine Exerciser (3) a 300 Entry Event Log and (4) a common alarm output function. When applied on 3-phase systems it also enables: (1) 3-Phase Emergency Source VLL sensing (2) Phase Rotation Monitoring (3) Emergency Source VLL Unbalance Monitoring.
2	44G	Strip heater w/ thermostat, wired to load terminals: 208-600 volts
3	119M	Energy Reducing Maintenance Switch (ERMS) ERMS lowers the instantaneous pickup setting, utilizes a faster acting instantaneous trip function, or activates an alternate set of trip settings on a breaker to provide reduced arc flash incident energy. To be used on service entrance rated switches containing Square D breakers with MicroLogic 5.0/6.0 P/H trip units Customer is responsible for all trip unit settings. Customer supplied 24VDC is required.



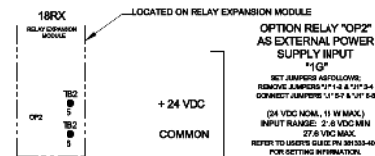
# FIELD CONNECTIONS



## OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE)

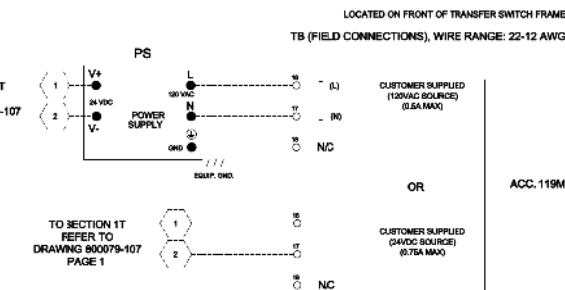
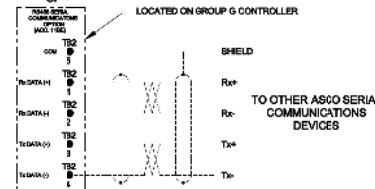


"OP2" OPTIONAL USES



## RS485 SERIAL COMMUNICATIONS OPTION

AVAILABLE WITH OPTIONAL ACCESSORY 118X ADVANCED FUNCTION SOFTWARE BURDLE  
REFER TO USER'S GUIDE PH 38133-430 FOR SETTING INFORMATION



**PROJECT NAME:** \_\_\_\_\_

**WIRING:** \_\_\_\_\_

**"G" FRAME, GROUP G CONTROLS**

**300 SERIES (30ATS/30NTS) 3PH 1100-3200 AMP**

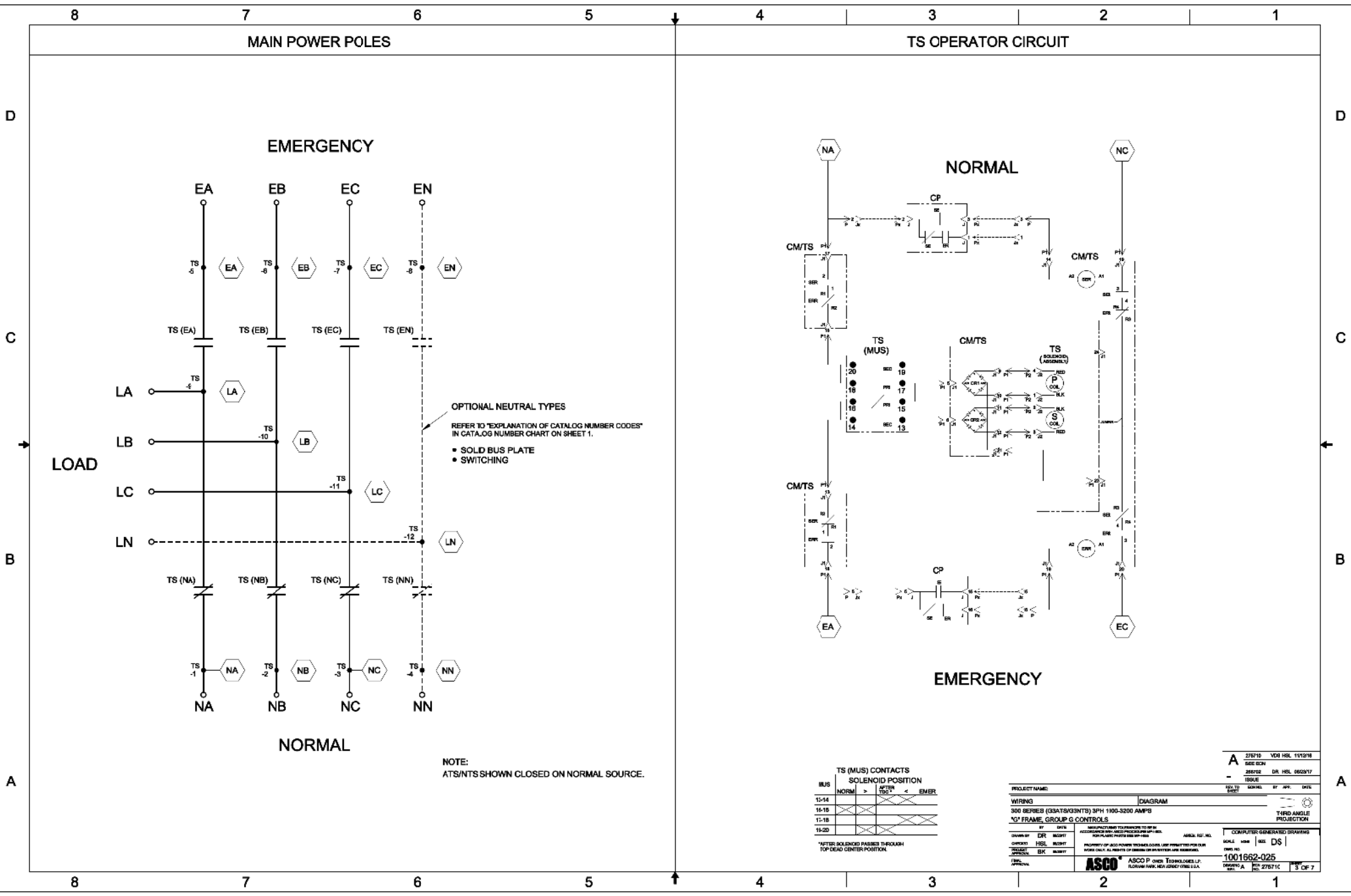
**MANUFACTURED TO TRANSFER TO THE**

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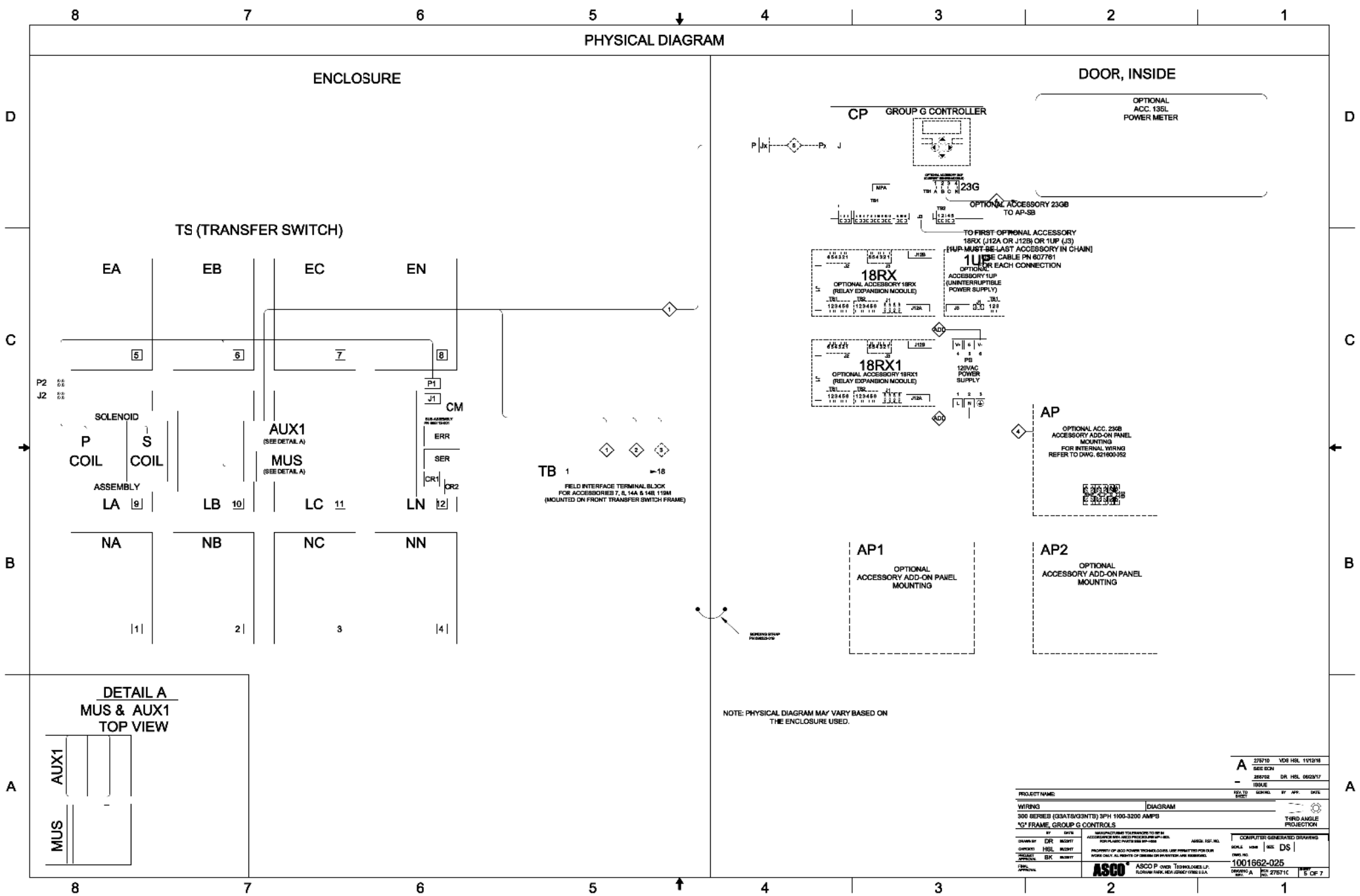
**ASCO P. OVER TECHNOLOGIES L.P.**

**1001662-025**

**2 OF 7**







PROJECT NAME		DATE	2/2/16	VDI HEL	1/12/16
WIRING		DATE	2/2/16	DR HEL	6/22/17
300 SERIES (33ATS/33NTS) 3PH 1100-3200 AMP		DATE	2/2/16	DR HEL	6/22/17
"G" FRAME, GROUP G CONTROLS		DATE	2/2/16	DR HEL	6/22/17
DESIGNED BY	DR	DATE	2/2/16	VDI HEL	1/12/16
CHECKED BY	HSL	DATE	2/2/16	DR HEL	6/22/17
PROJECT APPROVAL	BK	DATE	2/2/16	DR HEL	6/22/17
COMPUTER GENERATED DRAWING	SCALE: 1/8" = 1"				
ASCO	ASCO POWER TECHNOLOGIES, L.P.				
1001662-025	DRAWING NO. 1001662-025				
5 OF 7	REV. 1				

# PHYSICAL DIAGRAM (CONTINUED)

## REAR CONNECTED SWITCH 1000 - 3200 AMP. TS REAR VIEW

OPTIONAL ACCESSORY 23GB  
(LOAD CURRENT METERING)

MAIN BUS STABS/TERMINALS (TYPICAL)

EN  
EMERGENCY  
NEUTRAL



EC  
EMERGENCY  
PHASE C



EB  
EMERGENCY  
PHASE B



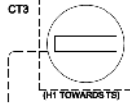
EA  
EMERGENCY  
PHASE A



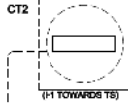
LN  
LOAD  
NEUTRAL



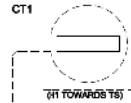
LC  
LOAD  
PHASE C



LB  
LOAD  
PHASE B



LA  
LOAD  
PHASE A



NN  
NORMAL  
NEUTRAL



NC  
NORMAL  
PHASE C



NB  
NORMAL  
PHASE B



NA  
NORMAL  
PHASE A



## FRONT CONNECTED SWITCH 1000 - 2000 AMP. TS TOP VIEW

OPTIONAL ACCESSORY 23GB  
(LOAD CURRENT METERING)

LA  
LOAD  
PHASE A



LB  
LOAD  
PHASE B



LC  
LOAD  
PHASE C



LN  
LOAD  
NEUTRAL



STANDARD:  
EMERGENCY & LOAD OUT  
OF THE TOP AND NORMAL  
OUT THE BOTTOM.

TO SB (AP)

MAIN BUS STABS/TERMINALS (TYPICAL)

EA  
EMERGENCY  
PHASE A



EB  
EMERGENCY  
PHASE B



EC  
EMERGENCY  
PHASE C



EN  
EMERGENCY  
NEUTRAL



## BOTTOM VIEW

NA  
NORMAL  
PHASE A



NB  
NORMAL  
PHASE B



NC  
NORMAL  
PHASE C



NN  
NORMAL  
NEUTRAL



LA  
LOAD  
PHASE A



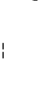
LB  
LOAD  
PHASE B



LC  
LOAD  
PHASE C



LN  
LOAD  
NEUTRAL



OPTIONAL:  
EMERGENCY OUT OF THE TOP  
AND NORMAL & LOAD  
OUT THE BOTTOM.

TO SB (AP)

PROJECT NAME:		278716 VDI HSL 11/12/18	
WIRING		300 SERIES (30ATS/30NTS) 3PH 1000-3200 AMP'S	
"G" FRAME, GROUP G CONTROLS		TWO ANGLE PROJECTION	
BY	DATE	REVISIONS	COMPUTER GENERATED DRAWING
CHKD	DATE	REVISIONS	SCALE
APPROV	DATE	REVISIONS	DATE
ASCO P-ONE TECHNOLOGIES, L.P.		1001662-025	
FLORHAM PARK, NEW JERSEY 07631-1111		DRAWING A	
		REV. 278716	
		SHEET 8 OF 7	





D

C

B

A

D

C

B

A

8

7

6

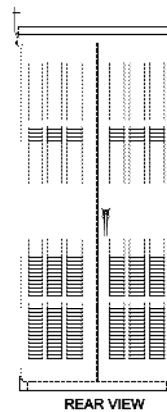
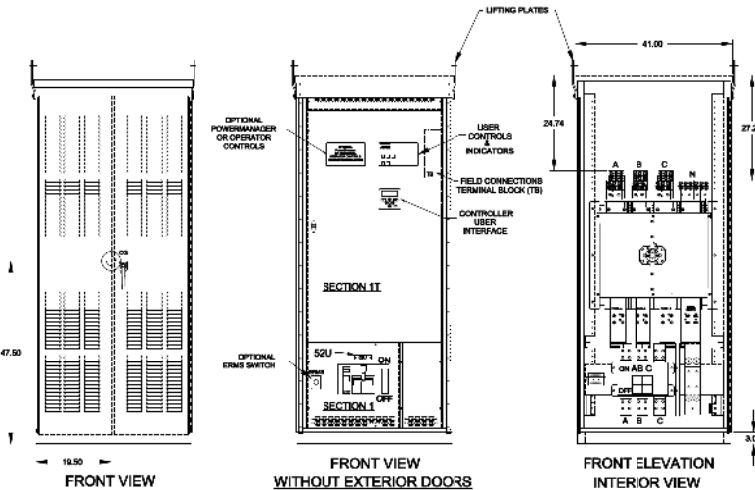
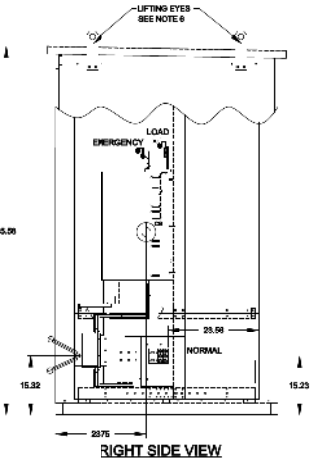
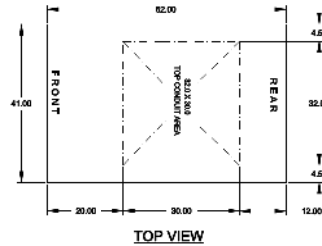
5

4

3

2

1



## GENERAL NOTES

- FLOOR MOUNTED ENCLOSURE.  
TYPE 3R CONSTRUCTED FROM CODE GAUGE STEEL.  
FINISH: TYPE 3R ANSI #1 GRAY POLYESTER ESM GLOSS ELECTROSTATIC POWDER.  
TYPE 3RX EXTERIOR CONSTRUCTED FROM CODE GAUGE STAINLESS STEEL.  
(R) EXTERIOR CONSTRUCTED FROM TYPE 304 STAINLESS STEEL.  
(S) EXTERIOR CONSTRUCTED FROM TYPE 316 STAINLESS STEEL.
- EXTERIOR DOORS HAVE PADLOCKABLE HANDLES WITH 3-POINT LATCH
- DESIGNED FOR FRONT & REAR ACCESS.
- RECOMMENDED CLEARANCES: FRONT: 36" REAR: 36"
- EXTERIOR VENTS:  
1000A - 1000A: NO VENTS.  
2000A: VENTS ARE SUPPLIED WITH POLYESTER DUST FILTERS.
- LIFTING PLATES: SECTIONS ARE SUPPLIED WITH LIFTING PLATES. INSPECT PLATES FOR DAMAGE AND TORQUE BOLTS TO 45 FT LBS BEFORE USE. REFER TO ANSINEMA PB 2.1 FOR PROPER HANDLING OF EQUIPMENT. AFTER INSTALLATION OF SECTION, REMOVE LIFTING PLATES, REINSTALL BOLTS INTO EXTERIOR HOLES AND TORQUE TO APPROXIMATELY 20 FT LBS.
- CENTER OF GRAVITY
- APPROXIMATE WEIGHT: 2400 Lbs

## SYSTEM NOTES

- SYSTEM RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS, 2000 AMPS, 36, 4W OR 18 3W.  
SHORT CIRCUIT RATING: 65,000 RMS SYM AMPERES @ 480V.  
THE EMERGENCY SOURCE INPUT MUST BE PROTECTED BY A REMOTE OVERCURRENT PROTECTION DEVICE AS LISTED ON THE MARKINGS ON THE TRANSFER SWITCH.
- ALL BUS IS SILVER-PLATED COPPER, BASED ON 1000A PER SQ. IN. DENSITY.
- GROUND: 20% RATED.
- NEUTRAL: 100% RATED.
- APPLICABLE LABEL(S): U.L. 861, SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.

## TRANSFER SWITCH

- G FRAME AUTOMATIC TRANSFER SWITCH
- TRANSFER SWITCH RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS AND 2000 AMPS.  
SHORT CIRCUIT RATING WHEN PROTECTED BY A CIRCUIT BREAKER  
TIME RESPONSE, MAXIMUM 0.05 SECONDS: 65,000 RMS SYM @ 480V.
- A FULL RATED NEUTRAL CONNECTION FOR EACH SOURCE AND THE LOAD IS OPTIONAL WHEN PROVIDED IT IS IN ONE OF THE FOLLOWING FORMATS:  
A. SOLID NEUTRAL  
B. SWITCHED NEUTRAL POLE  
C. OVERLAPPING NEUTRAL POLE
- UL 1008

## TERMINATIONS 1000A - 1200A

- SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.  
NORMAL: (4) 1/0 - 600MCM PER PHASE & NEUTRAL  
LOAD: (4) 1/0 - 600MCM PER PHASE & NEUTRAL  
EMERGENCY: (4) 1/0 - 600MCM PER PHASE & NEUTRAL  
GROUND: (12) 1/0 - 600MCM
- A SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
- OPTIONAL LUGS MAY BE SUPPLIED.

## TERMINATIONS 1600A - 2000A

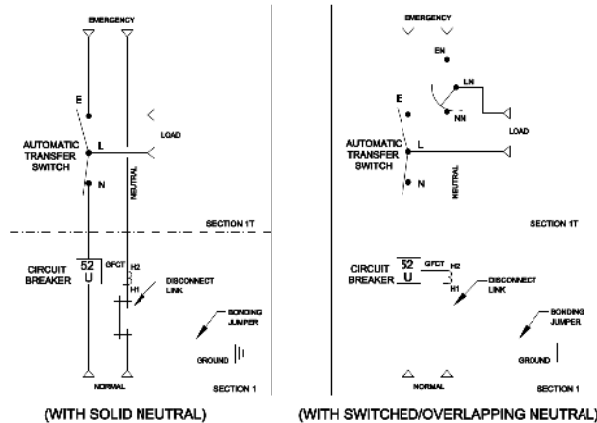
- SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.  
NORMAL: (6) 1/0 - 600MCM PER PHASE & NEUTRAL  
LOAD: (6) 1/0 - 600MCM PER PHASE & NEUTRAL  
EMERGENCY: (6) 1/0 - 600MCM PER PHASE & NEUTRAL  
GROUND: (16) 1/0 - 600MCM
- A SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
- OPTIONAL LUGS MAY BE SUPPLIED.

## CIRCUIT BREAKER: ITEM 52U

- SQUARE "D" 80% RATED, TYPE "P" 3000AF/1000AT, 3000AF/1200AT, 3000AF/1800AT (PIN RJF36160U44A) OR 3000AF/2000AT (PIN RJF36200U44A) STATIONARY MOUNTED, MANUALLY OPERATED BREAKER WITH LONG DELAY, SHORT DELAY, INSTANTANEOUS AND GROUND FAULT TRIP SETTINGS.  
SHORT CIRCUIT RATING: AIC 65,000 RMS SYM @ 480V.
- OPTIONAL 100% RATED BREAKER MAY BE SUPPLIED.
- OPTIONAL ENERGY REDUCTION MAINTENANCE SETTING MAY BE SUPPLIED
- U.L. 489

PROJECT NAME:		REV. TO: FIRST		DATE:	BY:	CHKD:
OUTLINE:		MOUNTING:		TARD ANGLE PROJECTION		
GAUS 1000A - 2000A, RJF BE BREAKER						
TYPE 3R/3RX 86.5 X 41 X 52 SECTION 1 & IT						
DESIGNED BY:	SC	DATE:	10/20/20	SCALE:	1" = 12"	COMPUTER GENERATED DRAWING
CHECKED BY:	RM	DATE:	10/20/20	SCALE:	1" = 12"	DATE:
PROPERTY OF ASCO POWER TECHNOLOGIES, INC. NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.				754577-050		
ASCO P.O. BOX 200000, CINCINNATI, OH 45220-0000				1 OF 1		

## ONE LINE DIAGRAMS



MINIMUM INPUT-TO-OUTPUT ISOLATION: 2500V  
OUTPUT  $\pm 5\%$  (INCLUDING MAX. 1% RIPPLE)  
DIELECTRIC WITHSTAND (INPUT/OUTPUT): 3 kV rms



## TRIP UNIT



F	257650	TRD	MM	10/23/15
	SEE ECN			
E	227403	TRD	WK	05/13/10
	SEE ECN			
D	226452	AE	BK	03/16/10
	SEE ECN			
C	223197	DAJ	BK	10/20/09
	SEE ECN			
B	211947	MJB	BK	2/7/07
	SEE ECN			
-	167055	CC	BK	05/13/04
	ISSUE			

REV. TO SHEET	ECN NO.	BY	APP.	DATE
------------------	---------	----	------	------



**THIRD ANGLE  
PROJECTION**

	BY	DATE
DRAWN BY	CC	05/13/04
CHECKED	BK	05/13/04
PROJECT APPROVAL	BK	05/13/04
FINAL APPROVAL		

ASSEM. REF. NO.

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COMPUTER GENERATED DRAWING

SCALE SIZE BS

DWG. NO.

—758574

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FLORHAM PARK, NEW JERSEY 07932 U.S.A.

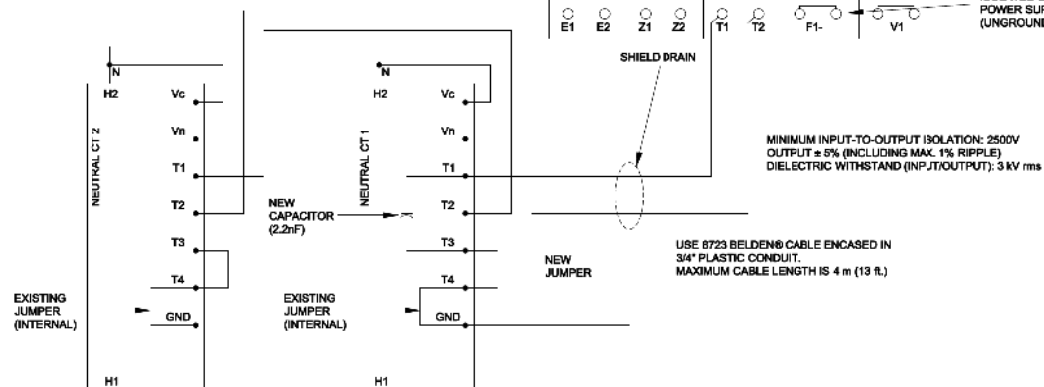
DRAWING F  
REV. NO. 257650  
SHEET 1 OF 2

CAPACITOR  
SEE GENERAL  
NOTES C

Bundle T1 and T2 conductors with  
wire ties or electrical tape as shown.

Neutral CT 1

Neutral CT 2



**A**

SUPPLY POWER

LINE

LOAD

H2

H1

MAIN BONDING JUMPER

NEUTRAL DISCONNECT LINK

**B**

SUPPLY POWER

LINE

LOAD

H2

H1

MAIN BONDING JUMPER

NEUTRAL DISCONNECT LINK

<b>F</b>	257850	TRD	MM	10/23/15
	SEE ECN			
<b>E</b>	227403	TRD	WK	05/13/10
	SEE ECN			
<b>D</b>	226452	AE	BK	03/16/10
	SEE ECN			
<b>C</b>	223197	DAJ	BK	10/20/09
	SEE ECN			
<b>B</b>	211947	MJB	BK	2/7/07
	SEE ECN			
<b>-</b>	167055	CC	BK	05/13/04
	ISSUE			

A. IF LOAD IS CONNECTED TO LOWER END OF CIRCUIT BREAKER, CONNECT THE LOAD NEUTRAL TO THE H1 END OF THE NEUTRAL CURRENT TRANSFORMER.

**B. IF SUPPLY POWER IS CONNECTED TO THE LOWER END OF THE CIRCUIT BREAKER ,CONNECT THE SUPPLY NEUTRAL TO THE H1 END OF THE NEUTRAL CURRENT TRANSFORMER.**

C. CAPACITOR 2.2NF IS PROVIDED WITH CIRCUIT BREAKER.

**PROJECT NAME:**

GFS CIRCUITRY.

	BY	DATE
DRAWN BY	CC	06/13/04
CHECKED	BK	06/13/04
PROJECT APPROVAL	BK	06/13/04
FINAL APPROVAL		

MANUFACTURING TOLERANCES TO BE IN  
ACCORDANCE WITH ASCD PROCEDURE MP-1-003.  
FOR PLASTIC PARTS SEE MP-1-055

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ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

SCALE SIZE BS

DWG. NO.
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758574

DRAWING F	ECN 257650
REV.	NO.

SHEET  
2 OF 2



THIRD ANGLE  
PROJECTION