

THREE PHASE WIRING FOR ASCO® D300L SERIES POWER TRANSFER LOAD CENTER WITH AUTOMATIC TRANSFER SWITCH RATED 225 AMPERES MAX., 208 VOLTS

THREE PHASE, 4 WIRE, TWO SOURCE TYPE: NORMAL (UTILITY) & EMERGENCY

VOLTAGE AND FREQUENCY SENSING

- A. DIFFERENTIAL TYPE VOLTAGE SENSING ON ALL PHASES OF NORMAL SOURCE. DROPOUT SETTING SELECTABLE AT 90, 85, 80 OR 70% OF NOMINAL. FACTORY SET AT 85%. PICKUP VOLTAGE ADJUSTABLE AT 90 OR 95% OF NOMINAL. (DEFAULT IS 95% IF DROPOUT IS SET TO 90%). FACTORY SET AT 90%. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).
- B. SINGLE PHASE VOLTAGE SENSING OF EMERGENCY SOURCE. NON-ADJUSTABLE DROPOUT SETTING AT 75% OF NOMINAL. NON-ADJUSTABLE PICKUP SETTING AT 90% OF NOMINAL.
- C. FREQUENCY SENSING OF EMERGENCY SOURCE. NON-ADJUSTABLE DROPOUT SETTING AT 85% OF NOMINAL. NON-ADJUSTABLE PICKUP SETTING AT 95% OF NOMINAL.

TIME DELAYS

- A. MOMENTARY NORMAL SOURCE OUTAGE DELAY - ACTIVATED WHEN THE NORMAL SOURCE FAILS. DEACTIVATED WHEN THE NORMAL SOURCE IS ACCEPTABLE. PROVIDES A SELECTABLE (1 OR 3 SECOND) DELAY ON TRANSFER AND ENGINE STARTING SIGNALS. FACTORY SET AT 3 SECONDS. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).
- B. TRANSFER TO EMERGENCY DELAY- ACTIVATED AFTER THE MOMENTARY NORMAL SOURCE OUTAGE DELAY EXPIRES AND THE EMERGENCY SOURCE IS SENSED TO BE ACCEPTABLE. TRANSFER TO EMERGENCY IS COMMITTED TO ON INITIATION OF DELAY. DEACTIVATED WHEN THE EMERGENCY SOURCE IS UNACCEPTABLE. PROVIDES AN ADJUSTABLE DELAY FROM 0 TO 5 MINUTES. FACTORY SET AT 0 MINUTES. (REFER TO OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).
- C. RETRANSFER TO NORMAL DELAY - ACTIVATED WHEN THE NORMAL SOURCE IS ACCEPTABLE. DEACTIVATED WHEN THE NORMAL SOURCE FAILS WITH NO TRANSFER TO NORMAL. ALSO DEACTIVATED WHEN THE EMERGENCY SOURCE FAILS WHILE THE NORMAL SOURCE IS ACCEPTABLE WITH TRANSFER TO NORMAL. ADJUSTABLE DELAY FROM 1 SECOND TO 30 MINUTES. FACTORY SET TO 30 MINUTES. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).
- D. UNLOADED RUNNING (ENGINE COOL DOWN) DELAY - ACTIVATED ON EXPIRATION OF RETRANSFER TO NORMAL DELAY OR FOLLOWING EXPIRATION OF THE NORMAL SOURCE OUTAGE DELAY WITHOUT A COMMIT TO TRANSFER TO EMERGENCY. NON-ADJUSTABLE DELAY OF 5 MINUTES.
- E. MOMENTARY EMERGENCY SOURCE OUTAGE DELAY- ACTIVATED WHEN THE SWITCH IS IN THE EMERGENCY POSITION AND THE EMERGENCY SOURCE FAILS. FACTORY SET AT 4 SECONDS. RESET IF EMERGENCY RESTORES WITHIN 4 SECONDS.

EXTENDED FEATURES

ENABLING OF THE EXTENDED SENSING AND TIME DELAY FEATURES PROVIDES THE FOLLOWING: (FACTORY SHIPPED WITH EXTENDED FEATURES DISABLED. REFER TO THE OPERATOR'S MANUAL FOR DETAILS.)

- A. NORMAL SOURCE OVER VOLTAGE TRIP - WHEN ENABLED, CAUSES TRANSFER AT 108% OF NOMINAL VOLTAGE.
- B. NORMAL SOURCE OVER/UNDER FREQUENCY TRIP - WHEN ENABLED, CAUSES TRANSFER AT 105% OR 95% OF NOMINAL FREQUENCY.
- C. EMERGENCY SOURCE OVER VOLTAGE TRIP - WHEN ENABLED, CAUSES TRANSFER AT 108% OF NOMINAL VOLTAGE.
- D. EMERGENCY SOURCE OVER FREQUENCY TRIP - WHEN ENABLED, CAUSES TRANSFER AT 105% OF NOMINAL FREQUENCY.
- E. UNLOADED RUNNING (ENGINE COOLDOWN) TIME DELAY - WHEN ENABLED, 5 MINUTES. NO DELAY WHEN DISABLED.

ENGINE CONTROL CONTACTS

ONE SET OF FORM C CONTACTS (1 N/O & 1 N/C) THAT CHANGE POSITION ON EXPIRATION OF THE NORMAL SOURCE OUTAGE DELAY AND RESET ON EXPIRATION OF THE UNLOADED RUNNING (ENGINE COOL DOWN) DELAY. OUTPUT CONTACTS (NR) ARE RATED 5 AMPS RESISTIVE AT 28V DC OR 120V AC MAXIMUM.

OPERATOR INTERFACE INDICATORS & CONTROLS MEMBRANE TYPE

- A. TRANSFER SWITCH TEST - MOMENTARY PUSH-BUTTON TO SIMULATE NORMAL SOURCE FAILURE SEQUENCE OF OPERATION. PRESS AND HOLD FOR AT LEAST 15 SECONDS TO ALLOW TIME FOR ENGINE-GENERATOR SET TO START.
- B. BYPASS TIME DELAY - MOMENTARY PUSH-BUTTON TO BYPASS EITHER THE TRANSFER TO EMERGENCY DELAY, ENGINE EXERCISER PERIOD OR THE RETRANSFER TO NORMAL DELAY DEPENDING ON WHICH DELAY IS ACTIVE AT THE TIME THE PUSH-BUTTON IS ACTIVATED.
- C. SET ENGINE EXERCISER - MOMENTARY PUSH-BUTTON TO ACTIVATE A SEVEN (7) DAY TIMER FOR AUTOMATIC WEEKLY TESTING OF THE ENGINE GENERATOR SET EITHER WITH OR WITHOUT LOAD TRANSFER. THE TIMER IS POWERED BY A NON-RECHARGEABLE 9V BATTERY WHEN NORMAL AND EMERGENCY SOURCES ARE UNAVAILABLE. DEPRESSING THE MOMENTARY PUSH-BUTTON FOR 5 SECONDS SETS THE TIME OF WEEK AT WHICH TESTING IS TO OCCUR. THE FEATURE IS ACTIVATED BY SETTING A DIP SELECTOR SWITCH ON THE CONTROL PANEL. ENGINE START WITH OR WITHOUT LOAD TRANSFER IS SELECTED WITH A SECOND DIP SELECTOR SWITCH ON THE CONTROL PANEL. FACTORY SET TO DISABLED, NO LOAD. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).
- D. LOAD CONNECTED TO INDICATORS GREEN LED INDICATOR TO INDICATE WHEN THE TRANSFER SWITCH LOAD IS CONNECTED TO THE NORMAL SOURCE. RED LED INDICATOR TO INDICATE WHEN THE TRANSFER SWITCH IS CONNECTED TO THE EMERGENCY SOURCE.
- E. SOURCE AVAILABLE INDICATORS GREEN LED INDICATOR TO INDICATE WHEN THE NORMAL SOURCE IS AVAILABLE. RED LED INDICATOR TO INDICATE WHEN THE EMERGENCY SOURCE IS AVAILABLE.

LOAD DISCONNECT FEATURE

ONE SET OF FORM C CONTACTS (1 N/O & 1 N/C) THAT CHANGE POSITION ON ACTIVATION OF A SELECTABLE TIME DELAY BEFORE TRANSFER (LD TDBT) AND RESET EITHER IMMEDIATELY FOLLOWING TRANSFER OR FOR THE SAME DELAY AS SET FOR PRE-SIGNAL BEFORE TRANSFER. SELECTABLE AS 0, 3, 10 OR 20 SECONDS. FACTORY SET AT 0. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS). OUTPUT CONTACTS (OP) ARE RATED 5 AMPS RESISTIVE AT 28 VDC OR 120 VAC MAXIMUM.

MOTOR LOAD TRANSFER FEATURE

INPHASE TRANSFER CONTROL LOGIC TO INITIATE AN INPHASE TRANSFER OF MOTOR LOADS BETWEEN LIVE SOURCES. USED TO HELP PREVENT NUISANCE TRIPPING OF DISTRIBUTION CIRCUIT BREAKERS AND POSSIBLE DAMAGE TO MECHANICAL LOADS ASSOCIATED WITH OUT OF PHASE TRANSFER. ACTIVATED BY SETTING A DIP SWITCH ON THE CONTROL PANEL. FACTORY SET AS DISABLED. (REFER TO OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).

REMOTE CONTROL FEATURES

THE FOLLOWING CONTROL PANEL INPUTS PROVIDE REMOTE CONTROL FUNCTIONS FOR THE AUTOMATIC TRANSFER SWITCH. EACH CONTROL FUNCTION CAN BE IMPLEMENTED BY THE CUSTOMER PROVIDING THE FORM OF CONTROL CONTACT DESCRIBED. EACH CONTROL CONTACT MUST BE SUITABLE FOR A 5 VDC LOW ENERGY CIRCUIT. EACH CONTROL FEATURE IS ACTIVATED BY SETTING A DIP TYPE SELECTOR SWITCH ON THE CONTROL PANEL. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL SETTINGS).

- A. REMOTE TEST FEATURE - REQUIRES A CUSTOMER SUPPLIED, REMOTE, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT SIMULATES A FAILURE OF THE NORMAL SOURCE SIMILAR TO THE SEQUENCE OUTLINED FOR THE TRANSFER SWITCH TEST PUSH-BUTTON. THE TRANSFER SWITCH WILL REMAIN CONNECTED TO THE EMERGENCY SOURCE UNDER ALL CONDITIONS WHILE THE CONTACT IS OPEN.
- B. REMOTE TRANSFER TO EMERGENCY FEATURE - REQUIRES A CUSTOMER SUPPLIED, REMOTE, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT CAUSES ENGINE START AND TRANSFER TO THE EMERGENCY SOURCE. RECLOSURE OF THE CONTACT ACTIVATES THE RETRANSFER TO NORMAL DELAY PRIOR TO RETRANSFER. IN THE EVENT THAT THE EMERGENCY SOURCE FAILS WHILE THE TRANSFER SWITCH IS CONNECTED TO EMERGENCY AND THE REMOTE CONTACT IS OPEN, THE TRANSFER SWITCH WILL AUTOMATICALLY RETRANSFER TO THE NORMAL SOURCE.
- C. INHIBIT TRANSFER TO EMERGENCY FEATURE - REQUIRES A CUSTOMER SUPPLIED, REMOTE, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT WILL PROHIBIT THE TRANSFER SWITCH FROM TRANSFERRING TO THE EMERGENCY SOURCE WHILE CONNECTED TO THE NORMAL SOURCE.
- D. BYPASS TRANSFER TIME DELAY FEATURE - REQUIRES A CUSTOMER SUPPLIED, REMOTE, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT BYPASSES THE RETRANSFER TO NORMAL DELAY IF ACTIVE.

ACCESSORIES

ACCESSORY 11RG (OPTIONAL) - PROGRAMMABLE ENGINE EXERCISER & SOURCE AVAILABILITY SIGNAL MODULES

PROGRAMMABLE ENGINE EXERCISER: A PROGRAMMABLE SEVEN (7) DAY OR FOURTEEN (14) DAY ELECTRONIC TIME SWITCH FOR AUTOMATIC WEEKLY TESTING OF THE ENGINE GENERATOR SET EITHER WITH OR WITHOUT LOAD. EACH DAY OF THE WEEK IS INDIVIDUALLY PROGRAMMABLE. THE TIME OF DAY IS PRESERVED BY A BATTERY BUILT INTO THE GROUP 1 TRANSFER SWITCH CONTROL PANEL.

THE FEATURE IS ACTIVATED BY SETTING A DIP SELECTOR SWITCH ON THE CONTROL PANEL. ENGINE START WITH OR WITHOUT LOAD TRANSFER IS SELECTED WITH A SECOND DIP SELECTOR SWITCH ON THE CONTROL PANEL. (REFER TO THE OPERATOR'S MANUAL FURNISHED WITH EACH TRANSFER SWITCH REGARDING CONTROL PANEL AND TIMER SETTINGS).

SOURCE AVAILABILITY SIGNALING: ONE FORM C CONTACT EACH FOR THE NORMAL & EMERGENCY SOURCES SIGNAL THE ACCEPTABILITY OF THE SOURCE AS SENSED BY THE GROUP 1 CONTROL PANEL. THE SIGNAL CONTACTS OPERATE IN CONJUNCTION WITH THE SOURCE AVAILABILITY LED STATUS INDICATION PROVIDED ON THE OPERATOR INTERFACE. FIELD WIRING TERMINALS ARE PROVIDED AS SHOWN, LOCATED ON THE INSIDE DOOR BEHIND THE OPERATOR INTERFACE. CONTACTS RATED 2 AMPS @ 30VDC, 0.5 AMPS @ 125 VAC (RESISTIVE).

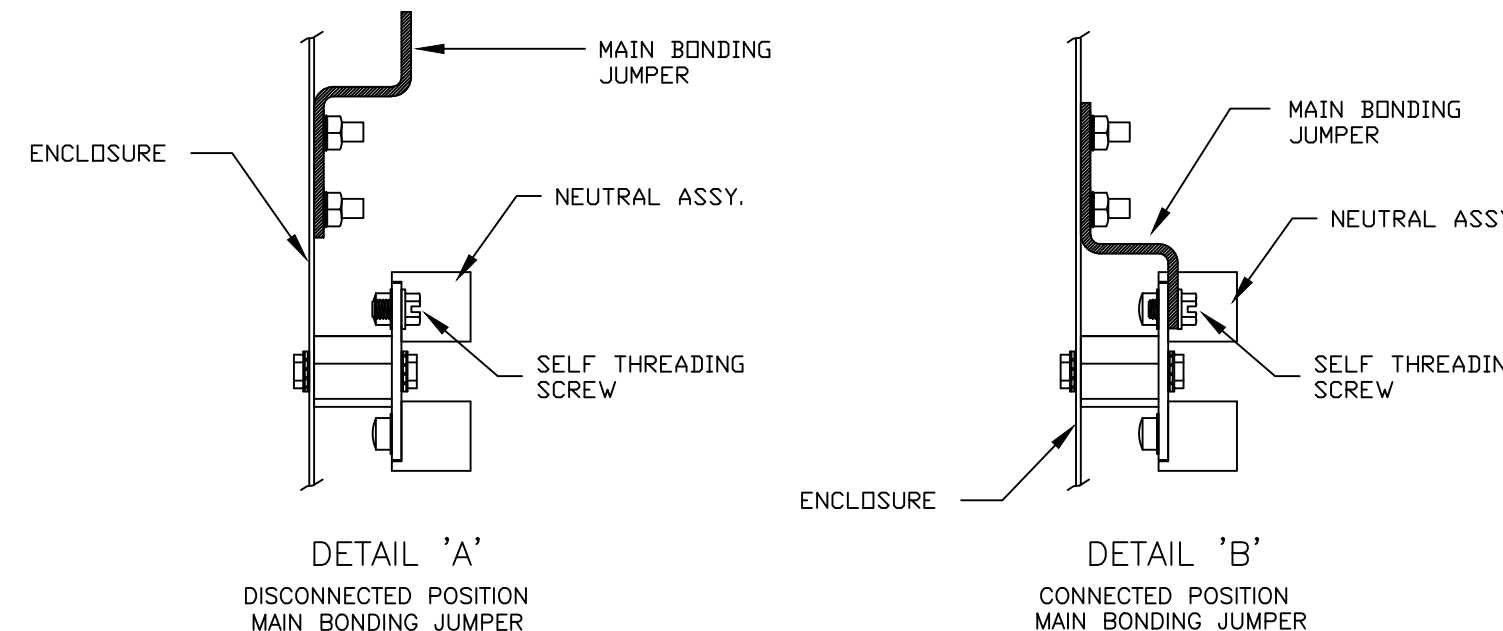
ACC. 73VN3, 73VB3 OR 73VL3 AS SPECIFIED (OPTIONAL)

Transient Voltage Surge Suppressors: ASCO 458 Series TVSS, 6 mode protection, (L-L, L-N, L-G, N-G)
Integral LED status indication per phase signaling (Service Available & Status Ok).
One (1) Form C contact wired to terminal block to signal overall Status Ok.

Supplied as one of the following accessories-
Acc. 73VN3: (1) TVSS connected to Normal source only.
Acc. 73VB3: (2) TVSS' each connected to Normal & Emergency sources.
Acc. 73VL3: (1) TVSS connected to Load only.

MAIN BONDING JUMPER

1. UNIT SHIPPED FROM FACTORY WITH THE MAIN BONDING JUMPER INSTALLED IN THE DISCONNECTED POSITION. (REFER TO DETAIL 'A')
2. WHEN USED FOR SERVICE ENTRANCE THE MAIN BONDING JUMPER MUST BE MOVED FROM THE DISCONNECTED POSITION TO THE CONNECTED POSITION. (REFER TO DETAILS 'A' AND 'B')



Notes:

- 1) Power Transfer Control Center constructed in accordance with UL 67 Standard for Panelboards. Suitable for Use as Service Equipment.
- 2) Automatic Power Transfer Switch: ASCO D300, 3 pole, 200 amp, 208 vac. UL Listed to UL 1008 Standard for Transfer Switching Equipment.

Transfer Controller - ASCO Group 1 Automatic Transfer Switch Controller including:
Automatic Engine Starting Contacts
Single Phase voltage sensing of Normal and Emergency sources.
Frequency sensing of Emergency source.
Momentary Normal source outage time delay, adjustable (1 or 3 sec.)
Retransfer to Normal time delay, adjustable (1 sec. to 30 min.)
Unloaded Engine Running (cooldown) time delay, (5 min.)

Operator Interface: Membrane style with LED status indicators-
"Normal Source Available" (green)
"Emergency Source Available" (red)
"Transfer Switch Connected to Normal" (green)
"Transfer Switch Connected to Emergency" (red)

"Transfer Switch Test" pushbutton
"Bypass Time Delay Bypass" pushbutton
"Set Engine Exerciser" pushbutton

Remote Control Features - Customer provided dry contacts, field wired to provide "Test", "Transfer to Emergency", "Inhibit Transfer to Emergency", "Bypass Transfer Time Delay".
- 3) Short Circuit Ratings:

(Mains): Normal Source - 22kA at 240vac
Square-D Cat. Type QD, 3 pole, 200 amps.

Emergency Source - 22kA at 240vac
Square-D Cat. Type QD, 3 pole, 200 amps.

(Branch): Branch ratings as follows when used with the specified branch devices.
22kA using Sq-D QO-VH or QOB-VH: 2 pole 150a, 3 pole 35-150a.
10kA using Sq-D QO or QOB rated: 1 pole 15-70a, 2 pole 15-125a,
3 pole 15-35a.
- 4) Panelboard: Square-D NQ, 225a, 240v, three phase with 100% rated neutral.
42 Circuits, accepts bolt-on or plug-on branch devices.
- 5) Grounding provisions for Normal, Emergency & Load.
- 6) Transfer Switch shown de-energized and connected to Normal Source.

BASE CATALOG NUMBER				CATALOG NUMBER SUFFIXES				EXPLANATION OF CATALOG NUMBER CODES								
SWITCH PREFIX	CATALOG TYPE	BRANCH CIRCUITS	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE	NEUTRAL TYPE	VOLTAGE CODES 3 PHASE (3 OR 4 WIRE) 50 OR 60 Hz	ENCLOSURE CODES				
										CODE	DESCRIPTION	CODE	NOMINAL VOLTAGE	CODE	TYPE	DESCRIPTION
D	300L	4 (42)	0 (SOLID) NOT SHOWN IN CATALOG NUMBER	3	200	C F	1	X	C F	NONE	SOLID	C F	208 240	C F L	1 3R 12	GENERAL PURPOSE, INDOOR OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT

PROJECT NAME: _____

WIRING DIAGRAM

D300L SERIES, 200 AMP POWER TRANSFER LOAD CENTER

SCALE: 1:1 SIZE: DS

884338-017

ASCO® ASCO Power Technologies, L.P. FLOHAM PARK, NEW JERSEY 07932 U.S.A.

229333 BWM BWM 10/15/10

REV. TO SHEET ECN NO. BY APP. DATE

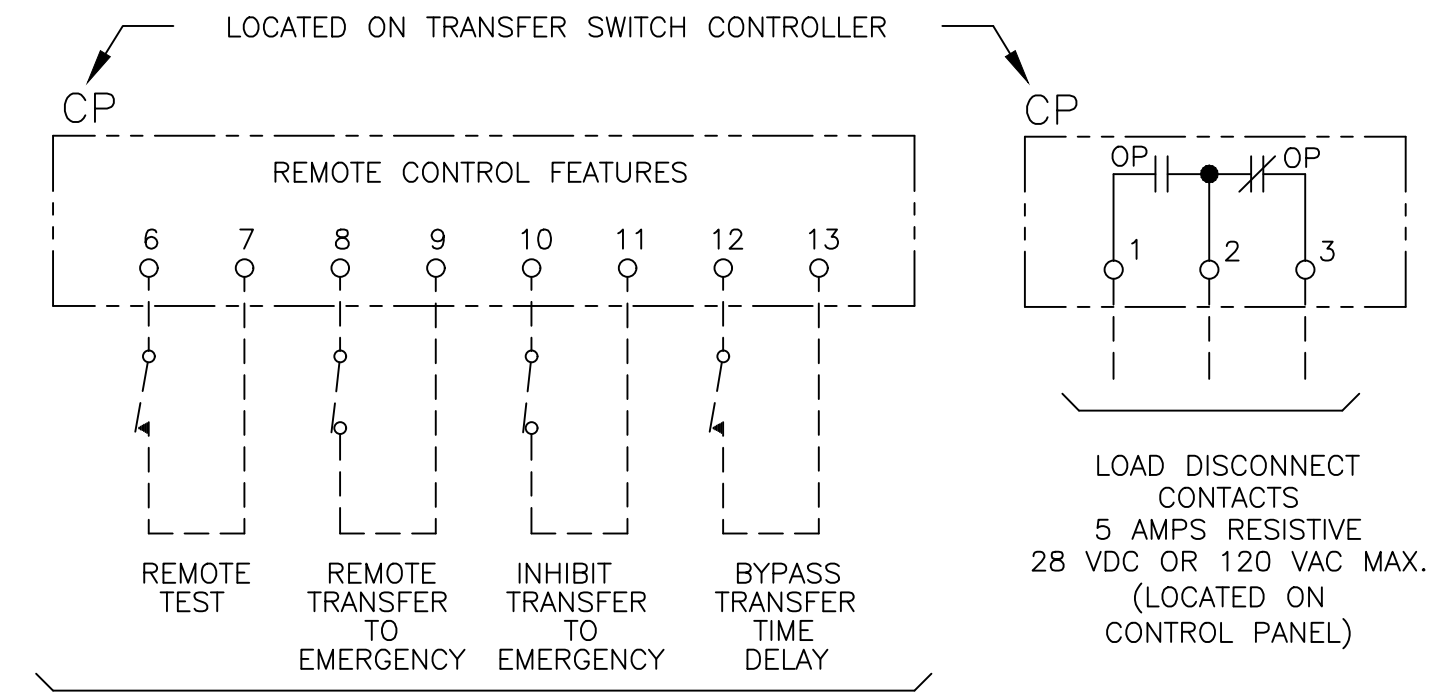
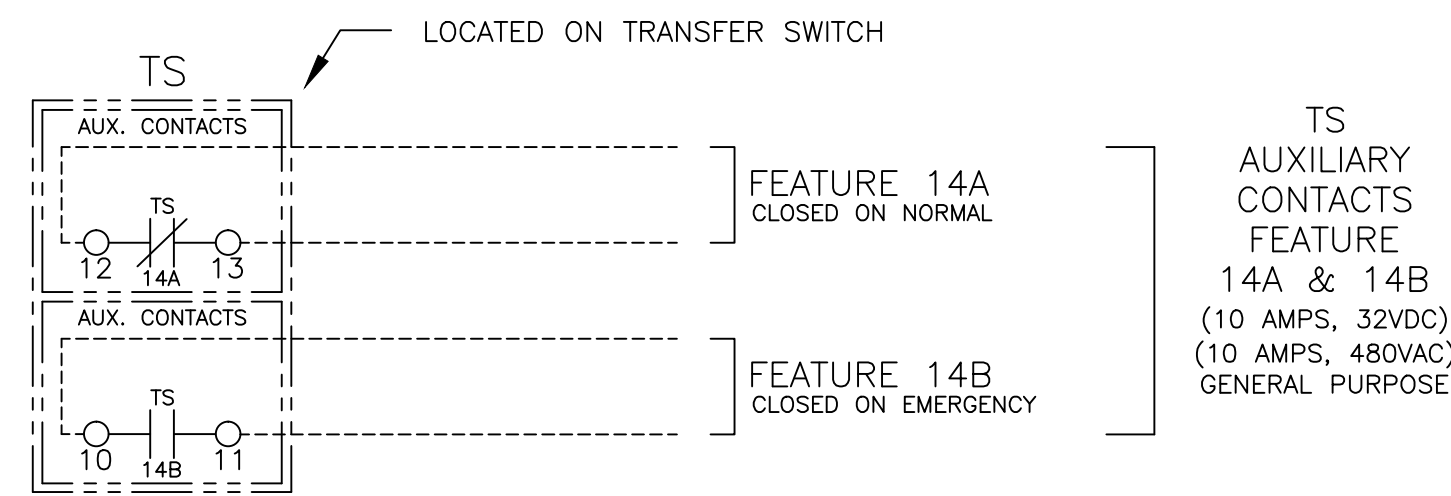
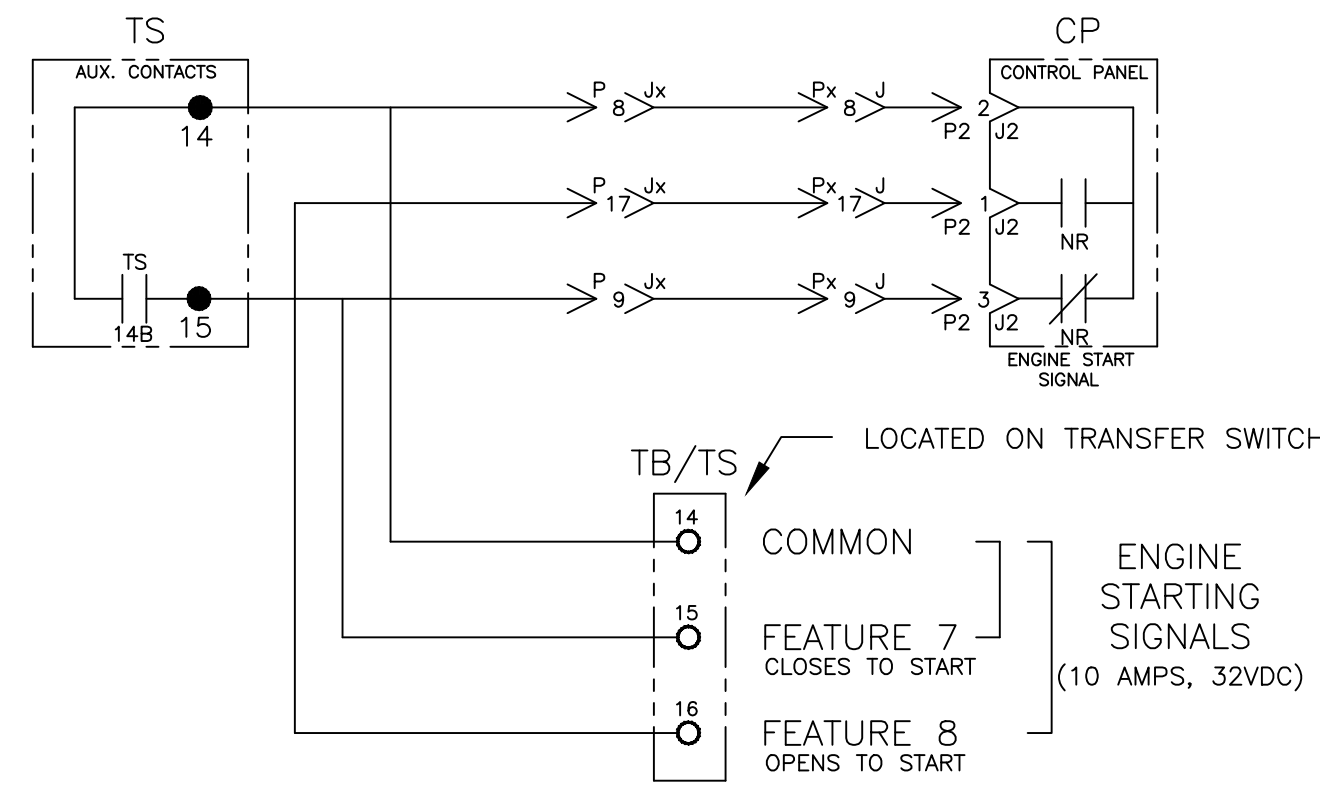
COMPUTER GENERATED DRAWING

PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

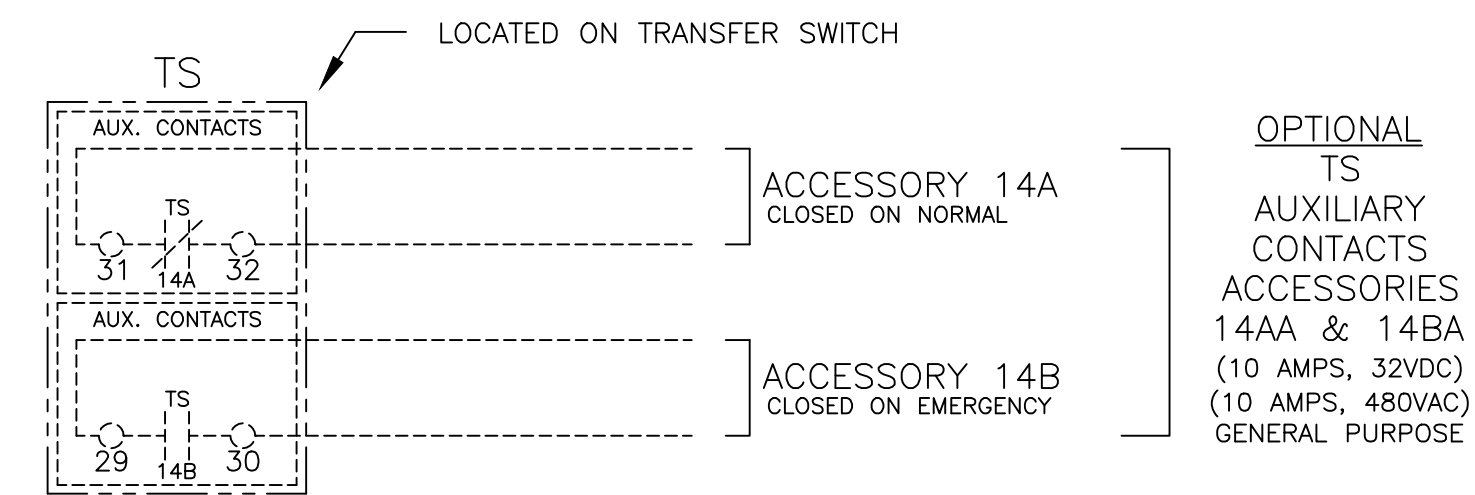
DRWING REV. ECN NO. 229333 SHEET 1 OF 4

FIELD CONNECTIONS

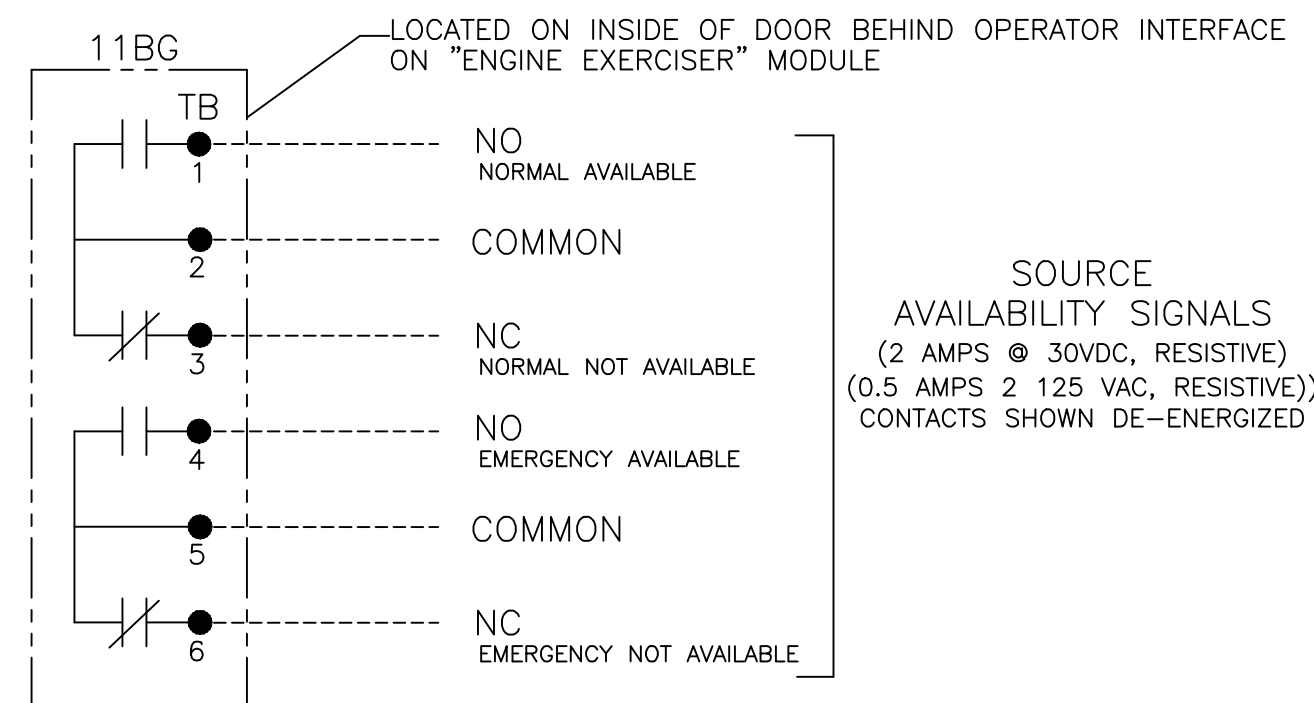
WIRE RANGE: 22-12 AWG



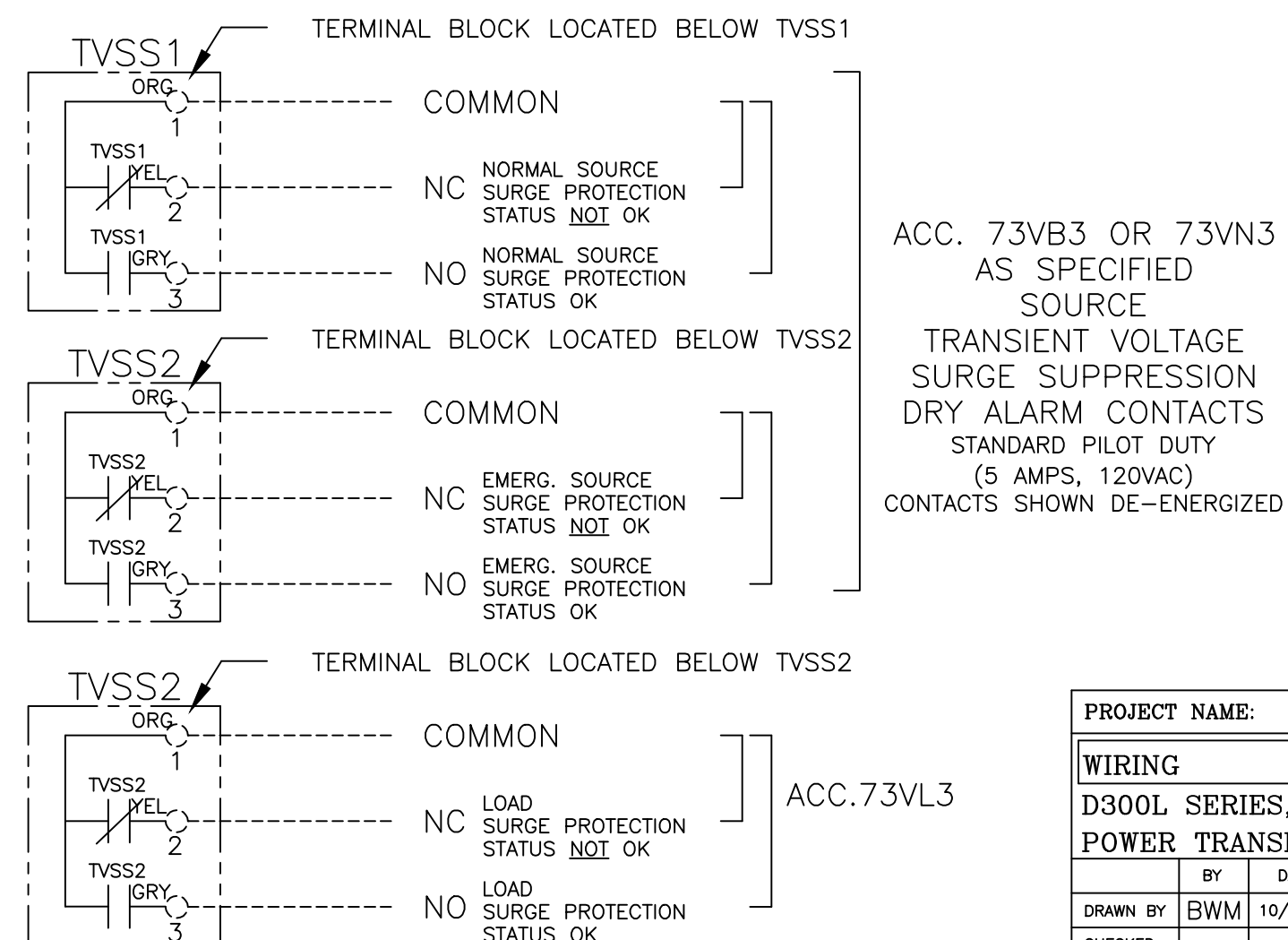
CUSTOMER SUPPLIED CONTACTS FOR FEATURES AS DESCRIBED IN STANDARD CONTROL FEATURES NOTES. CONTACT MUST BE SUITABLE FOR 5V DC LOW ENERGY CIRCUIT. ACTIVATED BY SETTING OF DIP SELECTOR SWITCHES ON CONTROL PANEL. (REFER TO OPERATOR'S MANUAL FOR REQUIRED SETTINGS.)



OPTIONAL ACC. 11BG SOURCE AVAILABILITY SIGNALS



OPTIONAL ACC. 73VN3 OR 73VB3 AS SPECIFIED

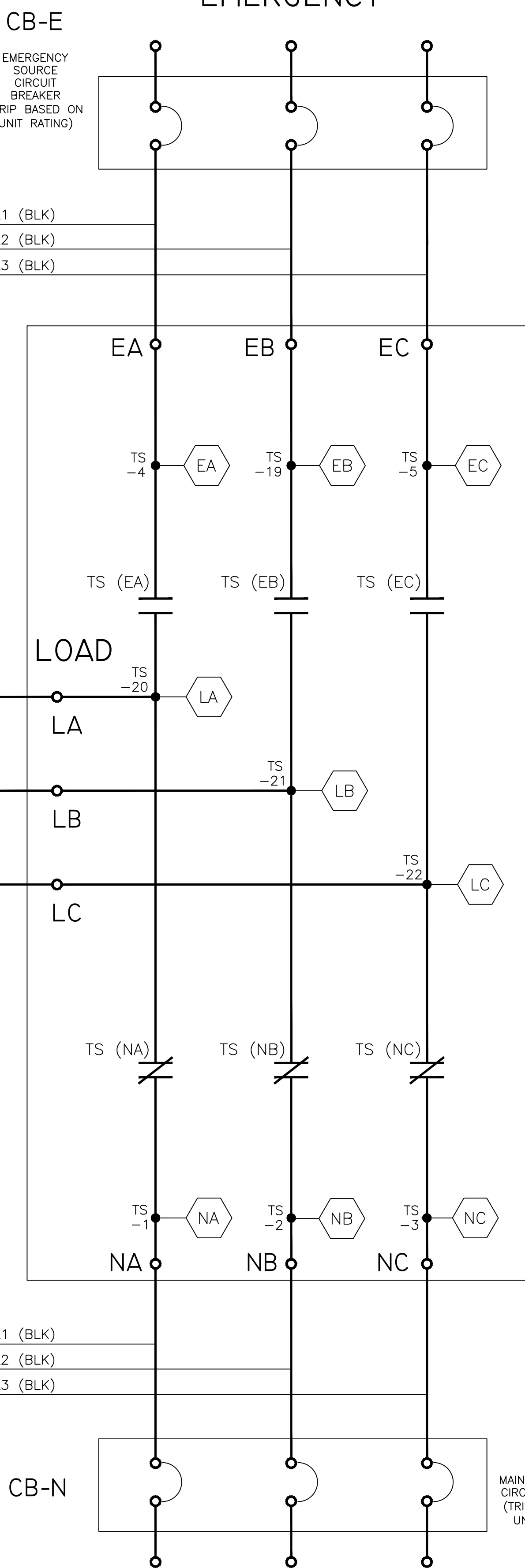


PROJECT NAME:		229333		BWM BWM 10/15/10	
REV. TO SHEET	ISSUE	ECN NO.	BY	APP.	DATE
WIRING		DIAGRAM		THIRD ANGLE PROJECTION	
D300L SERIES, 200 AMP POWER TRANSFER LOAD CENTER		COMPUTER GENERATED DRAWING		SCALE 1:1 SIZE DS	
DRAWN BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		ASSEM. REF. NO.	
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DWG. NO. 884338-017	
PROJECT APPROVAL		ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		DRAWING REV. 2 OF 4	
FINAL APPROVAL	BWM	10/15/10	EQU 229333		

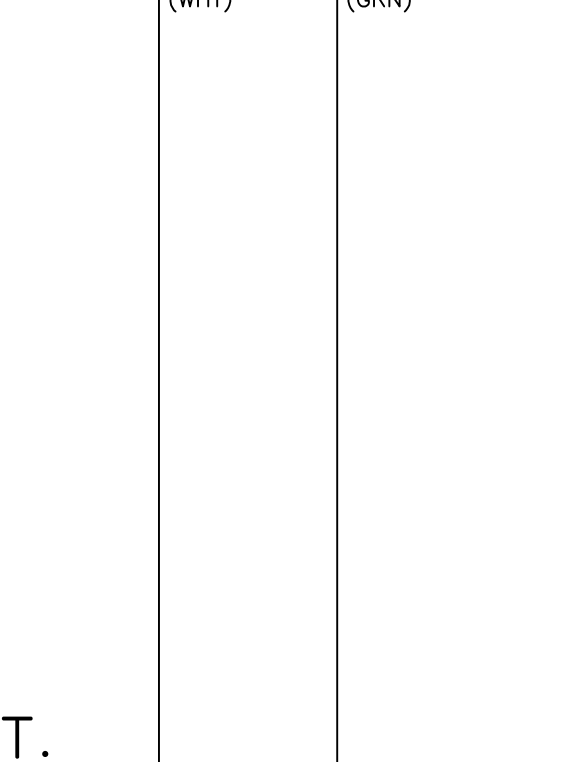
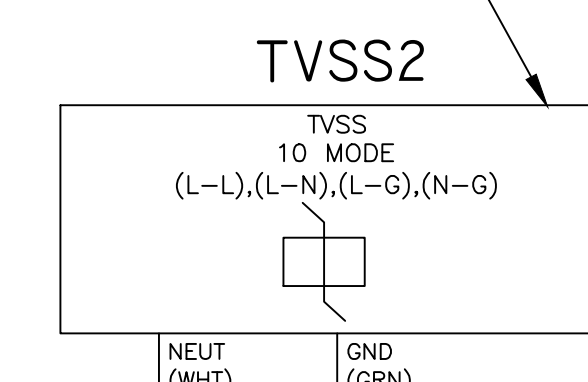
POWER DIAGRAM

EMERGENCY

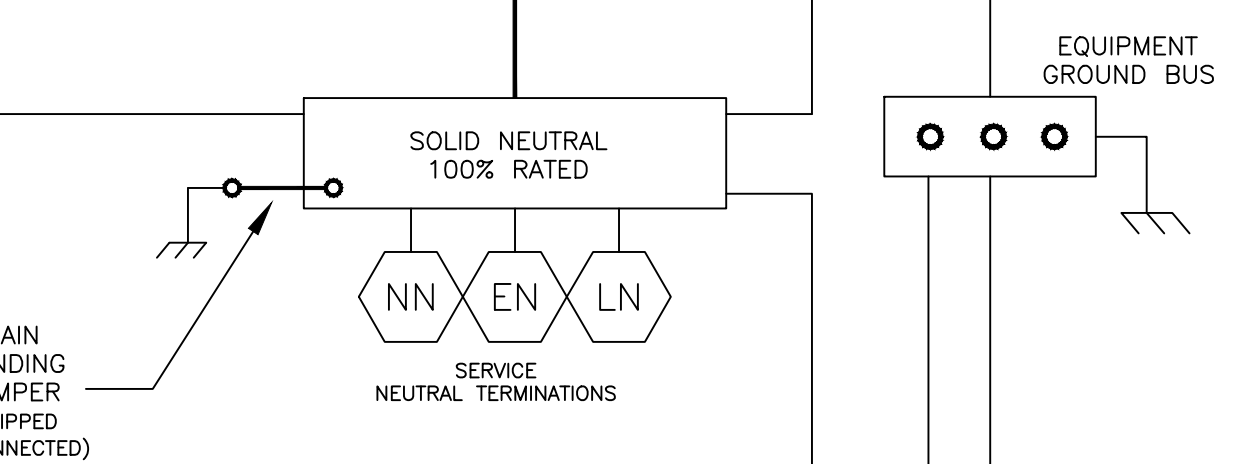
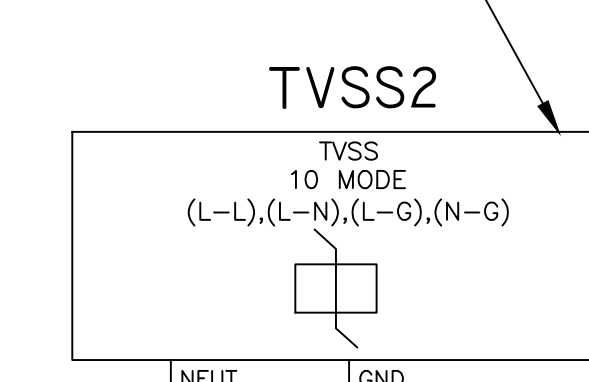
NORMAL



OPTIONAL EMERGENCY SOURCE TRANSIENT VOLTAGE SURGE SUPPRESSION UNIT 458120YGS SUPPLIED AS PART OF ACC. 73VB3 ONLY



OPTIONAL LOAD TRANSIENT VOLTAGE SURGE SUPPRESSION UNIT 458120YGS SUPPLIED AS PART OF ACC. 73VL3



OPTIONAL NORMAL SOURCE TRANSIENT VOLTAGE SURGE SUPPRESSION UNIT 458120YGS SUPPLIED AS PART OF ACC. 73VN3 OR 73VB3



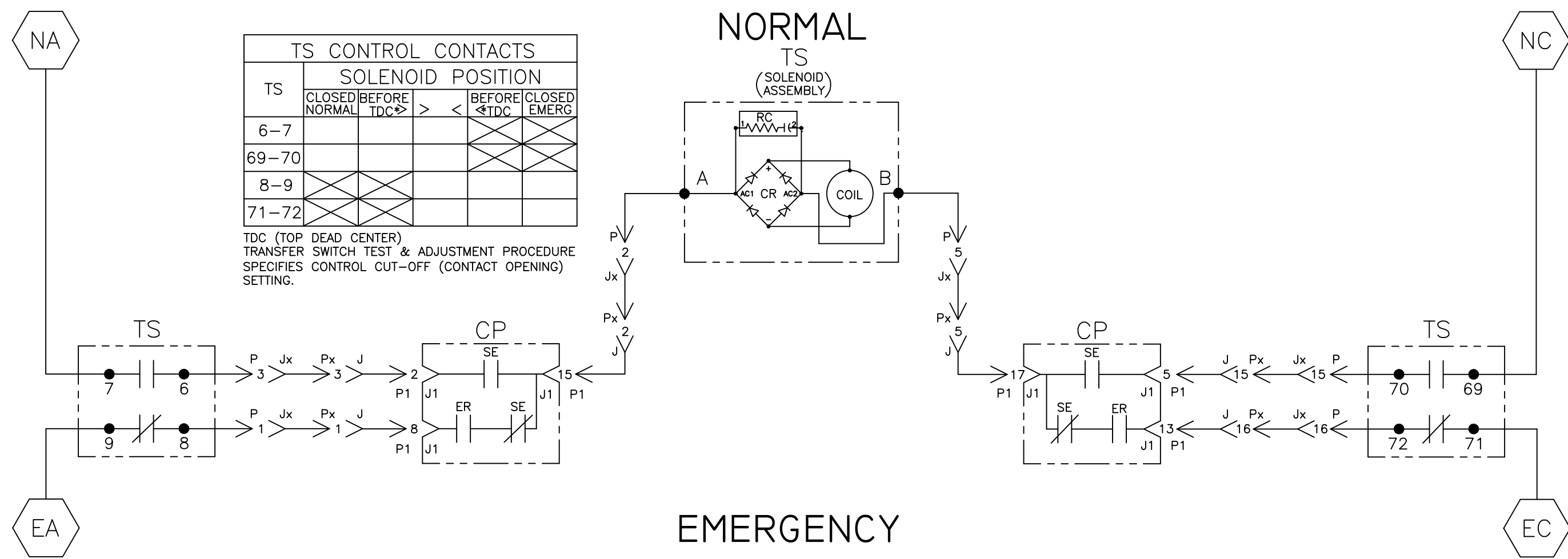
- NOTES:
- 1) ATS SHOWN CLOSED ON NORMAL SOURCE.
 - 2) THIS IS NOT A PHYSICAL REPRESENTATION.

PROJECT NAME:		229333		BWM BWM 10/15/10	
REV. TO SHEET	ISSUE	ECN NO.	BY	APP.	DATE
WIRING		DIAGRAM		THIRD ANGLE PROJECTION	
D300L SERIES, 200 AMP POWER TRANSFER LOAD CENTER					
DRAWN BY		DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		ASSEM. REF. NO.
CHECKED		10/15/10	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		SCALE 1:1 SIZE DS
PROJECT APPROVAL			COMPUTER GENERATED DRAWING		DWG. NO. 884338-017
FINAL APPROVAL		BWM	10/15/10	ASCO® ASCO POWER TECHNOLOGIES, L.P. FLOHAM PARK, NEW JERSEY 07932 U.S.A.	DRAWING REV. ECN NO. 229333 SHEET 3 OF 4

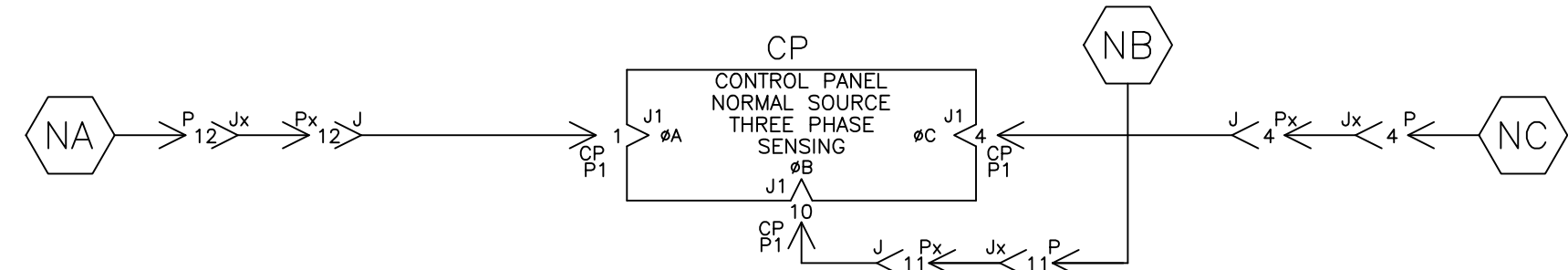
CONTROL CIRCUITS

PHYSICAL DIAGRAM

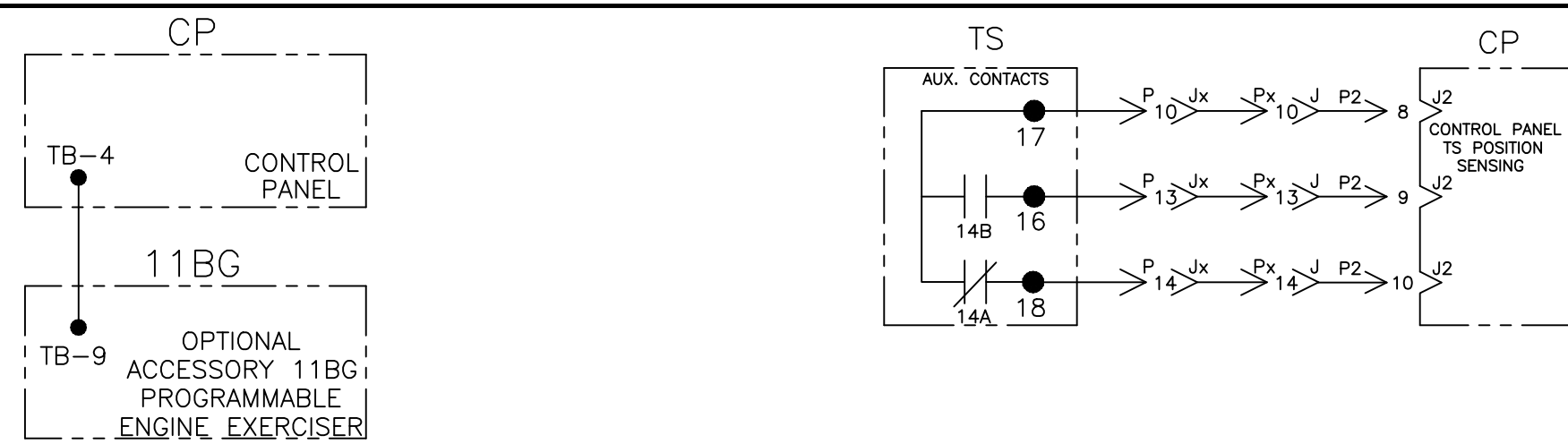
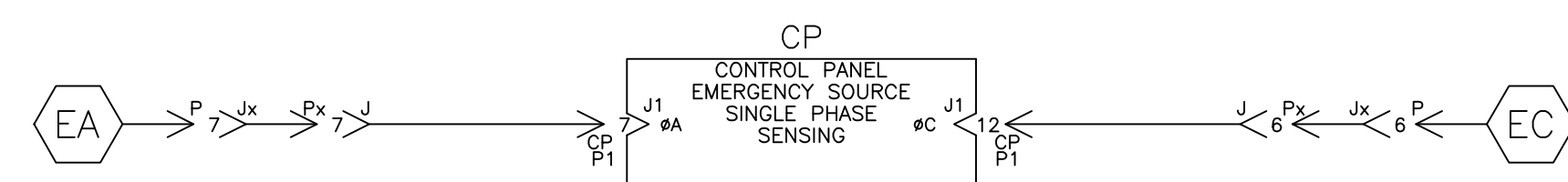
TRANSFER SWITCH OPERATOR



NORMAL SOURCE SENSING



EMERGENCY SOURCE SENSING



WIRE RUN LIST

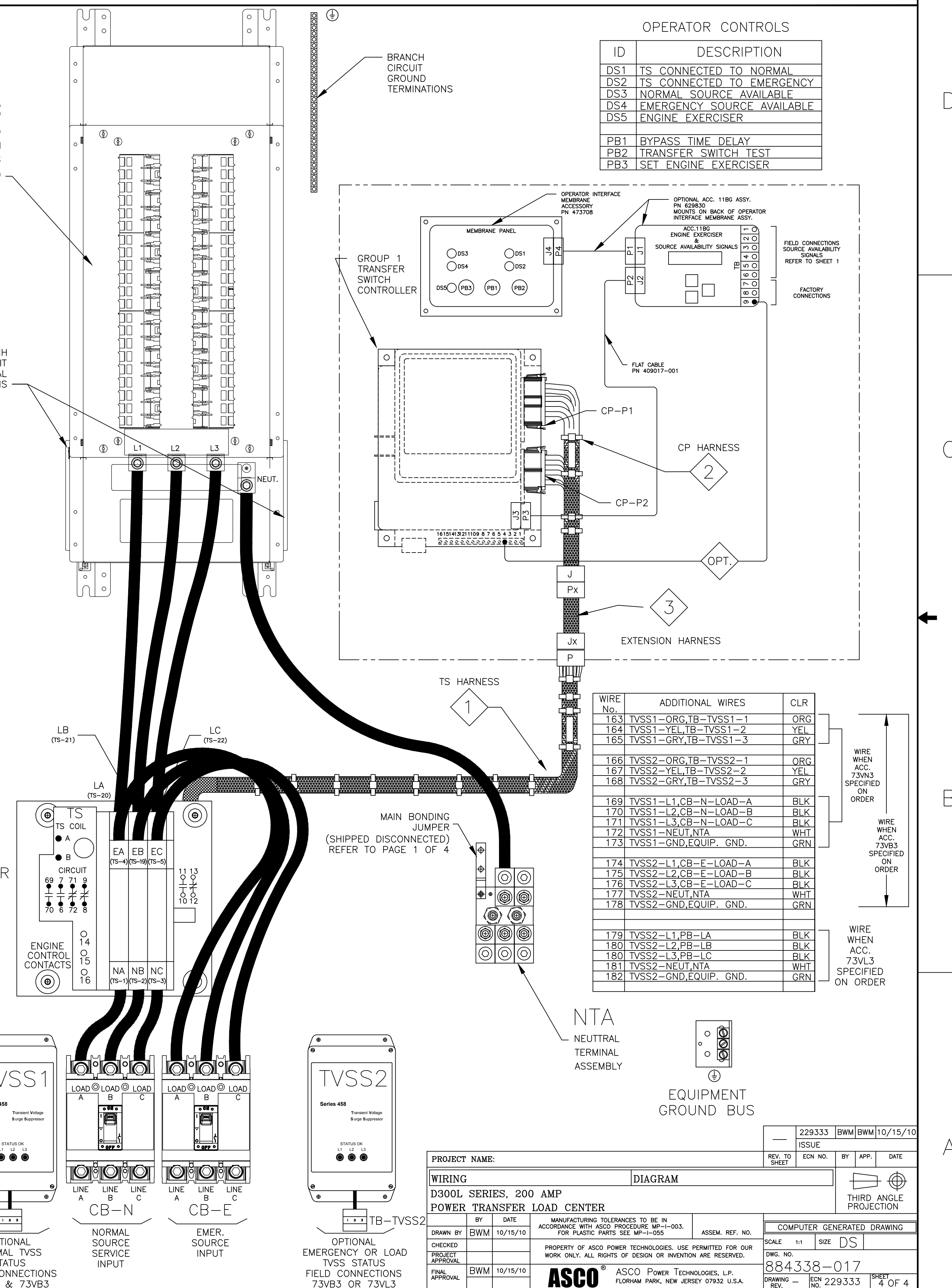
1 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	WIRE No.	ADDITIONAL WIRES	AWG	2 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	WIRE No.	ADDITIONAL WIRES	AWG	3 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	WIRE No.	ADDITIONAL WIRES	AWG	
WIRE No.	HARNESS 337782-003 (P) MAIN TS	CLR	AWG			WIRE No.	HARNESS 483763 (J,CP-P1,CP-P2) CONTROL PANEL	CLR	AWG			WIRE No.	HARNESS 309320-006 (Px,Jx) 24" EXTENSION HARNESS	CLR	AWG			
1	TS-8,P-1		20	50 TS-NA,CB-N-LOAD-LA	3/0	1	J-1,CP-P1-8		16	1	Px-1,Jx-1		1	Px-1,Jx-1		16		
2	TS-A,P-2			51 TS-NB,CB-N-LOAD-LB		2	J-2,CP-P1-15			2	Px-2,Jx-2		2	Px-2,Jx-2				
3	TS-6,P-3			52 TS-NC,CB-N-LOAD-LC		3	J-3,CP-P1-2			3	Px-3,Jx-3		3	Px-3,Jx-3				
4	TS-3,P-4			53 TS-EA,CB-E-LOAD-LA		4	J-4,CP-P1-4			4	Px-4,Jx-4		4	Px-4,Jx-4				
5	TS-B,P-5			54 TS-EB,CB-E-LOAD-LB		5	J-5,CP-P1-17			5	Px-5,Jx-5		5	Px-5,Jx-5				
6	TS-5,P-6			55 TS-EC,CB-E-LOAD-LC		6	J-6,CP-P1-12			6	Px-6,Jx-6		6	Px-6,Jx-6				
7	TS-4,P-7			56 TS-LA,PB-L1		7	J-7,CP-P1-7			7	Px-7,Jx-7		7	Px-7,Jx-7				
8	TB/TS-14,P-8			57 TS-LB,PB-L2		8	J-8,CP-P2-2			8	Px-8,Jx-8		8	Px-8,Jx-8				
9	TB/TS-15,P-9			58 TS-LC,PB-L3		9	J-9,CP-P2-3			9	Px-9,Jx-9		9	Px-9,Jx-9				
10	TS-17,P-10			59 NTA,PB-NEUT.		10	J-10,CP-P2-8			10	Px-10,Jx-10		10	Px-10,Jx-10				
11	TS-2,P-11					11	J-11,CP-P1-10			11	Px-11,Jx-11		11	Px-11,Jx-11				
12	TS-1,P-12					12	J-12,CP-P1-1			12	Px-12,Jx-12		12	Px-12,Jx-12				
13	TS-16,P-13					13	J-13,CP-P2-9			13	Px-13,Jx-13		13	Px-13,Jx-13				
14	TS-18,P-14					14	J-14,CP-P2-10			14	Px-14,Jx-14		14	Px-14,Jx-14				
15	TS-7,P-15					15	J-15,CP-P1-5			15	Px-15,Jx-15		15	Px-15,Jx-15				
16	TS-72,P-16					16	J-16,CP-P1-13			16	Px-16,Jx-16		16	Px-16,Jx-16				
17	TS-4,TS-9					17	J-17,CP-P2-1			17	Px-17,Jx-17		17	Px-17,Jx-17				
18	TS-7,TS-1					18	J-18,CP-P1-14			18	Px-18,Jx-18		18	Px-18,Jx-18				
19	TS-3,TS-69					19				19	Px-19,Jx-19		19	Px-19,Jx-19				
20	TS-5,TS-71					20				20	Px-20,Jx-20		20	Px-20,Jx-20				
21	TS-14,TB/TS-14					21				21	Px-21,Jx-21		21	Px-21,Jx-21				
22	TS-15,TB/TS-15					22				22	Px-22,Jx-22		22	Px-22,Jx-22				
23	TB/TS-16,P-17					23				23	Px-23,Jx-23		23	Px-23,Jx-23				
24	TS-19,P-18					24				24	Px-24,Jx-24		24	Px-24,Jx-24				
25	TS-20,P-19					25												
26	TS-21,P-20					26												
27	TS-22,P-21					27												
28						28												

PB PANELBOARD BRANCH CIRCUITS (42 SPACES)

BRANCH CIRCUIT NEUTRAL TERMINATIONS

TS TRANSFER SWITCH

OPTIONAL ACC. 11BG
WIRE No. CLR AWG
28 CP-TB-4,11BG-TB-9 16



OPERATOR CONTROLS

ID	DESCRIPTION
DS1	TS CONNECTED TO NORMAL
DS2	TS CONNECTED TO EMERGENCY
DS3	NORMAL SOURCE AVAILABLE
DS4	EMERGENCY SOURCE AVAILABLE
DS5	ENGINE EXERCISER
PB1	BYPASS TIME DELAY
PB2	TRANSFER SWITCH TEST
PB3	SET ENGINE EXERCISER

WIRE No. | ADDITIONAL WIRES | CLR

163	TVSS1-ORG,TB-TVSS1-1	ORG
164	TVSS1-YEL,TB-TVSS1-2	YEL
165	TVSS1-GRY,TB-TVSS1-3	GRY
166	TVSS2-ORG,TB-TVSS2-1	ORG
167	TVSS2-YEL,TB-TVSS2-2	YEL
168	TVSS2-GRY,TB-TVSS2-3	GRY
169	TVSS1-L1,CB-N-LOAD-A	BLK
170	TVSS1-L2,CB-N-LOAD-B	BLK
171	TVSS1-L3,CB-N-LOAD-C	BLK
172	TVSS1-NEUT,NTA	WHT
173	TVSS1-GND,EQUIP. GND.	GRN
174	TVSS2-L1,CB-E-LOAD-A	BLK
175	TVSS2-L2,CB-E-LOAD-B	BLK
176	TVSS2-L3,CB-E-LOAD-C	BLK
177	TVSS2-NEUT,NTA	WHT
178	TVSS2-GND,EQUIP. GND.	GRN
179	TVSS2-L1,PB-LA	BLK
180	TVSS2-L2,PB-LB	BLK
181	TVSS2-L3,PB-LC	BLK
182	TVSS2-NEUT,NTA	WHT
183	TVSS2-GND,EQUIP. GND.	GRN

WIRE WHEN ACC. 73V3 SPECIFIED ON ORDER

PROJECT NAME: _____

ISSUE _____

WIRING DIAGRAM

D300L SERIES, 200 AMP POWER TRANSFER LOAD CENTER

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.

PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

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

884338-017

REV. 10/15/10

SCALE 1:1 SIZE DS

COMPUTER GENERATED DRAWING

DWG. NO. 884338-017

REV. 10/15/10

EQ. NO. 229333

SHEET 4 OF 4