

ATS Submittal

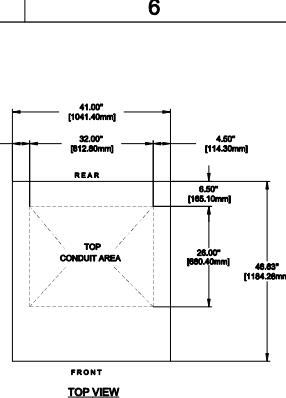
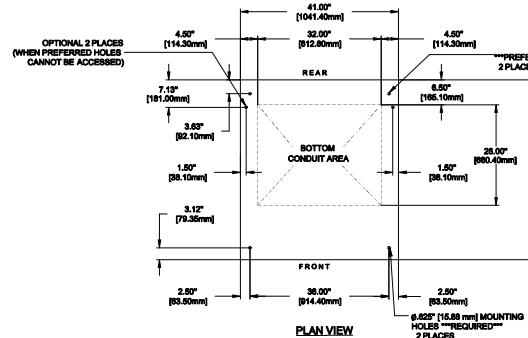
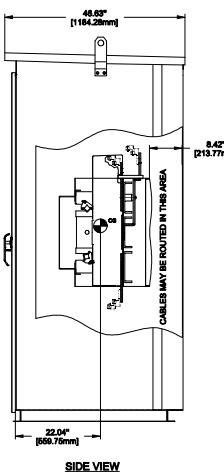
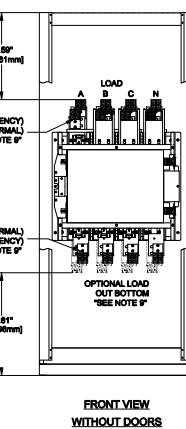
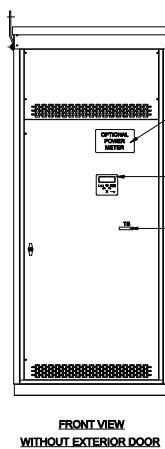
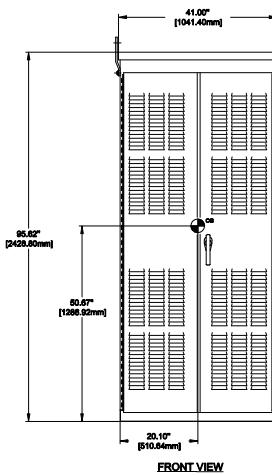
Transfer Switch Details

#3	ATS	AMPS: 2000	QTY: 2
Product	: Series 300	Catalog Number	: G03ATSB32000NGXM
Service Voltage / Hz	: 480V/60Hz	Optional Accessories	: 11BE,44G
Bypass Isolation	: Not Applicable	Product Description	: 300 Series, Automatic Open Transition Transfer Switch
No. of Switched Poles: 4	: 4	Neutral Configuration	: Switched [B]
Withstand Rating:	: See WCR Table Below	No. of Cables & Lug Size	: 6, 1/0 AWG to 600 MCM
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

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GENERAL NOTES

1. FLOOR MOUNTED ENCLOSURE. TYPE 3R (M) CONSTRUCTED FROM CODE GAUGE STEEL. FINISH TYPE: ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER. TYPE 3RX (R) EXTERIOR CONSTRUCTED FROM CODE GAUGE TYPE 304 STAINLESS STEEL. TYPE 3RX (S) EXTERIOR CONSTRUCTED FROM CODE GAUGE TYPE 316 STAINLESS STEEL.
2. EXTERIOR DOOR HAVE PADLOCKABLE HANDLES WITH 3-POINT LATCH
3. DESIGNED FOR FRONT ACCESS.
4. RECOMMENDED CLEARANCES: FRONT: 36" [914.40mm] REAR: NONE.
5. EXTERIOR VENTS ARE SUPPLIED WITH POLYESTER DUST FILTERS.
6. LIFTING PLATES: SECTIONS ARE SUPPLIED WITH LIFTING PLATES. INSPECT PLATES FOR DAMAGE AND TORQUE BOLTS TO 45 FT LBS [61 N m] BEFORE USE. REFER TO ANSI/NEMA 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 [27 N m].
7. CENTER OF GRAVITY
8. APPROXIMATE SHIPPING WEIGHT: 1675 LB [760 KG].
9. ACCESSORY 40, OPTIONAL LOAD AND SOURCE LOCATIONS IS AVAILABLE ON SERIES 7000 ONLY.

TRANSFER SWITCH

1. G FRAME AUTOMATIC TRANSFER SWITCH.
2. TRANSFER SWITCH RATING: 2000 AMPS
WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITHOUT AN ADJUSTABLE SHORT TIME RESPONSE, MAXIMUM 0.05 SECONDS: 85,000 RMS SYM @ 240V, 480V, 600V.
WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITH AN ADJUSTABLE SHORT TIME RESPONSE, MAXIMUM 0.30 SECONDS, 42,000 RMS SYM @ 240V, 480V.
MAXIMUM 0.50 SECONDS, 36,000 RMS SYM @ 240V, 480V.
3. 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 (NOT AVAILABLE ON ADTS & ACTS UNITS)
4. UL 1008 OR CSA C22.2 No. 178.1

TERMINATIONS 2000A

1. MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
SOURCE 1 (NORMAL): (8) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL.
LOAD: (6) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL.
SOURCE 2 (EMERGENCY): (6) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL.
GROUND: (18) 1/0-600MCM [50-300mm²].
2. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
3. SWITCH MAY BE SUPPLIED WITHOUT LUGS.
4. OPTIONAL LUGS MAY BE SUPPLIED (MAY AFFECT ENCLOSURE SIZE).

WIRING/CABLING

1. USE 90°C MINIMUM CU/AL WIRE FOR POWER CABLES.
2. WIRE SIZE TO BE BASED ON AMPACITY OF 75°C WIRE.
3. USE 60°C MINIMUM CU WIRE FOR CONTROLS.

C	300005	RR	MCW	320005
B	360001	TR	IK	0529015
A	360001	TR	IK	0304014
-	340007	TR	IK	1227713
REAR	RR	MCW		

PROJECT NAME: **Q3ATS 2000 AMPS FRONT CONNECTED, LIFTING EYES**
OUTLINE: **TYPE 3R/3RX SECURE 96 X 41 X 47**
MOUNTING: **FOR PLASTIC PARTS SEE SP-0405**
COMPUTER GENERATED DRAWING
DRAWN BY: **SK** DATE: **10/10/05** DRAWN FOR: **ASCO P. O. BOX 1001395-002**
APPROVED: **SK** DATE: **10/10/05** APPROVED FOR: **ASCO P. O. BOX 1001395-002**
RELEASER: **SK** DATE: **10/10/05** RELEASE FOR: **ASCO P. O. BOX 1001395-002**
THIRD ANGLE PROJECTION

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ASCO[®] P. O. BOX 1001395-002
FLORINA PARK, NEW JERSEY 08565 U.S.A.

DRAWN BY: **SK** DRAWN FOR: **ASCO P. O. BOX 1001395-002**
APPROVED BY: **SK** APPROVED FOR: **ASCO P. O. BOX 1001395-002**

THREE PHASE WIRING FOR ASCO[®] 300 SERIES TRANSFER SWITCHES (G3ATS/G3NTS) 1000-3200 AMPERES WITH GROUP G CONTROLS

GENERAL INFORMATION

THIS WIRING APPLIES TO 300 SERIES TRANSFER SWITCHES THAT UTILIZE THE "G" FRAME POWER TRANSFER SWITCH RATED 1000-3200 AMPERES.

THE GROUP G CONTROLLER PROVIDES EITHER AUTOMATIC (G3ATS) OR NON-AUTOMATIC (MANUAL) (G3NTS) OPERATION BASED ON ITS FACTORY SETTING ACCORDING TO THE CUSTOMER ORDER REQUIREMENTS.

THE TYPE OF TRANSFER SWITCH PROVIDED CAN BE DETERMINED FROM THE PRODUCT IDENTIFICATION MARKINGS LOCATED ON BOTH THE POWER TRANSFER SWITCH AND THE COVER OF THE GROUP G CONTROLLER.

ALL OPERATIONAL SETTINGS AND SEQUENCES OF THE GROUP G CONTROLLER AND ITS RELATED OPTIONAL ACCESSORIES (18RX, 240) ARE PROVIDED IN THE USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400.

INFORMATION FOR INSTALLATION AND TESTING OF THE TRANSFER SWITCH IS PROVIDED IN THE INSTALLATION MANUAL, ASCO 3ATS & 3NTS, G-DESIGN 1000-3200 A TRANSFER SWITCHES, PART NUMBER 381333-406.

ENGINE CONTROL CONTACTS

FEATURE 7 & FEATURE 8: OVERRIDE OF FORM C CONTACTS "NFC" (FEAT. 7 AND FEAT. 8 NOT TO CHANGE POSITION ON EXPIRATION OF THE FEATURE 10; OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES TIME DELAY, AND RESET ON EXPIRATION OF THE FEATURE 10; ENGINE COOLDOWN TIME DELAY).

AN AUXILIARY CONTACT THAT IS CLOSED WHEN THE TRANSFER SWITCH IS CONNECTED TO THE EMERGENCY SOURCE, IS CONNECTED ACROSS THE NC CONTACT (FEATURE 7).

AN ADDITIONAL SET OF ENGINE STARTING CONTACTS ARE AVAILABLE ON THE GROUP G CONTROLLER WHEN THE FEATURE SETTING OF THE CONTROLLER OUTPUT CONTACTS "OP1" IS SET TO OPERATE AS "NFC".

ADDITIONAL OPTIONAL ENGINE STARTING CONTACTS "NR2" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" AND/OR "OP3" WILL PROVIDE THE ENGINE STARTING FUNCTION WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "NR2".

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

LOAD DISCONNECT FEATURE

FEATURE 31: INCLUDES SUB-FEATURES 31F, 31G, 31M, 31N.

A SET OF FORM C CONTACTS ARE PROVIDED ON THE GROUP G CONTROLLER AS "OP1". WHEN THE FEATURE SETTING OF "OP1" IS SET TO OPERATE THE CONTACTS AS "FEATURE 31", THE TIME DELAY SETTINGS OF THE SUB-FEATURES ARE AVAILABLE.

"OP1" CAN BE SET TO OPERATE TO PROVIDE THE FOLLOWING FUNCTIONS USING THE TIME DELAY SETTINGS ASSOCIATED WITH EACH FEATURE:

31F - NORMAL TO EMERGENCY PRE-TRANSFER SIGNAL
31G - EMERGENCY TO NORMAL PRE-TRANSFER SIGNAL
31M - NORMAL TO EMERGENCY POST-TRANSFER SIGNAL
31N - EMERGENCY TO NORMAL POST-TRANSFER SIGNAL

THE "OP1" OUTPUT CONTACTS CHANGE POSITION FOLLOWING EACH OF THE ABOVE TIME DELAYS.

ADDITIONAL LOAD DISCONNECT CONTACTS, "FEATURE 31" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" AND/OR "OP3" WILL PROVIDE LOAD DISCONNECT FUNCTION WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "FEATURE 31".

ALL OUTPUT CONTACTS "OP1", "OP2", "OP3" SET TO OPERATE AS "FEATURE 31", SHARE THE COMMON TIME DELAY SETTINGS OF SUB-FEATURES 31F, 31G, 31M, AND 31N.

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

INPHASE TRANSFER FEATURE FOR LOAD TRANSFER

INPHASE TRANSFER CONTROL INITIATES AN INPHASE TRANSFER OF LOADS BETWEEN LIVE SOURCES. THIS IS USED TO PREVENT NUISANCE TRIPPING OF DISTRIBUTION CIRCUIT BREAKERS AND POSSIBLE DAMAGE TO MECHANICAL LOADS ASSOCIATED WITH OUT OF PHASE TRANSFER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

SOURCE AVAILABILITY SIGNALS

SIGNALS INDICATING THE AVAILABILITY OF THE NORMAL & EMERGENCY SOURCES IS PROVIDED WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. V- OUTPUT CONTACTS "RL6" (EMERGENCY SOURCE AVAILABLE) AND "RL5" (NORMAL SOURCE AVAILABLE) CHANGE POSITION WHEN THE SOURCE IS ACCEPTABLE.

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

NOTES

1. SWITCH SHOWN DE-ENERGIZED CONNECTED TO NORMAL SOURCE.
2. DESIGN SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUB. ICS 1, PART 1-101A.

3. ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.

4. INDICATES CUSTOMER CONNECTION POINTS.

5. INDICATES FACTORY CONNECTION POINTS.

6. CONNECTION POINTS THAT HAVE BOTH CUSTOMER CONNECTIONS AND FACTORY CONNECTIONS ARE SHOWN OPEN AS CUSTOMER CONNECTION POINTS.

7. AN OPERATOR'S MANUAL IS FURNISHED WITH EACH AUTOMATIC TRANSFER SWITCH. THIS MANUAL SHOULD BE REFERRED TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE SWITCH.

8. GROUND STRAP ON CONTROL PANEL IS AFFIXED TO CHASSIS (ENCLOSURE) AT LOWER LEFT CONTROL PANEL MOUNTING STUD.

COMMON ALARM & NOT IN AUTO SIGNALING FEATURES

A SET OF FORM C CONTACTS IS PROVIDED ON THE GROUP G CONTROLLER AS "OP1". THE FEATURE SETTING OF "OP1" CAN BE SET TO OPERATE THE CONTACTS AS A "NOT IN AUTO" SIGNAL.

WHEN "OP1" IS SET FOR "NOT IN AUTO", THE OUTPUT CONTACTS CHANGE POSITION WHEN THE TRANSFER IS BEING INHIBITED FROM TRANSFERRING TO THE EMERGENCY SOURCE (FEATURE 34B) OR THE TRANSFER SWITCH HAS BEEN SET FOR NON-AUTOMATIC (MANUAL) OPERATION.

WHEN OPTIONAL ACCESSORY 18BE "SOFTWARE BUNDLE" IS PART OF THE TRANSFER SWITCH ASSEMBLY, IT CAN ALTERNATIVELY SET FOR THE COMMON ALARM SIGNAL. THE OUTPUT CONTACTS CHANGE POSITION WHEN THE COMMON ALARM SIGNAL IS PRESENT AND SET WHEN A "COMMON ALARM" CONDITION IS PRESENT. THE "COMMON ALARM" SIGNAL CONDITIONS ARE SELECTABLE.

ADDITIONAL "COMMON ALARM" AND "NOT IN AUTO" CONTACTS ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" AND/OR "OP3" WILL PROVIDE SIGNAL FUNCTIONS WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "COMMON ALARM" OR "NOT IN AUTO".

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

EXTERNAL POWER SUPPLY COMPATIBILITY

USE OF AN EXTERNAL POWER SUPPLY IS USEFUL WHEN REQUIRED TO EXTEND THE FOLLOWING CONTROLLER TIME DELAYS BEYOND 6 SECONDS:

FEATURE 1C - OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES

FEATURE 1F - OVERRIDE MOMENTARY EMERGENCY SOURCE OUTAGES

AN EXTERNAL POWER SOURCE IS ALSO USEFUL WHEN THE TRANSFER SWITCH IS USED WITH COMMUNICATIONS FEATURES BY ENABLING THE CONTROLLER TO CONTINUE COMMUNICATING.

AN EXTERNAL POWER SOURCE MAY BE PROVIDED TO THE CONTROLLER, UNTIL THE NORMAL SOURCE OR EMERGENCY SOURCE IS AVAILABLE, BY USE OF:

- AN EXTERNAL 24 VDC POWER SUPPLY WITH ACCESSORY 18RX RELAY EXPANSION MODULE
- OPTIONAL ACCESSORY UP (UNINTERRUPTIBLE POWER SOURCE MODULE)

EXTERNAL 24 VDC POWER SUPPLY "1G"

AN EXTERNAL 24 VDC POWER SUPPLY "1G" MAY BE USED TO POWER THE CONTROLLER WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" WILL PROVIDE EXTERNAL 24 VDC POWER SOURCE FUNCTIONALITY WHEN ITS FEATURE SETTING IS SET TO OPERATE AS "1G". ADDITIONALLY, JUMPERS MUST BE RECONFIGURED ON ACCESSORY 18RX (RELAY EXPANSION MODULE) TO ENABLE THIS FUNCTION AS FOLLOWS:

REMOVE JUMPERS "1*1 & 2*1" 3-4

CONNECT JUMPERS "1*5 & 1*6-8"

THE OUTPUT CONTACTS CHANGE POSITION WHEN EITHER THE NORMAL SOURCE OR EMERGENCY SOURCE IS AVAILABLE AND RESET WHEN NEITHER SOURCE IS AVAILABLE. THE "OP2" NC CONTACT SWITCHES CUSTOMER PROVIDED +24 VDC FROM THE EXTERNAL POWER SUPPLY TO THE CONTROLLER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY):

WHEN OPTIONAL ACCESSORY UP IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY, THE CONTROLLER IS PROVIDED WITH LIMITED RESERVE POWER (APPROXIMATELY 3 MINUTES).

LOAD CURRENT METERING

WHEN OPTIONAL ACCESSORY 230B IS PART OF THE TRANSFER SWITCH ASSEMBLY, THREE PHASE CURRENT MEASUREMENTS ARE AVAILABLE FOR DISPLAY ON THE GROUP G CONTROLLER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR INFORMATION ON USE.

ADVANCED-FUNCTION SOFTWARE BUNDLE

WHEN OPTIONAL ACCESSORY 18BE IS PART OF THE TRANSFER SWITCH ASSEMBLY, AN ADVANCED-FUNCTION SOFTWARE BUNDLE IS AVAILABLE TO PERFORM THE FOLLOWING FUNCTIONS:

- SERIAL COMMUNICATIONS (RS-485)
- PROGRAMMABLE ENGINE EXERCISER
- EVENT LOG
- COMMON ALARM SIGNAL CAPABILITY ON GROUP G CONTROLLER "OP1" OUTPUT.

(3) PHASE SENSING ONLY

- 3-PHASE SOURCE SENSING.

- PHASE ROTATION SENSING.

- EMERGENCY VOLTAGE UNBALANCE SENSING.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR INFORMATION ON THESE FUNCTIONS.

NON-AUTOMATIC (MANUAL) OPERATION

TRANSFER SWITCH ASSEMBLY PROVIDED FOR NON-AUTOMATIC OPERATION PROVIDE USER INITIATED ELECTRICAL OPERATION OF THE TRANSFER SWITCH TO THE AVAILABLE SOURCE. THE TRANSFER SWITCH ASSEMBLY IS PHYSICALLY IDENTICAL TO THAT OF THE AUTOMATIC TYPE.

WHEN THE TRANSFER SWITCH IS SET FOR NON-AUTOMATIC OPERATION, A CUSTOMER PROVIDED SELECTOR SWITCH MAY BE USED TO OPERATE IT FROM A REMOTE LOCATION.

REMOTE CONTROL FEATURES

THE FOLLOWING CONTROL PANEL INPUTS PROVIDE REMOTE CONTROL FUNCTIONS FOR THE TRANSFER SWITCH. EACH FUNCTION CAN BE IMPLEMENTED BY THE CUSTOMER PROVIDING THE FORM OF CONTROL DESCRIBED. EACH CONTROL CONTACT MUST BE SUITABLE FOR A 6 VDC LOW ENERGY CIRCUIT.

EXTERNAL FEATURE 17: REMOTE TRANSFER TO EMERGENCY FEATURE (FOR AUTOMATIC TRANSFER TYPE) - REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT DURING ENGINE START AND TRANSFER TO EMERGENCY SOURCE, CLOSING OF THE CONTACT ACTIVATED BY THE GROUP G TRANSFER TO NORMAL (IF JUST TRANSFER) TIME DELAY TO RETRANSFER. IN THE EVENT THAT THE EMERGENCY SOURCE FAILS WHILE THE TRANSFER SWITCH IS CONNECTED TO EMERGENCY AND THE CUSTOMER SUPPLIED CONTACT IS OPEN, THE TRANSFER SWITCH WILL AUTOMATICALLY RETRANSFER TO THE NORMAL SOURCE.

EXTERNAL FEATURE 6B: REMOTE BYPASS OF RETRANSFER TO NORMAL TIME DELAY - REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT BYPASSES FEATURE 3A RETRANSFER TO NORMAL DELAY IF ACTIVE.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON-AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333-400 FOR SETTING INFORMATION.

ACCESSORIES

CATALOG NUMBER

CERTIFIED TO

BY

DATE

FORM REV K

PROJECT NAME

PK TO SHEET

WIRING

DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS

"G" FRAME, GROUP G CONTROLS

BY DATE

MANUFACTURING TOLERANCES TO BE IN

ACROSS ALL PARTS

FOR PLASTIC PARTS SEE SP-0404

AMSL REF. NO.

COMPUTER GENERATED DRAWINGS

THIRD ANGLE PROJECTION

K 317601 BVM 08/08/2025

SEE ECH

J 278211 TR BK 10/18/18

SEE ECH

H 280511 TR BK 10/17/17

SEE 4 HORIZONTAL PHASE SHIFTER

G 264970 TR BK 06/05/15

SEE ECH

F 282347 MPP AB 12/22/14

SEE ECH

E 247772 ECH BDH 4/14/14

SEE ECH

D 247610 TR BK 3/4/14

SEE ECH

C 246211 AE BK 01/01/14

SEE ECH

B 246211 AE BK 01/01/14

SEE ECH

A 246069 BK BK 12/29/13

SEE ECH

- 246072 BK BK 10/09/13

SEE ECH

WIRING

DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS

"G" FRAME, GROUP G CONTROLS

BY DATE

MANUFACTURING TOLERANCES TO BE IN

ACROSS ALL PARTS

FOR PLASTIC PARTS SEE SP-0404

AMSL REF. NO.

COMPUTER GENERATED DRAWINGS

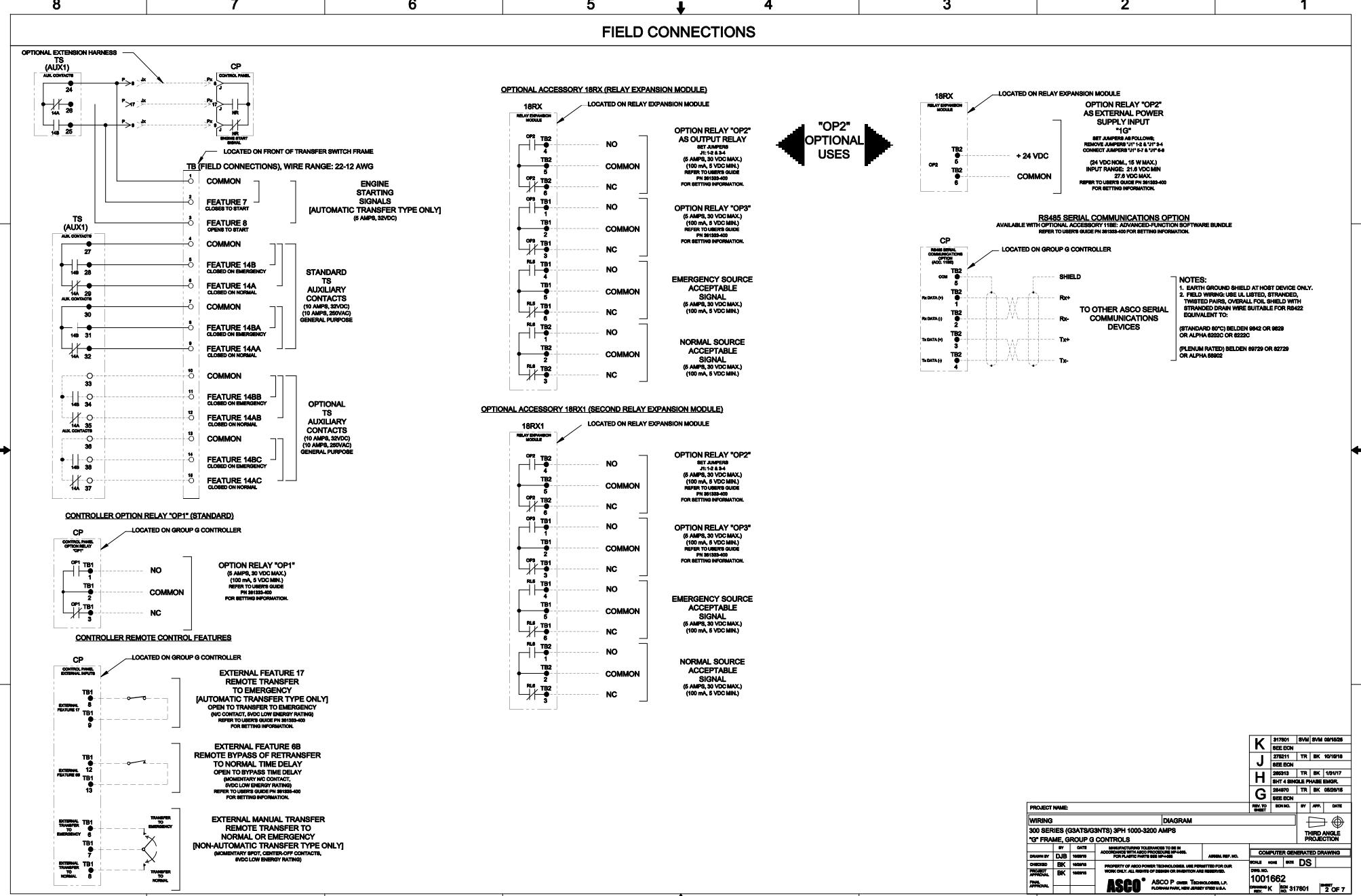
THIRD ANGLE PROJECTION

ASCO[®] ASCO P.O. BOX 517601, FLORINA PARK, NEW JERSEY 08854 U.S.A.

1001662

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T OF 7



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MAIN POWER POLES

EMERGENCY

LOAD

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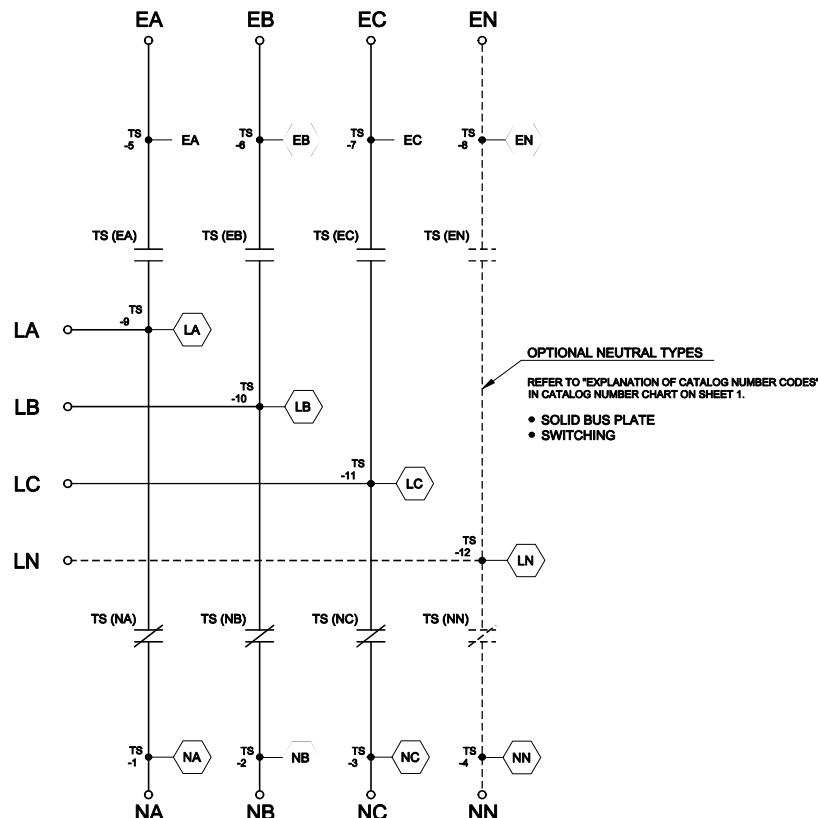
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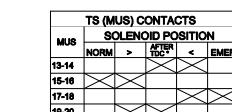
TS OPERATOR CIRCUIT

NORMAL

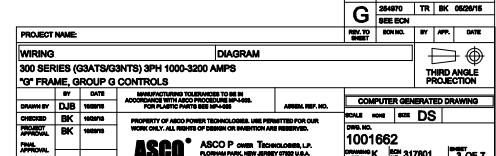
EMERGENCY



NOTE:



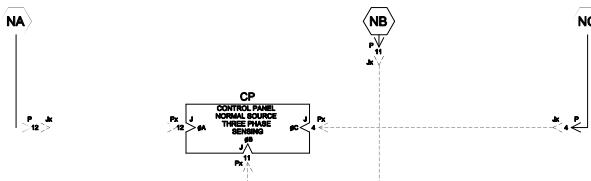
* AFTER SOLENOID PASSES THROUGH
FOR REAR CENTER POSITION



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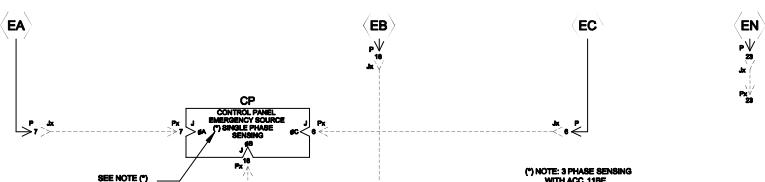
NORMAL SOURCE CIRCUITS

NORMAL



EMERGENCY SOURCE CIRCUITS

EMERGENCY

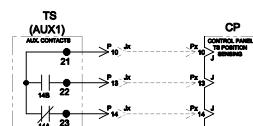


LOAD TERMINAL CIRCUITS

LOAD

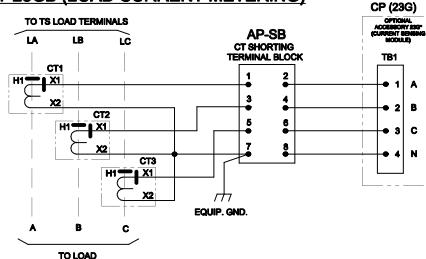


CONTROL SIGNALS & INDICATION



ADDITIONAL CIRCUITS

OPTIONAL ACCESSORY 23GB (LOAD CURRENT METERING)



CURRENT TRANSFORMER RATIO TABLE	
SWITCH RATING	CT RATIO
1000A	1200:5A
1500A	1800:5A
2000A	2000:5A
2800A	3000:5A
3200A	4000:5A

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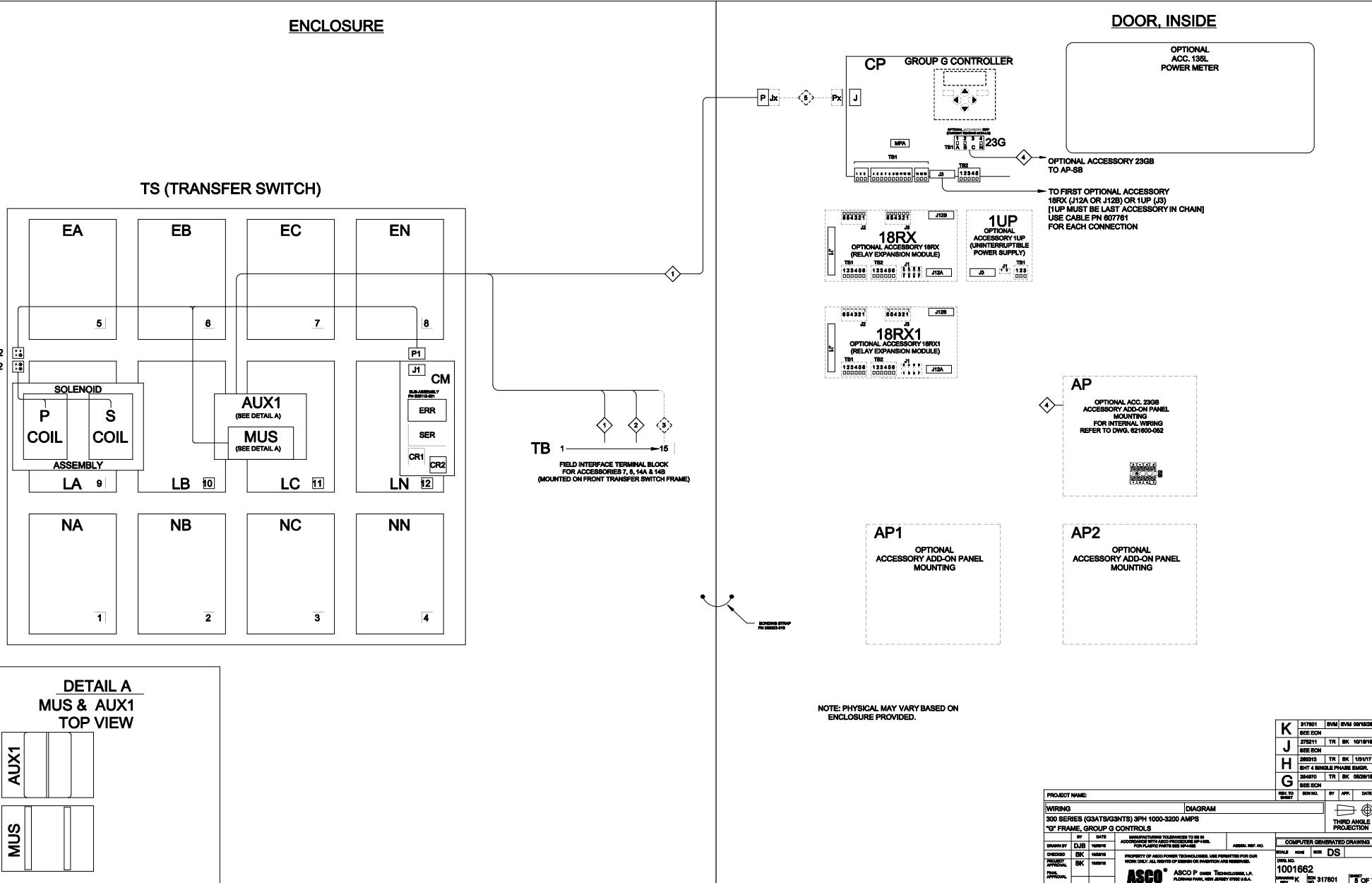
PROJECT NAME:		WIRING		DIAGRAM	
300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS		300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS		300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS	
"G" FRAME, GROUP G CONTROLS		"G" FRAME, GROUP G CONTROLS		"G" FRAME, GROUP G CONTROLS	
DRAWN BY	D.J.B.	DATE	MANUFACTURING TOLERANCES TO BE IN	ACCORDING TO ASME Y14.5M-1994, FOR PLASTIC PARTS SEE Y14.5M-1985	ASME REF. NO.
DESIGNED BY		REVISION	PROPS OF ASCO PARTS ARE INCHES. USE OF MILLIMETERS OR DECIMAL FRACTION IN MILLIMETERS IS PERMITTED. OUR USE OF INCHES OR DECIMAL FRACTION IN MILLIMETERS IS PERMITTED.		COMPUTER GENERATED DRAWING
APPROVED BY		REVISION	OUR USE OF INCHES OR DECIMAL FRACTION IN MILLIMETERS IS PERMITTED.		DS
ASCO [®] ASCO P.O. BOX 1000, FLORINA PARK, NEW JERSEY 08514 U.S.A.		DRAWN BY		DS	
DRAWN BY K DATE 317801		APR 1994		4 OF 7	

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PHYSICAL DIAGRAM

ENCLOSURE

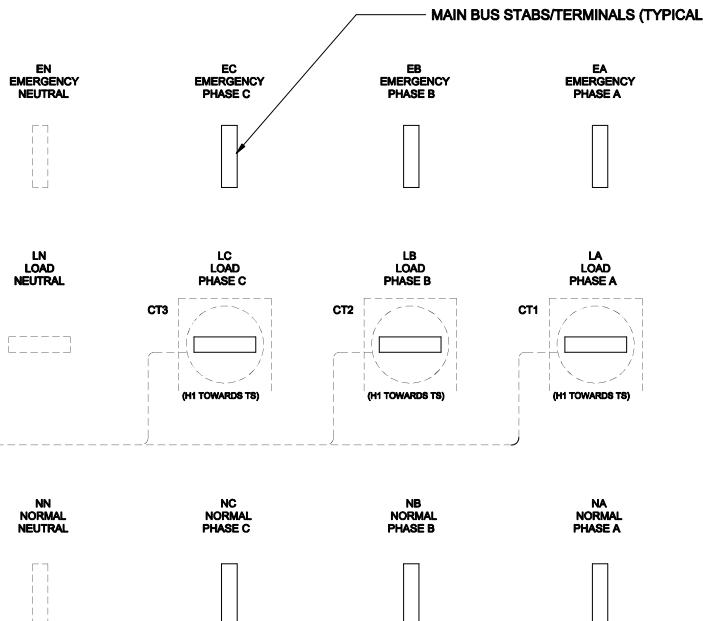
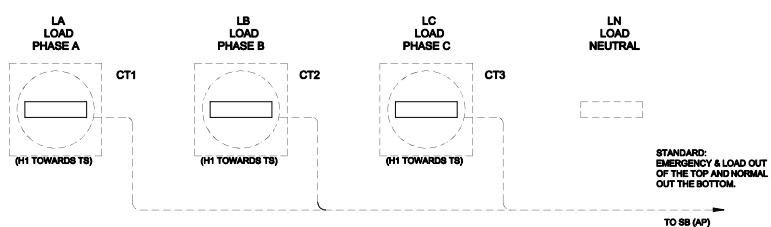
DOOR, INSIDE



**NOTE: PHYSICAL MAY VARY BASED ON
ENCLOSURE PROVIDED.**

8 7 6 5 4 3 2 1

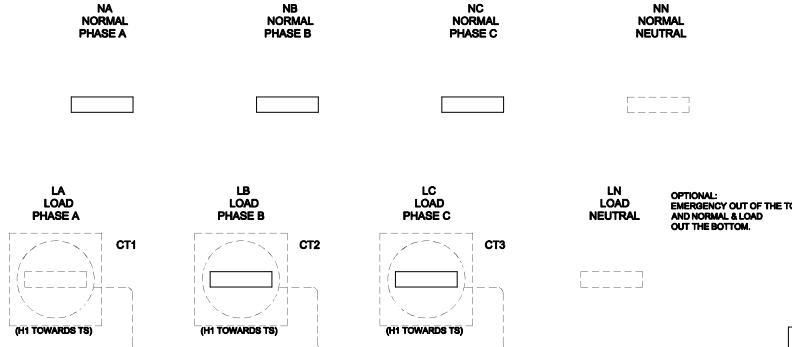
PHYSICAL DIAGRAM (CONTINUED)

REAR CONNECTED SWITCH
1000 - 3200 AMP. TS REAR VIEWOPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)FRONT CONNECTED SWITCH
1000 - 2000 AMP. TS TOP VIEWOPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)

MAIN BUS STABS/TERMINALS (TYPICAL)



BOTTOM VIEW



PROJECT NAME:		WIRING		DIAGRAM		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASME Y14.5M-1994, FOR PLASTIC PARTS SEE SP-44-94		APPL. DATA	
300 SERIES (G3ATSG3NTS) 3PH 1000-3200 AMPS		"G" FRAME, GROUP D CONTROLS							
DRAWN BY	DJS	REVIS.		DESIGNED BY		MANUFACTURED BY		APPROVED BY	
SP-44-94				SP-44-94		SP-44-94		SP-44-94	
REVISION	SK	REVIS.		REVISION		REVISION		REVISION	
RE-APPROVED	SK	RE-APPROVED		RE-APPROVED		RE-APPROVED		RE-APPROVED	
COMPUTER GENERATED DRAWING									
ASCO® ASCO P.C. TECHNOLOGIES L.P. FLORINA PARK, NEW JERSEY 08854 U.S.A.									
DRAWN BY: DS									
DRAWN BY: K REF. 317601									
8 OF 7									

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WIRE RUN LISTING

D

D

WIRE	NAME	LOCATOR	REFERENCE	CLR	AWG
No. P-2, TS-1	2 P-3, P1-14				
	3 P-4, TS-3				
	4 P-4, TS-5				
	5 P-4, TS-7				
	6 P-4, TS-9				
	7 P-4, TS(AUX1)24				
	7 P-4, TS(AUX1)25				
	8 P-4, TS(AUX1)22				
	8 P-4, TS(AUX1)21				
	9 P-1, TS-2				
	10 P-12, TS-1				
	11 P-12, TS(AUX1)22				
	12 P-14, TS(AUX1)23				
	13 P-16, P1-16				
	14 P-16, TS-1				
	15 P-16, TS-5				
	16 P-16, TS-9				
	17 P-20, TS-10				
	18 P-22, TS-1				
	19 P-22, TS-4				
	20 P-23, TS-4				
	21 P-4, TS-12				
	22 P-4, TS(MU5)-17				
	22 TS(MU5)-17, TS(MU5)-16				
	23 P-4, TS(MU5)-18				
	23 TS(MU5)-18, TS(MU5)-15				
	23 TS(MU5)-19, TS(MU5)-13				
	24 P1-4, P2-4				
	25 P1-4, P2-1				
	26 P1-4, P2-2				
	27 P1-12, P2-3				
	P1-13, TS(MU5)-16				
	28 TS(MU5)-16, TS(MU5)-14				
	29 TS(MU5)-20, TS(MU5)-16				
	1 P1-17, TS-1				
	4 P1-17, TS-2				
	3 P1-19, TS-3				
	5 P1-20, TS-7				
	30 P1-21, P1-23				
REMOVE WIRES					
	6 TS(AUX1)24, TS-2				
	7 TS(AUX1)25, TS-2				
	14 P-17, TS-3				
	22 P-15				

2 → HARNESS LOCATOR		WIRE NO. → TWS STD. AUX. CONTACTS		CLR	AWG
40	TB-10,TS(AUX1)-27				16
41	TB-11,TS(AUX1)-28				
42	TB-12,TS(AUX1)-29				
43	TB-13,TS(AUX1)-30				
44	TB-14,TS(AUX1)-31				
45	TB-15,TS(AUX1)-32				
3 → HARNESS LOCATOR		WIRE NO. → OPTIONAL AUX. CONTACTS		CLR	AWG
46	TB-10,TS(AUX1)-33				16
47	TB-11,TS(AUX1)-34				
48	TB-12,TS(AUX1)-35				
49	TB-13,TS(AUX1)-36				
50	TB-14,TS(AUX1)-36				
51	TB-15,TS(AUX1)-37				
4 → HARNESS LOCATOR		WIRE NO. → OPTIONAL ACCESSORY 29GB (CT-AP-BG-CP29GB-TB1)		CLR	AWG
230	CT1-X1,AP-BB-1				16
231	CT1-X1,AP-BB-2				
231	CT2-X1,AP-BB-3				
231	AP-BB-4,CP(29G)-TB1-2				
222	AP-BB-4,CP(29G)-TB1-3				
233	CT1-X2,CT3-X2			GRN	
233	CT2-X2,CT3-X2			GRN	
233	AP-BB-7,CP(29G)-TB1-3			GRN	
233	AP-BB-7,EQUIP. GRD.			GRN	
233	AP-BB-7,CP(29G)-TB1-4			GRN	
5 → HARNESS LOCATOR		WIRE NO. → HARNESS 309320-005 NO. → OPTIONAL 8 IN. EXTENSION HARNESS 200 JctcPx1		CLR	AWG
1	JctcPx1				16
2	JctcPx3				
3	JctcPx4				
4	JctcPx5				
5	JctcPx6				
6	JctcPx7				
7	JctcPx8				
8	JctcPx10				
9	JctcPx11				
10	JctcPx12				
11	JctcPx13				
12	JctcPx14				
222	JctcPx15				
13	JctcPx16				
14	JctcPx17				
15	JctcPx18				
16	JctcPx19				
17	JctcPx20				
18	JctcPx21				
19	JctcPx22				
20	JctcPx23				
21	JctcPx24				

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K		171701	5PM	5PM	091825
J		066 ECH			
J		272511	TR	BK	10/1916
H		268513	TR	BK	10/1717
G		264970	TR	BK	062616/15
G		SEE ECH			
ROW NO.		BO NO.	BY	APP.	DATE

THIRD ANGLE PROJECTION					
COMPUTER GENERATED DRAWING					
TITLE		NAME	ROLE	DS	
DS NO.		1001662			
PRINTED BY		K-171701			

PROJECT NAME		DRAWING NO.		SEE ECR	
WIRING		DIAGRAM		REV. NO.	
300 SERIES (3GATS/3GNTS) 3PH 1000-3200 AMPS "G" FRAME, GROUP G CONTROLS				MATERIALS	
BY	DATE	MANUFACTURED TO THE BE IN ACCORDANCE WITH THE DRAWINGS FOR PLASTIC PARTS SHEET NO.		ARMCO INC. NO.	
DRAWN BY	DJB 10/19/01				
CHECKED BY	EBK 10/19/01				
APPROVED BY	EBK 10/19/01				
APPROVAL					
ASCO		ASCO P. O. BOX 10000, TROY, L. I., FLORHAM PARK, NEW JERSEY 07090 U. S. A.		COMPUTER GENERATED DRAWING	
				FILE NO. DS	
				DRAWN BY 1001662	
				K. 317801	
				7 OF 7	