ASCO Power Technologies®

SWITCH SUBMITTAL

REVISION 1

Bypass Isolation Switch

TRANSFER SWITCH DETAILS									
ATS NAME	QTY	AMPS / POLES (VOLTS)	BYPASS	TRANSITION TYPE	CATALOG NUMBER	ACCESSORIES	OUTLINE DRAWING	WIRING DIAGRAM	BOM NUMBER
	1	2000 / 4 (480V)	YES	DELAYED	G7ADTBB32000N5XC	14A1,14B1,17AL,18B,18G,82E,150B	---------	---------	TO BE ENGINEERED

Transfer Switch Withstand and Closing Ratings																					
				300, 4000 & 7000 Series																	
ATS NAME	FRAME SIZE	SWITCH RATING AMPS		CURRENT LIMITING FUSES				SPECIFIC BREAKER			TIME BASED				Short Time Ratings[3] (sec)							
															480V Max.				600V Max.			
		Transfer Switches	Bypass Switches	480V Max.	600V Max.	MAX SIZE, A	CLASS	240V Max.	480V Max.	600V Max.	Time(Sec)	240V Max.	480V Max.	600V Max.	.13	.2	.3	.5	.1	.13	.3	.5
-	G[8]	1600 - 2000	1600 - 2000	200kA	200kA	3000	L	200kA	200kA	100kA	0.05	100kA	100kA	100kA	42kA			36kA	42kA			-

NOTES:
1) All WCR values indicated are tested in accordance with the requirements of UL 1008, 7th Edition.
2) Application requirements may permit higher WCR for certain switch sizes.
3) Short Time ratings are provided for applications involving circuit breakers that utilize trip delay settings for system selective coordination
4) Max fuse rating is 1200A on front connected H frame switches
6) Rating shown is for Bypass switches only, Transfer Switch rating is 100kA
8) These frames are only available on the 7000 Series product

Bypass Isolation Switch

Transfer Switch Details

#1	ATS	AMPS: 2000	QTY: 1

Product	:	7000 Series Bypass Transfer Switches	Catalog Number	:	G7ADTBB32000N5XC
Service Voltage / Hz	:	480V/60Hz	Optional Accessories	:	14A1,14B1,17AL,18B,18G,82E 150B
Bypass Isolation	:	YES	Product Description	:	7000 Series, Automatic Delayed Transition Bypass Switch
No. of Switched Poles: 4	:	4	Neutral Configuration	:	Switched [B]
Withstand Rating: Frame = G, Switch Rating = 2000, Series = 7000	:	See WCR Table Below	No. of Cables & Lug Size	:	6, #1/0 AWG to 600 MCM
Enclosure	:	1(C)-UL Type 1 Enclosure	Service	:	Three Phase, 4-wire
Extended Warranty	:	5 Years Year/s	Markings	:	

#	ACCESSORY DESCRIPTIONS	
	Accessory Code	Description
1	14A1	(1) Aux Contact on Bypass switch closed in bypass normal position contacts are rated 10A
2	14B1	(1) Aux Contact on Bypass switch closed in bypass emergency position contacts are rated 10A
3	17AL	Special circuitry with selector switch to enable selection of the emergency generator as preferred source with override in the event of a generator failure. Includes pilot light Red to indicate emergency selected as preferred source.
4	18B/18G	2pole D/T contacts that operate when emergency and normal source voltage is present at transfer switch terminals
5	82E	Standard Bypass Isolation Status Display Replaced With Membrane Display to match the J and H frame switches. Should be used on G, Q, S, and U Bypass Switches.
6	150B	Group-5: Tech Bundle - Includes the following: 5210 Power Meter monitoring load side, Ethernet Comm Module, Extended 25sec ride through via internal buffer module, Provisions for customer supplied 24Vdc backup power, Bypass/ISO status wired to IO module for external communication (Contains acc 135SB, 1PS1, & 72EE2). PowerLogic Source Controller: Tech Bundle - Includes the following: PM 5000 Power Meter monitoring load side, Ethernet Comm Module, Extended 25sec ride through via internal buffer

THREE PHASE WIRING FOR ASCO® 7000 SERIES AUTOMATIC DELAYED TRANSITION TRANSFER & BYPASS-ISOLATION SWITCHES TYPE 7ADTB RATED 1000-3000 AMPERES

FEATURES, SETTINGS, OPERATION, ACCESSORIES & NOTES

THE FOLLOWING FEATURES AND RELATED SETTINGS ARE PART OF THE GROUP 5 CONTROL PANEL'S USER CONFIGURABLE PARAMETERS. FOR DETAILED INFORMATION REGARDING THE CONFIGURATION OF THESE PARAMETERS AND OTHER FEATURES OF THE GROUP 5 CONTROL PANEL, REFER TO THE GROUP 5 CONTROL PANEL FOR 7000 ASCO SERIES AUTOMATIC TRANSFER SWITCHES USER'S GUIDE (PART NO. 381333-126) PROVIDED WITH EVERY 7000 SERIES AUTOMATIC TRANSFER SWITCH.

THE NOMINAL OPERATING VOLTAGE & FREQUENCY IS PRE-PROGRAMMED AT THE FACTORY BASED ON THE NAMEPLATE DATA PRINTED ON THE TRANSFER SWITCH & CONTROL PANEL NAMEPLATES.

VOLTAGE & FREQUENCY SENSING

THE FOLLOWING SETTINGS ARE EXPRESSED AS A PERCENTAGE OF THE CONTROL PANEL'S NOMINAL VOLTAGE SETTING UNLESS STATED OTHERWISE. ALL SETTINGS ARE ADJUSTABLE IN INCREMENTS OF 1%.

A. RMS VOLTAGE SENSING ON ALL PHASES OF THE NORMAL & EMERGENCY SOURCES.

PARAMETER	RANGE OF SETTINGS	DEFAULT SETTING
NORMAL VOLTAGE DROPOUT	70-98%	85%
NORMAL VOLTAGE PICKUP	85-100%	90%
NORMAL OVER VOLTAGE TRIP	102-115%	OFF
NORMAL VOLTAGE UNBALANCE	YES/NO	NO
NORMAL VOLTAGE UNBALANCE DROPOUT	5-20% OF AVG. NORMAL VOLTAGE	20% (if ON)
NORMAL VOLTAGE UNBALANCE PICKUP	3-18% OF AVG. NORMAL VOLTAGE	10% (if ON)
EMERGENCY VOLTAGE DROPOUT	70-98%	75%
EMERGENCY VOLTAGE PICKUP	85-100%	90%
EMERGENCY OVER VOLTAGE TRIP	102-115%	OFF
EMERGENCY VOLTAGE UNBALANCE	YES/NO	NO
EMERGENCY VOLTAGE UNBALANCE DROPOUT	5-20% OF AVG. EMERGENCY VOLTAGE	20% (if ON)
EMERGENCY VOLTAGE UNBALANCE PICKUP	3-18% OF AVG. EMERGENCY VOLTAGE	10% (if ON)

B. FREQUENCY SENSING OF THE NORMAL & EMERGENCY SOURCES.

PARAMETER	RANGE OF SETTINGS	DEFAULT SETTING
NORMAL FREQUENCY DROPOUT	85-98%	90%
NORMAL FREQUENCY PICKUP	90-100%	95%
NORMAL OVER FREQUENCY TRIP	102-110%	OFF
EMERGENCY FREQUENCY DROPOUT	85-98%	90%
EMERGENCY FREQUENCY PICKUP	90-100%	95%
EMERGENCY OVER FREQUENCY TRIP	102-110%	OFF

TIME DELAYS

THE FOLLOWING TIME DELAY SETTINGS ALL HAVE AN ADJUSTABLE RANGE OF 0-60 min 59 sec UNLESS STATED OTHERWISE. ADJUSTABLE IN INCREMENTS OF 1 sec.
NOTE: SOME TIME DELAYS MAY BE EFFECTED BY CUSTOMER REQUESTED ACCESSORIES PROVIDED WITH THE UNIT. REFER TO THE DESCRIPTIONS PROVIDED UNDER THE "ACCESSORIES" NOTES ON THIS PAGE.

FEATURE	NAME	DEFAULT SETTING
1C	NORMAL SOURCE FAILURE TO ENGINE START	1 sec
2B	TRANSFER TO EMERGENCY ON AVAILABILITY OF EMERGENCY SOURCE	0 sec
1F	EMERGENCY SOURCE FAILURE RETRANSFER (NORMAL SOURCE AVAILABLE)	0 sec
2E	ENGINE COOLDOWN FOLLOWING RETRANSFER TO NORMAL	5 min
3A	RETRANSFER TO NORMAL (NORMAL FAILURE MODE)	30 min
3A	RETRANSFER TO NORMAL (TEST MODE)	30 sec
-	DELAYED TRANSFER (LOAD "OFF" TIME), [0-5 min 59 sec]	3 sec

DESCRIPTIONS OF TIME DELAYS:

FEAT. 1C - DELAY ON NORMAL SOURCE OUTAGE. STARTS ON FAILURE OF NORMAL SOURCE. RESETS IF NORMAL SOURCE IS ACCEPTED BEFORE EXPIRATION. INHIBITS ENGINE STARTING AND AUTOMATIC TRANSFER UNTIL EXPIRATION.

FEAT. 2B - DELAY PRIOR TO TRANSFER TO THE EMERGENCY SOURCE. DELAY STARTS ON EXPIRATION OF FEAT. 1C AND WHEN THE EMERGENCY SOURCE HAS BEEN ACCEPTED. DELAY RESETS IF THE EMERGENCY SOURCE FAILS PRIOR TO EXPIRATION. ON EXPIRATION, TRANSFER TO EMERGENCY IS INITIATED UNLESS THE NORMAL SOURCE HAS RECOVERED AND THE "COMMIT TO TRANSFER" FEATURE IS SET TO "NO" COMMIT. PROVIDES A PERIOD FOR EMERGENCY SOURCE STABILIZATION OR STAGING OF MULTIPLE TRANSFER SWITCH CONTROLLED LOADS TO THE EMERGENCY SOURCE.

FEAT. 1F - DELAY ON RETRANSFER TO NORMAL IN THE EVENT OF EMERGENCY SOURCE FAILURE. DELAY BEGINS ON FAILURE OF THE EMERGENCY SOURCE IF THE NORMAL SOURCE IS ACCEPTABLE. ON EXPIRATION, RETRANSFER TO NORMAL WILL BE INITIATED.

FEAT. 2E - DELAY ON ENGINE SHUTDOWN (ENGINE COOL DOWN PERIOD). DELAY STARTS FOLLOWING RETRANSFER TO THE NORMAL SOURCE. PROVIDES A PERIOD FOR THE ENGINE-GENERATOR SET TO RUN UNLOADED PRIOR TO SHUTDOWN.

FEAT. 3A - RETRANSFER TO NORMAL DELAY (NORMAL FAILURE MODE)
DELAY STARTS WHEN NORMAL SOURCE IS ACCEPTED (FOLLOWING IT'S FAILURE) AND WHILE THE LOAD IS CONNECTED TO EMERGENCY. RESETS IF NORMAL FAILS PRIOR TO EXPIRATION OR IF THE EMERGENCY SOURCE FAILS BEFORE EXPIRATION AND FEAT. 1F EXPIRES (AUTOMATIC BYPASS ON EMERGENCY SOURCE FAILURE). PROVIDES A PERIOD FOR THE NORMAL SOURCE TO STABILIZE PRIOR TO RETRANSFER.

FEAT. 3A - RETRANSFER TO NORMAL DELAY (TEST MODE)
DELAY STARTS WHEN THE "TRANSFER TEST" SWITCH IS RESET TO "AUTO" (FOLLOWING A USER INITIATED TRANSFER TEST) AND WHILE THE LOAD IS CONNECTED TO EMERGENCY. RESETS IF NORMAL FAILS PRIOR TO EXPIRATION OR IF THE EMERGENCY SOURCE FAILS BEFORE EXPIRATION AND FEAT. 1F EXPIRES (AUTOMATIC BYPASS ON EMERGENCY SOURCE FAILURE).

DELAYED TRANSFER (LOAD "OFF" TIME) -
PROVIDES A USER DEFINABLE PERIOD DURING WHICH THE LOAD IS DISCONNECTED FROM BOTH THE NORMAL AND EMERGENCY SOURCES DURING TRANSFER IN EITHER DIRECTION. THE DELAY ("OFF" PERIOD) BEGINS FOLLOWING THE OPENING OF THE SOURCE CONTACTOR, CN OR CE, CONNECTED TO THE SOURCE FROM WHICH TRANSFER IS BEING MADE. UPON EXPIRATION, CLOSURE OF THE OPPOSITE SOURCE CONTACTOR IS INITIATED.

ENGINE EXERCISER

THE ENGINE EXERCISER FEATURE PROVIDES A MEANS TO PERFORM AUTOMATIC EXERCISING OF THE ENGINE-GENERATOR SET EITHER WITH OR WITHOUT LOAD TRANSFER.
THE USER CAN PROGRAM UP TO SEVEN DIFFERENT EXERCISE ROUTINES. EACH ROUTINE INCLUDES;
1. ENABLE OR DISABLE THE ROUTINE
2. ENABLE OR DISABLE TRANSFER OF THE LOAD DURING THE ROUTINE
3. SET START TIME OF ROUTINE -
   - TIME OF DAY
   - DAY OF WEEK
   - WEEK OF MONTH (1st, 2nd, 3rd, 4th, ALTERNATE OR ALL)
4. SET THE DURATION OF THE ROUTINE

(CONTINUED). . .

PARAMETER		RANGE OF SETTING	DEFAULT SETTING
MONTH	(CLOCK SET)	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	CURRENT DATE
DAY		1-31	
YEAR		00-99	
HOUR		0-23	Eastern Standard Time
MINUTE		0-59	
ENABLE ROUTINE	(ROUTINE 1-7)	YES/NO	NO
TRANSFER LOAD		YES/NO	NO
START HOUR		0-23	0
START MINUTE		0-59	0
RUN WEEK		ALL, ALTERNATE, 1st, 2nd, 3rd, 4th, 5th	ALL
RUN DAY		SUN MON TUE WED THU FRI SAT	SUN
DURATION HOURS		0-23	0
DURATION MINUTES		0-59	0

SIGNALS & AUXILIARIES

A. FEATURE 7 - ENGINE START SIGNAL
SIGNAL INITIATED BY DROPOUT OF CONTROL PANEL RELAY (NR) FOLLOWING EXPIRATION OF THE FEATURE 1C TIME DELAY (DELAY TO OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES). FEATURE 7 CLOSES TO SIGNAL ENGINE START. ENGINE STARTING SIGNAL RESETS FOLLOWING RETRANSFER TO THE NORMAL SOURCE AND EXPIRATION OF THE FEATURE 2E (ENGINE COOL DOWN) TIME DELAY.
FEATURE 7 CONSISTS OF A FORM A CONTACT CONNECTED TO THE FIELD CONNECTIONS TERMINAL BLOCK (TB). CONTACTS RATED 5 AMPS AT 32VDC/120VAC RESISTIVE.

B. FEATURES 14AF & 14BF - TRANSFER SWITCH AUXILIARY POSITION INDICATING CONTACTS.
SEVEN (7) FORM C CONTACTS TO INDICATE CONNECTION OF THE TRANSFER SWITCH TO NORMAL (14A) AND SEVEN (7) FOR EMERGENCY (14B). CONTACTS CONNECTED TO THE FIELD CONNECTIONS TERMINAL BLOCK (TB). CONTACTS RATED 10 AMPS, 32 VDC, 250 VAC.

C. FEATURE 17 - REMOTE TRANSFER TO EMERGENCY.
REQUIRES A CUSTOMER SUPPLIED NORMALLY OPEN CONTACT. CLOSING OF THE CONTACT CAUSES ENGINE START AND TRANSFER TO THE EMERGENCY SOURCE. OPENING OF THE CONTACT ACTIVATES THE FEATURE 3A (RETRANSFER TO NORMAL) DELAY PRIOR TO RETRANSFER. IN THE EVENT THE EMERGENCY SOURCE FAILS WHILE THE TRANSFER SWITCH IS CONNECTED TO EMERGENCY AND THE REMOTE CONTACT IS CLOSED, THE TRANSFER SWITCH WILL RETRANSFER TO THE NORMAL SOURCE. CONNECTED TO THE FIELD CONNECTIONS TERMINAL BLOCK (TB).

OPERATION

IF THE NORMAL SOURCE FAILS, THE TRANSFER SWITCH INITIATES STARTING OF THE ENGINE-GENERATOR SET. WHEN PROPER VOLTAGE AND FREQUENCY HAVE BEEN ATTAINED, THE LOAD WILL BE TRANSFERRED TO THE EMERGENCY SOURCE BY MEANS OF A DELAYED TRANSITION, (PROGRAMMED LOAD DISCONNECT PERIOD).

DELAYED TRANSITION TRANSFER TO EMERGENCY WILL CAUSE THE NORMAL SOURCE CONTACTOR (CN) TO OPEN. AFTER THE LOAD DISCONNECT DELAY, AS SET VIA THE USER INTERFACE OF THE GROUP 5 CONTROL PANEL, THE EMERGENCY SOURCE CONTACTOR (CE) WILL CLOSE. DURING THE PERIOD THAT BOTH CONTACTORS ARE OPEN AND THE TIME DELAY IS ACTIVE, A "LOAD DISCONNECT ACTIVE" LED WILL BE LIT (AMBER LED).

WHEN THE NORMAL SOURCE IS RESTORED FOR THE DURATION OF THE FEATURE 3A, RETRANSFER TO NORMAL TIME DELAY SETTING, THE LOAD WILL BE RETRANSFERRED TO THE NORMAL SOURCE IN A DELAYED TRANSITION MANNER.

DELAYED TRANSITION RETRANSFER TO NORMAL WILL CAUSE THE EMERGENCY SOURCE CONTACTOR (CE) TO OPEN. AFTER THE LOAD DISCONNECT TIME DELAY EXPIRES, THE NORMAL SOURCE CONTACTOR (CN) WILL CLOSE.

THE ENGINE WILL CONTINUE TO RUN FOR THE ENGINE COOL DOWN PERIOD, FEATURE 2E. DELAYED TRANSITION TRANSFER WILL ALSO OCCUR DURING TRANSFER TO EMERGENCY BY OPERATING THE TEST SWITCH. RETRANSFER TO NORMAL WILL OCCUR AS PREVIOUSLY DESCRIBED.

USER CONTROLS AND INDICATIONS

A. FEATURES 5 & 6B - TRANSFER TEST/RETRANSFER TIME DELAY BYPASS CONTROLS.
TRANSFER TEST:
OPERATION CAUSES A NORMAL SOURCE FAILURE SEQUENCE. ACTIVATE AND HOLD FOR AT LEAST 15 SECONDS TO ALLOW TIME FOR THE ENGINE-GENERATOR TO START.
RETRANSFER TIME DELAY BYPASS:
OPERATION WILL BYPASS THE FEATURE 3A (RETRANSFER TO NORMAL DELAY).

B. FEATURES 9A & 9B - TRANSFER SWITCH POSITION INDICATORS.
FEATURE 9A: TRANSFER SWITCH CLOSED ON NORMAL (GREEN LED)
FEATURE 9B: TRANSFER SWITCH CLOSED ON EMERGENCY (RED LED)

C. FEATURES 9C & 9D - SOURCE ACCEPTANCE INDICATORS.
FEATURE 9C: NORMAL SOURCE ACCEPTED (GREEN LED)
FEATURE 9D: EMERGENCY SOURCE ACCEPTED (RED LED)

D. LOAD DISCONNECT ACTIVE - INDICATES THAT THE TRANSFER SWITCH IS IN THE LOAD DISCONNECTED POSITION (BOTH NORMAL (CN) AND EMERGENCY (CE) CONTACTORS OPEN) (AMBER LED).

BYPASS SWITCH & ISOLATION USER CONTROLS & INDICATIONS

A. BYPASS / ISOLATION DISPLAY INDICATORS - LED TYPE, COMMON LAMP TEST

NORMAL SOURCE AVAILABLE - GREEN
EMERGENCY SOURCE AVAILABLE - RED

TRANSFER SWITCH CONNECTED TO NORMAL - GREEN
TRANSFER SWITCH CONNECTED TO EMERGENCY - RED

BYPASS SWITCH CONNECTED TO NORMAL - GREEN
BYPASS SWITCH CONNECTED TO EMERGENCY - RED
(CONTINUED)

LOAD CONNECTED - AMBER

TS IN CONNECTED POSITION - AMBER
TS IN TEST POSITION - AMBER
TS ISOLATED - AMBER

UNIT NOT IN AUTOMATIC - AMBER

B. BYPASS / ISOLATION DISPLAY ENGINE CONTROL SWITCH
TWO (2) POSITIONS:
"AUTO" - ENGINE STARTING CONTROLLED BY TRANSFER SWITCH CONTROL PANEL
"RUN" - SIGNALS ENGINE TO START

C. BYPASS / ISOLATION INTERLOCKS (SOLENOID ACTUATED)
SL1: INTERLOCKS THE TRANSFER SWITCH ISOLATION CRANK WITH THE TRANSFER AND BYPASS SWITCHES TO INSURE THAT:
THE TRANSFER SWITCH CANNOT BE DISCONNECTED WITHOUT BEING BYPASSED.
THE TRANSFER SWITCH CANNOT BE RECONNECTED UNLESS IT IS IN THE SAME POSITION AS THE BYPASS SWITCH.

SL2: INTERLOCKS THE BYPASS SWITCH OPERATOR WHEN THE TRANSFER SWITCH IS IN THE CONNECTED POSITION TO INSURE THAT THE BYPASS SWITCH CANNOT BE OPERATED TO A SOURCE OTHER THAN THAT WHICH THE TRANSFER SWITCH IS CONNECTED TO.

GENERAL NOTES

1. SWITCH SHOWN DE-ENERGIZED AND CONNECTED TO THE NORMAL SOURCE. THE BYPASS SWITCH OPERATOR IS IN THE "OFF" (AUTOMATIC) POSITION WITH THE ISOLATION CRANK (TS) IN THE FULLY CONNECTED POSITION.

2. DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUBLICATION ICS 1-1983, PART 1-101A.

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

4. ○N TERMINAL BLOCKS INDICATES AVAILABLE FIELD CONNECTION POINT.

5. ●N TERMINAL BLOCKS INDICATES FACTORY CONNECTION POINT.

6. CONTROL AND ACCESSORY WIRING IS ROUTED IN ACCORDANCE WITH ASCO ASSEMBLY PROCEDURE GS451261.

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

ACCESSORIES

ACC. 14A1 (1) AUXILIARY CONTACT ON BYPASS SWITCH, CLOSED IN BYPASS NORMAL POSITION.

ACC. 14B1 (1) AUXILIARY CONTACT ON BYPASS SWITCH, CLOSED IN BYPASS EMERGENCY POSITION.

ACC. 17AL SPECIAL CIRCUITRY WITH SELECTOR SWITCH TO ENABLE SELECTION OF THE EMERGENCY GENERATOR AS PREFERRED SOURCE WITH OVERRIDE IN THE EVENT OF A GENERATOR FAILURE. INCLUDES PILOT LIGHT (RED) TO INDICATE EMERGENCY SELECTED AS PREFERRED SOURCE.

ACC. 18B 2P D/T CONTACTS THAT OPERATE WHEN EMERGENCY SOURCE VOLTAGE IS PRESENT AT TRANSFER SWITCH TERMINALS.

ACC. 18G 2P D/T CONTACTS THAT OPERATE WHEN NORMAL SOURCE VOLTAGE IS PRESENT AT TRANSFER SWITCH TERMINALS.

ACC. 31Z SELECTIVE LOAD DISCONNECT CIRCUIT TO PROVIDE A PRE-TRANSFER AND/OR POST TRANSFER SIGNAL WHEN TRANSFERRING FROM EMERGENCY TO NORMAL AND/OR NORMAL TO EMERGENCY. ADDITIONALLY, THE SIGNAL CAN BE PROGRAMMED TO OCCUR DURING ALL TRANSFERS OR ONLY WHEN THE TRANSFER IS OCCURRING BETWEEN TWO LIVE SOURCES. THE LENGTH OF THE PRE AND POST TRANSFER DELAYS CAN BE SET TO 0-5 MINUTES, 59 SECONDS. FACTORY SETTINGS:

.....PARAMETER.....SETTING..
PRE-TRANSFER N>E (31F TIMER) 3 SEC
POST TRANSFER N>E (31M TIMER) 3 SEC
BYPASS 31F & 31M ON SOURCE FAIL NO
PRE-TRANSFER E>N (31G TIMER) 3 SEC
POST TRANSFER E>N (31N TIMER) 3 SEC
BYPASS 31G & 31N ON SOURCE FAIL NO

REFER TO GROUP 5 CONTROL PANEL USER'S GUIDE (PN 381333-126).

OUTPUT RATING: 6 AMPS, 240 VAC (GENERAL PURPOSE)
10 AMPS, 32 VDC RESISTIVE

ACC. 82E STANDARD BYPASS ISOLATION STATUS DISPLAY REPLACED WITH MEMBRANE DISPLAY. (SEE " BYPASS SWITCH USER CONTROLS & INDICATIONS")

ACCESSORIES CONTINUED....

ACC. 150B ACCESSORY BUNDLE GROUPS INCLUDED, ACC. 1PS1, 72EE2, 135SB

ACC 1PS1: TWO UNINTERRUPTIBLE POWER SUPPLIES (UPS'S) IN PARALLEL, 24VDC. FOR POWERING THE TS CONTROL PANEL, "DIGITAL POWER METER" AND COMMUNICATION DEVICES WHEN NORMAL AND EMERGENCY SOURCES ARE NOT PRESENT. UNINTERRUPTED POWER IS PROVIDED BY THE UPS'S FOR A PERIOD RANGING FOR APPROXIMATELY 1 MINUTE DEPENDING ON THE LOAD REQUIREMENTS. A CUSTOMER CONNECTION IS PROVIDED FOR A CUSTOMER SUPPLIED EXTERNAL 24VDC SOURCE WHICH IS USED AS A SECONDARY POWER SOURCE FOR THE UPS'S. FACTORY SETTING:
EXTERNAL BATTERY - YES

ACC 72EE2: THE 5170 QUAD-ETHERNET MODULE PROVIDES COMMUNICATION FROM THE TRANSFER SWITCH CONTROLLER AND METER TO EXTERNAL DEVICES VIA ETHERNET/SERIAL COMMUNICATION.

ACC 135SB: ASCO "DIGITAL POWER METER" AND THE "MOXA E1212 ETHERNET REMOTE I/O" MONITORING THE LOAD SOURCE. FOR MEASUREMENT OF VOLTAGE, FREQUENCY & CURRENT AND CALCULATION OF POWER, ENERGY & POWER FACTOR. THE "DIGITAL POWER METER" CAN COMMUNICATE DATA TO HOST DEVICES WHICH ARE PART OF ASCO COMMUNICATIONS SYSTEMS VIA ACC. 72EE2 SERIES MODULE. THE "DIGITAL POWER METER" IS CONNECTED TO MEASURE SINGLE PHASE 2 OR 3 WIRE OR THREE PHASE 3 OR 4 WIRE SYSTEMS BASED ON THE CONFIGURATION OF THE TRANSFER SWITCH SPECIFIED.

THE "DIGITAL POWER METER" AND THE MOXA E1212 SHALL BE POWERED WITH 24Vdc THAT IS DERIVED FROM THE NORMAL OR EMERGENCY SOURCES. THE FOLLOWING ACCESSORIES ALONG WITH TWO EXTERNAL 24Vdc POWER SUPPLIES ARE WIRED TO THE "DIGITAL POWER METER" AND THE "MOXA E1212". THE "MOXA E1212" IS INTER WIRED TO THE DISCRETE INPUTS AND OUTPUTS. ACCESSORIES 14A1, 14B1, 14T, 14U, 14V, NORMAL, EMERGENCY SOURCE AVAILABILITY (FROM THE SWITCH OR BYPASS POWER SUPPLY) AND ENGINE START (BID).

TABLE A. DISCRETE INPUT

NUMBER	LABEL (FACTORY SETTING)	ACCESSORY	ACCESSORY DESCRIPTION
DI0	BP NORMAL	14A1	BYPASS CONNECTED TO NORMAL SOURCE
DI1	BP EMERGENCY	14B1	BYPASS CONNECTED TO EMERGENCY SOURCE
DI2	BP IN AUTO	14T	BYPASS SWITCH IN AUTOMATIC POSITION
DI3	ISO CLOSED	14U	ISOLATION HANDLE IN CLOSED POSITION
DI4	ISO OPEN	14V	ISOLATION HANDLE IN OPEN POSITION
DI5	EMERG SRCE AVAL	N/A	EMERGENCY SOURCE AVAILABILITY PROVIDED BY MEANS THAT DO NOT REQUIRE AN OPERATIONAL GROUP 5 CONTROLLER
DI6	NORM SRCE AVAL	N/A	NORMAL SOURCE AVAILABILITY PROVIDED BY MEANS THAT DO NOT REQUIRE AN OPERATIONAL GROUP 5 CONTROLLER
DI7	ENGINE START	N/A	WIRED TO ENGINE START SIGNAL TO INDICATE WHEN A MANUAL ENGINE START HAS BEEN INITIATED FROM THE BYPASS ISOLATION DISPLAY (BID)

BASE CATALOG NUMBER				CATALOG NUMBER SUFFIXES			
CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE
7ADTB	A B	3	1000 1200 1600 2000 2600 3000	A B C D E F G H J K L M N P Q R	5	X	C E F G H J K L M N P Q
	BLANK FOR NONE					BLANK FOR NONE	BLANK FOR OPEN TYPE

EXPLANATION OF CATALOG NUMBER CODES

NEUTRAL TYPE		VOLTAGE CODES 3 PHASE (3 OR 4 WIRE) 50 OR 60 Hz.		ENCLOSURE CODES		
CODE	DESCRIPTION	CODE	NOMINAL VOLTAGE	CODE	TYPE	DESCRIPTION
BLANK	NONE	A	115	BLANK		OPEN TYPE (NO ENCLOSURE)
A	SOLID	B	120	C	1	GENERAL PURPOSE, INDOOR
B	SWITCHING	C	208	E	2	INDOOR, WATER & DUST RESISTANT
		D	220	F	3R	OUTDOOR, RAIN PROOF, SLEET & ICE RESISTANT
		E	230	G	4	INDOOR/OUTDOOR, WATERTIGHT & DUST TIGHT
		F	240	H	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		G	277	J	4X	TYPE 4 PLUS CORROSION RESISTANCE (FIBERGLASS)
		H	380	K	7	EXPLOSION PROOF
		J	400	L	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OIL TIGHT & DUST TIGHT
		K	415			(SECURE ENCLOSURES)
		L	440	M	3R	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
		M	460	N	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
		N	480	P	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		P	550	Q	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		Q	575			
		R	600			

CATALOG NUMBER
ASCO® CERTIFIED TO
S.O.
BY
DATE

FORM REV M

PROJECT NAME:

WIRING DIAGRAM
7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

REV.	TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
		SEE ECN			
-		263098	DSC	MM	09/09/16
		ISSUE			

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

ASSEM. REF. NO.

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COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO.
617429-561

DRAWING REV. A ECN NO. 282955 SHEET 1 OF 12

ASCO® ASCO POWER TECHNOLOGIES, L.P.
FLORHAM PARK, NEW JERSEY 07932 U.S.A.

TECHNICAL DATA

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH POSITION (AUX3)		
		EMERG	OFF	NORMAL
81-82				NONE
83-84				
85-86	●			
87-88	●			
89-90	●			
91-92	●			
93-94	●			
95-96				
97-98				
99-100				
101-102				
103-104	●	NONE		
105-106	●			
107-108				
109-110	●			
111-112	●			
113-114	●			
115-116	●			
117-118	●			
119-120				
121-122				
123-124				
125-126				
127-128				

BYPASS SWITCH OPERATOR AUXILIARY CONTACTS

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH POSITION (AUX4)		
		EMERG (PULL)	<>	NORMAL (PUSH)
137-138	●			
137-139				
140-141	●			
140-142				

BYPASS SWITCH OPERATOR AUXILIARY CONTACTS

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH HANDLE POSITION (AUX5)		
		OFF (90°)	<> (75°)	BYPASS (-90°)
143-144	●			
143-145				
146-147				
146-148	●			

ISOLATION (TRANSFER SWITCH CARRIAGE POSITION) AUXILIARY CONTACTS

IS AUXILIARY CONTACT	STATUS (*)	TRANSFER SWITCH CARRIAGE POSITION				
		CONNECT	> <	TEST	> <	ISOLATE
1-2	●					
4-5	●					
7-8	●					
10-12	●					
13-14	●					
13-15						
16-17	●					
16-18	●					
19-21	●					
22-23	●					
22-24	●					
25-26	●					
28-29	●					
31-32	●					
31-33						
46-47	●					
46-48						
58-59						
58-60						
61-62						

(*) CONTACT AVAILABILITY STATUS:

" " ●CONTACT PROVIDED & USED IN CIRCUITRY

"BLANK" CONTACT NOT USED. IF PHYSICALLY AVAILABLE, CONTACT IS FOR FACTORY USE ONLY!

REV.	REV. TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
		SEE ECN			
-		263098	DSC	MM	09/09/16
		ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS

"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

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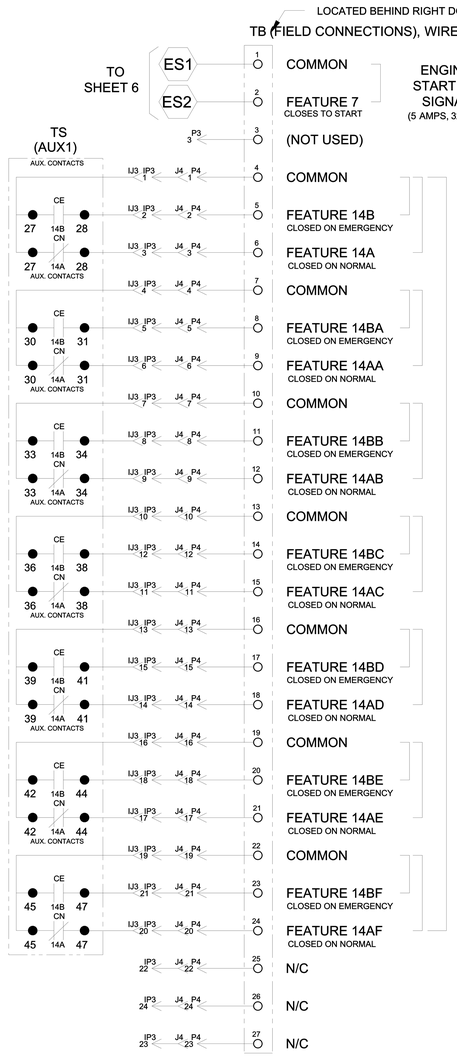
COMPUTER GENERATED DRAWING

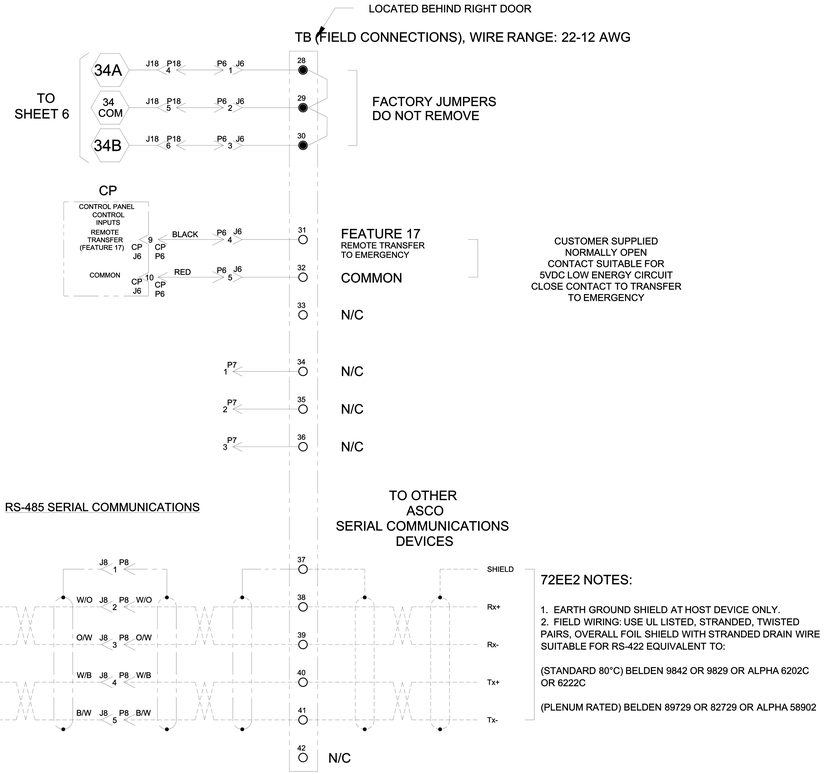
SCALE NONE SIZE DS

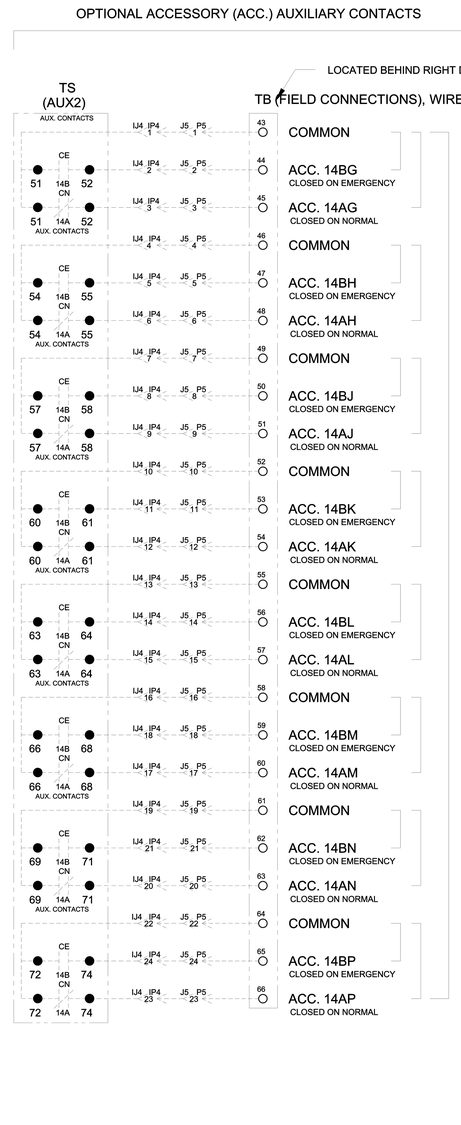
DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 2 OF 12

FIELD CONNECTIONS







REV.	REV. TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
		SEE ECN			
-		263098	DSC	MM	09/09/16
		ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

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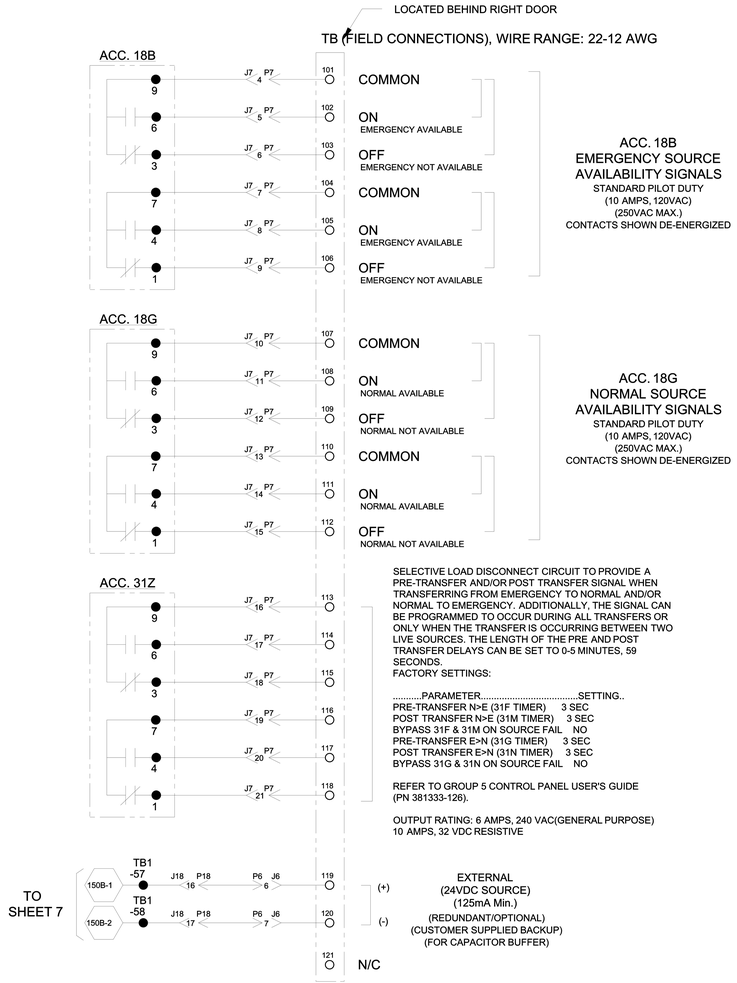
COMPUTER GENERATED DRAWING

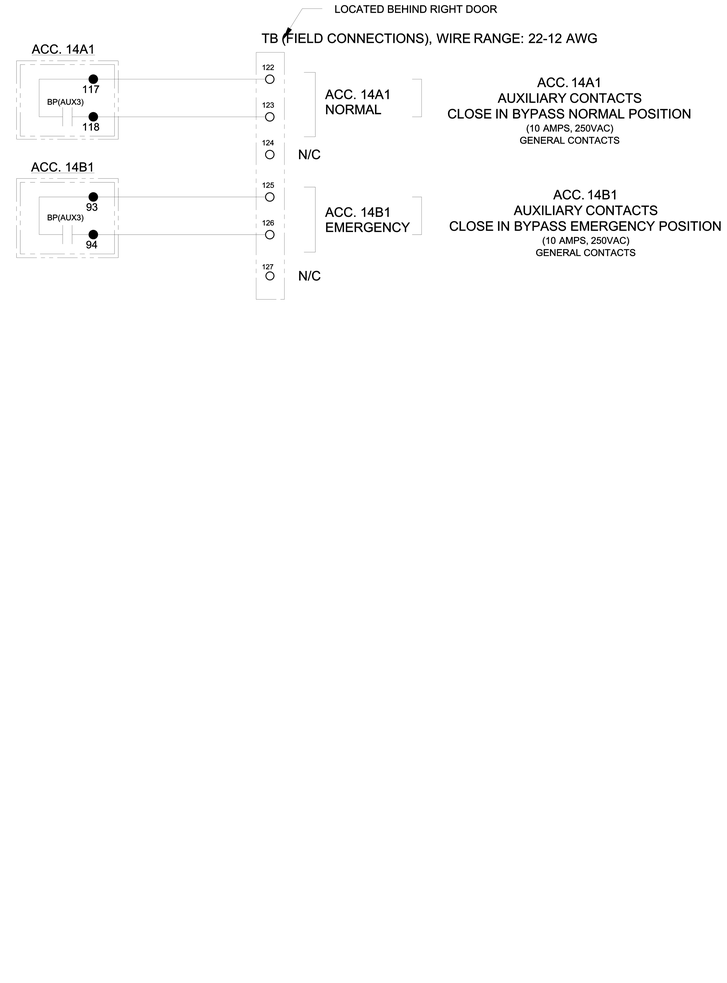
SCALE NONE SIZE DS

DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 3 OF 12

FIELD CONNECTIONS (CONTINUED)





REV.	REV. TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
		SEE ECN			
-		263098	DSC	MM	09/09/16
		ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
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COMPUTER GENERATED DRAWING

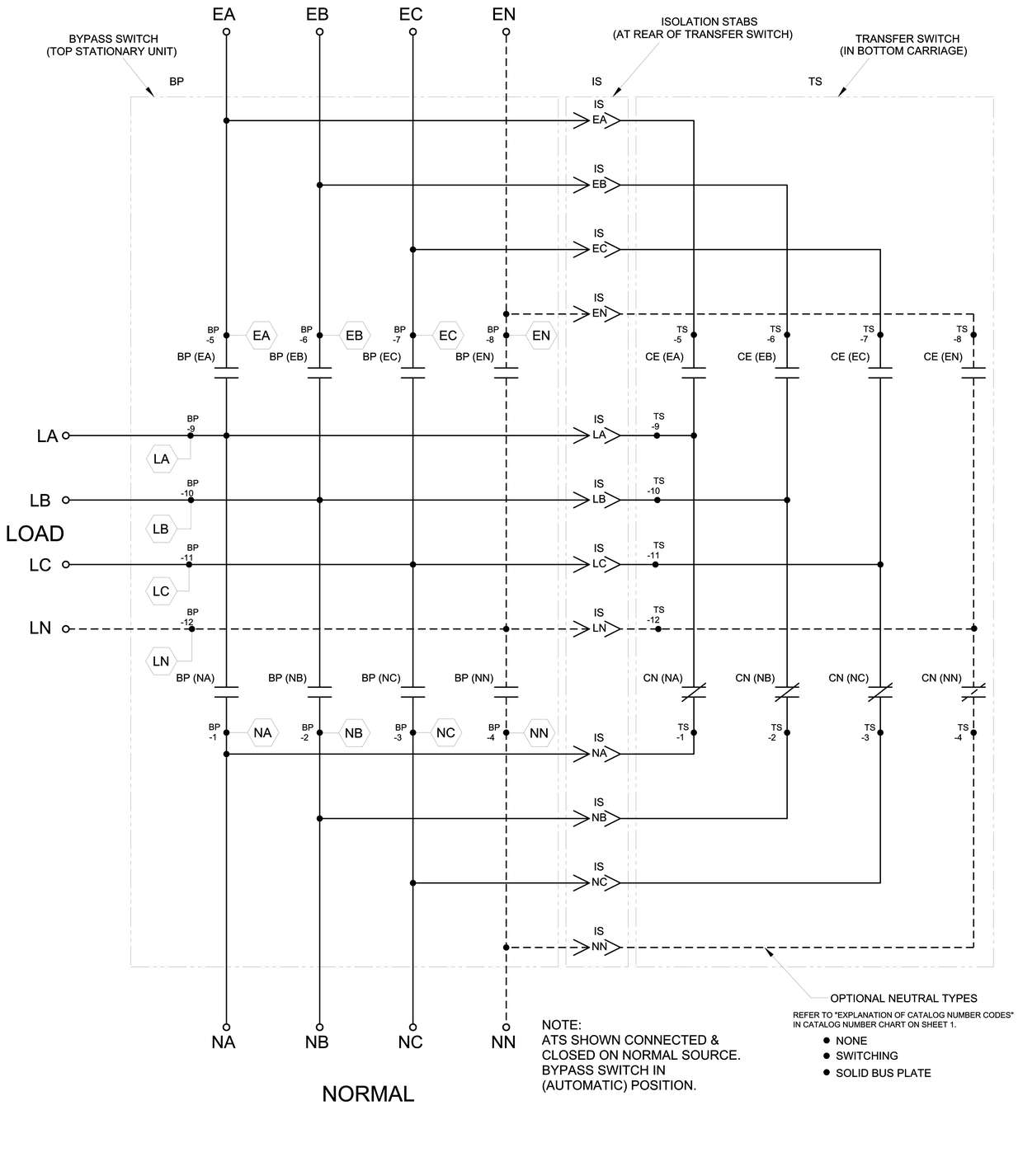
SCALE NONE SIZE DS

DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 4 OF 12

MAIN POWER POLES

EMERGENCY

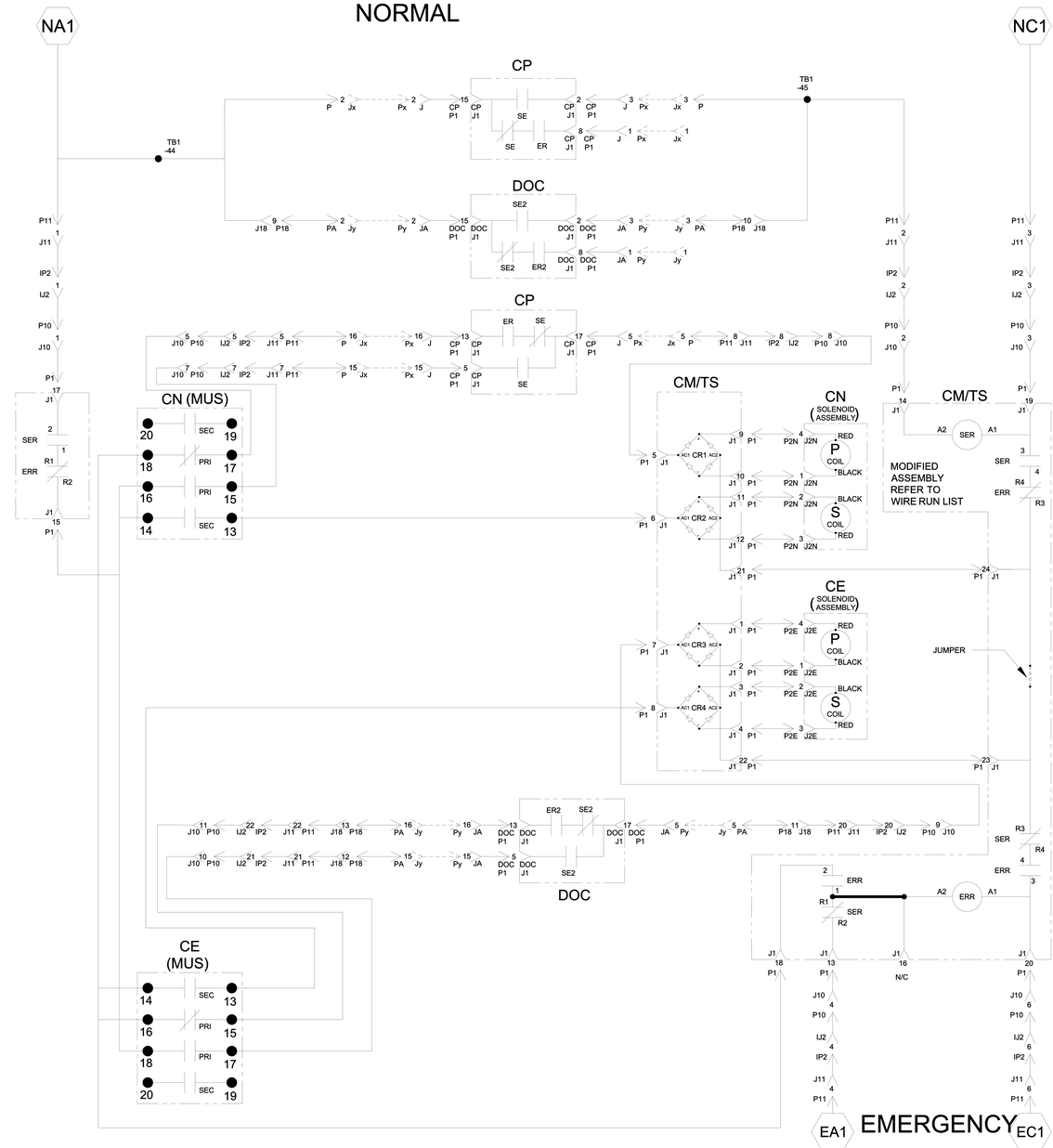


NOTE:
ATS SHOWN CONNECTED & CLOSED ON NORMAL SOURCE. BYPASS SWITCH IN (AUTOMATIC) POSITION.

NORMAL

TS OPERATOR CIRCUIT

NORMAL



CN (MUS) CONTACTS						
MUS	SOLENOID POSITION					
	CLOSED NORMAL	>	AFTER TDC *	<	OPEN	
13-14						
15-16						
17-18						
19-20						

CE (MUS) CONTACTS					
MUS	SOLENOID POSITION				
	OPEN	>	AFTER TDC *	<	CLOSED EMERG.
13-14					
15-16					
17-18					
19-20					

* AFTER SOLENOID CORE PASSES THROUGH TOP DEAD CENTER POSITION.

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	SEE ECN			
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	ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS

"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

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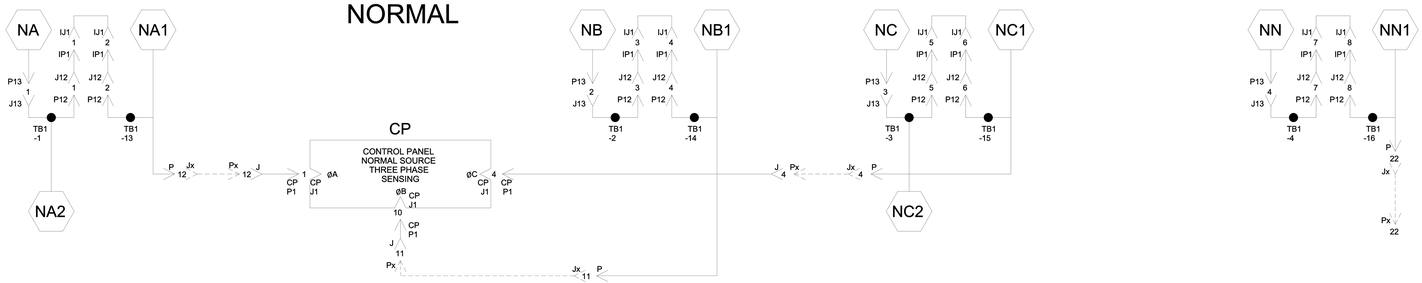
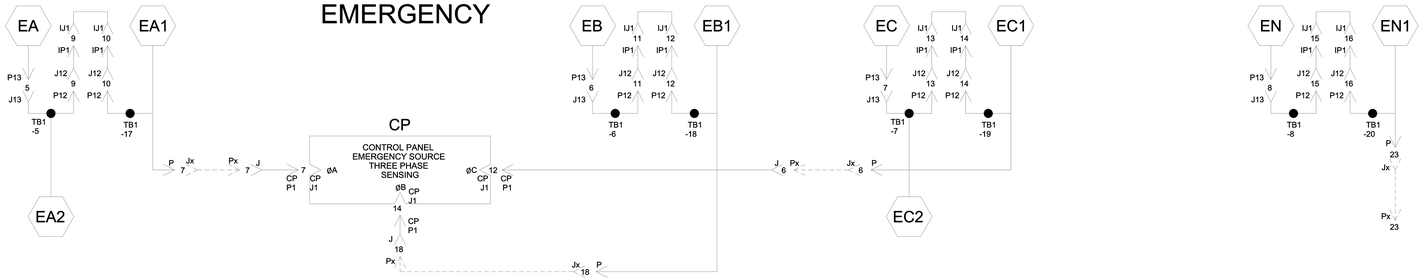
NORMAL SOURCE CIRCUITS

NORMAL



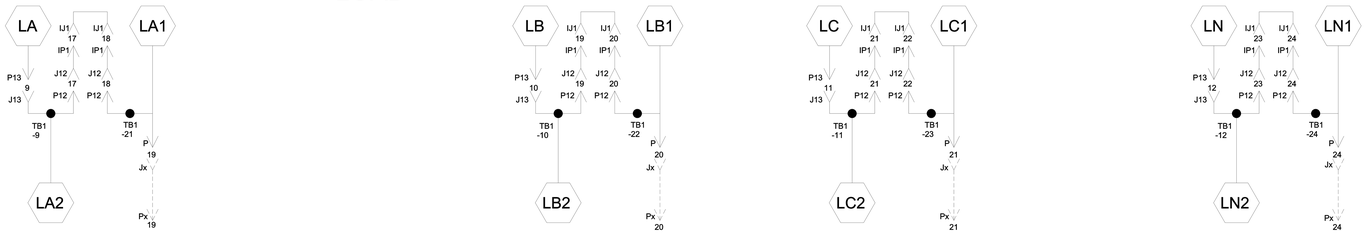
EMERGENCY SOURCE CIRCUITS

EMERGENCY

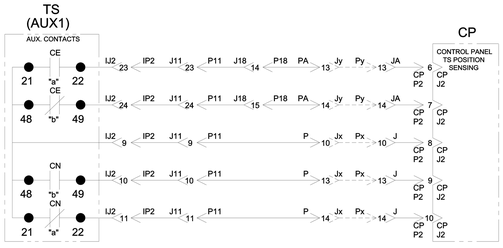


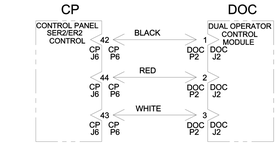
LOAD TERMINAL CIRCUITS

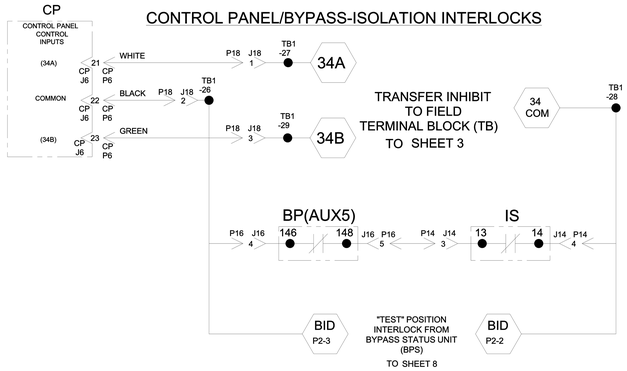
LOAD

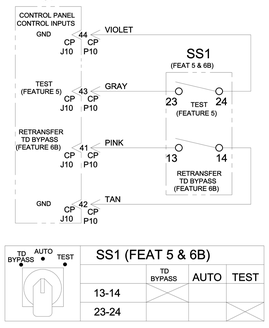


CONTROL SIGNALS & INDICATION

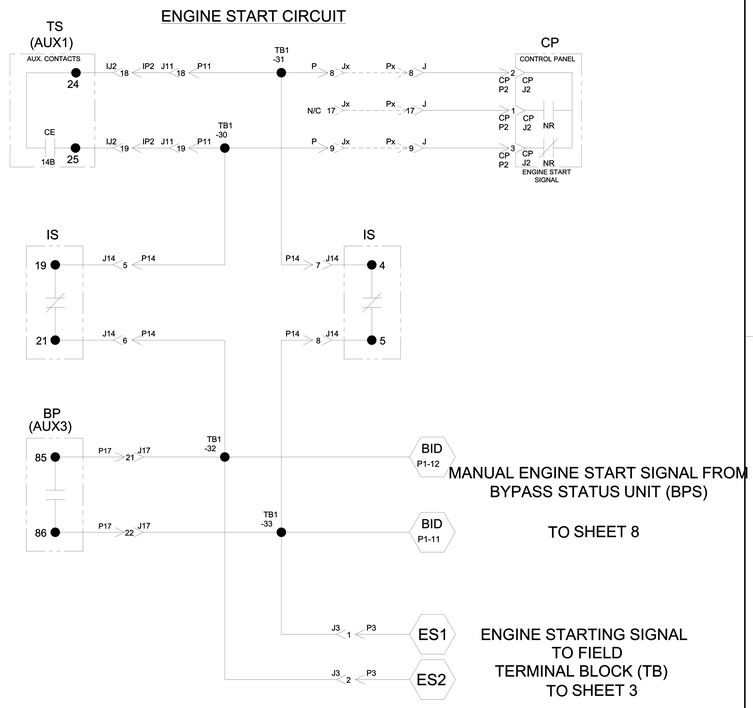




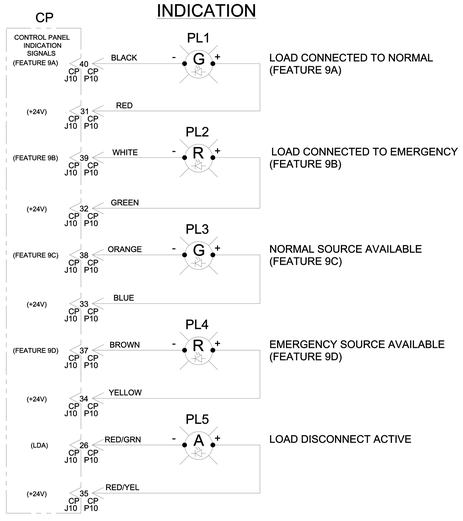




ENGINE START CIRCUIT



INDICATION



REV. TO SHEET	ECN NO.	BY	APP.	DATE
A	282955	VDS	HSL	01/21/20
	SEE ECN			
-	263098	DSC	MM	09/09/16
	ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
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PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 6 OF 12

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ADDITIONAL CIRCUITS

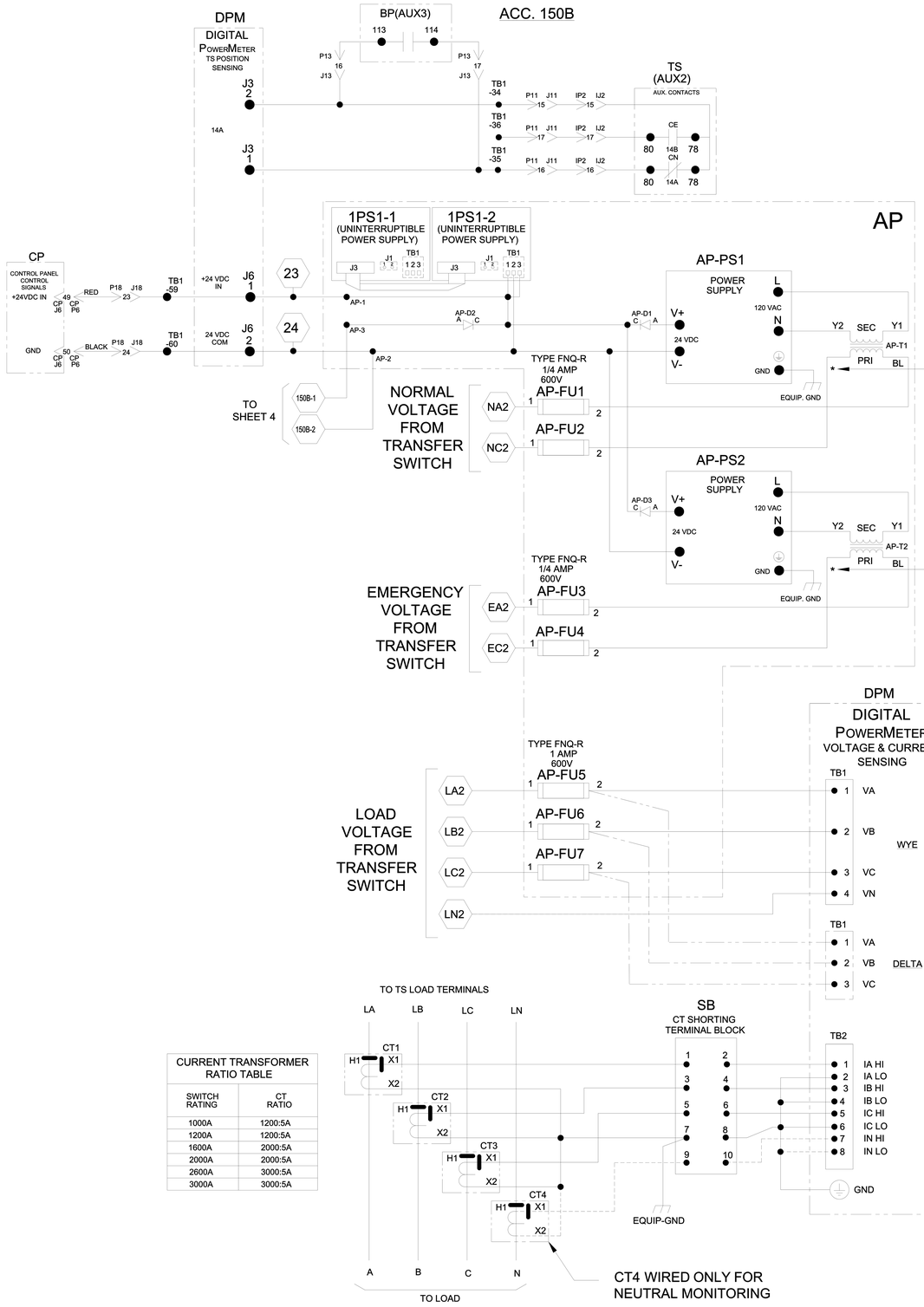


TABLE A

PRIMARY TRANS TAPS	
VOLTS	* COLOR
208	WHITE
220-240	BLACK
380-416	BROWN
440-480	RED
550-600	GREEN

CURRENT TRANSFORMER RATIO TABLE

SWITCH RATING	CT RATIO
1000A	1200:5A
1200A	1200:5A
1600A	2000:5A
2000A	2000:5A
2600A	3000:5A
3000A	3000:5A

DIGITAL POWERMETER (TB1) WIRING NOTES:

1. TB1 MUST BE WIRED IN A DELTA (SHOWN IN PHANTOM) IN ALL CASES WHERE THE SWITCH IS NOT SUPPLIED WITH A NEUTRAL (CATALOG NUMBER DOES NOT CONTAIN A3, B3 OR C3).

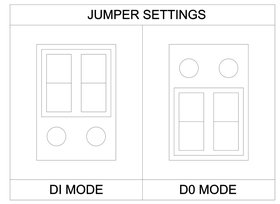
2. TB1 MUST BE WIRED IN A WYE (SHOWN IN CONTINUOUS) IN ALL CASES WHERE THE SWITCH IS SUPPLIED WITH A NEUTRAL (CATALOG NUMBER CONTAINS A3, B3 OR C3).

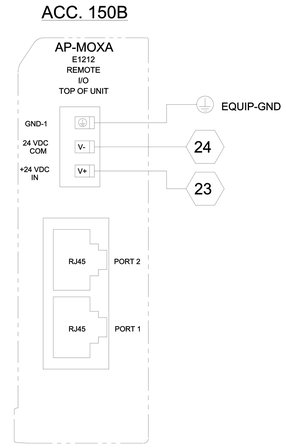
3. REFER TO ADDITIONAL WIRING (150B) ON WIRE RUN LISTING.

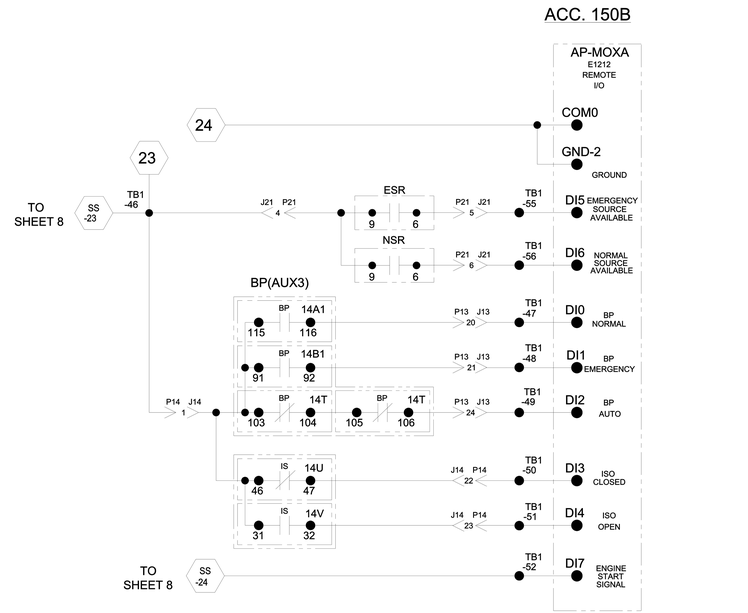
MOXA ioLogik E1212 WIRING NOTES:

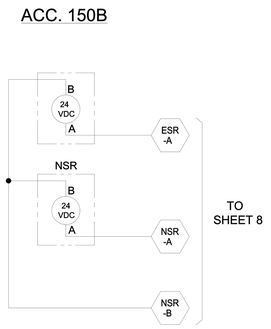
DIO'S REQUIRE CONFIGURING THE JUMPERS INSIDE THE ENCLOSURE. REMOVE SCREW LOCATED ON THE BACK PANEL AND OPEN THE COVER TO CONFIGURE THE JUMPERS.

DEFAULT IS DO MODE
SET TO DI MODE FOR ALL INPUTS (8)









A	282955	VDS	HSL	01/21/20	SEE ECN
-	263098	DSC	MM	09/09/16	ISSUE

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

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SCALE NONE SIZE DS

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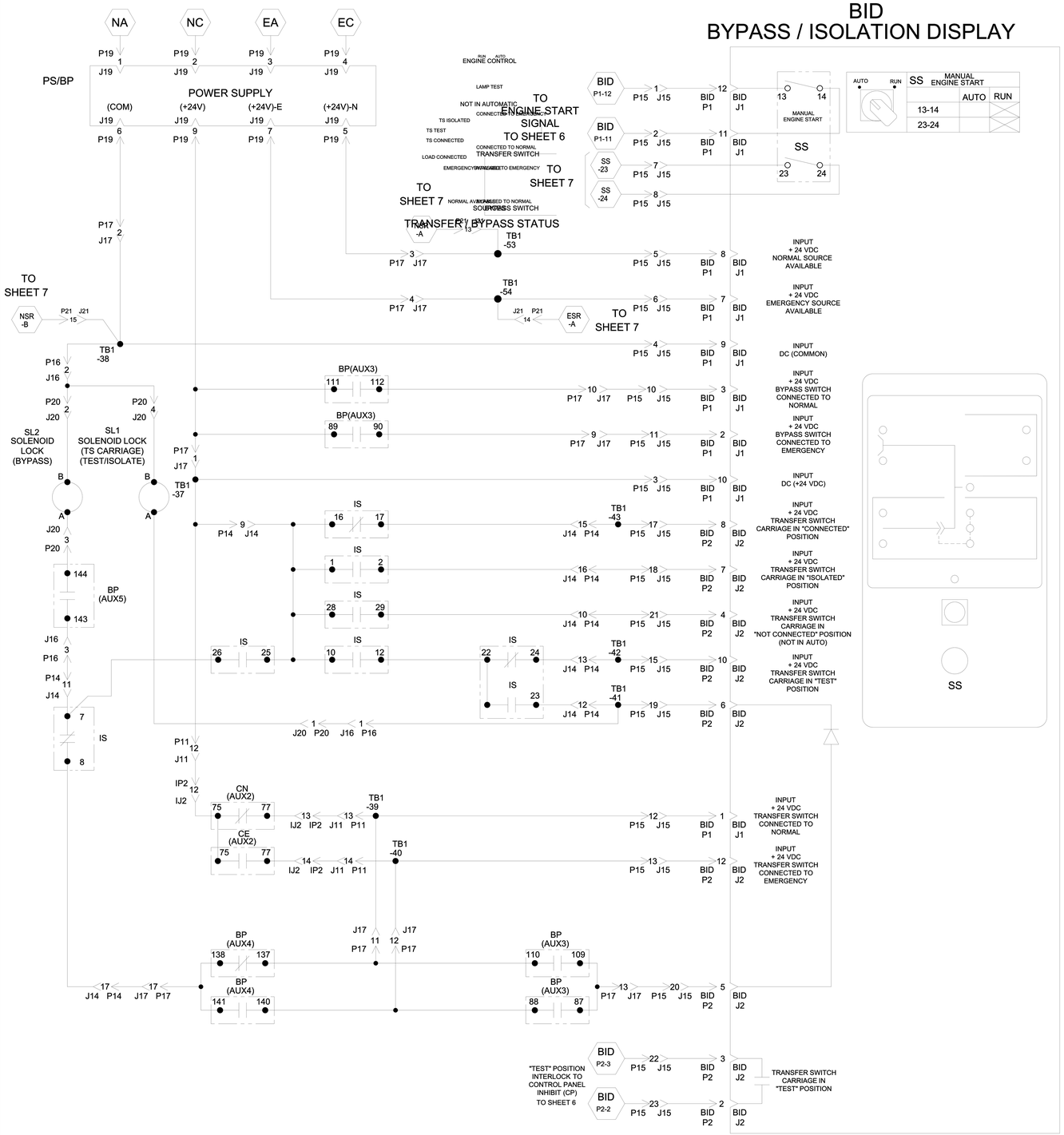
DRAWING REV. A ECN NO. 282955 SHEET 7 OF 12

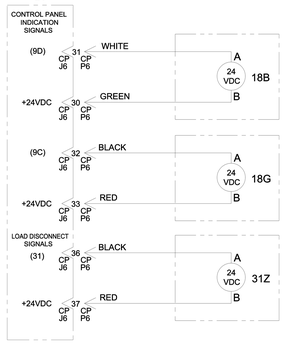
BYPASS / ISOLATION INTERLOCKING & INDICATION

BID
BYPASS / ISOLATION DISPLAY

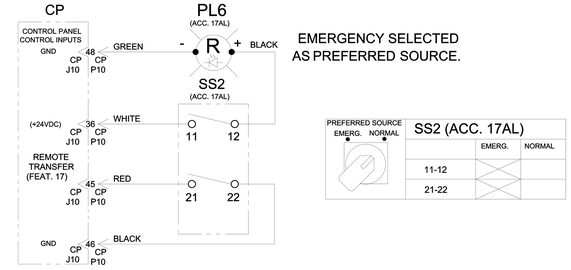


ADDITIONAL CIRCUITS (CONTINUED)

ACC. 18B, 18G, 31Z



ACC. 17AL



A	282955	VDS	HSL	01/21/20		
	SEE ECN					
-	263098	DSC	MM	09/09/16		
	ISSUE					
	REV. TO SHEET	ECN NO.	BY	APP.	DATE	

PROJECT NAME:

WIRING — DIAGRAM

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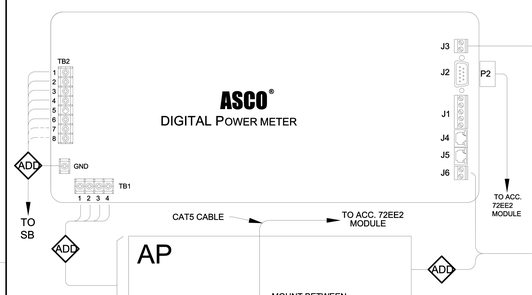
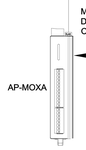
PHYSICAL DIAGRAM

LEFT DOOR, INSIDE (PANEL "L")



AP



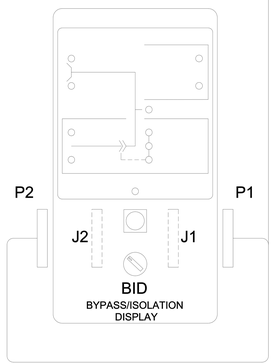
ACC. 150B
ACCESSORY ADD-ON PANEL MOUNTING
FOR INTERNAL WIRING REFER TO DWG. 621600-238

AP1

OPTIONAL
ACCESSORY ADD-ON PANEL MOUNTING

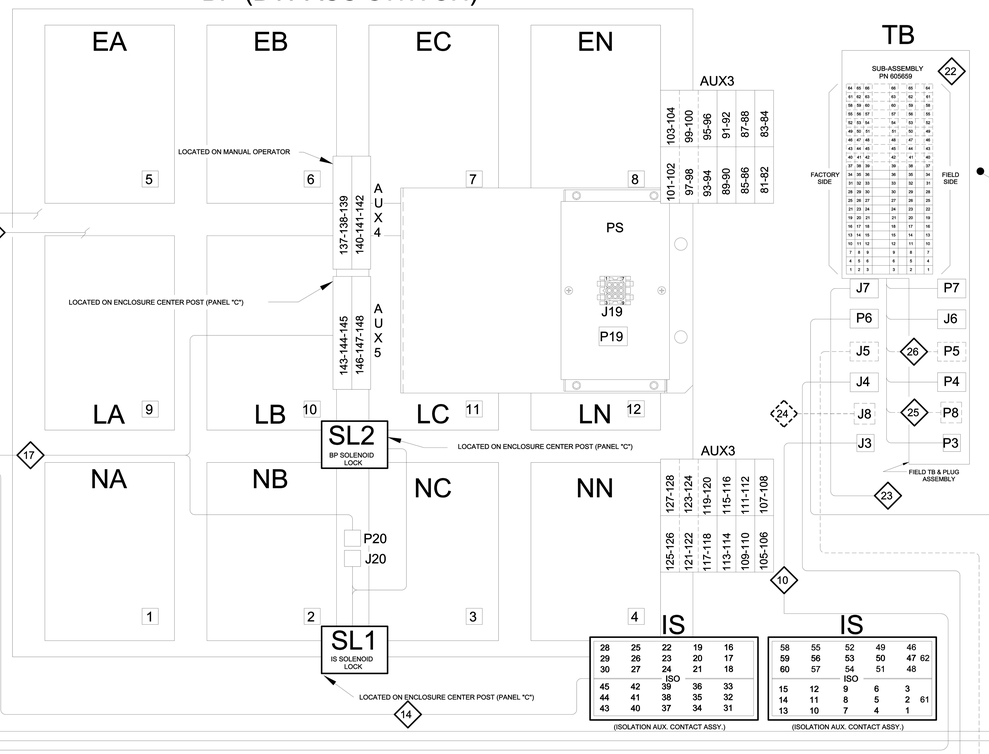
NOTE: AP1 IS ROTATED 90 DEGREES

CENTER POST, INSIDE (PANEL "C")

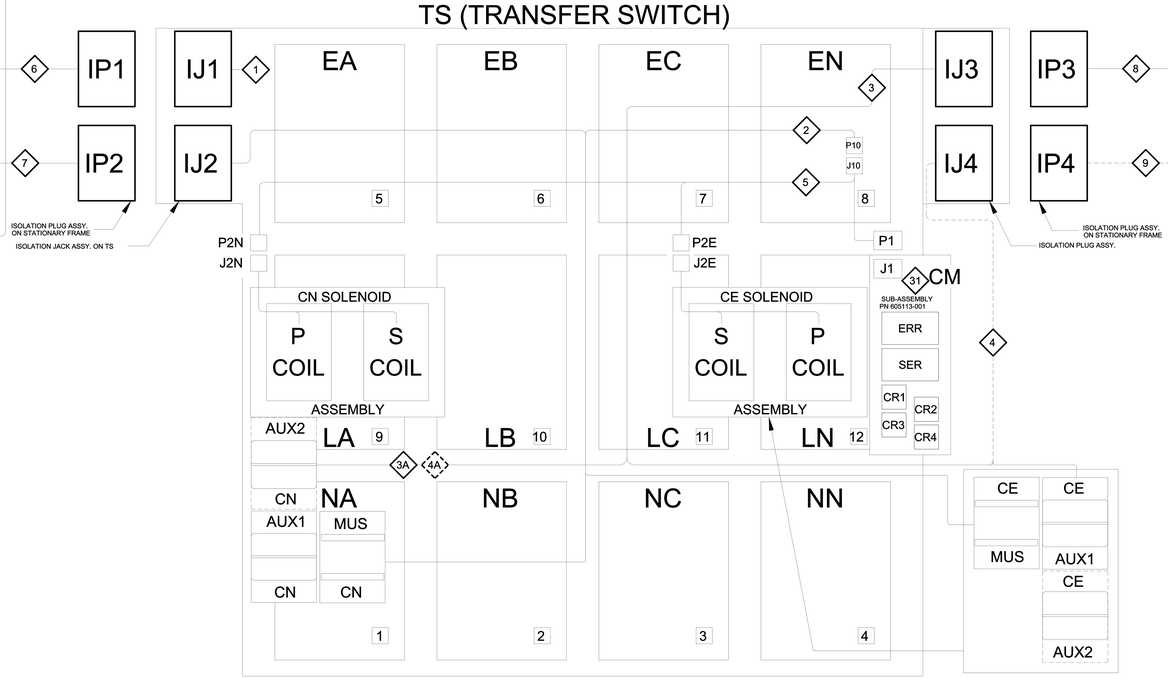


MAIN ENCLOSURE

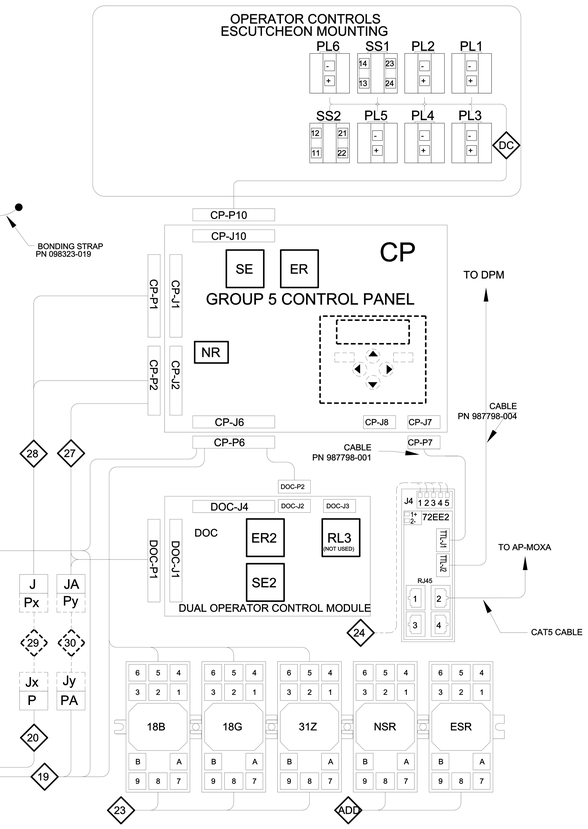
BP (BYPASS SWITCH)



TS (TRANSFER SWITCH)



RIGHT DOOR, INSIDE (PANEL "R")



NOTES:
1)ADDITIONAL OPTIONAL ACCESSORY ADD-ON PANELS MAY BE MOUNTED IN UPPER COMPARTMENT OF ENCLOSED TYPE UNITS. THESE ARE SHOWN ON THE NEXT SHEET IF APPLICABLE.
2)PHYSICAL DIAGRAM MAY VARY BASED ON THE ENCLOSURE USED.

OPERATOR CONTROLS

ID	DESCRIPTION
PL1	TS CONNECTED TO NORMAL (GREEN)
PL2	TS CONNECTED TO EMERGENCY (RED)
PL3	NORMAL SOURCE ACCEPTED (GREEN)
PL4	EMERGENCY SOURCE ACCEPTED (RED)
PL5	LOAD DISCONNECT ACTIVE (AMBER)
PL6	EMER PREFERRED SOURCE (RED)
SS1	TEST-RETRANSFER DELAY BYPASS
SS2	PREFERRED SOURCE EMER-NORM

REV.	TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
		SEE ECN			
-		263098	DSC	MM	09/09/16
		ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

ASSEM. REF. NO.

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COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 617429-561

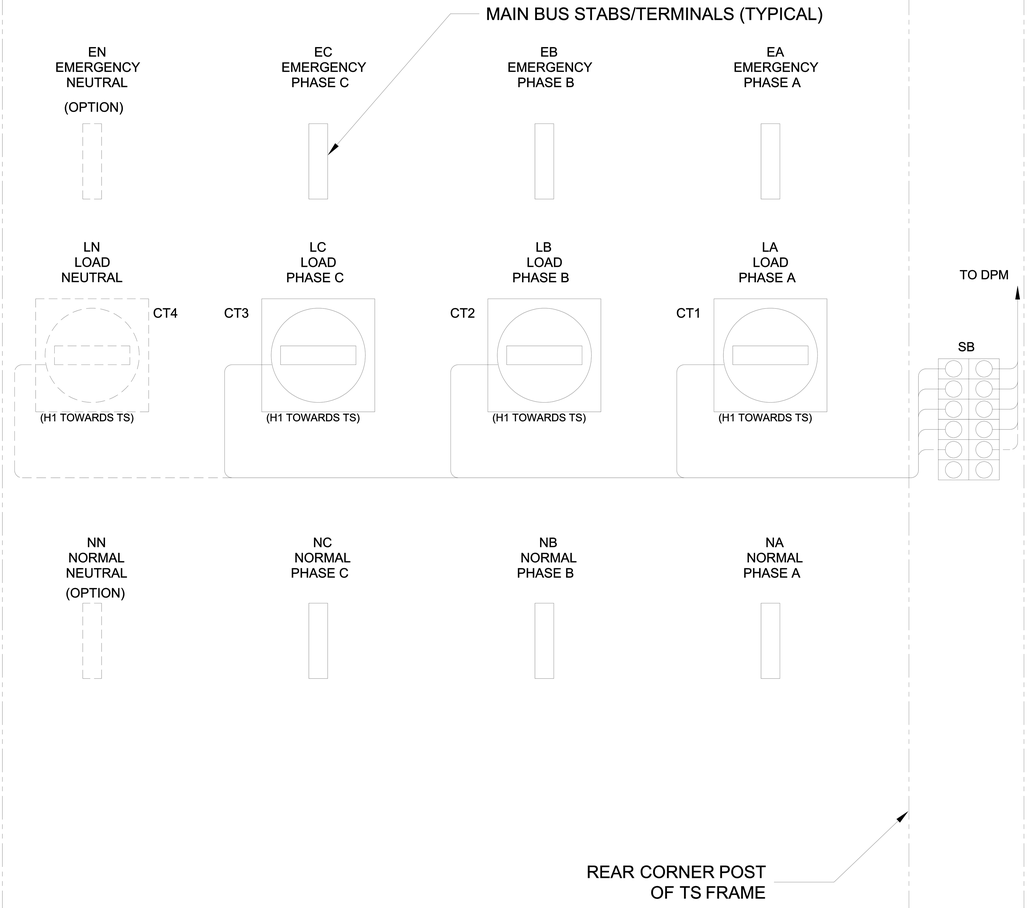
DRAWING REV. A ECN NO. 282955 SHEET 9 OF 12

ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.

PHYSICAL DIAGRAM (CONTINUED)

REAR CONNECTED SWITCH
1000 - 3000 AMP. ADTB

VIEW FROM THE REAR



REV. TO SHEET	ECN NO.	BY	APP.	DATE
A	282955	VDS	HSL	01/21/20
	SEE ECN			
-	263098	DSC	MM	09/09/16
	ISSUE			

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

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ASCO® ASCO POWER TECHNOLOGIES, L.P.
FLORHAM PARK, NEW JERSEY 07932 U.S.A.

COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 10 OF 12

WIRE RUN LISTING

1 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-001 (IJ1) TS	CLR	AWG
1	IJ1-1,IJ1-2		16
2	IJ1-3,IJ1-4		
3	IJ1-5,IJ1-6		
4	IJ1-7,IJ1-8		
5	IJ1-9,IJ1-10		
6	IJ1-11,IJ1-12		
7	IJ1-13,IJ1-14		
8	IJ1-15,IJ1-16		
9	IJ1-17,IJ1-18		
10	IJ1-19,IJ1-20		
11	IJ1-21,IJ1-22		
12	IJ1-23,IJ1-24		

2 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 619510-024 (IJ2,P10) TS	CLR	AWG
1	IJ2-1,P10-1		16
21	IJ2-2,P10-2		
4	IJ2-3,P10-3		
23	IJ2-4,P10-4		
24	IJ2-5,P10-5		
25	IJ2-6,P10-6		
26	IJ2-7,P10-7		
27	IJ2-8,P10-8		
28	IJ2-9,CE(AUX1)-21		
28	CE(AUX1)-21,CN(AUX1)-21		
28	CN(AUX1)-21,CN(AUX1)-48		
30	IJ2-10,CN(AUX1)-49		
29	IJ2-11,CN(AUX1)-22		
31	IJ2-12,CE(AUX2)-75		
31	CN(AUX2)-75,CE(AUX2)-75		
32	IJ2-13,CN(AUX2)-77		
33	IJ2-14,CE(AUX2)-77		
34	IJ2-15,CE(AUX2)-78		
34	CN(AUX2)-78,CE(AUX2)-78		
35	IJ2-16,CN(AUX2)-80		
36	IJ2-17,CE(AUX2)-80		
37	IJ2-18,CE(AUX1)-24		
38	IJ2-19,CE(AUX1)-25		
39	IJ2-20,P10-9		
40	IJ2-21,P10-10		
41	IJ2-22,P10-11		
42	IJ2-23,CE(AUX1)-22		
43	IJ2-24,CE(AUX1)-49		
	REMOVE WIRES		
	ADD WIRES		
520	P10-12		
521	P10-13		
522	P10-14		
523	P10-15		
524	P10-16		
525	P10-17		
526	P10-18		
527	P10-19		
528	P10-20		
529	P10-21		
530	P10-22		
531	P10-23		
532	P10-24		

3 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 605674-003-A (IJ3) TS STD. AUX. CONTACTS	CLR	AWG
50	IJ3-1,CE(AUX1)-27		16
51	IJ3-2,CE(AUX1)-28		
52	IJ3-3,CN(AUX1)-28		
53	IJ3-4,CE(AUX1)-30		
54	IJ3-5,CE(AUX1)-31		
55	IJ3-6,CN(AUX1)-31		
56	IJ3-7,CE(AUX1)-33		
57	IJ3-8,CE(AUX1)-34		
58	IJ3-9,CN(AUX1)-34		
59	IJ3-10,CE(AUX1)-36		
60	IJ3-11,CN(AUX1)-38		
61	IJ3-12,CE(AUX1)-38		
62	IJ3-13,CE(AUX1)-39		
63	IJ3-14,CN(AUX1)-41		
64	IJ3-15,CE(AUX1)-41		
65	IJ3-16,CE(AUX1)-42		
66	IJ3-17,CN(AUX1)-44		
67	IJ3-18,CE(AUX1)-44		
68	IJ3-19,CE(AUX1)-45		
69	IJ3-20,CN(AUX1)-47		
70	IJ3-21,CE(AUX1)-47		
71	IJ3-22,CE(AUX1)-48		
72	IJ3-23,CN(AUX1)-50		
73	IJ3-24,CE(AUX1)-50		
	REMOVE WIRES		
71	IJ3-22,CE(AUX1)-48		
72	IJ3-23,CN(AUX1)-50		
73	IJ3-24,CE(AUX1)-50		

3A — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 609051-001-A TS STD. AUX. CONTACTS	CLR	AWG
50	CE(AUX1)-27,CN(AUX1)-27		16
53	CE(AUX1)-30,CN(AUX1)-30		
56	CE(AUX1)-33,CN(AUX1)-33		
59	CE(AUX1)-36,CN(AUX1)-36		
62	CE(AUX1)-39,CN(AUX1)-39		
65	CE(AUX1)-42,CN(AUX1)-42		
68	CE(AUX1)-45,CN(AUX1)-45		
71	CE(AUX1)-48,CN(AUX1)-48		

5 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 619510-025 (P1,P2N,P2E,J10) TS CONTROL	CLR	AWG
310	P1-1,P2E-4		16
311	P1-2,P2E-1		
312	P1-3,P2E-2		
313	P1-4,P2E-3		
27	P1-5,J10-8		
117	P1-6,CN(MUS)-13		
320	P1-7,J10-9		
317	P1-8,CE(MUS)-13		
110	P1-9,P2N-4		
111	P1-10,P2N-1		
112	P1-11,P2N-2		
113	P1-12,P2N-3		
23	P1-13,J10-4		
21	P1-14,J10-2		
114	P1-15,CE(MUS)-18		
114	CE(MUS)-18,CN(MUS)-14		
114	CN(MUS)-14,CN(MUS)-16		
20	P1-17,J10-1		
115	P1-18,CE(MUS)-14		
115	CE(MUS)-16,CE(MUS)-14		
115	CE(MUS)-16,CN(MUS)-18		
22	P1-19,J10-3		
25	P1-20,J10-6		
314	P1-21,P1-24		
315	P1-22,P1-23		
24	J10-5,CN(MUS)-17		
26	J10-7,CN(AUX3)-15		
321	J10-10,CE(MUS)-17		
322	J10-11,CE(MUS)-15		
	REMOVE WIRES		
	ADD WIRES		
520	J10-12		
521	J10-13		
522	J10-14		
523	J10-15		
524	J10-16		
525	J10-17		
526	J10-18		
527	J10-19		
528	J10-20		
529	J10-21		
530	J10-22		
531	J10-23		
532	J10-24		

4 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-004-A (IJ4) TS OPT. AUX. CONTACTS	CLR	AWG
80	IJ4-1,CE(AUX2)-51		16
81	IJ4-2,CE(AUX2)-52		
82	IJ4-3,CN(AUX2)-52		
83	IJ4-4,CE(AUX2)-54		
84	IJ4-5,CE(AUX2)-55		
85	IJ4-6,CN(AUX2)-55		
86	IJ4-7,CE(AUX2)-57		
87	IJ4-8,CE(AUX2)-58		
88	IJ4-9,CN(AUX2)-58		
89	IJ4-10,CE(AUX2)-60		
90	IJ4-11,CE(AUX2)-61		
91	IJ4-12,CN(AUX2)-61		
92	IJ4-13,CE(AUX2)-63		
93	IJ4-14,CE(AUX2)-64		
94	IJ4-15,CN(AUX2)-64		
95	IJ4-16,CE(AUX2)-66		
96	IJ4-17,CN(AUX2)-68		
97	IJ4-18,CE(AUX2)-68		
98	IJ4-19,CE(AUX2)-69		
99	IJ4-20,CN(AUX2)-71		
100	IJ4-21,CE(AUX2)-71		
101	IJ4-22,CE(AUX2)-72		
102	IJ4-23,CN(AUX2)-74		
103	IJ4-24,CE(AUX2)-74		

4A — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 609051-002-A TS OPT. AUX. CONTACTS	CLR	AWG
80	CE(AUX2)-51,CN(AUX2)-51		16
83	CE(AUX2)-54,CN(AUX2)-54		
86	CE(AUX2)-57,CN(AUX2)-57		
89	CE(AUX2)-60,CN(AUX2)-60		
92	CE(AUX2)-63,CN(AUX2)-63		
95	CE(AUX2)-66,CN(AUX2)-66		
98	CE(AUX2)-69,CN(AUX2)-69		
101	CE(AUX2)-72,CN(AUX2)-72		

6 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-006 (IP1,J12) STATIONARY FRAME	CLR	AWG
1	IP1-1,J12-1		16
1	IP1-2,J12-2		
2	IP1-3,J12-3		
2	IP1-4,J12-4		
3	IP1-5,J12-5		
3	IP1-6,J12-6		
4	IP1-7,J12-7		
4	IP1-8,J12-8		
5	IP1-9,J12-9		
5	IP1-10,J12-10		
6	IP1-11,J12-11		
6	IP1-12,J12-12		
7	IP1-13,J12-13		
7	IP1-14,J12-14		
8	IP1-15,J12-15		
8	IP1-16,J12-16		
9	IP1-17,J12-17		
9	IP1-18,J12-18		
10	IP1-19,J12-19		
10	IP1-20,J12-20		
11	IP1-21,J12-21		
11	IP1-22,J12-22		
12	IP1-23,J12-23		
12	IP1-24,J12-24		

7 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-006 (IP2,J11) STATIONARY FRAME	CLR	AWG
1	IP2-1,J11-1		16
21	IP2-2,J11-2		
4	IP2-3,J11-3		
23	IP2-4,J11-4		
24	IP2-5,J11-5		
25	IP2-6,J11-6		
26	IP2-7,J11-7		
27	IP2-8,J11-8		
28	IP2-9,J11-9		
30	IP2-10,J11-10		
29	IP2-11,J11-11		
31	IP2-12,J11-12		
32	IP2-13,J11-13		
33	IP2-14,J11-14		
34	IP2-15,J11-15		
35	IP2-16,J11-16		
36	IP2-17,J11-17		
37	IP2-18,J11-18		
38	IP2-19,J11-19		
39	IP2-20,J11-20		
40	IP2-21,J11-21		
41	IP2-22,J11-22		
42	IP2-23,J11-23		
43	IP2-24,J11-24		

8 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-006 (IP3,J4) STATIONARY FRAME	CLR	AWG
50	IP3-1,J4-1		16
51	IP3-2,J4-2		
52	IP3-3,J4-3		
53	IP3-4,J4-4		
54	IP3-5,J4-5		
55	IP3-6,J4-6		
56	IP3-7,J4-7		
57	IP3-8,J4-8		
58	IP3-9,J4-9		
59	IP3-10,J4-10		
60	IP3-11,J4-11		
61	IP3-12,J4-12		
62	IP3-13,J4-13		
63	IP3-14,J4-14		
64	IP3-15,J4-15		
65	IP3-16,J4-16		
66	IP3-17,J4-17		
67	IP3-18,J4-18		
68	IP3-19,J4-19		
69	IP3-20,J4-20		
70	IP3-21,J4-21		
71	IP3-22,J4-22		
72	IP3-23,J4-23		
73	IP3-24,J4-24		

9 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-006 (IP4,J5) STATIONARY FRAME(OPT.)	CLR	AWG
80	IP4-1,J5-1		16
81	IP4-2,J5-2		
82	IP4-3,J5-3		
83	IP4-4,J5-4		
84	IP4-5,J5-5		
85	IP4-6,J5-6		
86	IP4-7,J5-7		
87	IP4-8,J5-8		
88	IP4-9,J5-9		
89	IP4-10,J5-10		
90	IP4-11,J5-11		
91	IP4-12,J5-12		
92	IP4-13,J5-13		
93	IP4-14,J5-14		
94	IP4-15,J5-15		
95	IP4-16,J5-16		
96	IP4-17,J5-17		
97	IP4-18,J5-18		
98	IP4-19,J5-19		
99	IP4-20,J5-20		
100	IP4-21,J5-21		
101	IP4-22,J5-22		
102	IP4-23,J5-23		
103	IP4-24,J5-24		

10 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 605674-007 (J3,TB1) ENGINE START	CLR	AWG
120	J3-1,TB1-33		16
121	J3-2,TB1-32		
	ADD WIRES		
122	J3-3		
123	J3-4		

DC — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☐)

WIRE No.	HARNESS 713083-002 (CP-P10) DOOR CONTROLS & INDICATORS		CLR	AWG
130	CP-P10-31,PL1(+)	RED		22 (25 COND)
131	CP-P10-42,SS1-14	TAN		
132	CP-P10-40,PL1(-)	BLK		
133	CP-P10-39,PL2(-)	WHT		
134	CP-P10-38,PL3(-)	ORG		
135	CP-P10-37,PL4(-)	BRN		
136	CP-P10-43,SS1-23	GRY		
137	CP-P10-41,SS1-13	PNK		
325	CP-P10-32,PL2(+)	GRN		
326	CP-P10-33,PL3(+)	BLU		
327	CP-P10-34,PL4(+)	YEL		
328	CP-P10-26,PL5(-)		RED/GRN	
329	CP-P10-35,PL5(+)		RED/YEL	
330	CP-P10-44,SS1-24	VIO		
	REMOVE WIRES			
	ADD WIRES			
550	CP-P10-46,SS2-22	BLK		22 (4 COND)
551	CP-P10-45,SS2-21	RED		
552	CP-P10-36,SS2-11	WHT		
553	CP-P10-48,PL6(-)	GRN		
554	PL6(+),SS2-12	BLK 22		

13 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 605674-010 (P13,BP) BP HIGH VOLTAGE	CLR	AWG
1	P13-1,BP-1		16
2	P13-2,BP-2		
3	P13-3,BP-3		
4	P13-4,BP-4		
5	P13-5,BP-5		
6	P13-6,BP-6		
7	P13-7,BP-7		
8	P13-8,BP-8		
9	P13-9,BP-9		
10	P13-10,BP-10		
11	P13-11,BP-11		
12	P13-12,BP-12		
26	P13-13,CR-9		
140	P13-14,BP(AUX3)-82		
27	P13-15,CR-6		
26	CR-9,BP(AUX3)-105		
141	BP(AUX3)-106,BP(AUX3)-81		
1	BP-1,P19-1		
3	BP-3,P19-2		
5	BP-5,P19-3		
7	BP-7,P19-4		
	REMOVE WIRES		
26	P13-13,CR-9		
140	P13-14,BP(AUX3)-82		
27	P13-15,CR-6		
26	CR-9,BP(AUX3)-105		
141	BP(AUX3)-106,BP(AUX3)-81		
	ADD WIRES		
34	P13-16,BP(AUX3)-113		
35	P13-17,BP(AUX3)-114		
212	P13-18		
213	P13-19		
344	P13-20,BP(AUX3)-116		
345	P13-21,BP(AUX3)-92		
346	P13-22		
347	P13-23		
348	P13-24,BP(AUX3)-106		
226	BP(AUX3)-115,BP(AUX3)-103		
226	BP(AUX3)-103,BP(AUX3)-91		
226	BP(AUX3)-91,IS-31		
699	BP(AUX3)-104,BP(AUX3)-105		

14 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 605674-011 (J14,IS) ISOLATION AUX. CONTACTS	CLR	AWG
140	J14-1,IS-61		16
27	J14-2,IS-62		
150	J14-3,IS-13		
151	J14-4,IS-14		
38	J14-5,IS-19		
121	J14-6,IS-21		
37	J14-7,IS-4		
120	J14-8,IS-5		
31	J14-9,IS-10		
152	J14-10,IS-29		
153	J14-11,IS-26		
154	J14-12,IS-23		
155	J14-13,IS-24		
156	J14-14,IS-18		
157	J14-15,IS-17		
158	J14-16,IS-2		
190	J14-17,IS-8		
31	IS-10,IS-1		
31	IS-1,IS-16		
31	IS-16,IS-25		
31	IS-25,IS-28		
159	IS-12,IS-22		
153	IS-7,IS-26		
	REMOVE WIRES		
140	J14-1,IS-61		
27	J14-2,IS-62		
156	J14-14,IS-18		
	ADD WIRES		
226	J14-1,IS-46		
27	J14-2		
156	J14-14		
161	J14-18		
162	J14-19		
163	J14-20		
164	J14-21		
165	J14-22,IS-47		
166	J14-23,IS-32		
167	J14-24		
226	IS-31,IS-46		

15 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 736883 (J15, BID-P1, BID-P2) BYPASS ISOLATION DISPALY	CLR	AWG
121	J15-1,BID-P1-12		22
120	J15-2,BID-P1-11		
31	J15-3,BID-P1-10		
170	J15-4,BID-P1-9		
171	J15-5,BID-P1-8		
172	J15-6,BID-P1-7		
176	J15-10,BID-P1-3		
177	J15-11,BID-P1-2		
32	J15-12,BID-P1-1		
33	J15-13,BID-P2-12		
155	J15-15,BID-P2-10		
157	J15-17,BID-P2-8		
158	J15-18,BID-P2-7		
154	J15-19,BID-P2-6		
149	J15-20,BID-P2-5		
152	J15-21,BID-P2-4		
191	J15-22,BID-P2-3		
151	J15-23,BID-P2-2		
	ADD WIRES		
226	J15-7,BID-SS-23		16
340	J15-8,BID-SS-24		
391	J15-9		
710	J15-14		
711	J15-16		
405	J15-24		

17 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 605674-014 (J16,SL1,SL2,BP(AUX5)) BP/IS INTERLOCKS	CLR	AWG
154	J16-1,P20-1		16
170	J16-2,P20-2		
153	J16-3,BP(AUX5)-143		
191	J16-4,BP(AUX5)-146		
150	J16-5,BP(AUX5)-148		
170	P20-2,P20-4		
192	P20-3,BP(AUX5)-144		
	ADD WIRES		
154	J20-1,SL1-A		
170	J20-2,SL2-B		
192	J20-3,SL2-A		
170	J20-4,SL1-B		
481	J16-6		
482	J16-7		
483	J16-8		
484	J16-9		
485	J16-10		
486	J16-11		
487	J16-12		
488	J16-13		
489	J16-14		
490	J16-15		
491	J16-16		
492	J16-17		
493	J16-18		
494	J16-19		
495	J16-20		
496	J16-21		
497	J16-22		
498	J16-23		
499	J16-24		

18 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS ADD. WIRES (P17,BP) BP LOW VOLTAGE	CLR	AWG
	ADD WIRES		16
31	P17-1,BP(AUX3)-111		
170	P17-2,P19-6		
171	P17-3,P19-5		
172	P17-4,P19-7		
173	P17-5		
174	P17-6		
157	P17-7		
175	P17-8		
177	P17-9,BP(AUX3)-90		
176	P17-10,BP(AUX3)-112		
32	P17-11,BP(AUX4)-137		
33	P17-12,BP(AUX4)-140		
149	P17-13,BP(AUX3)-87		
178	P17-14		
152	P17-15		
156	P17-16		
190	P17-17,BP(AUX4)-138		
155	P17-18		
191	P17-19		
151	P17-20		
121	P17-21,BP(AUX3)-85		
120	P17-22,BP(AUX3)-86		
247	P17-23		
248	P17-24		
32	BP(AUX4)-137,BP(AUX3)-110		
33	BP(AUX4)-140,BP(AUX3)-88		
31	P19-9,BP(AUX3)-89		
31	BP(AUX3)-89,BP(AUX3)-111		
149	BP(AUX3)-87,BP(AUX3)-109		
190	BP(AUX4)-138,BP(AUX4)-141		

19 — HARNESS LOCATOR (BOX CHECKED IF HARNESS IS MODIFIED ☒)

WIRE No.	HARNESS 605674-016 (P6,P18) INTERNAL CONTROL & FIELD INPUTS		CLR	AWG
210	P18-1,CP-28			16
191	P18-2,CP-29			
211	P18-3,CP-30			
210	P18-4,P6-1			
151	P18-5,P6-2			
211	P18-6,P6-3			
243	P6-4,CP-25			
244	P6-5,CP-26			
	REMOVE WIRES			
210	P18-1,CP-28			
191	P18-2,CP-29			
211	P18-3,CP-30			
243	P6-4,CP-25			
244	P6-5,CP-26			
	ADD WIRES			
210	P18-1,CP-P6-21	WHT		22 (4 COND)
191	P18-2,CP-P6-22	BLK		
211	P18-3,CP-P6-23	GRN		
215	P18-7			16
216	P18-8			
217	P18-9,PA-2			
218	P18-10,PA-3			
39	P18-11,PA-5			
40	P18-12,PA-15			
41	P18-13,PA-16			
42	P18-14,PA-13			
43	P18-15,PA-14			
224	P18-16,P6-6			
225	P18-17,P6-7			
226	P18-18			
227	P18-19			
228	P18-20			
229	P18-21			
230	P18-22			
226	P18-23,CP-P6-49	RED		22 (2 COND)
225	P18-24,CP-P6-50	BLK		
243	P6-4,CP-P6-9	BLK		22 (2 COND)
244	P6-5,CP-P6-10	RED		
				16
247	P6-8			
248	P6-9			
249	P6-10			
250	P6-11			
251	P6-12			
252	P6-13			
253	P6-14			
254	P6-15			
255	P6-16			
256	P6-17			
257	P6-18			
258	P6-19			
259	P6-20			
260	P6-21			
261	P6-22			
262	P6-23			
263	P6-24			
600	PA-1			
601	PA-4			
602	PA-6			
603	PA-7			
604	PA-8			
605	PA-9			
606	PA-10			
607	PA-11			
608	P6-12			
609	P6-17			
610	P6-18			
611	P6-19			
612	P6-20			
613	P6-21			
614	P6-22			
615	P6-23			
616	P6-24			
337	CP-P6-42,DOC-P2-1	BLK		22 (4 COND)
338	CP-P6-44,DOC-P2-2	RED		
339	CP-P6-43,DOC-P2-3	WHT		
500	CP-P6-30,18B-B	GRN		
501	CP-P6-31,18B-A	WHT		22 (4 COND)
502	CP-P6-32,18G-A	BLK		
503	CP-P6-33,18G-B	RED		
504	CP-P6-36,31Z-A	BLK		22 (2 COND)
505	CP-P6-37,31Z-B	RED		

REV.				
A	282955	VDS	HSL	01/21/20
	SEE ECN			
-	263098	DSC	MM	09/09/16
	ISSUE			

REV. TO SHEET	ECN NO.	BY	APP.	DATE

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

ASSEM. REF. NO.

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ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.

COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 617429-561

DRAWING REV. A ECN NO. 282955 SHEET 11 OF 12

WIRE RUN LISTING

20 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 605674-017 (P,J) CONTROL PANEL EXTENSION

WIRE No.	CLR	AWG
350 P-1,J-1		16
1 P-2,J-2		
21 P-3,J-3		
3 P-4,J-4		
27 P-5,J-5		
7 P-6,J-6		
5 P-7,J-7		
37 P-8,J-8		
38 P-9,J-9		
28 P-10,J-10		
2 P-11,J-11		
1 P-12,J-12		
30 P-13,J-13		
29 P-14,J-14		
26 P-15,J-15		
24 P-16,J-16		
367 P-17,J-17		
6 P-18,J-18		
9 P-19,J-19		
10 P-20,J-20		
11 P-21,J-21		
4 P-22,J-22		
8 P-23,J-23		
12 P-24,J-24		

21 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

SUB-ASSEMBLY 605749 (TB1,P,P11,P12,J13,P14,P15,P16,J17,J18) MAIN INTERCONNECT ASSEMBLY

WIRE No.	CLR	AWG
1 P-2,TB1-13		16
21 P-3,P11-2		
3 P-4,TB1-15		
5 P-5,TB1-17		
7 P-6,TB1-19		
5 P-7,TB1-17		
37 P-8,TB1-31		
38 P-9,TB1-30		
28 P-10,P11-9		
2 P-11,TB1-14		
1 P-12,TB1-13		
30 P-13,P11-10		
29 P-14,P11-11		
24 P-16,P11-5		
6 P-18,TB1-18		
9 P-19,TB1-21		
10 P-20,TB1-22		
11 P-21,TB1-23		
4 P-22,TB1-16		
8 P-23,TB1-20		
12 P-24,TB1-24		
1 P11-1,TB1-13		
3 P11-3,TB1-15		
5 P11-4,TB1-17		
7 P11-6,TB1-19		
26 P11-7,J13-13		
27 P11-8,TB1-25		
31 P11-12,TB1-37		
32 P11-13,TB1-39		
33 P11-14,TB1-40		
34 P11-15,TB1-34		
35 P11-16,TB1-35		
36 P11-17,TB1-36		
37 P11-18,TB1-31		
38 P11-19,TB1-30		
1 P12-1,TB1-1		
1 P12-2,TB1-13		
2 P12-3,TB1-2		
2 P12-4,TB1-14		
3 P12-5,TB1-3		
3 P12-6,TB1-15		
4 P12-7,TB1-4		
4 P12-8,TB1-16		
5 P12-9,TB1-5		
5 P12-10,TB1-17		
6 P12-11,TB1-6		
6 P12-12,TB1-18		
7 P12-13,TB1-7		
7 P12-14,TB1-19		
8 P12-15,TB1-8		
8 P12-16,TB1-20		
9 P12-17,TB1-9		
9 P12-18,TB1-21		
10 P12-19,TB1-10		
10 P12-20,TB1-22		
11 P12-21,TB1-11		
11 P12-22,TB1-23		
12 P12-23,TB1-12		
12 P12-24,TB1-24		
1 J13-1,TB1-1		
2 J13-2,TB1-2		
3 J13-3,TB1-3		
4 J13-4,TB1-4		
5 J13-5,TB1-5		
6 J13-6,TB1-6		
7 J13-7,TB1-7		
8 J13-8,TB1-8		
9 J13-9,TB1-9		
10 J13-10,TB1-10		
11 J13-11,TB1-11		
12 J13-12,TB1-12		
140 J13-14,P14-1		
27 J13-15,TB1-25		
27 P14-2,TB1-25		
150 P14-3,P16-5		
151 P14-4,TB1-28		
38 P14-5,TB1-30		
121 P14-6,TB1-32		
37 P14-7,TB1-31		
120 P14-8,TB1-33		
31 P14-9,TB1-37		
152 P14-10,J17-15		
153 P16-3,P14-11		
154 P14-12,TB1-41		
155 P14-13,TB1-42		
156 P14-14,P15-16		
157 P14-15,TB1-43		
158 P14-16,P15-18		

21 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

SUB-ASSEMBLY 605749 (TB1,P,P11,P12,J13,P14,P15,P16,J17,J18) MAIN INTERCONNECT ASSEMBLY (CONTINUED....)

WIRE No.	CLR	AWG
190 P14-17,J17-17		16
121 P15-1,TB1-32		
120 P15-2,TB1-33		
31 P15-3,TB1-37		
170 P15-4,TB1-38		
171 P15-5,J17-3		
172 P15-6,J17-4		
173 P15-7,J17-5		
174 P15-8,J17-6		
176 P15-10,J17-10		
177 P15-11,J17-9		
32 P15-12,TB1-39		
33 P15-13,TB1-40		
178 P15-14,J17-14		
155 P15-15,TB1-42		
157 P15-17,TB1-43		
154 P16-1,TB1-41		
170 P16-2,TB1-38		
191 P16-4,TB1-26		
31 J17-1,TB1-37		
170 J17-2,TB1-38		
157 J17-7,TB1-43		
32 J17-11,TB1-39		
33 J17-12,TB1-40		
154 J17-13,TB1-41		
155 J17-18,TB1-42		
191 J17-19,TB1-26		
151 J17-20,TB1-28		
121 J17-21,TB1-32		
120 J17-22,TB1-33		
210 J18-1,TB1-27		
191 J18-2,TB1-26		
211 J18-3,TB1-29		
210 J18-4,TB1-27		
151 J18-5,TB1-28		
211 J18-6,TB1-29		
REMOVE WIRES		
26 P11-7,J13-13		
27 P11-8,TB1-25		
27 J13-15,TB1-25		
27 P14-2,TB1-25		
1 P-2,TB1-13		
5 P-5,TB1-17		
21 P-3,P11-2		
152 P14-10,J17-15		
156 P14-14,P15-16		
173 P15-7,J17-5		
174 P15-8,J17-6		
175 P15-9,J17-8		
178 P15-14,J17-14		
157 J17-7,TB1-43		
154 J17-13,TB1-41		
155 J17-18,TB1-42		
191 J17-19,TB1-26		
151 J17-20,TB1-28		
171 P15-5,J17-3		
172 P15-6,J17-4		
140 J13-14,P14-1		
ADD WIRES		
1 TB1-13,TB1-44		
1 P-2,TB1-44		
218 P-3,TB1-45		
218 P11-2,TB1-45		
26 P11-7,P-15		
27 P11-8,P-5		
39 P11-20,J18-11		
40 P11-21,J18-12		
41 P11-22,J18-13		
42 P11-23,J18-14		
43 P11-24,J18-15		
34 J13-16,TB1-34		
35 J13-17,TB1-35		
343 J13-18		
213 J13-19		
344 J13-20,TB1-47		
345 J13-21,TB1-48		
346 J13-22		
347 J13-23		
348 J13-24,TB1-49		
226 P14-1,TB1-46		
161 P14-18		
162 P14-19		
163 P14-20		
164 P14-21		
165 P14-22,TB1-50		
166 P14-23,TB1-51		
167 P14-24		
171 P15-5,TB1-53		
172 P15-6,TB1-54		
226 P15-7,TB1-46		
340 P15-8,TB1-52		
156 P15-16		
154 P15-19,TB1-41		
149 P15-20,J17-13		
152 P15-21,P14-10		
191 P15-22,TB1-26		
151 P15-23,TB1-28		
405 P15-24		
171 J17-3,TB1-53		
172 J17-4,TB1-54		
406 J17-23		
407 J17-24		
215 J18-7		
216 J18-8		
1 J18-9,TB1-44		
21 J18-10,TB1-45		

21 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

SUB-ASSEMBLY 605749 (TB1,P,P11,P12,J13,P14,P15,P16,J17,J18) MAIN INTERCONNECT ASSEMBLY (CONTINUED....)

WIRE No.	CLR	AWG
224 J18-16,TB1-57		16
225 J18-17,TB1-58		
226 J18-18		
227 J18-19		
228 J18-20		
229 J18-21		
230 J18-22		
226 J18-23,TB1-59		
225 J18-24,TB1-60		
34 TB1-34,DPM-J3-2		
35 TB1-35,DPM-J3-1		
170 TB1-38,J21-15		
171 TB1-53,J21-13		
172 TB1-54,J21-14		
226 TB1-46,TB1-59		
226 TB1-46,J21-4		
344 TB1-47,AP-MOXA-DI0		
345 TB1-48,AP-MOXA-DI1		
348 TB1-49,AP-MOXA-DI2		
165 TB1-50,AP-MOXA-DI3		
166 TB1-51,AP-MOXA-DI4		
340 TB1-52,AP-MOXA-DI7		
224 TB1-57,AP-3		
225 TB1-58,AP-2		
225 TB1-60,DPM-J6-2		
226 TB1-59,DPM-J6-1		
1 TB1-1,AP-FU1-1		
3 TB1-3,AP-FU2-1		
5 TB1-5,AP-FU3-1		
7 TB1-7,AP-FU4-1		
9 TB1-9,AP-FU5-1		
10 TB1-10,AP-FU6-1		
11 TB1-11,AP-FU7-1		
12 TB1-12, (SEE ADDITIONAL WIRES 150B)		
800 J21-5,TB1-55		
801 J21-6,TB1-56		
801 TB1-56,AP-MOXA-DI6		
800 TB1-55,AP-MOXA-DI5		

23 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS (J7) OPTIONAL FIELD OUTPUTS

WIRE No.	CLR	AWG
270 J7-1		16
271 J7-2		
272 J7-3		
273 J7-4,18B-9		
274 J7-5,18B-6		
275 J7-6,18B-3		
276 J7-7,18B-7		
277 J7-8,18B-4		
278 J7-9,18B-1		
279 J7-10,18G-9		
280 J7-11,18G-6		
281 J7-12,18G-3		
282 J7-13,18G-7		
283 J7-14,18G-4		
284 J7-15,18G-1		
285 J7-16,31Z-9		
286 J7-17,31Z-6		
287 J7-18,31Z-3		
288 J7-19,31Z-7		
289 J7-20,31Z-4		
290 J7-21,31Z-1		
291 J7-22		
292 J7-23		
293 J7-24		

24 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 605454-005 (J8) OPTIONAL SERIAL I/O

WIRE No.	CLR	AWG
300 J8-1,72EE2-5	SHLD	24 (4 COND)
301 J8-2,72EE2-1	WHT/ORG	
302 J8-3,72EE2-2	ORG/WHT	
303 J8-4,72EE2-3	WHT/BLU	
304 J8-5,72EE2-4	BLU/WHT	
305 J8-6		
306 J8-7		
307 J8-8		
308 J8-9		

25 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 605454-007 (P8,TB) OPTIONAL SERIAL I/O

WIRE No.	CLR	AWG
300 P8-1,TB-37	SHLD	24 (4 COND)
301 P8-2,TB-38	WHT/ORG	
302 P8-3,TB-39	ORG/WHT	
303 P8-4,TB-40	WHT/BLU	
304 P8-5,TB-41	BLU/WHT	
305 P8-6		
306 P8-7		
307 P8-8		
308 P8-9		

22 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

SUB-ASSEMBLY 605659 (P3,P4,J6,P7,TB) STD. FIELD TB

WIRE No.	CLR	AWG
120 TB-1,P3-1		16
121 TB-2,P3-2		
122 TB-3,P3-3		
50 TB-4,P4-1		
51 TB-5,P4-2		
52 TB-6,P4-3		
53 TB-7,P4-4		
54 TB-8,P4-5		
55 TB-9,P4-6		
56 TB-10,P4-7		
57 TB-11,P4-8		
58 TB-12,P4-9		
59 TB-13,P4-10		
61 TB-14,P4-12		
60 TB-15,P4-11		
62 TB-16,P4-13		
64 TB-17,P4-15		
63 TB-18,P4-14		
65 TB-19,P4-16		
67 TB-20,P4-18		
66 TB-21,P4-17		
68 TB-22,P4-19		
70 TB-23,P4-21		
69 TB-24,P4-20		
71 TB-25,P4-22		
73 TB-26,P4-24		
72 TB-27,P4-23		
240 TB-28,J6-1		
241 TB-29,J6-2		
242 TB-30,J6-3		
243 TB-31,J6-4		
244 TB-32,J6-5		
270 TB-34,P7-1		
271 TB-35,P7-2		
272 TB-36,P7-3		
JUMPERS		
TB-28,TB-29		
TB-29,TB-30		
ADD WIRES		
123 P3-4		
224 J6-6,TB-119		
225 J6-7,TB-120		
247 J6-8		
248 J6-9		
249 J6-10		
250 J6-11		
251 J6-12		
252 J6-13		
253 J6-14		
254 J6-15		
255 J6-16		
256 J6-17		
257 J6-18		
258 J6-19		
259 J6-20		
260 J6-21		
261 J6-22		
262 J6-23		
263 J6-24		
273 P7-4,TB-101		
274 P7-5,TB-102		
275 P7-6,TB-103		
276 P7-7,TB-104		
277 P7-8,TB-105		
278 P7-9,TB-106		
279 P7-10,TB-107		
280 P7-11,TB-108		
281 P7-12,TB-109		
282 P7-13,TB-110		
283 P7-14,TB-111		
284 P7-15,TB-112		
285 P7-16,TB-113		
286 P7-17,TB-114		
287 P7-18,TB-115		
288 P7-19,TB-116		
289 P7-20,TB-117		
290 P7-21,TB-118		
291 P7-22		
292 P7-23		
293 P7-24		
700 BP(AUX3)-117,TB-122		
701 BP(AUX3)-118,TB-123		
702 BP(AUX3)-93,TB-125		
703 BP(AUX3)-94,TB-126		

26 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 605454-008 (P5,TB) OPT. AUX. CONTACTS

WIRE No.	CLR	AWG
80 TB-43,P5-1		16
81 TB-44,P5-2		
82 TB-45,P5-3		
83 TB-46,P5-4		
84 TB-47,P5-5		
85 TB-48,P5-6		
86 TB-49,P5-7		
87 TB-50,P5-8		
88 TB-51,P5-9		
89 TB-52,P5-10		
90 TB-53,P5-11		
91 TB-54,P5-12		
92 TB-55,P5-13		
93 TB-56,P5-14		
94 TB-57,P5-15		
95 TB-58,P5-16		
97 TB-59,P5-18		
96 TB-60,P5-17		
98 TB-61,P5-19		
100 TB-62,P5-21		
99 TB-63,P5-20		
101 TB-64,P5-22		
103 TB-65,P5-24		
102 TB-66,P5-23		

27 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 619385 (JA,CP-P2,DOC-P1) DOC

WIRE No.	CLR	AWG
217 JA-2,DOC-P1-15		16
218 JA-3,DOC-P1-2		
342 JA-1,DOC-P1-8		
41 JA-16,DOC-P1-13		
40 JA-15,DOC-P1-5		
39 JA-5,DOC-P1-17		
42 JA-13,CP-P2-6	PIN	
43 JA-14,CP-P2-7	PIN	
ADD WIRES		
351 JA-4		
352 JA-6		
353 JA-7		
354 JA-8		
355 JA-9		
356 JA-10		
357 JA-11		
358 JA-12		
359 JA-17		
360 JA-18		
361 JA-19		
362 JA-20		
363 JA-21		
364 JA-22		
365 JA-23		
366 JA-24		

28 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 483763 (J,CP-P1,CP-P2) CONTROL PANEL

WIRE No.	CLR	AWG
350 J-1,CP-P1-8		16
1 J-2,CP-P1-15		
21 J-3,CP-P1-2		
3 J-4,CP-P1-4		
5 J-5,CP-P1-17		
7 J-6,CP-P1-12		
5 J-7,CP-P1-7		
37 J-8,CP-P2-2		
38 J-9,CP-P2-3		
28 J-10,CP-P2-8		
2 J-11,CP-P1-10		
1 J-12,CP-P1-1		
30 J-13,CP-P2-9		
29 J-14,CP-P2-10		
26 J-15,CP-P1-5		
24 J-16,CP-P1-13		
367 J-17,CP-P2-1		
6 J-18,CP-P1-14		
ADD WIRE		
9 J-19		
10 J-20		
11 J-21		
4 J-22		
8 J-23		
12 J-24		

29 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 309320-005 OPTIONAL 8 IN. EXTENSION HARNESS

WIRE No.	CLR	AWG
350 Jx-1,Px-1		16
1 Jx-2,Px-2		
21 Jx-3 Px-3		
3 Jx-4,Px-4		
27 Jx-5,Px-5		
7 Jx-6,Px-6		
5 Jx-7,Px-7		
37 Jx-8,Px-8		
38 Jx-9,Px-9		
28 Jx-10,Px-10		
2 Jx-11,Px-11		
1 Jx-12,Px-12		
30 Jx-13,Px-13		
29 Jx-14,Px-14		
26 Jx-15,Px-15		
24 Jx-16,Px-16		
367 Jx-17,Px-17		
6 Jx-18,Px-18		
9 Jx-19,Px-19		
10 Jx-20,Px-20		
11 Jx-21,Px-21		
4 Jx-22,Px-22		
8 Jx-23,Px-23		
12 Jx-24,Px-24		

30 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

HARNESS 309320-005 OPTIONAL 8 IN. EXTENSION HARNESS

WIRE No.	CLR	AWG
342 Jy-1,Py-1		16
21 Jy-2,Py-2		
218 Jy-3,Py-3		
351 Jy-4,Py-4		
219 Jy-5,Py-5		
352 Jy-6,Py-6		
353 Jy-7,Py-7		
354 Jy-8,Py-8		
355 Jy-9,Py-9		
356 Jy-10,Py-10		
357 Jy-11,Py-11		
358 Jy-12,Py-12		
222 Jy-13,Py-13		
223 Jy-14,Py-14		
220 Jy-15,Py-15		
221 Jy-16,Py-16		
359 Jy-17,Py-17		
360 Jy-18,Py-18		
361 Jy-19,Py-19		
362 Jy-20,Py-20		
363 Jy-21,Py-21		
364 Jy-22,Py-22		
365 Jy-23,Py-23		
366 Jy-24,Py-24		

31 HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

SUB-ASSEMBLY 605113-001 (J1,CM) DUAL SOLENOID UNIT CONTROL MODULE ASSEMBLY

WIRE No.	CLR	AWG
J1-1,CR3-(+)		16
J1-2,CR3-(-)		
J1-3,CR4-(+)		
J1-4,CR4-(-)		
J1-5,CR1-AC1		
J1-6,CR2-AC1		
J1-7,CR3-AC1		
J1-8,CR4-AC1		
J1-9,CR1-(+)		
J1-10,CR1-(-)		
J1-11,CR2-(+)		
J1-12,CR2-(-)		
J1-13,SER-R2		
J1-14,SER-A2		
J1-15,ERR-R2		
J1-16,ERR-A2		
J1-17,SER-2		
J1-18,ERR-2		
J1-19,SER-A1		
SER-A1,SER-3		
J1-20,ERR-A1		
ERR-A1,ERR-3		
J1-21,CR1-AC2		
CR1-AC2,CR2-AC2		
J1-22,CR3-AC2		
CR3-AC2,CR4-AC2		
J1-23,SER-R3		
J1-24,ERR-R3		
SER-R3,ERR-R3		
SER-1,ERR-R1		
SER-R1,ERR-1		
SER-4,ERR-R4		
SER-R4,ERR-4		
NOTE: SUB-ASSEMBLY NO WIRE NUMBERS NEEDED		
ADD WIRES		
ERR-1,ERR-A2		

ADDITIONAL WIRING

WIRE No.		CLR	AWG
720 CT1-X1,SB-1			16
720 SB-2,DPM-TB2-1			
721 CT2-X1,SB-3			
721 SB-4,DPM-TB2-3			
722 CT3-X1,SB-5			
722 SB-6,DPM-TB2-5			
723 CT3-X2,CT2-X2	GRN		
723 CT2-X2,CT1-X2	GRN		
723 CT1-X2,SB-7	GRN		
723 SB-7,EQUIP-GND	GRN		
723 SB-8,DPM-TB2-2	GRN		
723 DPM-TB2-2,DPM-TB2-4	GRN		
723 DPM-TB2-4,DPM-TB2-6	GRN		
723 DPM-TB2-6,DPM-GND.	GRN		
723 AP-MOXA-GND-1,EQUIP-GND	GRN		
225 DPM-J6-2,AP-2			
225 AP-2,AP-MOXA-V(-)			
225 AP-MOXA-V(-), AP-MOXA-COM0	WHT	22	
225 AP-MOXA-COM0, AP-MOXA-GND-2	WHT		
			16
226 DPM-J6-1,AP-1			
226 AP-1,AP-MOXA-V(+)			
226 ESR-9,NSR-9			
170 NSR-B,ESR-B			
226 P21-4,ESR-9			
800 P21-5,ESR-6			
801 P21-6,NSR-6			
171 P21-13,NSR-A			
172 P21-14,ESR-A			
170 P21-15,NSR-B			

ADDITIONAL WIRING (150B) <WYE>

WIRE No.	CLR	AWG
900 DPM-TB1-1,AP-FU5-2		16
901 DPM-TB1-2,AP-FU6-2		
902 DPM-TB1-3,AP-FU7-2		
12 TB1-12,DPM-TB1-4		

ADDITIONAL WIRING (150B) <DELTA>

WIRE No.	CLR	AWG
900 DPM-TB1-1,AP-FU5-2		16
901 DPM-TB1-2,AP-FU6-2		
902 DPM-TB1-3,AP-FU7-2		

NEUTRAL MONITORING (150B)

WIRE No.	CLR	AWG
903 CT4-X1,SB-9		16
903 SB-10,DPM-TB2-7		
723 CT4-X2,CT3-X2 GRN		
723 DPM-TB2-8,DPM-GND GRN		

DIGITAL POWER METER TB1 WIRING:

1. WIRE IN WYE IF SWITCH IS SUPPLIED WITH A NEUTRAL (CATALOG NUMBER CONTAINS A3, B3 OR C3).

2. WIRE IN DELTA IF SWITCH IS NOT SUPPLIED WITH A NEUTRAL (CATALOG NUMBER DOES NOT CONTAIN A3, B3 OR C3).

REV.	REV. TO SHEET	ECN NO.	BY	APP.	DATE
A		282955	VDS	HSL	01/21/20
-		SEE ECN 263098 ISSUE	DSC	MM	09/09/16

PROJECT NAME:

WIRING DIAGRAM

7000 SERIES (G7ADTB) 3PH 1000-3000 AMPS
"G" FRAME, GROUP 5 CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DSC	09/09/16
CHECKED	MM	09/09/16
PROJECT APPROVAL	BK	09/09/16
FINAL APPROVAL		

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

ASSEM. REF. NO.

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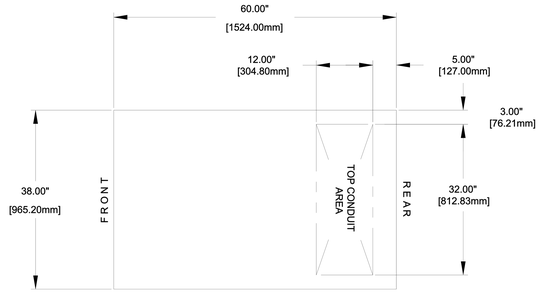
COMPUTER GENERATED DRAWING

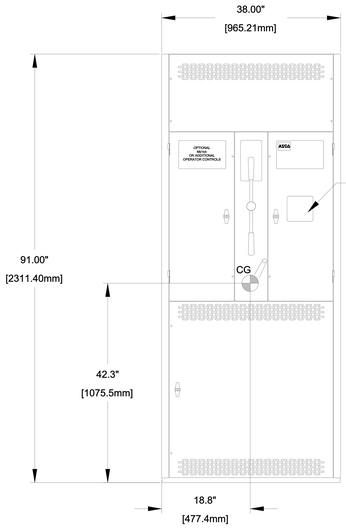
SCALE NONE SIZE DS

DWG. NO. 617429-561

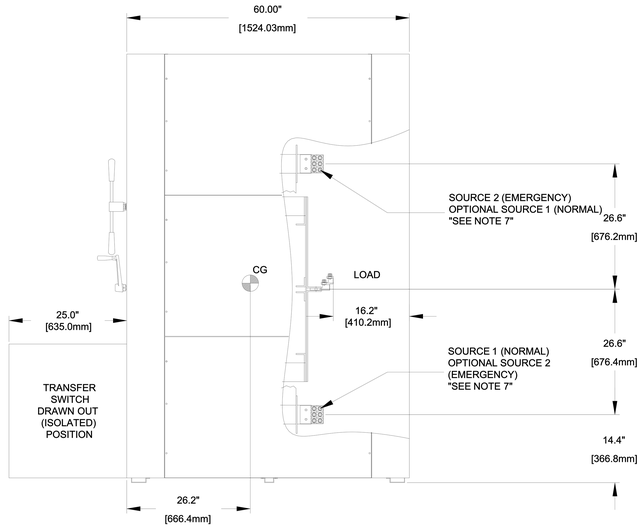
DRAWING REV. A ECN NO. 282955 SHEET 12 OF 12



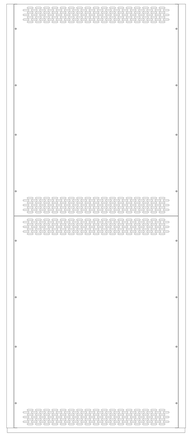
TOP VIEW



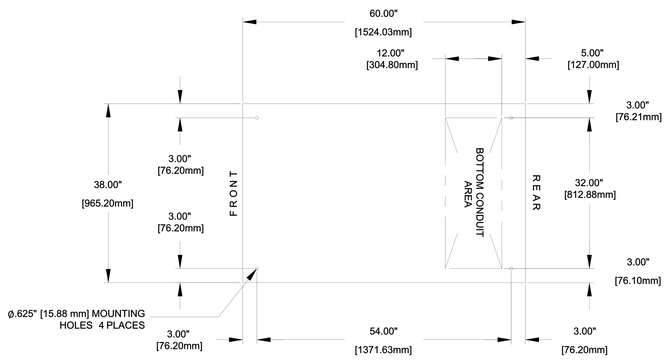
FRONT VIEW



RIGHT SIDE VIEW
WITHOUT COVERS



REAR VIEW



PLAN VIEW

GENERAL NOTES

1. FLOOR MOUNTED ENCLOSURE.
   TYPE 1 (C) CONSTRUCTED FROM CODE GAUGE STEEL.
   FINISH TYPE: ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.
2. DOOR EQUIPPED WITH A KEY LOCKING HANDLE
3. DESIGNED FOR FRONT & REAR ACCESS.
4. RECOMMENDED CLEARANCES: FRONT: 50" [1270.00mm] REAR: 30" [762mm]
5. CENTER OF GRAVITY
6. APPROXIMATE SHIPPING WEIGHT: 2785 LB [1263 KG].
7. ACCESSORY 40, OPTIONAL SOURCE LOCATIONS IS AVAILABLE ON SERIES 7000 ONLY.

TRANSFER SWITCH

1. G FRAME ISOLATION-BYPASS TRANSFER SWITCH.
2. TRANSFER SWITCH RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS AND 2000 AMPS.
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITHOUT AN ADJUSTABLE SHORT TIME RESPONSE,
   1000A-1200A: MAXIMUM 0.05 SECONDS, 85,000 RMS SYM @ 240V, 480V, 600V
   1600A-2000A: MAXIMUM 0.05 SECONDS, 100,000 RMS SYM @ 240V, 480V, 600V
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITH AN ADJUSTABLE SHORT TIME RESPONSE,
   1600A-2000A: MAXIMUM 0.30 SECONDS, 42,000 RMS SYM @ 240V, 480V, 600V.
   1600A-2000A: 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 ADTB & ACTB UNITS)
4. UL 1008 OR CSA C22.2 No. 178.1

TERMINATIONS 1000A-1200A

1. MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
   SOURCE 1 (NORMAL): (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   LOAD: (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   SOURCE 2 (EMERGENCY): (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   GROUND: (12) 1/0-600MCM [50-300mm²]
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
2. SWITCH MAY BE SUPPLIED WITHOUT LUGS.
3. OPTIONAL LUGS MAY BE SUPPLIED (MAY AFFECT ENCLOSURE SIZE).

TERMINATIONS 1600A-2000A

1. MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
   SOURCE 1 (NORMAL): (6) 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]
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
2. SWITCH MAY BE SUPPLIED WITHOUT LUGS.
3. 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.

REV. TO SHEET	ECN NO.	BY	APP.	DATE
M	303562	SV		09-05-23
	SEE ECN			
L	289897	TR	MM	06/14/21
	SEE ECN			

PROJECT NAME:

OUTLINE MOUNTING
GATB 1000A-2000A
TYPE 1 91 X 38 X 60

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	SV	05-12-23
CHECKED	RN	09-04-23
PROJECT APPROVAL		
FINAL APPROVAL	RN	09-04-23
	JPB	09-04-23

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

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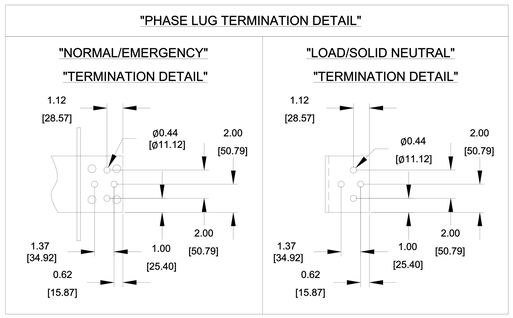
FLORHAM PARK, NEW JERSEY 07932 U.S.A.

COMPUTER GENERATED DRAWING

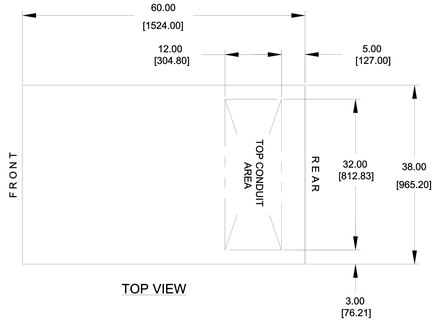
SCALE 1/16" = 1" SIZE DS

DWG. NO. 617441

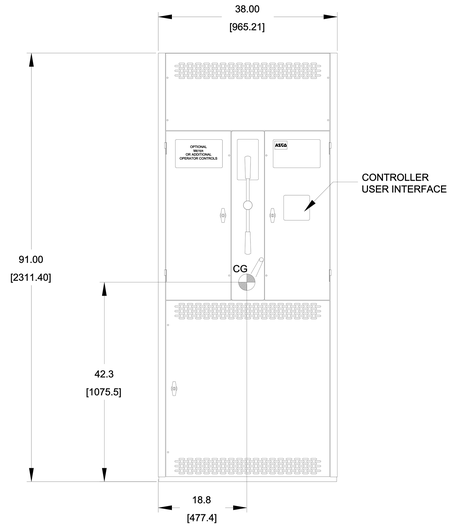
DRAWING REV. M ECN NO. 303562 SHEET 1 OF 1



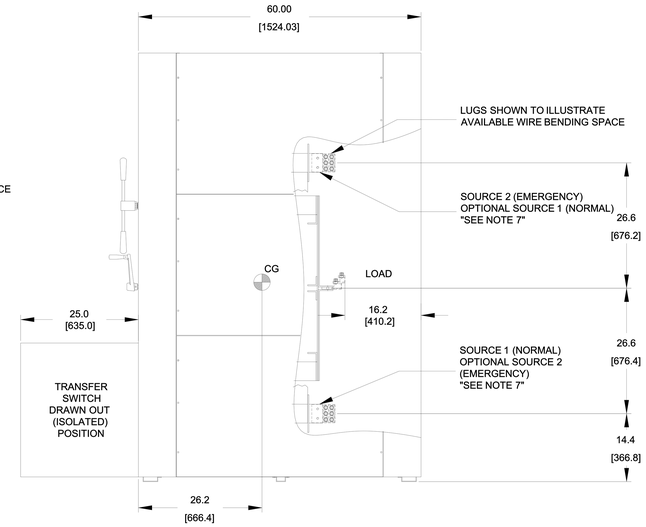
"DETAIL - A"



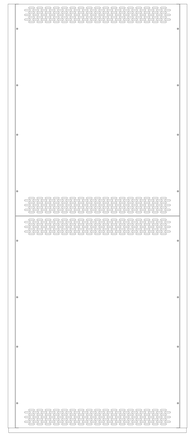
TOP VIEW



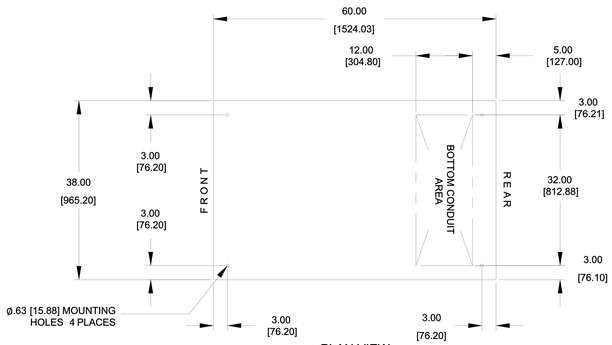
FRONT VIEW



RIGHT SIDE VIEW
WITHOUT COVERS



REAR VIEW



PLAN VIEW

GENERAL NOTES

1. FLOOR MOUNTED ENCLOSURE.
   TYPE 1 (C) CONSTRUCTED FROM CODE GAUGE STEEL.
   FINISH TYPE: ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.
2. DOOR EQUIPPED WITH A KEY LOCKING HANDLE
3. DESIGNED FOR FRONT & REAR ACCESS.
4. REQUIRED CLEARANCES: FRONT: 50 [1270] REAR: 30 [762].
   RECOMMENDED CLEARANCES FOR FIELD TERMINATIONS: REAR/SIDE: 30 [762], REAR RECOMMENDED.
   WITH THE SIDE PLATE REMOVED, THERE IS A 13 [330] WIDE OPENING FOR FIELD CABLE TERMINATIONS
5. CENTER OF GRAVITY
6. APPROXIMATE SHIPPING WEIGHT: 2785 LB [1263 KG].
7. ACCESSORY 40, OPTIONAL SOURCE LOCATIONS IS AVAILABLE ON SERIES 7000 ONLY.

TRANSFER SWITCH

1. G FRAME AUTOMATIC/NON-AUTOMATIC ISOLATION-BYPASS TRANSFER SWITCH.
2. TRANSFER SWITCH RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS AND 2000 AMPS.
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITHOUT
   AN ADJUSTABLE SHORT TIME RESPONSE,
   1000A-1200A: MAXIMUM 0.05 SECONDS, 85,000 RMS SYM @ 240V, 480V, 600V
   1600A-2000A: MAXIMUM 0.05 SECONDS, 100,000 RMS SYM @ 240V, 480V, 600V
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITH
   AN ADJUSTABLE SHORT TIME RESPONSE,
   1600A-2000A: MAXIMUM 0.30 SECONDS, 42,000 RMS SYM @ 240V, 480V, 600V.
   1600A-2000A: 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 (SEE DETAIL A FOR TERMINATION)
   B. SWITCHED NEUTRAL POLE (SEE DETAIL A FOR TERMINATION)
   C. OVERLAPPING NEUTRAL POLE (NOT AVAILABLE ON ADTB, ACTB, NDTB & NCTB UNITS)
   (SEE DETAIL A FOR TERMINATION)
4. UL 1008 OR CSA C22.2 No. 178.1

TERMINATIONS 1000A-1200A

1. SWITCH CAN BE SUPPLIED WITHOUT LUGS (SEE SHEET 2).
   A. SOURCES, LOAD AND GROUND LUG KITS ARE ORDERED SEPARATELY.
2. MECHANICAL (SCREW TYPE) LUGS FOR COPPER (CU) OR ALUMINUM (AL) CABLE WHEN ORDERED WITH SWICH.
   SOURCE 1 (NORMAL): (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   LOAD: (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   SOURCE 2 (EMERGENCY): (4) 1/0-600MCM [50-300mm²] PER PHASE & NEUTRAL
   GROUND: (12) 1/0-600MCM [50-300mm²]
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.

TERMINATIONS 1600A-2000A

1. SWITCH CAN BE SUPPLIED WITHOUT LUGS (SEE SHEET 2).
   A. SOURCES, LOAD AND GROUND LUG KITS ARE ORDERED SEPARATELY.
2. MECHANICAL (SCREW TYPE) LUGS FOR COPPER (CU) OR ALUMINUM (AL) CABLE WHEN ORDERED WITH SWICH.
   SOURCE 1 (NORMAL): (6) 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]
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.

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.

T	315544	TR	TR	4/29/25
	GENERAL NOTE 4 REAR 30"			
R	313427	YK	SV	12/24/24
	SEE ECN			
P	312357	YK	SV	10/08/24
	SEE ECN			

REV. TO SHEET	ECN NO.	BY	APP.	DATE

PROJECT NAME:

OUTLINE MOUNTING

GATB 1000A-2000A, PROVISION FOR MECHANICAL LUG
TYPE 1 91 X 38 X 60

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	SV	05-12-23
CHECKED	RN	09-04-23
PROJECT APPROVAL		
FINAL APPROVAL	RN	09-04-23
	JPB	09-04-23

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

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COMPUTER GENERATED DRAWING

SCALE 1/16" = 1" SIZE DS

DWG. NO. 617441

DRAWING REV. T ECN NO. 315544 SHEET 1 OF 3

DIMENSION ARE IN INCHES [MILLIMETERS]

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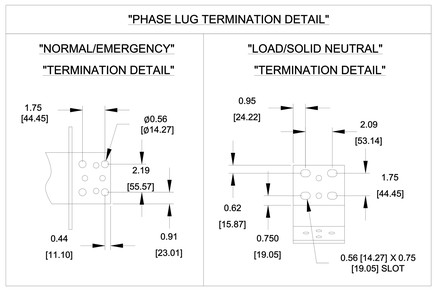
FLORHAM PARK, NEW JERSEY 07932 U.S.A.



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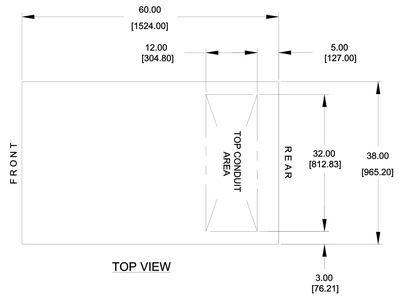
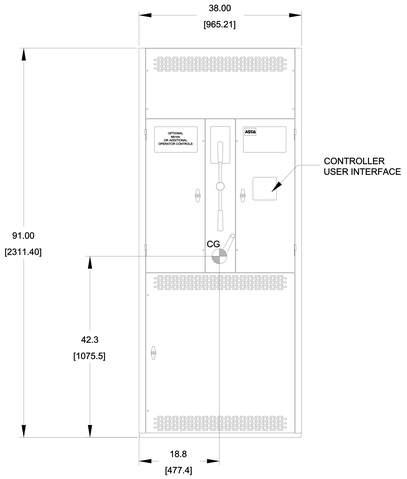
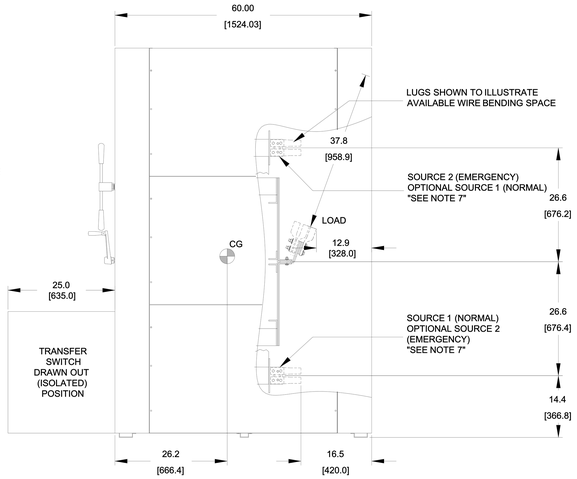


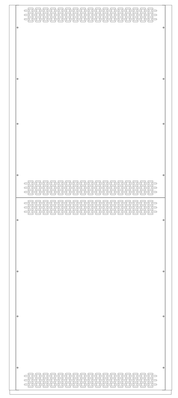
TOP VIEW



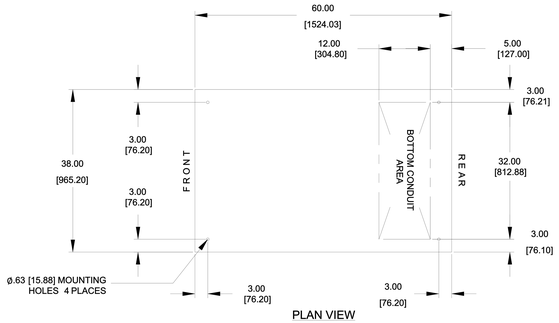
FRONT VIEW



RIGHT SIDE VIEW
WITHOUT COVERS



REAR VIEW



PLAN VIEW

GENERAL NOTES

1. FLOOR MOUNTED ENCLOSURE.
   TYPE 1 (C) CONSTRUCTED FROM CODE GAUGE STEEL.
   FINISH TYPE: ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.
2. DOOR EQUIPPED WITH A KEY LOCKING HANDLE
3. DESIGNED FOR FRONT & REAR ACCESS.
4. REQUIRED CLEARANCES: FRONT: 50 [1270] REAR: 30 [762].
   RECOMMENDED CLEARANCES FOR FIELD TERMINATIONS: REAR/SIDE: 30 [762], REAR RECOMMENDED.
   WITH THE SIDE PLATE REMOVED, THERE IS A 13 [330] WIDE OPENING FOR FIELD CABLE TERMINATIONS
5. CENTER OF GRAVITY
6. APPROXIMATE SHIPPING WEIGHT: 2785 LB [1263 KG].
7. ACCESSORY 40, OPTIONAL SOURCE LOCATIONS IS AVAILABLE ON SERIES 7000 ONLY.

TRANSFER SWITCH

1. G FRAME 7000 SERIES AUTOMATIC/NON-AUTOMATIC ISOLATION-BYPASS TRANSFER SWITCH ONLY.
2. TRANSFER SWITCH RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS AND 2000 AMPS.
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITHOUT
   AN ADJUSTABLE SHORT TIME RESPONSE,
   1000A-1200A: MAXIMUM 0.05 SECONDS, 85,000 RMS SYM @ 240V, 480V, 600V
   1600A-2000A: MAXIMUM 0.05 SECONDS, 100,000 RMS SYM @ 240V, 480V, 600V
   WITHSTAND AND CLOSING RATING WHEN PROTECTED BY A CIRCUIT BREAKER WITH
   AN ADJUSTABLE SHORT TIME RESPONSE,
   1600A-2000A: MAXIMUM 0.30 SECONDS, 42,000 RMS SYM @ 240V, 480V, 600V.
   1600A-2000A: 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 (SEE DETAIL A FOR TERMINATION)
   B. SWITCHED NEUTRAL POLE (SEE DETAIL A FOR TERMINATION)
   C. OVERLAPPING NEUTRAL POLE (NOT AVAILABLE ON ADTB, ACTB, NDTB & NCTB UNITS)
   (SEE DETAIL A FOR TERMINATION)
4. UL 1008 OR CSA C22.2 No. 178.1

TERMINATIONS 1000A-2000A

1. SWITCH SUPPLIED WITHOUT LUGS.
   A. SOURCES, LOAD AND GROUND LUG KITS ARE ORDERED SEPARATELY.
2. COMPRESSION LUGS FOR COPPER (CU) OR ALUMINUM (AL) CABLE.
   LUG SIZES ARE BASED ON T & B AND BURNDY ONLY
   SOURCE 1 (NORMAL): MAX (6) 600MCM [300mm²] PER PHASE & NEUTRAL
   LOAD: MAX (6) 600MCM [300mm²] PER PHASE & NEUTRAL
   SOURCE 2 (EMERGENCY): MAX (6) 600MCM [300mm²] PER PHASE & NEUTRAL
   GROUND: MAX (24) 600MCM [300mm²]
   "CONTACT ASCO FOR NEEDS BEYOND THESE SIZE & QUANTITIES."
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
   B. 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.

T	315544	TR	TR	4/29/25
	GENERAL NOTE 4 REAR 30"			
R	313427	YK	SV	12/24/24
	SEE ECN			
P	312357	YK	SV	10/08/24
	SEE ECN			

PROJECT NAME:	REV. TO SHEET	ECN NO.	BY	APP.	DATE
OUTLINE MOUNTING					
GATB 1000A-2000A, PROVISION FOR COMPRESSION LUG					
TYPE 1 91 X 38 X 60, 7000 SERIES TRANSFER SWITCH ONLY					

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	SV	05-12-23
CHECKED	RN	09-04-23
PROJECT APPROVAL		
FINAL APPROVAL	RN	09-04-23
	JPB	09-04-23

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

ASSEM. REF. NO.

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COMPUTER GENERATED DRAWING

SCALE 1/16" = 1" SIZE DS

DWG. NO. 617441

DRAWING REV. T ECN NO. 315544 SHEET 2 OF 3

ASCO® ASCO POWER TECHNOLOGIES, L.P.
FLORHAM PARK, NEW JERSEY 07932 U.S.A.

DIMENSION ARE IN INCHES [MILLIMETERS]

HOLE DATA
A CATHEDRAL C'SK'D IN PLATE
B CSK'D BOTH SIDES
C CSK'D IN FULL
D CSK'D IN FULL
E CSK'D 1 SIDE
DIMENSION ARE IN INCHES [MILLIMETERS]
PROJECT NAME
DATE ISSUED
DATE ISSUED
DRILL HOLE DIAMETER
DRILL HOLE DIAMETER
DRILL HOLE DIAMETER