

ATS Submittal

Transfer Switch Details

#7	ATS	AMPS: 0600	QTY: 3
Product	: Series 300	Catalog Number	: J03ATSB30600CGXM
Service Voltage / Hz	: 208V/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	: 2, 1/0 AWG to 600 MCM
Frame = J, Switch Rating = 0600, 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

**OUTLINE FOR
ASCO[®]RIES 150-600 AMPERE "J" FRAME (3ATS,3NTS,3ADTS,3NTDS) FRONT CONNECTED TRANSFER SWITCHES TYPE 3R/4X/12 SECURE ENCLOSURE**

GENERAL NOTES

1. TYPE 3R44X12 ENCLOSURE, FREE STANDING, FLOR OR WALL MOUNTABLE. 14 GAUGE CONSTRUCTION.
2. DOOR HINGED ON RIGHT SIDE, LOCKABLE HINGE ON LEFT SIDE, DOOR CLOSURE LEFT, TOP, AND BOTTOM.
3. FINISH: TYPE 3R44Z18 ANTI STICK GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.

TYPE 4X (P): EXTERIOR CONSTRUCTED OF CODE GLOSS TYPE 304 STAINLESS STEEL
TYPE 4X (V): EXTERIOR CONSTRUCTED OF CODE GLOSS TYPE 316 STAINLESS STEEL
OTHER ANODIC COLOR AVAILABLE CONSULT FACTORY UL RECOGNIZED

4. **RECOMMENDED CLEARANCES:**
FRONT - 12" % RATED GROUND BUS IS PROVIDED.
5. 20" % RATED GROUND BUS IS PROVIDED.
6. UNIT IS DESIGNED FOR COMBINATION TOP AND BOTTOM CABLE ENTRY. THE STANDARD SWITCH POSITION IS TOP CABLE ENTRY AND LOAD AND BOTTOM LUGS NORMAL.
7. A FULLY RATED NEUTRAL CONNECTION FOR EACH SOURCE AND THE LOAD IS OPTIONAL. WHEN PROVIDED IT IS IN ONE OF THE FOLLOWING FORMATS AS SPECIFIED BY THE CATALOG NO. NEUTRAL TYPE:
A. **NEUTRAL, GND, NEUTRAL**
B. **SWITCHED NEUTRAL, NEUTRAL**
C. **SWITCHED NEUTRAL, POLE**
8. **CENTER OF GRAVITY:**
12"

9. WHEN INSTALLING GROUND LUGS TO TYPE 4 ENCLOSURE, REMOVE HARDWARE FROM STUDS AND REMOVE MASKING PLATES TO EXPOSE UNPAINTED SURFACE.

CABLING NOTES

1. ALL SIZES SUPPLIED STANDARD WITH MECHANICAL (SCREW TYPE) LUGS. (SEE AMP SIZE BELOW)
A. LUG MATERIAL: ALUMINUM ALLOY 6061-T6 WITH ELECTRO TIN PLATED FINISH.
B. SCREW MATERIAL: ALUMINUM ALLOY 6226-T9 WITH ELECTRO TIN PLATED FINISH.
C. UL LISTED, CSA CERPOSIER.

- C. UL LISTED, CSA CERTIFIED.
- D. LUG SCREW TIGHTENING TORQUE PER UL 466B: 19 FT-LBS.
- E. SUITABLE WIRE BENDING SPACE IS PROVIDED. (SEE AMP SIZE BELOW)

2. CONSULT FACTORY FOR OTHER TERMINATION REQUIREMENTS.

3. GROUND LUGS ARE PROVIDED STANDARD AS FOLLOWS. (SEE AMP SIZE BEI

4. CUSTOMER TERMINAL BLOCKS:
THE TR WILL BE MOUNTED ON THE TRANSFER SWITCH FRAME AS INDICATED

NOTES 150-400 AMP SWITCHES

1. SUPPLIED WITH STANDARD MECHANICAL (SCREW TYPE) LUGS ON THE NORMAL, EMERGENCY & LOAD BUS STABS. ONE (1) LUG PER PHASE AND NEUTRAL EACH SUITABLE FOR CONNECTION OF TWO (2) 1/0 -250MCM CU/AL CABLES OR ONE (1) #4-600MCM CU/AL CABLE.

A. SUITABLE WIRE BENDING SPACE IS PROVIDED FOR UP TO ONE (1) 800MCM CABLE PER TERMINAL PER NEC.

NOTES, SOS, AND SWITCHES

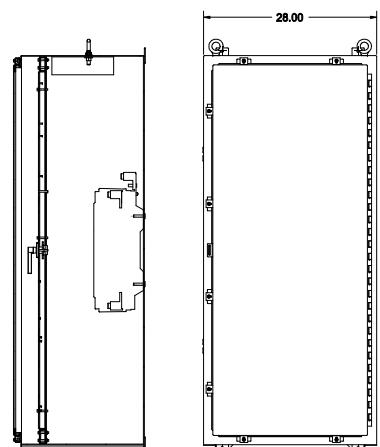
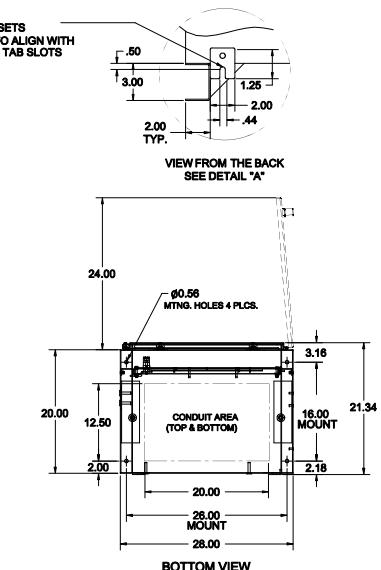
1. SUPPLIED WITH STANDARD MECHANICAL (SCREW TYPE) LUGS ON THE NORMAL, EMERGENCY & LOAD BUS STABS. ONE (1) LUG PER PHASE AND NEUTRAL EACH SUITABLE FOR CONNECTION OF TWO 1/0 AWG CABLES.

A. SUITABLE WIRE BENDING SPACE IS PROVIDED FOR UP TO TWO (2) 800MCM CABLE PER TERMINAL PER NEC.

2. GROUND LUGS ARE PROVIDED STANDARD AS FOLLOW:
SIX (6) #12-600MCM C/U/WL CABLE CONNECTIONS.

ATS SWITCH RATING (AMPS)	POLES	WEIGHTS LB (KG)
280-400	2	480 (222)
280-400	3	496 (225)
280-400	4	502 (228)
600	2	495 (225)
600	3	502 (228)
600	4	509 (231)

DTS SWITCH RATING (AMPS)	POLES	WEIGHTS LB (KG)
150-400	2	506 (230)
150-400	3	512 (232)
150-400	4	518 (235)
600	2	511 (232)
600	3	518 (235)
600	4	525 (238)



FRONT VIEW
WITH QUITTER DOOR

PROJECT NAME:		ISSUED	
		TO: BY: APP. DATE	
COMPOSITE		BY: 	
300 SERIES TS "F"		OUTLINE	
150-800 AMP 3R/4A/4X12 SECURED			
BY	MM/MIN	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASME Y14.5M-1994. FOR PLASTIC PARTS SEE MP-005	
DRAWN BY	MM/MIN	ARREST REF. NO.	
CHANGED BY	TR	COMPUTER GENERATED DRAWING	
APPROVED BY	W/K	SCALE	DS
APPROVAL	MM/MIN	DATE	100/1393-006
APPROVED	MM/MIN	DRAWN BY	R. 202647
ASCO	ASCO P. O. Box 7000, Teterboro, NJ PLASTIC DIVISION, NEW YORK STATE, NY	DESIGNED BY	100/1

THREE PHASE WIRING FOR ASCO[®] 300 SERIES TRANSFER SWITCHES (J3ATS/J3NTS) 600 AMPERES WITH GROUP G CONTROLS

GENERAL INFORMATION

THIS WIRING APPLIES TO 300 SERIES TRANSFER SWITCHES THAT UTILIZE THE "J" FRAME POWER TRANSFER SWITCH RATED 600 AMPERES.

THE GROUP G CONTROLLER PROVIDES EITHER AUTOMATIC (J3ATS) OR NON-AUTOMATIC (J3NTS) 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, 18E, 25G) ARE PROVIDED IN THE USER'S GUIDE FOR THE 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 340TS, 340NTS & 340DT, J-DESIGN 150-600 A TRANSFER SWITCHES, PART NUMBER 381333-404.

ENGINE CONTROL CONTACTS

FEATURE 7 & FEATURE 8:
OVERRIDE CONTACTS "NR1" (FEAT. 7 NOC, FEAT. 8 NO) THAT CHANGE POSITION ON EXPIRATION OF THE FEATURE 1C, OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES TIME DELAY, AND RESET ON EXPIRATION OF THE FEATURE 2E ENGINE COOLDOWN TIME DELAY.

AN AUXILIARY CONTACT THAT IS CLOSED WHEN THE TRANSFER SWITCH IS CONNECTED TO THE EMERGENCY SOURCE, IS CONNECTED ACROSS THE NOC 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 "NR2".

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 LOAD DISCONNECT FUNCTIONS 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 SUBFEATURES 31E, 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 SUB-FEATURE;

31E - 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 FUNCTIONS WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "FEATURE 31".

ALL OUTPUT CONTACTS "OP1", "OP2", "OP3" BET TO OPERATE AS "FEATURE 31", SHARE THE COMMON TIME DELAY SETTINGS OF SUB-FEATURES 31E, 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 CONTROLS 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. OUTPUT CONTACTS "RL1" (EMERGENCY SOURCE AVAILABLE) AND "RL2" (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. SEE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUB. ICS 1, PART 1-101A.

3. ALL WIRING IS #10 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 PROVIDED WITH 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 34G) OR THE TRANSFER SWITCH HAS BEEN SET FOR NON-AUTOMATIC (MANUAL) OPERATION.

WHEN OPTIONAL ACCESSORY 18E "SOFTWARE BUNDLE" IS PART OF THE TRANSFER SWITCH ASSEMBLY, THE SOFTWARE BUNDLE ALTERNATIVELY PROVIDES A COMMON ALARM. THE OUTPUT CONTACTS CHANGE POSITION WHEN A COMMON ALARM IS PRESENT AND ACTIVE WHEN A "COMMON ALARM" CONDITION IS PRESENT. THE "COMMON ALARM" SIGNAL CONDITIONS ARE SELECTABLE.

ADDITIONAL "COMMON ALARM" & "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 SUPPLY 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 ONE OF:

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

- OPTIONAL ACCESSORY UP (UNINTERRUPTIBLE POWER SUPPLY MODULE)

- OPTIONAL ACCESSORY UP (UNINTERRUPTIBLE POWER SUPPLY)

EXTERNAL 24 VDC POWER SUPPLY 18G

AN EXTERNAL 24 VDC POWER SUPPLY 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 SUPPLY FUNCTIONALITY WHEN THE 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 "U1-2 & U1-3" & CONNECT JUMPERS "U1-5 & U1-6"

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 UP (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 18E 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 EXERCISE

- EVENT LOG

- COMMON ALARM SIGNAL CAPABILITY ON GROUP G CONTROLLER "OP1" OUTPUT.

(3) PHASE SENSING ONLY

- PHASE POSITION 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.

SEE SOURCE AVAILABILITY SIGNALS

SEE LOAD CURRENT METERING

SEE ADVANCED-FUNCTION SOFTWARE BUNDLE

SEE EXTERNAL POWER SUPPLY

SEE INPHASE TRANSFER FEATURE

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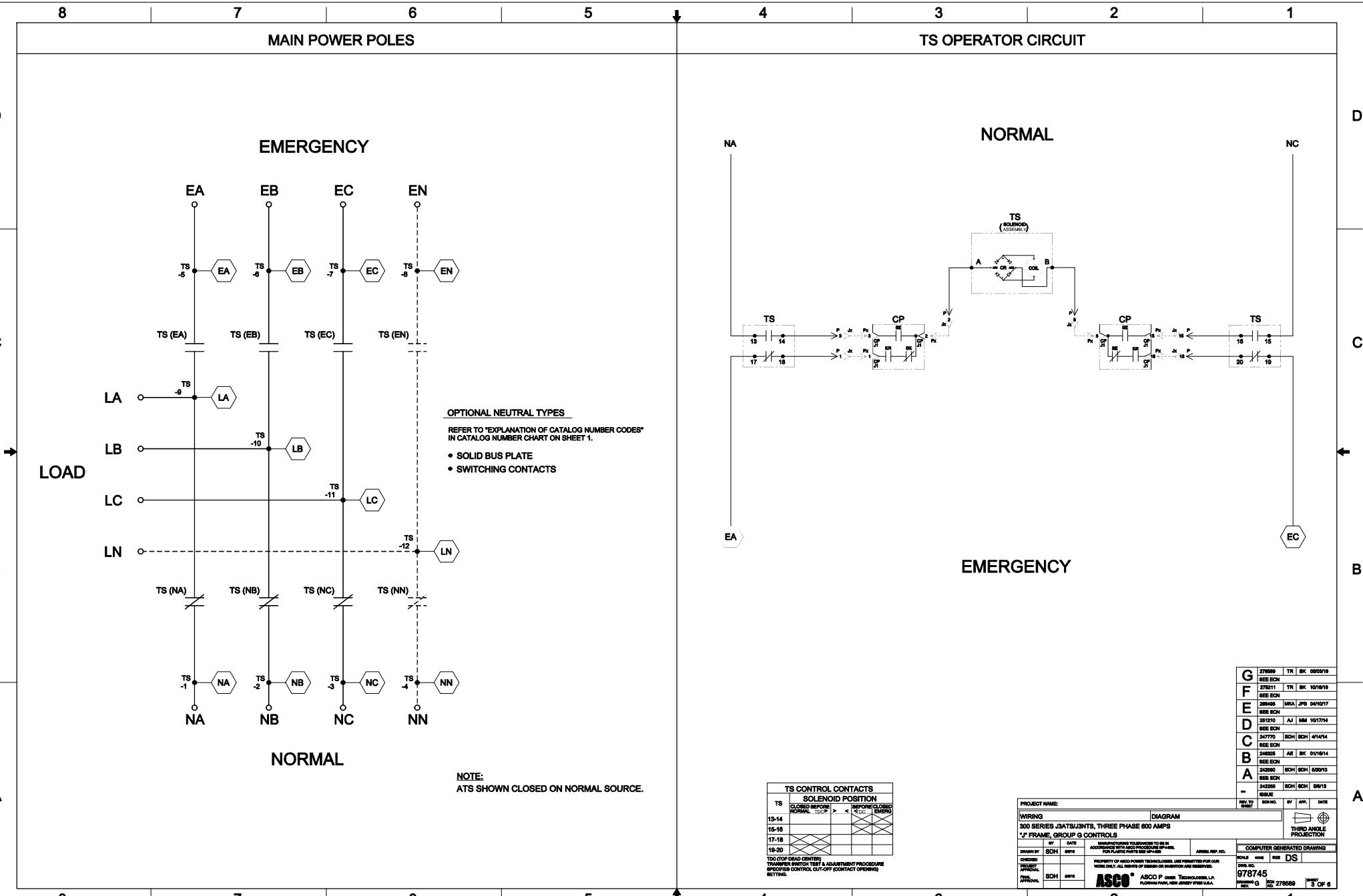
SEE SOURCE AVAILABILITY SIGNALS

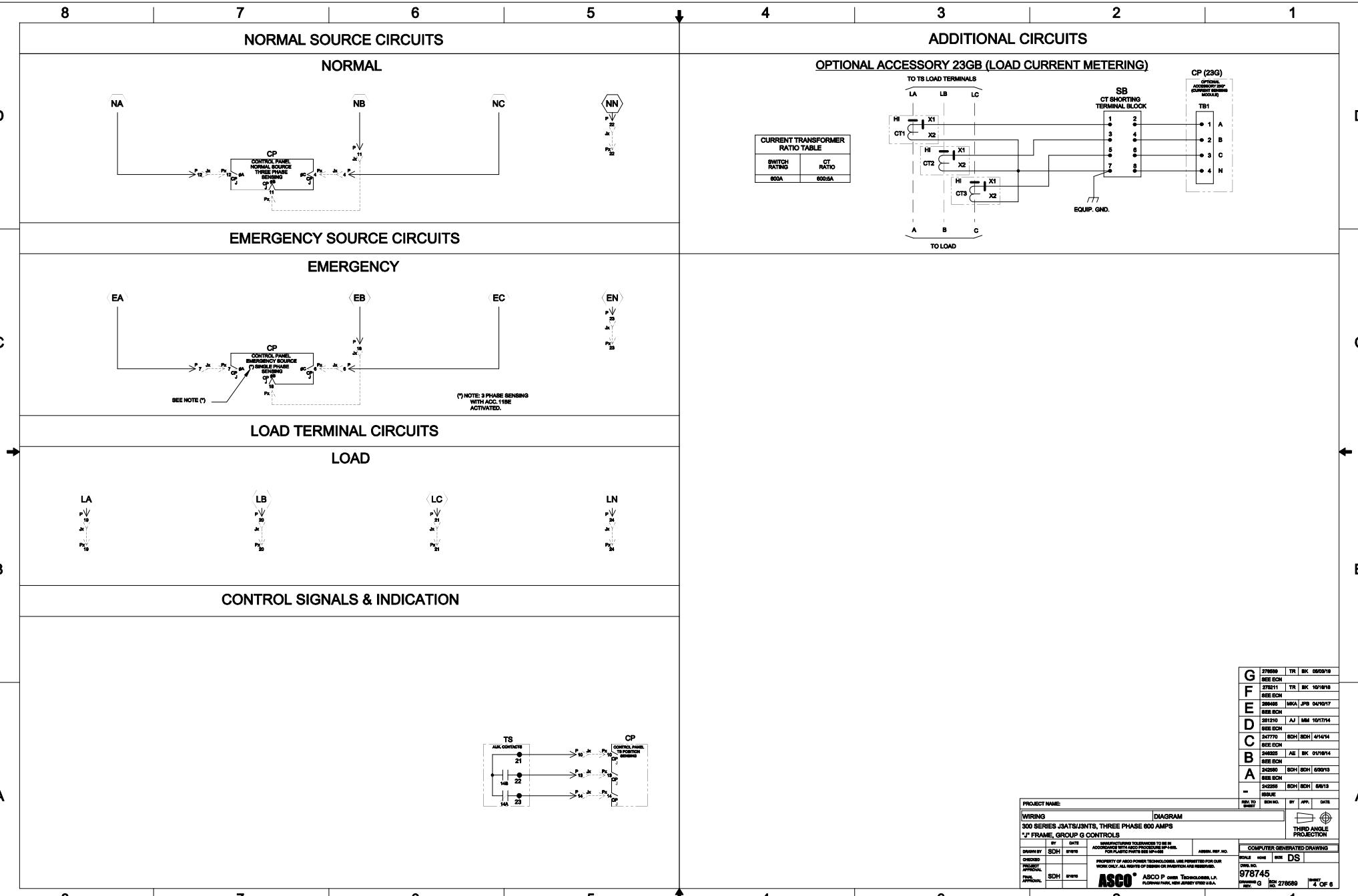
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SEE ADVANCED-FUNCTION SOFTWARE BUNDLE

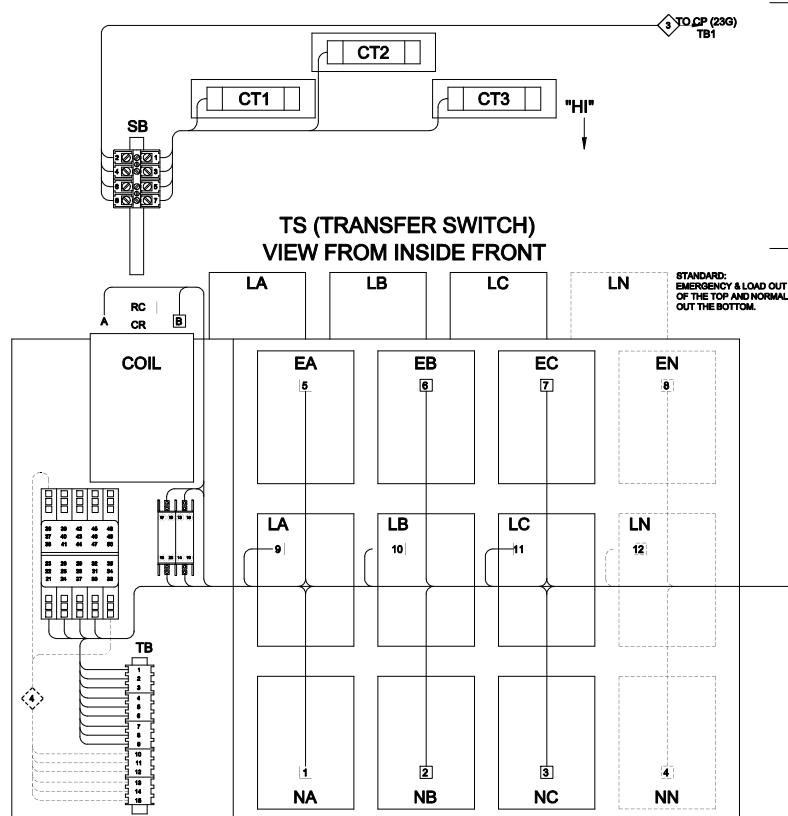
SEE EXTERNAL POWER SUPPLY



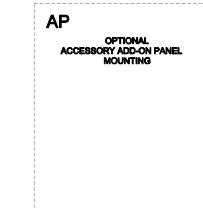
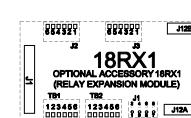
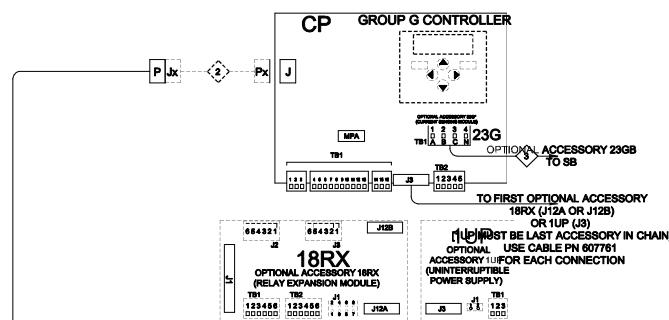
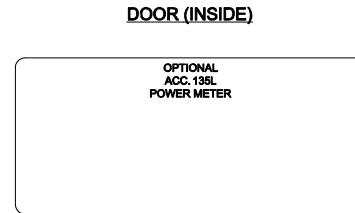




PHYSICAL DIAGRAM



**OPTIONAL
ACCESSORY 23GE**



DOOR HINGE —

BONDING STR

PROJECT NAME:		DIAGRAM		ISSUE	
WIRING				REV NO. <input type="text"/> BY <input type="text"/> APP. <input type="text"/> DATE <input type="text"/>	
300 SERIES J3ATSWNTS, THREE PHASE 600 AMPS					
"J" FRAME, GROUP G CONTROLS					
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASME Y14.5M-1982. FOR PLASTIC PARTS SEE MP-485		DRAWING NO. <input type="text"/>	
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CHECKED BY <input type="text"/>	SDH <input type="text"/>	PROPERTY OF ALCO POWER CONTROLS, INC. PERMITTED FOR OUR WORK STATION USE ONLY. NOT TO BE COPIED OR REPRODUCED.		COMPUTER GENERATED DRAWING	
APPROVED BY <input type="text"/>	SDH <input type="text"/>	ASCO [®] ASCO P. O. Box 7300, Tulsa, OK 74133-0730, U.S.A.		NAME <input type="text"/> DS	
FILE NO. <input type="text"/> 978745					
DRAWING G <input type="text"/> 276606					
PAGE 1 OF 4					
THIRD ANGLE PROJECTION					

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7

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WIRE RUN LISTING

WIRE No.	HARNESS (P) MAIN TS	EXTERIOR LOCATOR	CLR	AWG
1 P-1,TS-18				
2 P-2,TS-18				
3 P-3,TS-14				
4 P-4,TS-3				
5 TS-5,TS-15				
6 TS-6,TS-1				
7 TS-7,TS-7				
8 TS-7,TS-19				
9 TS-8,TS-1				
10 TS-9,TS-17				
11 TS-10,TS-24				
12 TS-11,TS-1				
13 TS-12,TS-25				
14 TS-13,TS-2				
15 TS-14,TS-21				
16 TS-15,TS-2				
17 TS-16,TS-1				
18 TS-17,TS-13				
19 TS-18,TS-22				
20 TS-19,TS-25				
21 TS-20,TS-16				
22 TS-21,TS-20				
23 TS-22,TS-3				
24 TS-23,TS-12				
25 TS-24,TS-4				
26 TS-25,TS-5				
27 TS-26,TS-10				
28 TS-27,TS-11				
29 TS-28,TS-4				
30 TS-29,TS-22				
31 TS-30,TS-7				
32 TS-31,TS-8				
33 TS-32,TS-9				

REMOVE WIRES

WIRE No.	HARNESS LOCATOR	EXTERIOR LOCATOR	CLR	AWG
1 Px1-Jc-1		16		
2 Px2-Jc-2				
3 Px3-Jc-3				
4 Px4-Jc-4				
5 Px5-Jc-5				
6 Px6-Jc-6				
7 Px7-Jc-7				
8 Px8-Jc-8				
9 Px9-Jc-9				
10 Px10-Jc-10				
11 Px11-Jc-11				
12 Px12-Jc-12				
13 Px13-Jc-13				
14 Px14-Jc-14				
15 Px15-Jc-15				
16 Px16-Jc-16				
17 Px17-Jc-17				
18 Px18-Jc-18				
19 Px19-Jc-19				
20 Px20-Jc-20				
21 Px21-Jc-21				
22 Px22-Jc-22				
23 Px23-Jc-23				
24 Px24-Jc-24				

REMOVE WIRES

WIRE No.	HARNESS LOCATOR	EXTERIOR LOCATOR	CLR	AWG
35 TS-33,TS-10				
36 TS-34,TS-19				
37 TS-35,TS-12				
38 TS-36,TS-13				
39 TS-37,TS-15				
40 TS-38,TS-14				

ADD WIRES

WIRE No.	ADDITIONAL WIRES	CLR	AWG
300 CT1-X1,SB-1			
301 CT1-X1,SB-2			
302 CT1-X1,SB-3			
303 SB-2,CP(23G)-TB1-1			
304 SB-4,CP(23G)-TB1-2			
305 SB-6,CP(23G)-TB1-3			
306 CT1-X2,CT2-X2			
307 CT1-X2,CT2-X3			
308 SB-7,ECU,IP,GND		GRN	
309 SB-8,CP(23G)-TB1-4		GRN	
310 SB-9,CP(23G)-TB1-5		GRN	
311 SB-10,CP(23G)-TB1-6		GRN	
312 SB-11,CP(23G)-TB1-7		GRN	
313 SB-12,CP(23G)-TB1-8		GRN	
314 SB-13,CP(23G)-TB1-9		GRN	
315 SB-14,CP(23G)-TB1-10		GRN	
316 SB-15,CP(23G)-TB1-11		GRN	
317 SB-16,CP(23G)-TB1-12		GRN	
318 SB-17,CP(23G)-TB1-13		GRN	
319 SB-18,CP(23G)-TB1-14		GRN	
320 SB-19,CP(23G)-TB1-15		GRN	
321 SB-20,CP(23G)-TB1-16		GRN	
322 SB-21,CP(23G)-TB1-17		GRN	
323 SB-22,CP(23G)-TB1-18		GRN	
324 SB-23,CP(23G)-TB1-19		GRN	
325 SB-24,CP(23G)-TB1-20		GRN	
326 SB-25,CP(23G)-TB1-21		GRN	
327 SB-26,CP(23G)-TB1-22		GRN	
328 SB-27,CP(23G)-TB1-23		GRN	
329 SB-28,CP(23G)-TB1-24		GRN	
330 SB-29,CP(23G)-TB1-25		GRN	
331 SB-30,CP(23G)-TB1-26		GRN	
332 SB-31,CP(23G)-TB1-27		GRN	
333 SB-32,CP(23G)-TB1-28		GRN	

WIRE No.	ADDITIONAL WIRES	CLR	AWG
300 CT1-X1,SB-1			
301 CT1-X1,SB-2			
302 CT1-X1,SB-3			
303 SB-2,CP(23G)-TB1-1			
304 SB-4,CP(23G)-TB1-2			
305 SB-6,CP(23G)-TB1-3			
306 CT1-X2,CT2-X2			
307 CT1-X2,CT2-X3			
308 SB-7,ECU,IP,GND		GRN	
309 SB-8,CP(23G)-TB1-4		GRN	
310 SB-9,CP(23G)-TB1-5		GRN	
311 SB-10,CP(23G)-TB1-6		GRN	
312 SB-11,CP(23G)-TB1-7		GRN	
313 SB-12,CP(23G)-TB1-8		GRN	
314 SB-13,CP(23G)-TB1-9		GRN	
315 SB-14,CP(23G)-TB1-10		GRN	
316 SB-15,CP(23G)-TB1-11		GRN	
317 SB-16,CP(23G)-TB1-12		GRN	
318 SB-17,CP(23G)-TB1-13		GRN	
319 SB-18,CP(23G)-TB1-14		GRN	
320 SB-19,CP(23G)-TB1-15		GRN	
321 SB-20,CP(23G)-TB1-16		GRN	
322 SB-21,CP(23G)-TB1-17		GRN	
323 SB-22,CP(23G)-TB1-18		GRN	
324 SB-23,CP(23G)-TB1-19		GRN	
325 SB-24,CP(23G)-TB1-20		GRN	
326 SB-25,CP(23G)-TB1-21		GRN	
327 SB-26,CP(23G)-TB1-22		GRN	
328 SB-27,CP(23G)-TB1-23		GRN	
329 SB-28,CP(23G)-TB1-24		GRN	
330 SB-29,CP(23G)-TB1-25		GRN	
331 SB-30,CP(23G)-TB1-26		GRN	
332 SB-31,CP(23G)-TB1-27		GRN	
333 SB-32,CP(23G)-TB1-28		GRN	

PROJECT NAME:	WIRING	DIAGRAM
300 SERIES J3ATTS/J3NTS, THREE PHASE 600 AMPS		THIRD ANGLE PROJECTION
* J FRAME, GROUP G CONTROLS		
DRAWN BY: SDH	DATE: 09/01/14	MANUFACTURED TO TOLERANCES TO BE IN ACCORDANCE WITH ASME Y14.5M-2009. FOR PLASTIC PARTS SEE SP-04-04
DESIGNED BY: SDH	APPROVED BY: SDH	PRINTED ON: 09/01/14 BY: SDH
REVIEWED BY: SDH	APPROVED BY: SDH	PRINTED BY: SDH
PROJECT NO.: 978745		
DRAFT NO.: DS		
CROSS REF. NO.: 278689		
DRAWN BY: SDH		
APPROVED BY: SDH		
PRINTED BY: SDH		
REV. NO.: 0		
PAGE NO.: 5 OF 6		