TRANSFER SWITCH DETAILS

ATS NAME	QTY	AMPS / POLES (VOLTS)	BYPASS	TRANSITION TYPE	CATALOG NUMBER	ACCESSORIES	OUTLINE DRAWING	WIRING DIAGRAM	BOM NUMBER
	3	1600 / 4 (480V)	N/A	OPEN	G03ATSB31600NGXM	11BE,44G	609798-021	1001662	1387784
	3	2000 / 4 (480V)	N/A	OPEN	G03ATSB32000NGXM	11BE,44G	1001395-002	1001662	1154425
	3	2600 / 4 (480V)	N/A	OPEN	G03ATSB32600NGXM	11BE,44G	1001395-003	1001662	1090132
	2	3000 / 4 (480V)	N/A	OPEN	G03ATSB33000NGXM	11BE,44G	1001395-003	1001662	1154426
	1	4000 / 4 (480V)	N/A	OPEN	G07ATSB34000N5XM	44G	844459-002	844627	1529266

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			-
-	G	2600-3000	2600 - 3000	200kA	200kA	4000	L	125kA[6]	125kA[6]	100kA	0.05	100kA	100kA	100kA	42kA			36kA	42kA			-
-	G	4000	4000	200kA	200kA	5000	L	100kA	100kA	100kA	0.05	100kA	100kA	100kA	85kA	65kA			65kA			

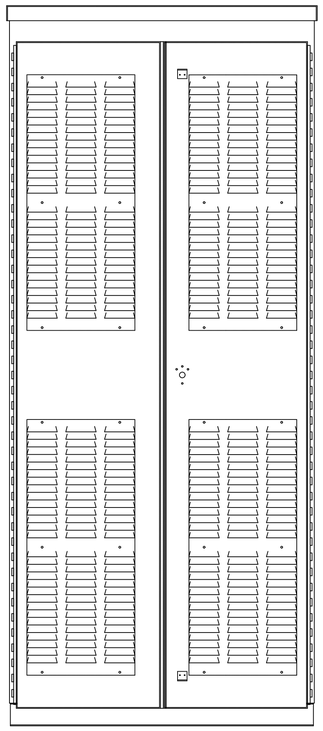
NOTES:
1) All WCR values indicated are tested in accordance with the requirements of UL 1008, 7th Edition.
2) Application requirements may permit higher WCR for certain switch sizes.
3) Short Time ratings are provided for applications involving circuit breakers that utilize trip delay settings for system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

#4	ATS	AMPS: 3000	QTY: 2

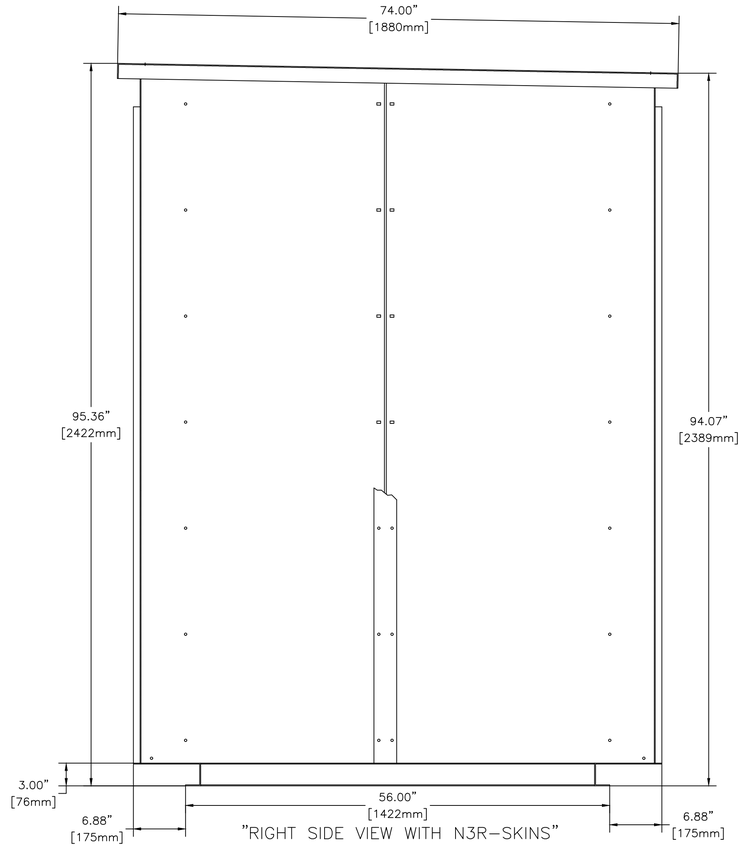
Product	:	Series 300	Catalog Number	:	G03ATSB33000NGXM
Service Voltage / Hz	:	480V/60Hz	Optional Accessories	:	11BE,44G
Bypass Isolation	:	Not Applicable	Product Description	:	300 Series, Automatic Open Transition Transfer Switch
No. of Switched Poles: 4	:	4	Neutral Configuration	:	Switched [B]
Withstand Rating: Frame = G, Switch Rating = 3000, Series = 300	:	See WCR Table Below	No. of Cables & Lug Size	:	See applicable outline drawing
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

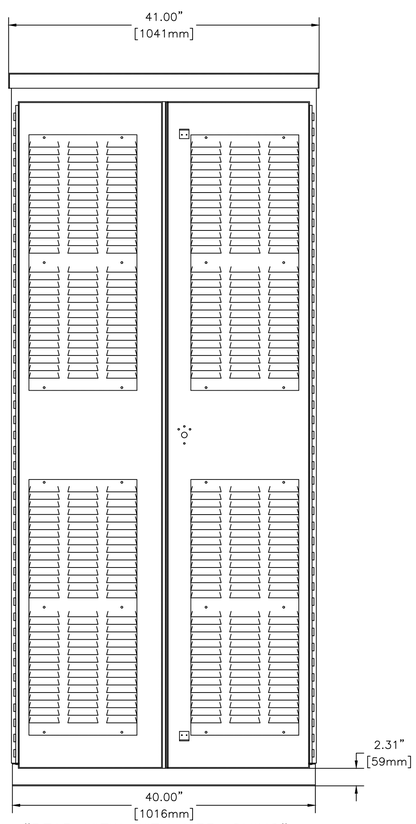
OUTLINE FOR ASCO® 300 SERIES 2600-3000 AMPERE "G" FRAME (3ATS,3NTS,3NDTS,3ADTS) REAR CONNECTED TRANSFER SWITCHES TYPE 3R SECURE ENCLOSURE



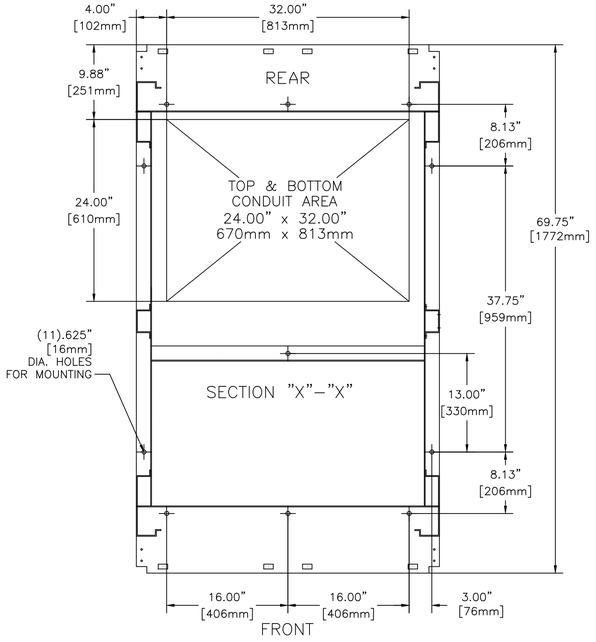
"FRONT VIEW WITH N3R-SKINS"

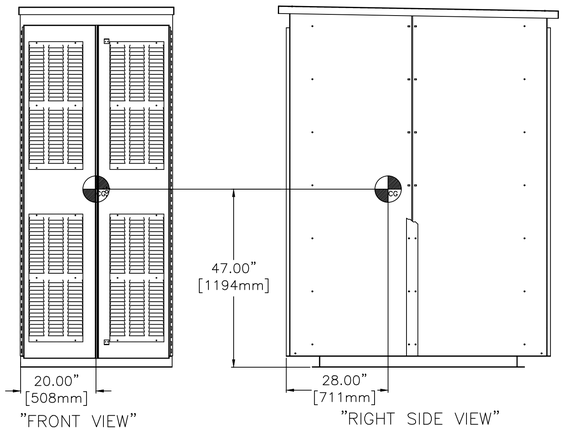


"RIGHT SIDE VIEW WITH N3R-SKINS"



"REAR VIEW WITH N3R-SKINS"





"FRONT VIEW" "RIGHT SIDE VIEW"

GENERAL NOTES

1. TYPE 3R RAINPROOF ENCLOSURE. FREE STANDING. FLOOR MOUNTED. CODE GAUGE FORMED FRAME CONSTRUCTION.
2. NEC STANDARD GAUGE PAN TYPE DOOR WITH LOCKABLE HANDLE.
3. FINISH: ANSI 61 GRAY, POLYESTER POWDER STANDARD. OTHER ANSI COLORS AVAILABLE CONSULT FACTORY. UL RECOGNIZED.
4. RECOMMENDED CLEARANCES:
   FRONT: 36.00" (914mm)
   REAR: 30.00" (762mm)
5. A 20% RATED GROUND BUS IS PROVIDED AT THE REAR OF THE ENCLOSURE.
6. UNIT IS DESIGNED FOR BOTTOM CABLE ENTRY ONLY. THE STANDARD SWITCH CONFIGURATION IS FOR TOP LUGS EMERGENCY CENTER LUGS LOAD AND BOTTOM LUGS NORMAL. (REFER TO THE WIRING DIAGRAM FURNISHED WITH EACH TRANSFER SWITCH TO DETERMINE TERMINATION POSITIONS).
7. NEUTRAL CONFIGURATIONS:
   AN OPTIONAL FULL RATED NEUTRAL CONFIGURATION FOR EACH SOURCE AND THE LOAD MAY BE PROVIDED. WHEN EQUIPPED IT IS IN ONE OF THE FOLLOWING FORMATS AS SPECIFIED BY THE CATALOG NUMBER NO.
   NEUTRAL TYPE:
   (A) SOLID (COPPER BUS) NEUTRAL.
   (B) SWITCHED NEUTRAL POLE.
8. CG CENTER OF GRAVITY.
9. NO KNOCKOUTS ARE PROVIDED.
10. EXTERIOR VENTS ARE SUPPLIED WITH POLYESTER DUST FILTERS.

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 6262-T9 WITH ELECTRO TIN PLATED FINISH.
   C. UL LISTED, CSA CERTIFIED.
   D. LUG SCREW TIGHTENING TORQUE PER UL 486B: 375 IN-LBS.
   E. SUITABLE WIRE BENDING SPACE IS PROVIDED. (SEE AMP SIZE BELOW)
2. GROUND LUGS ARE PROVIDED STANDARD AS FOLLOWS. (SEE AMP SIZE BELOW).
3. CUSTOMER TERMINAL BLOCKS:
   FOR ALL 300 SERIES UNITS THE TB WILL BE MOUNTED ON THE UPPER RIGHT INSIDE OF ENCLOSURE FOR 3ADTS AND 3NDTS. FOR ALL OTHER UNITS TB WILL BE MOUNTED ON THE TRANSFER SWITCH FRAME AS INDICATED.

NOTES 2600-3000 AMPS

1. SUPPLIED WITH STANDARD MECHANICAL (SCREW TYPE) LUGS ON THE NORMAL, EMERGENCY & LOAD BUS STABS. TWO (2) LUG PER PHASE AND NEUTRAL EACH SUITABLE FOR CONNECTION OF TWELVE (12) 1/0 -750MCM CU/AL CABLE (SEE NOTE "E" BELOW).
   A. SUITABLE WIRE BENDING SPACE IS PROVIDED FOR UP TO TWELVE (12) 750MCM CABLES PER TERMINAL PER NEC.
2. GROUND LUGS ARE PROVIDED STANDARD AS FOLLOWS;
   (36) 1/0 - 750MCM CU/AL CABLE

AMP SIZE	POLES	WEIGHTS LB (KG)
2600 TO 3000	2	2000 (908)
	B2	2150 (976)
	C2	2150 (976)
	3	2150 (976)
	B3	2230 (1012)
	C3	2230 (1012)

REV. TO SHEET	ECN NO.	BY	APP.	DATE
D	293302	NS	TR	01/06/22
	SEE ECN			
C	276412	BK	BK	12/27/18
	SEE ECN			
B	254523	WK	BK	04/29/15
	SEE ECN			
A	248503	AE	BK	5/21/14
	ISSUED			
—	245810	AE	BK	12/10/13
	ISSUED			

PROJECT NAME:

OUTLINE
300 SERIES TS "G"
2600-3000 AMPS. "G" FRAME TYPE 3R SECURE

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	AE	12/10/13
CHECKED	BK	12/10/13
PROJECT APPROVAL	WK	12/10/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

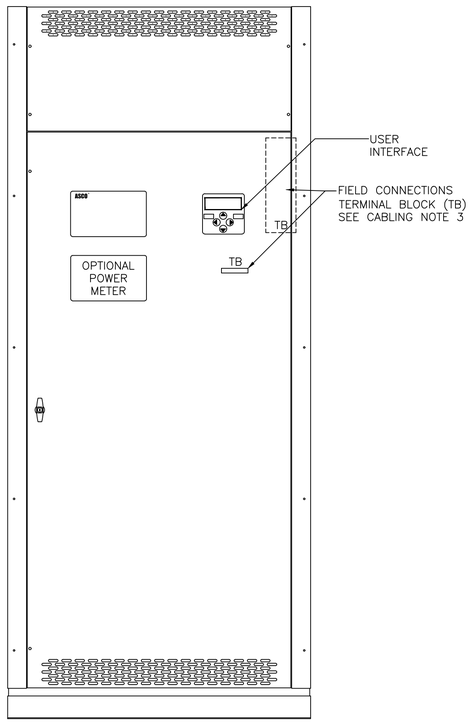
SCALE NONE SIZE DS

DWG. NO. 1001395-003

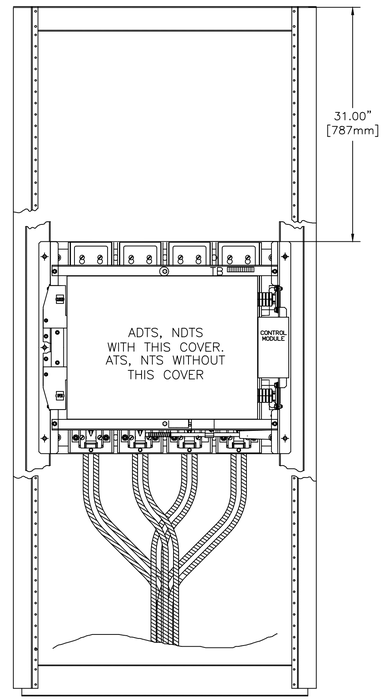
DRAWING REV. D ECN NO. 293302 SHEET 1 OF 2

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

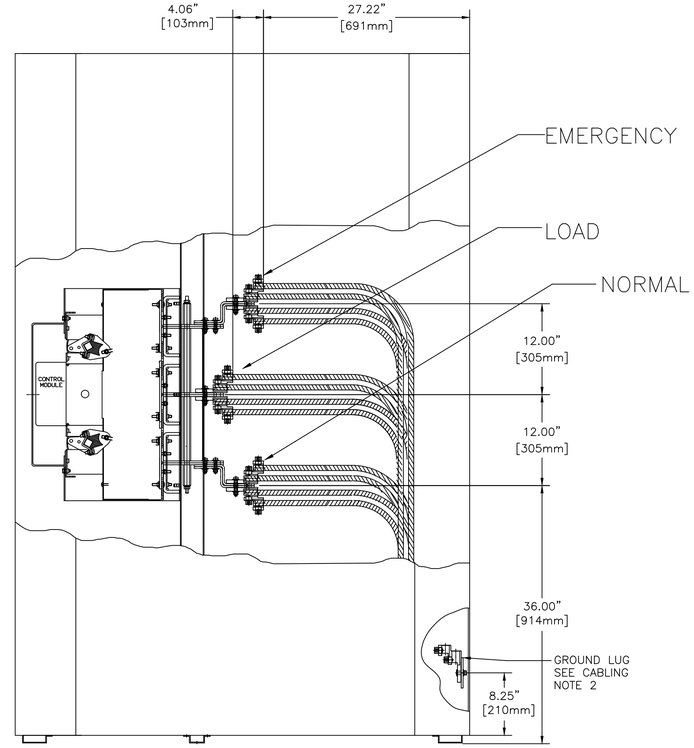
OUTLINE FOR ASCO® 300 SERIES 2600-3000 AMPERE "G" FRAME (3ATS,3NTS,3NDTS,3ADTS) REAR CONNECTED TRANSFER SWITCHES TYPE 3R SECURE ENCLOSURE



"FRONT VIEW WITH COVERS"



"FRONT VIEW W/O COVERS"



"RIGHT SIDE VIEW W/O N3R-SKINS"

REV. TO SHEET	ECN NO.	BY	APP.	DATE
D	293302	NS	TR	01/06/22
	SEE ECN			
C	276412	BK	BK	12/27/18
	SEE ECN			
B	254523	WK	BK	04/29/15
	SEE ECN			
A	248503	AE	BK	5/21/14
	ISSUED			
—	245810	AE	BK	12/10/13
	ISSUED			

PROJECT NAME:

OUTLINE
300 SERIES TS "G"
2600-3000 AMPS. "G" FRAME TYPE 3R SECURE

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	AE	12/10/13
CHECKED	BK	12/10/13
PROJECT APPROVAL	BK	12/10/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

SCALE NONE | SIZE DS

DWG. NO. 1001395-003

DRAWING REV. D | ECN NO. 293302 | SHEET 2 OF 2

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

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

GENERAL INFORMATION

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

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

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

ALL OPERATIONAL SETTINGS AND SEQUENCES OF THE GROUP G CONTROLLER AND ITS RELATED OPTIONAL ACCESSORIES (1UP, 18RX, 23G) ARE PROVIDED IN THE USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400.

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

ENGINE CONTROL CONTACTS

FEATURE 7 & FEATURE 8:
ONE SET OF FORM C CONTACTS "NR" (FEAT. 7 N/C, FEAT. 8 N/O) 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 N/C 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" PROVIDE THE ENGINE STARTING FUNCTION WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "NR2".

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

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

LOAD DISCONNECT FEATURE

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

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

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

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

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

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

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

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

INPHASE TRANSFER FEATURE FOR LOAD TRANSFER

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

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

SOURCE AVAILABILITY SIGNALS

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

COMMON ALARM & NOT IN AUTO SIGNALING FEATURES

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

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

WHEN OPTIONAL ACCESSORY 11BE "SOFTWARE BUNDLE" IS PART OF THE TRANSFER SWITCH ASSEMBLY, "OP1" MAY ALTERNATIVELY SET FOR A "COMMON ALARM" SIGNAL. THE OUTPUT CONTACTS CHANGE POSITION WHEN A "COMMON ALARM" IS NOT PRESENT AND RESET WHEN A "COMMON ALARM" CONDITION IS PRESENT. THE "COMMON ALARM" SIGNAL CONDITIONS ARE SELECTABLE.

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

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

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

EXTERNAL POWER SUPPLY COMPATIBILITY

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

FEATURE 1C – OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES
FEATURE 1F – OVERRIDE MOMENTARY EMERGENCY SOURCE OUTAGES

AN EXTERNAL POWER 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 USE OF;

- AN EXTERNAL 24 VDC POWER SUPPLY WITH ACCESSORY 18RX (RELAY EXPANSION MODULE) OR
- OPTIONAL ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY MODULE)

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

REMOVE JUMPERS "J1" 1–2 & "J1" 3–4
CONNECT JUMPERS "J1" 5–7 & "J1" 6–8

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

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

ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY):
WHEN OPTIONAL ACCESSORY 1UP IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY, THE CONTROLLER IS PROVIDED WITH LIMITED RESERVE POWER (APPROXIMATELY 3 MINUTES).

LOAD CURRENT METERING

WHEN OPTIONAL ACCESSORY 23GB 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 11BE IS PART OF THE TRANSFER SWITCH ASSEMBLY, AN ADVANCED–FUNCTION SOFTWARE BUNDLE IS AVAILABLE TO PERFORM THE FOLLOWING FUNCTIONS;

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

(3 PHASE SENSING ONLY)
- 3 PHASE EMERGENCY SOURCE SENSING.
- PHASE ROTATION SENSING.
- EMERGENCY VOLTAGE UNBALANCE SENSING.

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

NON-AUTOMATIC (MANUAL) OPERATION

TRANSFER SWITCH ASSEMBLIES FACTORY SET FOR NON–AUTOMATIC OPERATION PROVIDE USER INITIATED, ELECTRICAL OPERATION OF THE TRANSFER SWITCH TO EITHER AVAILABLE SOURCE. THE TRANSFER SWITCH ASSEMBLY IS PHYSICALLY IDENTICAL TO THAT OF THE AUTOMATIC TYPE.

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

REMOTE CONTROL FEATURES

THE FOLLOWING CONTROL PANEL INPUTS PROVIDE REMOTE CONTROL FUNCTIONS FOR THE TRANSFER SWITCH. EACH FUNCTION CAN BE IMPLEMENTED BY THE CUSTOMER PROVIDING THE FORM OF CONTROL DESCRIBED. EACH CONTROL CONTACT MUST BE SUITABLE FOR A 5 VDC LOW ENERGY CIRCUIT.

EXTERNAL FEATURE 17: REMOTE TRANSFER TO EMERGENCY FEATURE (FOR AUTOMATIC TRANSFER TYPE ONLY) – REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT CAUSES ENGINE START AND TRANSFER TO THE EMERGENCY SOURCE. RE–CLOSURE OF THE CONTACT ACTIVATES THE FEATURE 3A "RETRANSFER TO NORMAL (IF JUST TEST) TIME DELAY PRIOR TO RETRANSFER. IN THE EVENT THAT THE EMERGENCY SOURCE FAILS WHILE THE TRANSFER SWITCH IS CONNECTED TO EMERGENCY AND THE CUSTOMER SUPPLIED CONTACT IS OPEN, THE TRANSFER SWITCH WILL AUTOMATICALLY RETRANSFER TO THE NORMAL SOURCE.

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

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

ACCESSORIES

NOTES

1. SWITCH SHOWN DE–ENERGIZED CONNECTED TO NORMAL SOURCE.
2. DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUB. ICS 1, PART 1–101A.
3. ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.
4. ○ INDICATES CUSTOMER CONNECTION POINTS.
5. ● INDICATES FACTORY CONNECTION POINTS.
6. CONNECTION POINTS THAT HAVE BOTH CUSTOMER CONNECTIONS AND FACTORY CONNECTIONS ARE SHOWN OPEN AS CUSTOMER CONNECTION POINTS.
7. THE TRANSFER UNIT IS MOUNTED ON THE BACK INSIDE SURFACE OF THE ENCLOSURE. THE CONTROL PANEL AND ANY OPTIONAL ACCESSORIES ARE MOUNTED ON THE INSIDE SURFACE OF THE DOOR.
8. AN OPERATOR'S MANUAL IS FURNISHED WITH EACH AUTOMATIC TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE SWITCH.
9. GROUND STRAP ON CONTROL PANEL IS AFFIXED TO CHASSIS (ENCLOSURE) AT LOWER LEFT CONTROL PANEL MOUNTING STUD.

CATALOG NUMBER SUFFIXES

TS FRAME	CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE
G	3ATS 3NTS	A B	3	1000 1200 1600 2000 2600 3000 3200	C D E F G H J K L M N P Q R	G	X	C F G H L M N P Q 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
A	SOLID			BLANK		OPEN TYPE (NO ENCLOSURE)
B	SWITCHING			C	1	GENERAL PURPOSE, INDOOR
		C	208			
		D	220	F	3R	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
		E	230	G	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
		F	240	H	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		G	277	L	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		H	380			
		J	400			(SECURE ENCLOSURES)
		K	415	M	3R	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
		L	440	N	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
		M	460	P	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		N	480	Q	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		P	550			
		Q	575			
		R	600			

REV				
J	275211	TR	BK	10/15/18
	SEE ECN			
H	265313	TR	BK	1/31/17
	SHT 4 SIINGLE PHASE EMGR.			
G	254970	TR	BK	05/26/15
	SEE ECN			
F	252347	MPP	AB	12/22/14
	SEE ECN			
E	247772	SDH	SDH	4/14/14
	SEE ECN			
D	247048	TR	BK	3/4/14
	SEE ECN			
C	246325	AE	BK	01/16/14
	SEE ECN			
B	246211	AE	BK	01/10/14
	SEE ECN			
A	245959	BK	BK	12/23/13
	SEE ECN			
–	245072	BK	BK	10/28/13
	ISSUE			

CATALOG NUMBER _____
ASCO® CERTIFIED TO S.O. _____
BY _____
DATE _____
FORM REV J

PROJECT NAME:

REV. TO SHEET	ECN NO.	BY	APP.	DATE

WIRING DIAGRAM
300 SERIES (G3ATS/G3NTS) 3PH 1000–3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

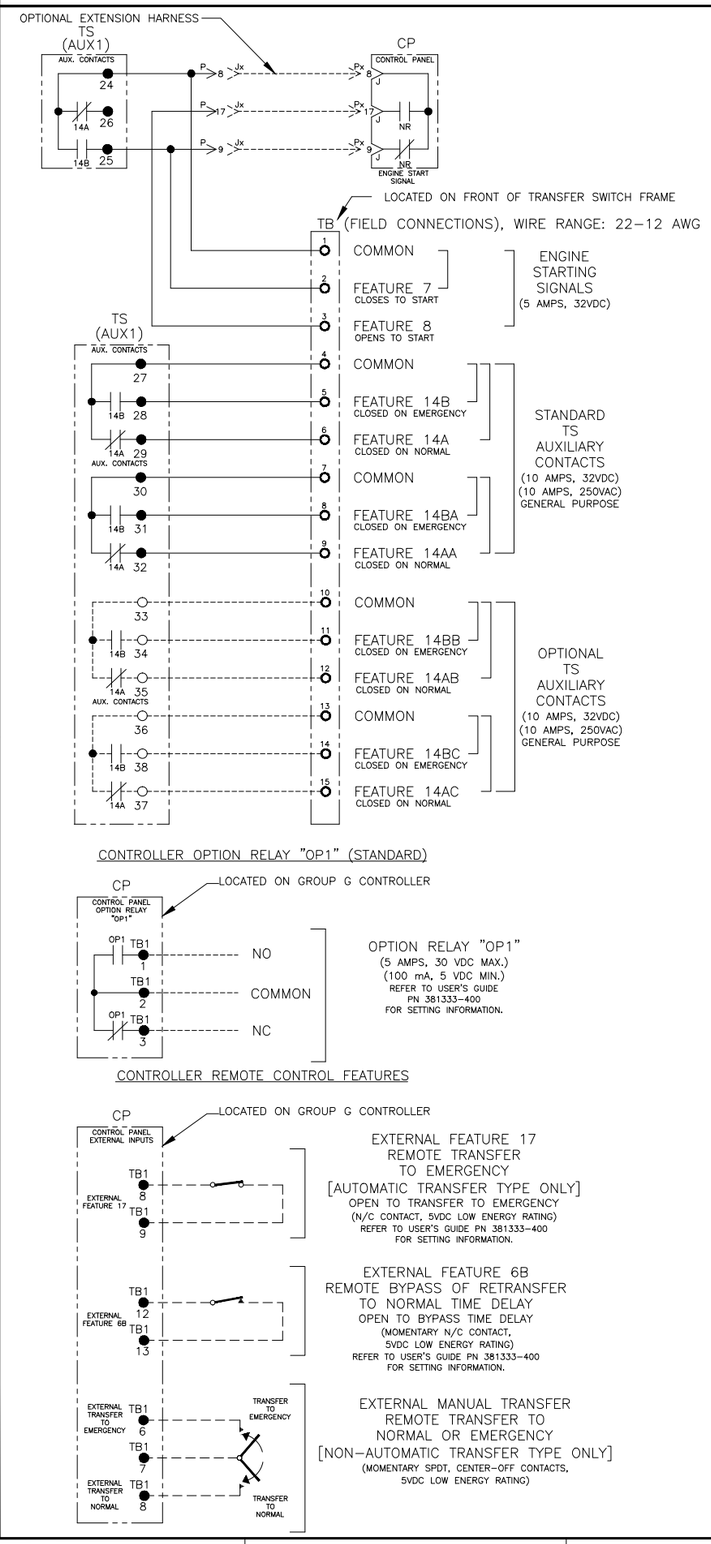
	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
FINAL APPROVAL		

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP–1–003. FOR PLASTIC PARTS SEE MP–1–055
ASSEM. REF. NO.

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

COMPUTER GENERATED DRAWING
SCALE NONE SIZE DS
DWG. NO. 1001662
DRAWING REV. J ECN NO. 275211 SHEET 1 OF 7

FIELD CONNECTIONS



CONTROLLER OPTION RELAY "OP1" (STANDARD)

OPTION RELAY "OP1"
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PN 381333–400
FOR SETTING INFORMATION.

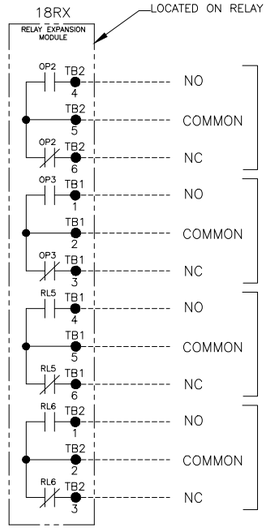
CONTROLLER REMOTE CONTROL FEATURES

EXTERNAL FEATURE 17
REMOTE TRANSFER
TO EMERGENCY
[AUTOMATIC TRANSFER TYPE ONLY]
OPEN TO TRANSFER TO EMERGENCY
(N/C CONTACT, 5VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PN 381333–400
FOR SETTING INFORMATION.

EXTERNAL FEATURE 6B
REMOTE BYPASS OF RETRANSFER
TO NORMAL TIME DELAY
OPEN TO BYPASS TIME DELAY
(MOMENTARY N/C CONTACT,
5VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PN 381333–400
FOR SETTING INFORMATION.

EXTERNAL MANUAL TRANSFER
REMOTE TRANSFER TO
NORMAL OR EMERGENCY
[NON–AUTOMATIC TRANSFER TYPE ONLY]
(MOMENTARY SPDT, CENTER–OFF CONTACTS,
5VDC LOW ENERGY RATING)

OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE)



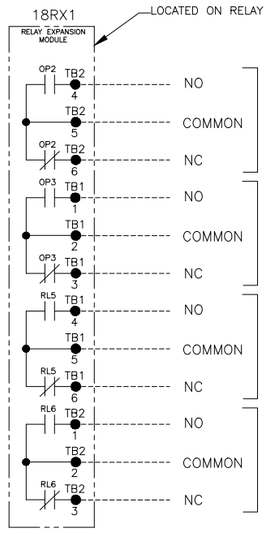
OPTION RELAY "OP2"
AS OUTPUT RELAY
SET JUMPERS
J1: 1–2 & 3–4
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PN 381333–400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PN 381333–400
FOR SETTING INFORMATION.

EMERGENCY SOURCE
ACCEPTABLE
SIGNAL
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)

NORMAL SOURCE
ACCEPTABLE
SIGNAL
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)

OPTIONAL ACCESSORY 18RX1 (SECOND RELAY EXPANSION MODULE)



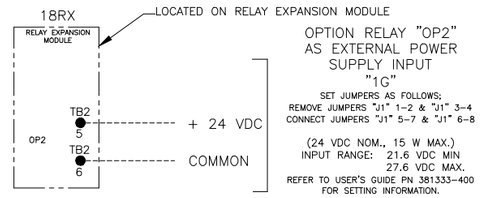
OPTION RELAY "OP2"
SET JUMPERS
J1: 1–2 & 3–4
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PN 381333–400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PN 381333–400
FOR SETTING INFORMATION.

EMERGENCY SOURCE
ACCEPTABLE
SIGNAL
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)

NORMAL SOURCE
ACCEPTABLE
SIGNAL
(5 AMPS, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)

"OP2" OPTIONAL USES

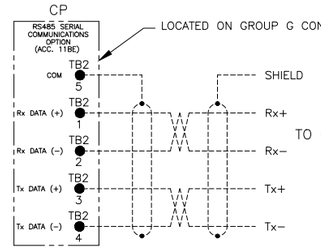


OPTION RELAY "OP2"
AS EXTERNAL POWER
SUPPLY INPUT
"1G"
SET JUMPERS AS FOLLOWS:
REMOVE JUMPERS "J1" 1–2 & "J1" 3–4
CONNECT JUMPERS "J1" 5–7 & "J1" 6–8

(24 VDC NOM., 15 W MAX.)
INPUT RANGE: 21.6 VDC MIN
27.6 VDC MAX.
REFER TO USER'S GUIDE PN 381333–400
FOR SETTING INFORMATION.

RS485 SERIAL COMMUNICATIONS OPTION

AVAILABLE WITH OPTIONAL ACCESSORY 11BE: ADVANCED–FUNCTION SOFTWARE BUNDLE
REFER TO USER'S GUIDE PN 381333–400 FOR SETTING INFORMATION.



NOTES:
1. EARTH GROUND SHIELD AT HOST DEVICE ONLY.
2. FIELD WIRING: USE UL LISTED, STRANDED, TWISTED PAIRS, OVERALL FOIL SHIELD WITH STRANDED DRAIN WIRE SUITABLE FOR RS422 EQUIVALENT TO:

(STANDARD 80°C) BELDEN 9842 OR 9829
OR ALPHA 6202C OR 6222C

(PLENUM RATED) BELDEN 89729 OR 82729
OR ALPHA 58902

REV. TO SHEET	ECN NO.	BY	APP.	DATE
J	275211	TR	BK	10/15/18
	SEE ECN			
H	265313	TR	BK	1/31/17
	SHT 4 SINGLE PHASE EMGR.			
G	254970	TR	BK	05/26/15
	SEE ECN			

PROJECT NAME:

WIRING DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000–3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

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

COMPUTER GENERATED DRAWING

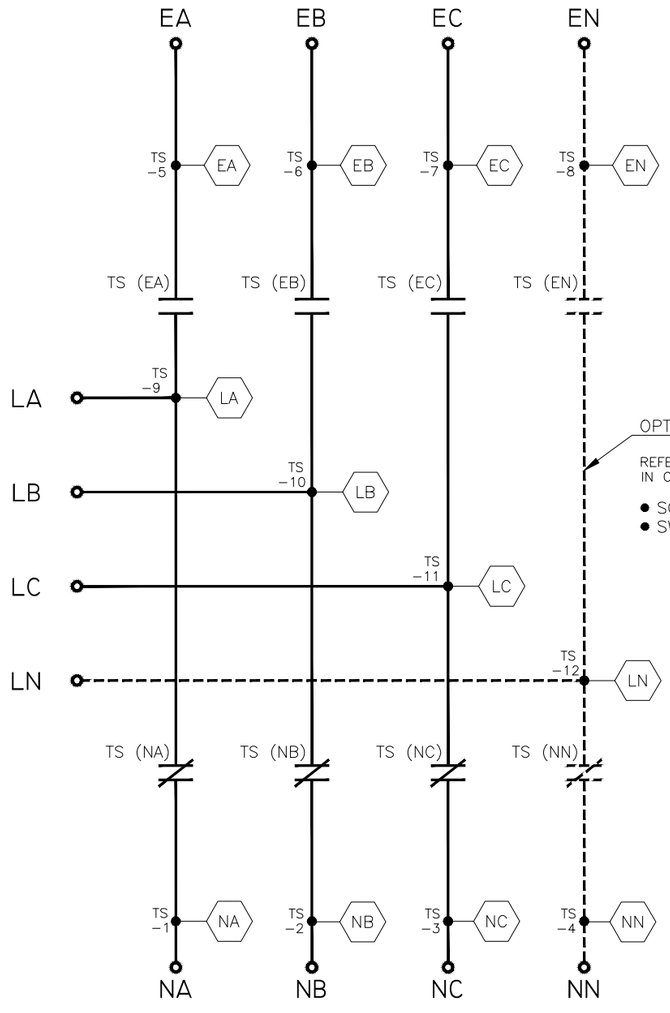
SCALE NONE SIZE DS

DWG. NO. 1001662

DRAWING REV. J ECN NO. 275211 SHEET 2 OF 7

MAIN POWER POLES

EMERGENCY



OPTIONAL NEUTRAL TYPES

REFER TO "EXPLANATION OF CATALOG NUMBER CODES" IN CATALOG NUMBER CHART ON SHEET 1.

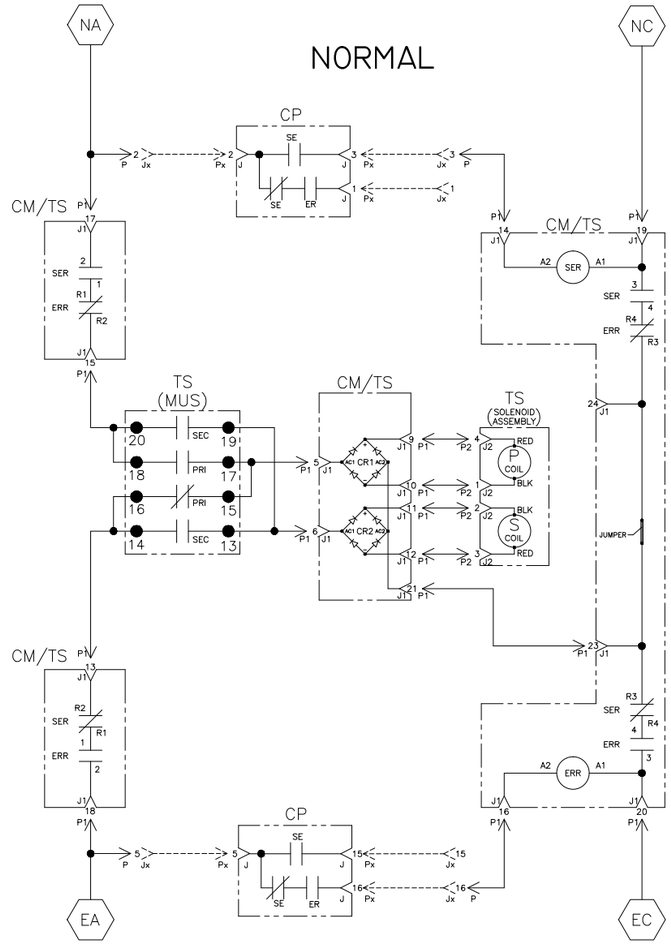
- SOLID BUS PLATE
- SWITCHING

NORMAL

NOTE:
ATS/NTS SHOWN CLOSED ON NORMAL SOURCE.

TS OPERATOR CIRCUIT

NORMAL



EMERGENCY

TS (MUS) CONTACTS					
MUS	SOLENOID POSITION				
	NORM	>	AFTER TDC *	<	EMER
13–14					
15–16					
17–18					
19–20					

* AFTER SOLENOID PASSES THROUGH TOP DEAD CENTER POSITION.

REV. TO SHEET	ECN NO.	BY	APP.	DATE
J	275211 SEE ECN	TR	BK	10/15/18
H	265313 SHT 4 SINGLE PHASE EMGR.	TR	BK	1/31/17
G	254970 SEE ECN	TR	BK	05/26/15

PROJECT NAME:

WIRING DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000–3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
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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FLORHAM PARK, NEW JERSEY 07932 U.S.A.

COMPUTER GENERATED DRAWING

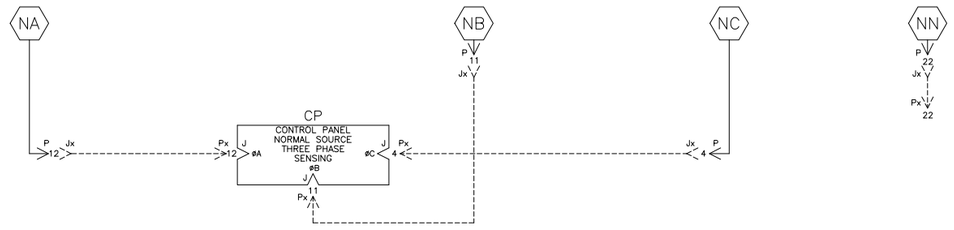
SCALE NONE SIZE DS

DWG. NO. 1001662

DRAWING REV. J ECN NO. 275211 SHEET 3 OF 7

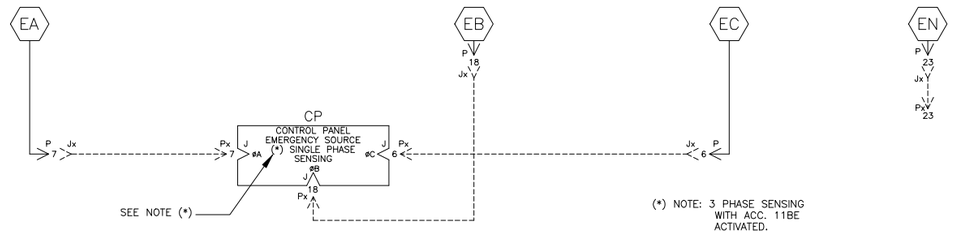
NORMAL SOURCE CIRCUITS

NORMAL



EMERGENCY SOURCE CIRCUITS

EMERGENCY

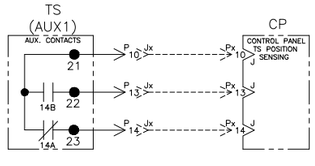


(*) NOTE: 3 PHASE SENSING WITH ACC. 11BE ACTIVATED.

LOAD TERMINAL CIRCUITS

LOAD

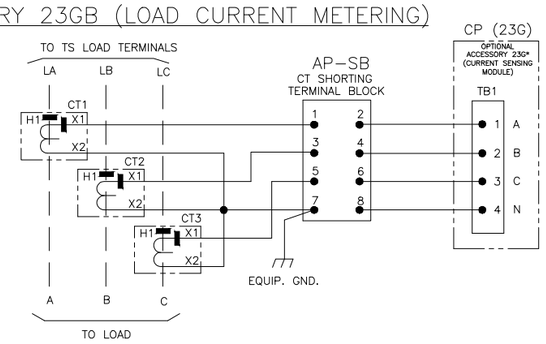
CONTROL SIGNALS & INDICATION



ADDITIONAL CIRCUITS

OPTIONAL ACCESSORY 23GB (LOAD CURRENT METERING)

CURRENT TRANSFORMER RATIO TABLE	
SWITCH RATING	CT RATIO
1000A	1200:5A
1200A	
1600A	2000:5A
2000A	
2600A	3000:5A
3000A	
3200A	4000:5A



REV.	TO SHEET	ECN NO.	BY	APP.	DATE
J		275211	TR	BK	10/15/18
		SEE ECN			
H		265313	TR	BK	1/31/17
		SHT 4 SINGLE PHASE EMGR.			
G		254970	TR	BK	05/26/15
		SEE ECN			

PROJECT NAME:

WIRING DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000–3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

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

COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 1001662

DRAWING REV. J ECN NO. 275211 SHEET 4 OF 7

PHYSICAL DIAGRAM

ENCLOSURE

TS (TRANSFER SWITCH)

EA 5 | EB 6 | EC 7 | EN 8

P2 J2

SOLENOID
P COIL | S COIL
ASSEMBLY

AUX1 (SEE DETAIL A)
MUS (SEE DETAIL A)

P1 J1 CM
SUB-ASSEMBLY PN 605113-001
ERR
SER
CR1 CR2

LA 9 | LB 10 | LC 11 | LN 12

NA 1 | NB 2 | NC 3 | NN 4

TB 1 ——► 15
FIELD INTERFACE TERMINAL BLOCK
FOR ACCESSORIES 7, 8, 14A & 14B
(MOUNTED ON FRONT TRANSFER SWITCH FRAME)

BONDING STRAP
PN 098323-019

DETAIL A
MUS & AUX1
TOP VIEW

AUX1
MUS

DOOR, INSIDE

CP GROUP G CONTROLLER
P Jx 5 Px J
MPA
TB1
OPTIONAL ACCESSORY 23G* (CURRENT SENSING MODULE)
TB1 A B C N 23G
TB1 | TB2 | J3

OPTIONAL ACC. 135L POWER METER

4 OPTIONAL ACCESSORY 23GB TO AP-SB

TO FIRST OPTIONAL ACCESSORY 18RX (J12A OR J12B) OR 1UP (J3)
[1UP MUST BE LAST ACCESSORY IN CHAIN]
USE CABLE PN 607761
FOR EACH CONNECTION

I8RX
OPTIONAL ACCESSORY 18RX
(RELAY EXPANSION MODULE)
J2 J3 J12B J12A TB1 TB2 J1

I8RX1
OPTIONAL ACCESSORY 18RX1
(RELAY EXPANSION MODULE)
J2 J3 J12B J12A TB1 TB2 J1

I UP
OPTIONAL ACCESSORY 1UP
(UNINTERRUPTIBLE POWER SUPPLY)
J3 J1 TB1

AP
OPTIONAL ACC. 23GB
ACCESSORY ADD-ON PANEL MOUNTING
FOR INTERNAL WIRING
REFER TO DWG. 621600-052

AP1
OPTIONAL ACCESSORY ADD-ON PANEL MOUNTING

AP2
OPTIONAL ACCESSORY ADD-ON PANEL MOUNTING

NOTE: PHYSICAL MAY VARY BASED ON ENCLOSURE PROVIDED.

REV. TO SHEET	ECN NO.	BY	APP.	DATE
J	275211	TR	BK	10/15/18
	SEE ECN			
H	265313	TR	BK	1/31/17
	SHT 4 SINGLE PHASE EMGR.			
G	254970	TR	BK	05/26/15
	SEE ECN			

PROJECT NAME:

WIRING DIAGRAM
300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
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. 1001662

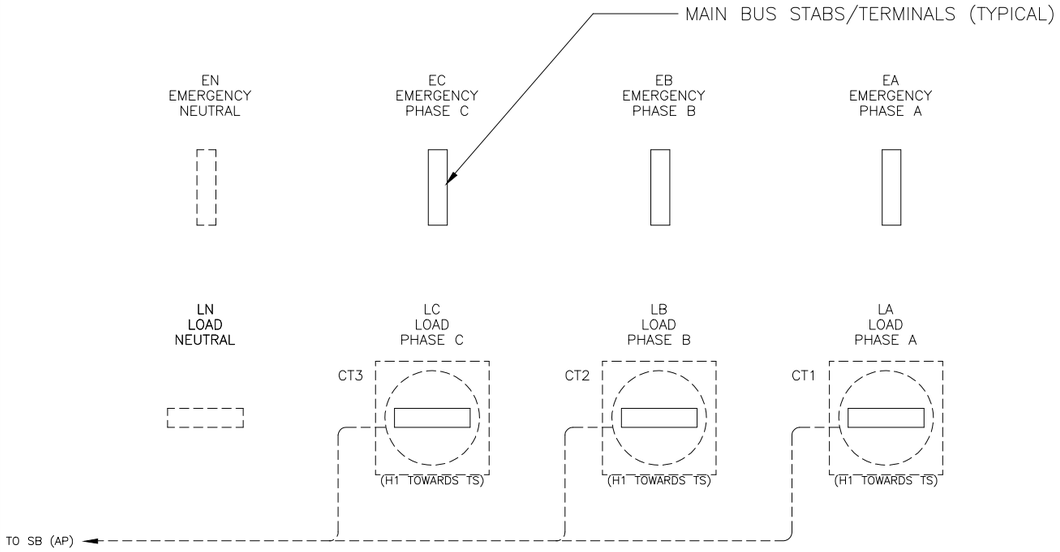
DRAWING REV. J | ECN NO. 275211 | SHEET 5 OF 7

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

PHYSICAL DIAGRAM (CONTINUED)

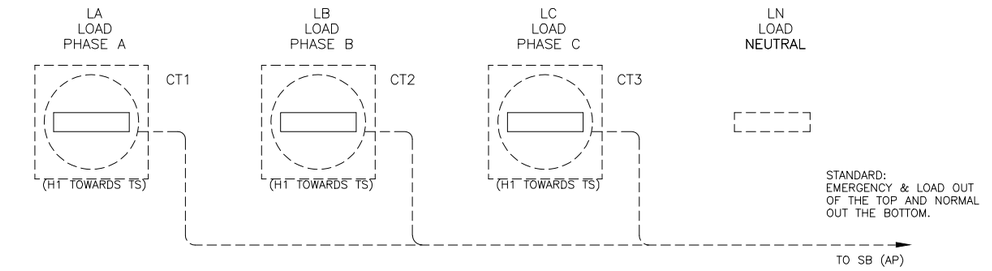
REAR CONNECTED SWITCH
1000 – 3200 AMP. TS REAR VIEW

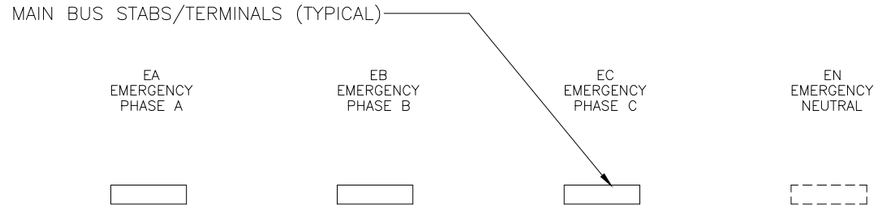
OPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)



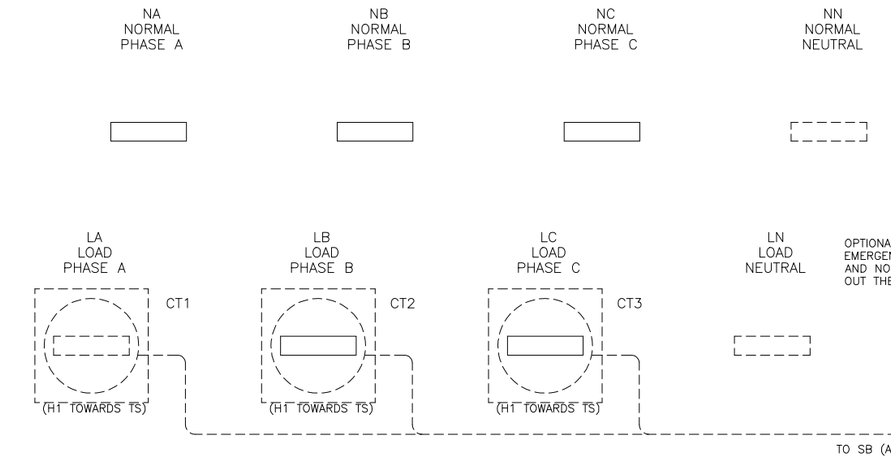
FRONT CONNECTED SWITCH
1000 – 2000 AMP. TS TOP VIEW

OPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)





BOTTOM VIEW



REV. TO SHEET	ECN NO.	BY	APP.	DATE
J	275211	TR	BK	10/15/18
	SEE ECN			
H	265313	TR	BK	1/31/17
	SHT 4 SINGLE PHASE EMGR.			
G	254970	TR	BK	05/26/15
	SEE ECN			

PROJECT NAME:

WIRING DIAGRAM
300 SERIES (G3ATS/G3NTS) 3PH 1000–3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

SCALE NONE SIZE DS

DWG. NO. 1001662

DRAWING REV. J ECN NO. 275211 SHEET 6 OF 7

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

WIRE RUN LISTING

① ← HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☒

WIRE No.	HARNESS 605454 (P,P1,P2,J3) MAIN TS	CLR	AWG
1	P-2,TS-1		16
2	P-3,P1-14		
3	P-4,TS-3		
4	P-5,TS-5		
5	P-6,TS-7		
4	P-7,TS-5		
6	P-8,TS(AUX1)-24		
6	TS(AUX1)-24,J3-1		
7	P-9,TS(AUX1)-25		
7	TS(AUX1)-25,J3-2		
8	P-10,TS(AUX1)-21		
9	P-11,TS-2		
10	P-12,TS-1		
11	P-13,TS(AUX1)-22		
12	P-14,TS(AUX1)-23		
13	P-16,P1-16		
14	P-17,J3-3		
15	P-18,TS-6		
16	P-19,TS-9		
17	P-20,TS-10		
18	P-21,TS-11		
19	P-22,TS-4		
20	P-23,TS-8		
21	P-24,TS-12		
22	P1-5,TS(MUS)-17		
22	TS(MUS)-17,TS(MUS)-15		
23	P1-6,TS(MUS)-19		
23	TS(MUS)-19,TS(MUS)-13		
24	P1-9,P2-4		
25	P1-10,P2-1		
26	P1-11,P2-2		
27	P1-12,P2-3		
28	P1-13,TS(MUS)-16		
28	TS(MUS)-16,TS(MUS)-14		
29	P1-15,TS(MUS)-20		
29	TS(MUS)-20,TS(MUS)-18		
1	P1-17,TS-1		
4	P1-18,TS-5		
3	P1-19,TS-3		
5	P1-20,TS-7		
30	P1-21,P1-23		
	REMOVE WIRES		
6	TS(AUX1)-24,J3-1		
7	TS(AUX1)-25,J3-2		
14	P-17,J3-3		
	ADD WIRES		
6	TS(AUX1)-24,TB-1		
7	TS(AUX1)-25,TB-2		
200	P-1		
14	P-17,TB-3		
222	P-15		

② ← HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☒

WIRE No.	TS STD. AUX. CONTACTS	CLR	AWG
40	TB-4,TS(AUX1)-27		16
41	TB-5,TS(AUX1)-28		
42	TB-6,TS(AUX1)-29		
43	TB-7,TS(AUX1)-30		
44	TB-8,TS(AUX1)-31		
45	TB-9,TS(AUX1)-32		

③ ← HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

WIRE No.	OPTIONAL AUX. CONTACTS	CLR	AWG
46	TB-10,TS(AUX1)-33		16
47	TB-11,TS(AUX1)-34		
48	TB-12,TS(AUX1)-35		
49	TB-13,TS(AUX1)-36		
50	TB-14,TS(AUX1)-38		
51	TB-15,TS(AUX1)-37		

④ ← HARNESS LOCATOR

WIRE No.	OPTIONAL ACCESSORY 23GB (CT*,AP-SB,CP(23G)-TB1)	CLR	AWG
230	CT1-X1,AP-SB-1		16
230	AP-SB-2,CP(23G)-TB1-1		
231	CT2-X1,AP-SB-3		
231	AP-SB-4,CP(23G)-TB1-2		
232	CT3-X1,AP-SB-5		
232	AP-SB-6,CP(23G)-TB1-3		
233	CT1-X2,CT2-X2	GRN	
233	CT2-X2,CT3-X2	GRN	
233	CT3-X2,AP-SB-7	GRN	
233	AP-SB-7,EQUIP. GRD.	GRN	
233	AP-SB-8,CP(23G)-TB1-4	GRN	

⑤ ← HARNESS LOCATOR — BOX CHECKED IF HARNESS IS MODIFIED ☐

WIRE No.	HARNESS 309320-005 OPTIONAL 8 IN. EXTENSION HARNESS	CLR	AWG
200	Jx-1,Px-1		16
1	Jx-2,Px-2		
2	Jx-3,Px-3		
3	Jx-4,Px-4		
4	Jx-5,Px-5		
5	Jx-6,Px-6		
4	Jx-7,Px-7		
6	Jx-8,Px-8		
7	Jx-9,Px-9		
8	Jx-10,Px-10		
9	Jx-11,Px-11		
10	Jx-12,Px-12		
11	Jx-13,Px-13		
12	Jx-14,Px-14		
222	Jx-15,Px-15		
13	Jx-16,Px-16		
14	Jx-17,Px-17		
15	Jx-18,Px-18		
16	Jx-19,Px-19		
17	Jx-20,Px-20		
18	Jx-21,Px-21		
19	Jx-22,Px-22		
20	Jx-23,Px-23		
21	Jx-24,Px-24		

WIRE No.	ADDITIONAL WIRING	CLR	AWG
			16

REV. TO SHEET	ECN NO.	BY	APP.	DATE
J	275211	TR	BK	10/15/18
	SEE ECN			
H	265313	TR	BK	1/31/17
	SHT 4 SINGLE PHASE EMGR.			
G	254970	TR	BK	05/26/15
	SEE ECN			

PROJECT NAME:

WIRING | DIAGRAM

300 SERIES (G3ATS/G3NTS) 3PH 1000-3200 AMPS
"G" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DJB	10/28/13
CHECKED	BK	10/28/13
PROJECT APPROVAL	BK	10/28/13
FINAL APPROVAL		

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

ASSEM. REF. NO.

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

COMPUTER GENERATED DRAWING

SCALE NONE | SIZE DS

DWG. NO. 1001662

DRAWING REV. J | ECN NO. 275211 | SHEET 7 OF 7

EQUIPMENT STORAGE REQUIREMENTS

Equipment provided by Schneider-Electric and/or ASCO Power Technologies that is stored for a short-term duration (i.e., days to weeks) or long-term duration (i.e., months to years), must be kept in a cool, dry, temperature-controlled environment. Storage of equipment in open warehouses, locations without proper temperature and humidity control, and/or outdoor storage is not acceptable without the utilization of heating elements, thermostats, humidistats, and protection from weather and dirt. Failure to comply may result in moisture ingress and/or condensation to form resulting in rusting and or corrosion, component and/or equipment failure and replacement, and/or nullification of any manufacturer warranty.

For **General Instructions for Proper Handling, Installation, Operation, and Maintenance of Deadfront Distribution Switchboards Rated 600 Volts or Less**, refer to ANSI NEMA PB 2.1-2013

Copies of the following documents should be included on the submittals, depending on the units that are on the proposal:

For ASCO Power Technology's **Switchgear and Switchboards**, refer to Instruction Bulletin **381333-393**.
For Schneider-Electric/Square D's **Power Zone 4 (PZ4) Switchgear**, refer to Instruction Bulletin **80298-002-09**.
For Schneider-Electric/Square D's **Power Zone 4 (PZ4) NEMA 3R Walk-In Switchgear**, refer to Instruction Bulletin **80298-156-02**.
For Schneider-Electric/Square D's **Quality, Efficient, Delivery" (QED2) Switchboard**, refer to Instruction Bulletin **80043-055-14**.
For Schneider-Electric/Square D's **Masterclad Metal-Clad Indoor Switchgear**, refer to Instruction Bulletin **6055-30.**

Limited Warranty

Series 150, 200, 300 and 4000 Power Transfer Switches

This Warranty is given ONLY to purchasers who buy for commercial or industrial use in the ordinary course of each purchaser's business.

General

ASCO Power Technologies, LP products and systems are in our opinion the finest available. We take pride in our products and are pleased that you have chosen them. Under certain circumstances we offer with our products the following Limited Guardian Warranty Against Defects in Material and Workmanship.

Please read your Guardian Warranty carefully. This Warranty sets forth our responsibilities in the unlikely event of defect and tells you how to obtain performance under this Warranty.

Limited Warranty Against Defects in Material and Workmanship:

Product Description	Series	Catalog Code
Automatic Transfer Switch	150, 200	1ATS, 2ATS
	300	3ATS, 3ADTS
	4000	4ATS, 4ADTS, 4ACTS
Non-Automatic Transfer Switch (Electrically Operated)	300	3NTS, 3NDTS
ASCO Lighting Control Panels	4000	4NTS, 4NDTS, 4NCTS
Manual Transfer Switch	300	3MTS, 3MTQ, 3MUQ, 3MPQ, 3MGQ, 3MGDQ, 3MTDQ
Service Entrance Transfer Switch (SEATS)	300	3AUS, 3ADUS, 3APS, 3ARS, 3MUS
Power Transfer Load Center (PTLC)	300	300L
Quick Connect Panels	300	3QCN, 3QCU, 3QCD
Electrically Operated Bypass Switch	4000	4ATE, 4NTE, 4ADTE, 4NDTE

Limited Warranty

ASCO warrants that the ATS will be free from defects in material and workmanship and will conform to ASCO's standard specifications for the ATS for a period of twenty four (24) months from date of product shipment from ASCO (the "Warranty Period"). This Limited Warranty does not extend to subsequent owners of the structure during the Warranty period.

Terms of Warranty

The foregoing Limited Warranty is conditioned upon user's compliance with the following:

1. The ASCO Power Transfer Switch is installed in accordance with ASCO specifications and state and local codes and standards by an electrician licensed in the state of installation.

2. The ASCO Power Transfer Switch is maintained in accordance with ASCO instructions and used under normal conditions for the purposes intended by ASCO.

All warranty field-related repairs, replacements or adjustments must be made by ASCO Services Inc. or its duly authorized representative.

Optional Available Extended Warranty

Optional extended warranty coverage may be purchased from ASCO for a specified fee at the time of the original sale. If purchased, Warranty period shall be extended up to an additional thirty - six (36) months beyond the standard twenty - four (24) months to provide up to five (5) year coverage applicable to the above referenced products, except for 3AUS, 3APS, and 3ARS products where the warranty period for the circuit breaker shall be limited to 24 months from date of shipment from ASCO. The length of optional extended coverage shall be reflected on the ASCO invoice and/or order acknowledgement document.

ASCO Power Technologies™

Warranty Extends To First Purchaser for Use, Non-Transferable

This Warranty is extended to the first person, firm, association, or corporation for whom the ASCO product specified herein is originally installed for use (the "user") in the fifty United States or Canada. This Warranty is not transferable or assignable without the prior written permission of ASCO.

Assignment of Warranties

ASCO assigns to user any warranties which are made by manufacturers and suppliers of components of, or accessories to, the ASCO product and which are assignable, but ASCO makes no representations as to the effectiveness or extent of such warranties, assumes no responsibility for any matters which may be warranted by such manufacturers or suppliers and extends no coverage under this Warranty to such components or accessories.

Drawings, Descriptions

ASCO warrants for the period and on the terms of the Warranty set forth herein that the ASCO product will conform to the descriptions contained in the certified drawings, if any, applicable thereto, to ASCO's final invoices, and to applicable ASCO product brochures and manuals current as of the date of product shipment ("descriptions"). ASCO does not control the use of any ASCO product. Accordingly, it is understood that the descriptions are not Warranties of performance and not Warranties of fitness for a particular purpose.

Warranty Claims Procedure

Within a reasonable time, but in no case to exceed thirty (30) days, after user's discovery of a defect, user shall contact ascopowerwarranty@ascopower.com. Subject to the limitations specified herein, an ASCO Services field service representative will repair the non-conforming ASCO product warranted hereunder, without charge for parts, labor, or travel expenses. Warranty coverage will apply only after ASCO's inspection discloses the claimed defect and shows no signs of treatment or use that would void the coverage of this Warranty . All defective products and component parts replaced under this Warranty become the property of ASCO.

Warranty Performance of Component Manufacturers

It is ASCO's practice, consistent with its desire to remedy Warranty defects in the most prompt and effective manner possible, to cooperate with and utilize the services of component manufacturers and their authorized representatives in the performance of work to correct defects in the product components. Accordingly, ASCO may utilize third parties in the performance of Warranty work, including repair or replacement hereunder, where, in ASCO's opinion, such work can be performed in less time, with less expense, or in closer proximity to the ASCO product.

Items Not Covered By Warranty

This Warranty does not cover damage or defect caused by misuse, improper application, wrong or inadequate electrical current or connection, negligence, inappropriate on site operating conditions, repair by non-ASCO designated personnel, accident in transit, tampering, alterations, a change in location or operating use, exposure to the elements, water, or other corrosive liquids or gases, acts of God, theft or installation contrary to ASCO's recommendations or specifications, or in any event if the ASCO serial number has been altered, defaced, or removed.

This Warranty does not cover shipping costs, installation costs, external circuit breaker resetting or maintenance or service items and further, except as may be provided herein, does not include labor costs or transportation charges arising from the replacement of the ASCO product or any part thereof or charges to remove or reinstall same at any premises of user.

Repair or replacement of a defective product or part thereof does not extend the original Warranty period.

The products listed in this Warranty are not for use in the control area or any reactor connected or safety applications or within the containment area of a nuclear facility or for integration into medical devices.

Limitations

This Warranty is in lieu of and excludes all other Warranties, express or implied, including merchantability and fitness for a particular purpose.

User's sole and exclusive remedy is repair or replacement of the ASCO product as set forth herein.

If user's remedy is deemed to fail of its essential purpose by a court of competent jurisdiction, ASCO's responsibility for property loss or damage shall not exceed the net product purchase price.

In no event shall ASCO assume any liability for indirect, special, incidental, consequential or exemplary damages of any kind whatsoever, including without limitation lost profits, business interruption or loss of data, whether any claim is based upon theories of contract, negligence, strict liability, tort, or otherwise.

Miscellaneous

No salesperson, employee, or agent of ASCO is authorized to add to or vary the terms of this Warranty. Warranty terms may be modified, if at all, only in writing signed by an ASCO officer.

ASCO obligations under this Warranty are conditioned upon ASCO timely receipt of full payment of the product purchase price and any other amounts due. ASCO reserves the right to supplement or change the terms of this Warranty in any subsequent warranty offering to user or others.

In the event that any provision of this Warranty should be or becomes invalid and/or unenforceable during the Warranty period, the remaining terms and provisions shall continue in full force and effect.

This Warranty shall be governed by, and construed under, the laws of the State of New Jersey, without reference to the conflict of laws principles thereof.

This Warranty represents the entire agreement between ASCO and user with respect to the subject matter herein and supersedes all prior or contemporaneous oral or written communications, representations, understandings, or agreements relating to this subject.

10/08/21 Publication No. 381339-334

Limited Guardian Warranty

7000 SERIES Power Transfer Switches

This Warranty is given ONLY to purchasers who buy for commercial or industrial use in the ordinary course of each purchaser's business.

General

ASCO Power Technologies, LP products and systems are in our opinion the finest available. We take pride in our products and are pleased that you have chosen them. Under certain circumstances we offer with our products the following Limited Guardian Warranty Against Defects in Material and Workmanship.

Please read your Guardian Warranty carefully. This Warranty sets forth our responsibilities in the unlikely event of defect and tells you how to obtain performance under this Warranty.

Limited Warranty Against Defects in Material and Workmanship:

Product Description	Catalog Code
Automatic Transfer Switch	7ATS, 7ADTS, 7ACTS
Automatic Transfer Bypass - Isolation Switch	7ATB, 7ADTB, 7ACTB
Non-Automatic Transfer Switch (Electrically Operated)	7NTS
Manual Transfer Switch	7MTS
Service Entrance Transfer Switch (SEATS)	7AUS, 7ADUS, 7ACUS, 7AUB, 7ADUB, 7ACUB, 7APS, 7ARS, 7ASUD, 7ASUS, 7ASUB
Power Transfer Load Center (PTLC)	7000L
Automatic Soft Load Transfer Switch & Bypass-Isolation Switch	7ASLS, 7ASLD, 7ASLE, 7ASLB

Terms of Warranty

The following Limited Warranty is conditioned upon user's compliance with the following:

1. The ASCO 7000 Power Transfer Switch is installed in accordance with ASCO specifications and state and local codes and standards by an electrician licensed in the state of installation.

2. The ASCO 7000 Power Transfer Switch is maintained in accordance with ASCO instructions and used under normal conditions for the purposes intended by ASCO.

As provided herein, the ASCO product is warranted to be free of defects in material and workmanship for a period of two, five, and ten years from date of shipment from ASCO provided that the product has been stored in a suitable environment prior to installation; except, however, for 7AUS, 7AUB, 7APS, 7ARS, 7ASLD, 7ASLE, 7ASUD, 7ASUS, 7ASUB and 7000L products, the warranty period for the circuit breaker shall be two (2) years from date of shipment from ASCO. The product shipment date will be determined only from the ASCO bill of lading. If any part or portion of the ASCO product fails to conform to the Warranty within the Warranty period, ASCO, at its option, will furnish new or factory remanufactured products for repair or replacement of that portion or part.

Years 1 – 2: Covers all replacement parts, labor, and travel expenses necessary to remedy the defects in material and/or workmanship. All warranty repair or replacement of said equipment will be performed at ASCO's option at ASCO's service facility location, factory, or user's installation site by ASCO's certified service personnel as deemed most practical by ASCO.

Years 3 – 5: Following expiration of the initial two-year warranty period as detailed herein; parts only determined to be defective will be provided at no charge. Customer is responsible for all other related costs (labor and travel expenses). This does not apply to circuit breakers in 7AUS, 7AUB, 7APS, 7ARS, 7ASLD, 7ASLE, 7ASUD, 7ASUS, 7ASUB and 7000L products.

Years 6 – 10: Following expiration of year five warranty period as detailed herein; main contacts only determined to be defective will be provided at no charge. Customer is responsible for all other related costs (labor and travel expenses).

Warranty Extends To First Purchaser For Use, Non-Transferable

Optional extended warranty coverage may be purchased from ASCO for a specified fee at the time of the original sale. If purchased, it shall extend the coverage conditions noted for years 1-2 above up to an additional three (3) years, to provide up to five (5) years of coverage applicable to the above referenced products. Extended warranty coverage must be purchased in one (1) year increments. The length of the optional extended coverage shall be reflected on the ASCO invoice and/or order acknowledgement document. The extended warranty coverage does not affect the standard warranty described above for years 3-10 or the 2-year circuit breaker warranty; those warranty periods will remain the same.

All warranty related repairs, replacements or adjustments must be made by ASCO Services Inc. or its duly authorized representative.

Warranty Extends To First Purchaser For Use, Non-Transferable

This Warranty is extended to the first person, firm, association, or corporation for whom the ASCO product specified herein is originally installed for use (the "user") in the fifty United States or Canada. This Warranty is not transferable or assignable without the prior written permission of ASCO.

Assignment of Warranties

ASCO assigns to user any warranties which are made by manufacturers and suppliers of components of, or accessories to, the ASCO product and which are assignable, but ASCO makes no representations as to the effectiveness or extent of such warranties, assumes no responsibility for any matters which may be warranted by such manufacturers or suppliers and extends no coverage under this Warranty to such components or accessories.

Drawings, Descriptions

ASCO warrants for the period and on the terms of the Warranty set forth herein that the ASCO product will conform to the descriptions contained in the certified drawings, if any, applicable thereto, to ASCO's final invoices, and to applicable ASCO product brochures and manuals current as of the date of product shipment (“descriptions”). ASCO does not control the use of any ASCO product. Accordingly, it is understood that the descriptions are not Warranties of performance and not Warranties of fitness for a particular purpose.

Warranty Claims Procedure

Within a reasonable time, but in no case to exceed thirty (30) days, after user's discovery of a defect, user shall contact ascopowerwarranty@ascopower.com. Subject to the limitations specified herein, (i) during the first two years of the warranty, an ASCO service representative will repair the non-conforming ASCO product warranted hereunder without charge for parts, labor, or travel expenses; (ii) during the remainder of the warranty, ASCO will arrange for an ASCO service representative to repair or replace the non-conforming ASCO product warranted hereunder without charge for covered parts, and user shall bear all labor, travel expenses, and shipping charges associated with repair or replacement of the product herein. Warranty coverage will apply only after ASCO’s inspection discloses the claimed defect and shows no signs of treatment or use that would void the coverage of this Warranty. All defective products and component parts replaced under this warranty become the property of ASCO.

Warranty Performance of Component Manufacturers

It is ASCO's practice, consistent with its desire to remedy Warranty defects in the most prompt and effective manner possible, to cooperate with and utilize the services of component manufacturers and their authorized representatives in the performance of work to correct defects in the product components. Accordingly, ASCO may utilize third parties in the performance of Warranty work, including repair or replacement hereunder, where, in ASCO's opinion, such work can be performed in less time, with less expense, or in closer proximity to the ASCO product.

Items Not Covered By Warranty

This Warranty does not cover damage or defect caused by misuse, improper application, wrong or inadequate electrical current or connection, negligence, inappropriate on site operating conditions, repair by non-ASCO designated personnel, accident in transit, tampering, alterations, a change in location or operating use, exposure to the elements, water, or other corrosive liquids or gases, acts of God, theft or installation contrary to ASCO's recommendations or specifications, or in any event if the ASCO serial number has been altered, defaced, or removed.

This Warranty does not cover shipping costs, installation costs, external circuit breaker resetting or maintenance or service items and further, except as may be provided herein, does not include labor costs or transportation charges arising from the replacement of the ASCO product or any part thereof or charges to remove or reinstall same at any premises of user.

Repair or replacement of a defective product or part thereof does not extend the original Warranty period.

The products listed in this Warranty are not for use in the control area or any reactor connected or safety applications or within the containment area of a nuclear facility or for integration into medical devices.

Limitations

This Warranty is in lieu of and excludes all other Warranties, express or implied, including merchantability and fitness for a particular purpose.

User's sole and exclusive remedy is repair or replacement of the ASCO product as set forth herein.

If user's remedy is deemed to fail of its essential purpose by a court of competent jurisdiction, ASCO's responsibility for property loss or damage shall not exceed the net product purchase price.

In no event shall ASCO assume any liability for indirect, special, incidental, consequential or exemplary damages of any kind whatsoever, including without limitation lost profits, business interruption or loss of data, whether any claim is based upon theories of contract, negligence, strict liability, tort, or otherwise.

Miscellaneous

No salesperson, employee, or agent of ASCO is authorized to add to or vary the terms of this Warranty. Warranty terms may be modified, if at all, only in writing signed by an ASCO officer.

ASCO obligations under this Warranty are conditioned upon ASCO timely receipt of full payment of the product purchase price and any other amounts due. ASCO reserves the right to supplement or change the terms of this Warranty in any subsequent warranty offering to user or others.

In the event that any provision of this Warranty should be or becomes invalid and/or unenforceable during the Warranty period, the remaining terms and provisions shall continue in full force and effect.

This Warranty shall be governed by, and construed under, the laws of the State of New Jersey, without reference to the conflict of laws principles thereof.

This Warranty represents the entire agreement between ASCO and user with respect to the subject matter herein and supersedes all prior or contemporaneous oral or written communications, representations, understandings, or agreements relating to this subject.

10/08/21 Publication No. 381339-335

Flexible Power Transfer Solutions for Commercial & Industrial Applications

ASCO Power Technologies™

ASCO SERIES 300
Power Transfer Switches

ascopower.com

Life Is On Schneider Electric

ASCO SERIES 300 Automatic Transfer Switches

Power outages impact small and large facilities alike. ASCO SERIES 300 Automatic Transfer Switches offer rugged design and reliable performance to small and mid-size commercial and industrial facilities in packaged solutions that are easy to select, procure, install, and operate.

Every SERIES 300 generator transfer switch is engineered with ASCO's reliability expertise in a package that makes backup power accessible for small and mid-size facilities. Leveraging knowledge derived from a century of critical power transfer experience, each SERIES 300 is backed by the same ASCO technical support and service that solves the most demanding critical power challenges facing facilities today.

Product Details

Transfer Switch Overview

ASCO's SERIES 300 lineup offers flexible backup power solutions for businesses of every size.

SERIES 300 Automatic Transfer Switches

Designed to Fit Anywhere

The ASCO SERIES 300 product line provides the most compact design of generator power transfer switches in the industry.

Available to mount on walls or floors, all models through 2000 amperes are designed to be completely front-accessible. This permits installation flush against walls while allowing installation of cabling and connections from the front of the switch. Cable entrance plates are standard on 1600 and 2000 amperes units; these allow use of optional side-mounted pull boxes for additional cable bending space.

- 30 through 3000 amperes in compact designs
- Up to 600 VAC, single or three phase
- Listed to UL 1008 - Standard for Safety - Transfer Switch Equipment
- True double-throw operation: The single solenoid design is inherently interlocked to prevent simultaneous connections of two power sources.
- Will not transfer to a dead source - single solenoid operator derives power from the destination source
- Easy-to-navigate 128x64 graphical LCD display with keypad provides LED indicators for switch position, source availability, not-in-auto mode, and alert conditions.
- Integrated, multilingual, user interface for configuration and monitoring
- Available Delayed Transition operation
- Non-automatic operation can be selected without opening enclosure door
- Optional Relay Expansion Module with extra relays for accessory outputs
- Soft keys for test function and time delay bypass
- Emergency source failure alert indication
- Optional Historical Event Log
- Displays statistical ATS monitoring information
- Built-in diagnostic functions
- Password protection to prevent unauthorized actions
- Adjustable delay feature prevents nuisance transfer due to momentary utility power outages and generator dips
- Auxiliary contacts signal position of main contacts - two for normal and two for emergency position
- Standard solid neutral terminals
- Restriction of Hazardous Substances (RoHS) compliant controller
- Standard 2 year warranty. Optional 1, 2, and 3 year extensions

Power Knowledge

Basic Automatic Transfer Switch Functions

SERIES 300 Power Transfer Switch rated 200 amps

SERIES 300 Automatic Switching Solutions

Automatic and Non-Automatic Transfer Switching

ASCO Transfer Switches are available in both automatic and non-automatic types. Both are electrically operated. For automatic transfer switches, the controller initiates transfer between power sources . For non-automatic transfer switches, a user initiates transfer using local or remote controls.

SERIES 300 non-automatic transfer switches offer the following features:

- Models range from 30 through 3000 amperes, up to 600V
- Controller prevents inadvertent operation under low voltage conditions
- Source acceptability lights inform operator when sources are available to accept load
- Standard in-phase monitor for transferring motor loads betweem live sources

Power Knowledge

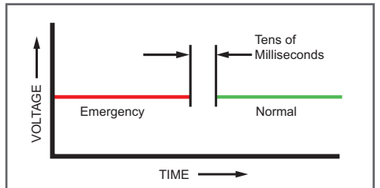
Non-Automatic and Manual Transfer Switches for Backup Power Applications

400 Amp, Type 1 Enclosure

Open Transition Transfer Switching

ASCO Transfer Switches are available with a standard, 2-position, open transition models that reliably transfer loads in less than 100 milliseconds. Open transition switches are suitable for a wide range of applications.

- 30 to 3000 amps
- Single-operator switching mechanism prevents simultaneous connection of both sources
- Available In-Phase Monitor can be activated for transferring motor loads

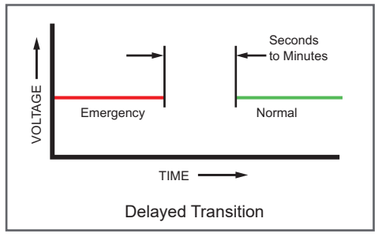


Open Transition

Delayed Transition Transfer Switching

ASCO Delayed Transition Transfer Switches transfer loads between power sources using a timed load disconnect position with an adjustable delay.

- 150 through 3000 amps
- Reliable, field-proven, dual-solenoid operating mechanism
- Mechanical interlocks to prevent simultaneous connection of both power sources
- Adjustable delay for load disconnect - 0 to 5 minutes
- Non-automatic models available in manual operation configuration
- Automatic models available with load shed feature



Delayed Transition

Power Knowledge

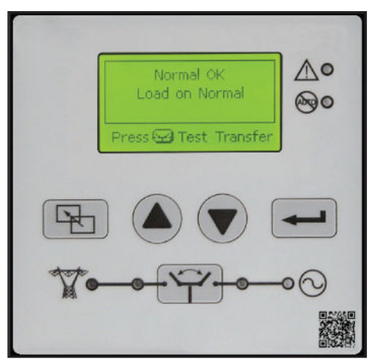
Transition Mode Basics

Transferring Motor Loads between Power Sources

Transferring Loads with Zero Power Interruption

SERIES 300 Group G Controller

The SERIES 300 Group G Controller is reliable and field-proven. It provides all of the voltage, frequency, control, timing, and diagnostic functions required for most emergency and standby power applications.



- Touch pad programming
- Displays active timers
- On-board diagnostics
- Password protection
- Voltage and frequency sensing
- Status and control functions

Product Details

Group G Controller

Transfer Switch Communications and Metering

Options to Customize Functionality and Increase Value

Product Details

5300 SERIES Annunciators

Remote Annunciation

Monitor Power Equipment Status from Anywhere

Monitoring and control transfer switches from across the room, building, or from Internet.

5310 – LED annunciator – Single ATS

5350 – LED annunciator – up to 8 ATSs

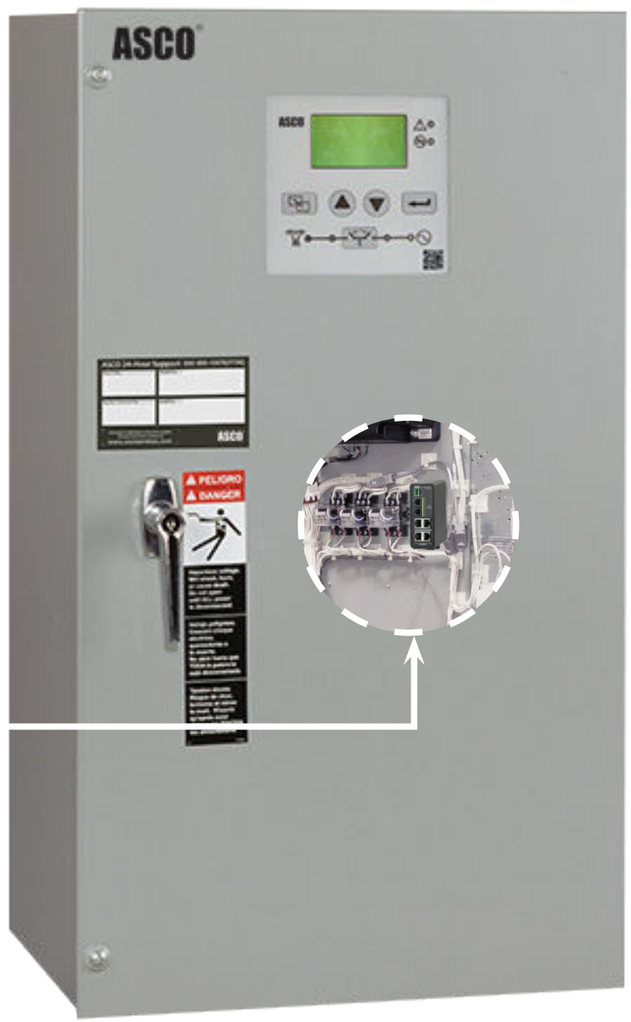
Product Details

5140 Connectivity Module

Communication

Turn Transfer Switches into Power Information Portals

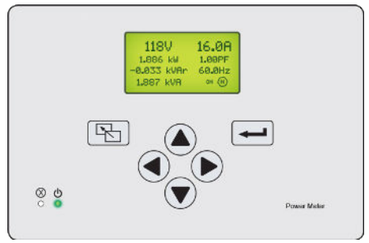
5140 Connectivity Module – Makes status and power information from a single switch available to via ModBUS, SNMP, and web pages.



Metering

Transfer Switches are the Perfect Place to Monitor Power Flow, Power Conditions, and Power Events

5210 Power Meter – Provides deeper insight into circuit status and conditions.



Product Details

5210 Power Meter

SERIES 300 Optional Accessories

Communications	
11BE	Feature Bundle. Programmable engine exerciser with seven independenct routines run the generator with or without loads, on a daily, weekly, bi-weekly, or monthly basis. Controlled from the user interface keypad. • Event log display shows the event number, time and date, type and reason (if applicable). • Stores up to 300 events • RS485 Communication Port enabled common alarm output contact • On three-phase systems, Accessory 11BE enables line-to-line voltage imbalance sensing and three-phase sensing capabilities for the Emergency power source as well as the Phase Rotation checking for both power sources.
18RX	Relay Expansion Module provides accessory relays and includes one Form C contact for normal source availability (18G), and one Form C contact for emergency source availability (18B) (contact rating 5 amperes @ 30 VDC or @ 125 VAC resistive) (100 ma, 4 VDC min) Additional output relay is provided the default is to indicate a common alarm.
72EE	Connectivity module provides remote monitoring and control capabilities and includes accessory 11BE feature bundle
Environment and Power	
44A	Strip heater with thermostat for cold environment to prevent internal condensation and icing. External 120-volt AC power source required.
44G	Strip heater with thermostat, wired to load terminals on 208-240, 360-380, 460-480, 550-600 volt models. Contains wiring harnesses for all transfer switch sizes.
1UP	UPS back up power runs controller and LCD display for 30 seconds without AC power
Extension Harness	
37B	Six-foot extension harness for open type units to accommodate customer mounting of controls and switch
37C	Nine-foot extension harness for open type units to accommodate customer mounting of controls and switch
Indicators	
62W	Audible alarm with silencing feature to signal transfers to emergency. (For D-frame models, may require oversize enclosure depending on accessory combination).
Customer Control Circuits	
30A	Load-shed circuit initiated by opening of a customer-supplied contact (Open Transition model only)
30B	Load-shed circuit initiated by removal of customer-supplied control voltage (Open Transition model only)
30AA	Load-shed circuit initiated by opening of a customer-supplied contact (Delayed Transition model only)
30BA	Load-shed circuit initiated by removal of customer-supplied control voltage (Delayed Transition model only)
Surge Protection	
73	Surge suppressor rated 65 kA
Metering	
23GA, 23GB	Load Current Metering card measures either single or three-phase load current. Not available with Power Meter option 135L. Use 23GA for Single-Phase, 23GB for Three-Phase.
135L	Power Meter on load side (includes shorting block and current transformers). Not available with Load Current Metering options 23GA or 23GB.

Field Conversion Kits

Kit No.	Description
935147	Advanced Function Bundle Retrofit Kit (11BE) - See above accessory 11BE description for details.
935148	REX Module with Source Availability Contacts (Acc. 18RX)
935149	UPS to allow controller to run for 30 seconds minimum without AC Power (Acc. 1UP)
935150	1/3 Phase load current sensing card only (Acc. 23GA/GB)
K613127-001	Strip Heater (125 watt) 120 volt (Acc. 44A)
K613127-002	Strip Heater (125 watt) 208-480 volt (Acc. 44G)
948551	Quad-Ethernet Module (Acc. 72EE)
K609027	Cable Pull Box (1600-2000 amperes)

Withstand and Closing Ratings

FRAME	RATINGS AMPERES	CURRENT LIMITING FUSES				SPECIFIC BREAKER		
		480V MAX.	600V MAX.	MAX. SIZE, AMPS	CLASS	240V MAX.	480V MAX.	600V MAX.
D	30	100kA	-	300	J	22kA	22kA	10kA
		200kA	35kA	200	J			
		35kA	35kA	200	RK1			
	70-100	35kA	35kA	200	RK1	150kA	85kA	25kA
		200kA	35kA	200	J			
	150	35kA	35kA	200	RK1	150kA	85kA	25kA
		200kA	35kA	200	J			
	200	200kA	35kA	200	J	200kA	85kA	14kA
		35kA	35kA	200	RK1			
	230	100kA	-	300	J	200kA	85kA	14kA
E	260, 400	200kA	-	600	J	65kA	42kA	22kA
J	150, 200, 260	200kA	200kA	600	J	200kA	200kA	42kA
				800	L			
	400	200kA	200kA	600	J	65kA	50kA	42kA
				800	L			
	600	200kA	200kA	600	J	65kA	85kA	42kA
				800	L			
H	800-1200*	200kA	200kA	1200	L	65kA	150kA	65kA
G	1600-2000	200kA	200kA	2500	L	85kA	85kA	85kA
	2600-3000	200kA	200kA	4000	L	125kA	125kA	100kA
	4000	200kA	200kA	5000	L	100kA	100kA	100kA

Notes:

* Front connection only

All units are RMS Symmetrical Amperes

All Withstand and Closing Rating values are tested in accordance with UL 1008.
See **ASCO Publication 1128** for more information.

Application requirements may permit higher WCR for certain switch sizes.

Power Knowledge

- UL 1008 Transfer Switch Withstand and Closing Ratings
- Performance Testing for Transfer Switches

Additional SERIES 300 Product Information

Transfer Switches and Panels	Controls	Technical Information
Manual Transfer Switch	Group G Controller	Withstand and Closing Ratings
Manual Transfer Switch with Quick Connects		Weights and Dimensions and Ordering Info
Quick Connect Power Panel		Drawings
Dual Purpose Quick Connect Power Panel		Wiring Diagrams

SERIES 300 Manual Transfer Switching and Quick Connection Solutions

ASCO SERIES 300 Manual Transfer Switching and Quick Connection Solutions offer reliable service and application flexibility for a wide range of facilities.

Manual Transfer Switches

- Three-position, easy-to-use center-off switch
- Compact design - easy to install and maintain
- Designed to handle demands of motors and inrush currents

Power Knowledge

Differences Between Manual, Non-Automatic, & Automatic Transfer Switches

Product Details

SERIES 300 Manual Transfer Switch

Manual Transfer Switches with Quick Connects

- The ASCO SERIES 300 Manual Transfer Switch with Integrated Quick Connects provides a total temporary power connection and transfer solution
- Enables connection and control of a temporary or portable generator
- Provides a complete UL 1008-listed solution in a single unit

Product Details

SERIES 300 Manual Transfer Switch with Quick Connects

Quick Connect Panels

- Listed to UL 1008 Transfer Switch Accessory standard
- Utilizes standard Cam-Lok™ receptacles for quick connections
- Standard Type 3R construction is weatherproof with or without cable
- Utilizes standard Series 16 Single Pole quick connect receptacles

Power Knowledge

NEC Requirement for Permanent Manual Switching Means

Product Details

SERIES 300 Quick Connect Power Panel

Dual-Purpose Manual Transfer Switches with Quick Connects

- Provides both supplemental backup power and load testing connectivity through a single device.
- Listed to UL 891 by ETL
- Utilizes standard Series 16 Single Pole quick connect receptacles

Product Details

SERIES 300 Dual Purpose Quick Connect Power Panel

Life Is On | Schneider Electric™

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Publication 1195 R7. Printed in the U.S.A.

Power Transfer for Mission-Critical Applications

ASCO Power Technologies™

ASCO 7000 SERIES
Low-Voltage Transfer Switches

ascopower.com

Life Is On Schneider Electric

ASCO 7000 SERIES Power Transfer Switches

ASCO 7000 SERIES Power Transfer Switches provide unmatched reliability and sophisticated control for the most demanding mission-critical backup power needs.

ASCO 7000 SERIES Transfer Switches are widely used in the most complex mission-critical hospital and healthcare facilities, enterprise and cloud-based data centers, telecommunication networks, water treatment plants, and any facility that requires the highest levels of power availability.

Every 7000 SERIES transfer switch is engineered-to-order to optimize switch functionality and provide facilities with the best solution for their specific application, and custom-engineering is available to meet any transfer switching need.

Backed by industry-leading technical support and service knowledge derived from a century of critical power switching experience, the 7000 SERIES solves the most demanding critical power challenges facing facilities today.

Power Knowledge

Transfer Switch Overview

"With nine hospitals on the line, ASCO helps me sleep well at night."

Tom M., Facility Engineering Director

7000 SERIES Power Transfer Switches

ASCO Power Transfer Switches are the standard of the industry. High-speed transfer of loads between alternate sources of power, regardless of ampacity, is achieved using a reliable, field-proven solenoid operating mechanism.

- Listed to UL 1008 Transfer Switch Equipment and Certified to CSA 22.2, No. 178
- Qualified and certified to IEC 60947-6-1, optional CE mark
- Rated up to 600 VAC, 30 through 4000 amps
- 3 to 18-Cycle Withstand and Closing Rating Standard, 30-Cycle WCR Optional
- High Withstand and Closing Rating, including Short-Time Ratings, support breaker coordination
- Solid, switched, or overlapping neutral configurations
- Front-replaceable main and arcing contacts on 800-4000 amp models
- Central terminal block for control connections on 260-4000 amp models
- Four auxiliary contacts: two closed when switch is in normal position and two closed when switch is in emergency position
- Local/remote communications to ASCO communication products
- Comprehensive 2, 5, or 10 year warranty

Power Knowledge

Basic Automatic Transfer Switch Functions

Three Pole 7000 SERIES Automatic Transfer Switch rated 1600 amps

7000 SERIES Power Switching Solutions

Automatic and Non-Automatic Transfer Switching

ASCO Transfer Switches are available in automatic and non-automatic types. For automatic transfer switches, the controller initiates transfer. For non-automatic transfer switches, a user initiates transfer between power sources using local or remote switches. ASCO 7000 SERIES Transfer Switches offer the following features:

- Rated up to 600VAC, sizes from 30 through 4000 amps
- Controller prevents inadvertent operation under low voltage conditions
- Low control circuit currents allow for long distances between remotely control switches and transfer switches
- Standard in-phase monitor for transferring motor loads
- Non-automatic models provide source acceptability lights to inform operator when sources are available to accept load

Power Knowledge

- Non-Automatic and Manual Transfer Switches for Backup Power Applications

Four Pole, Non-Automatic, Electrically-Operated 400 Amp Switch in a Type 1 Enclosure

Open Transition Transfer Switching

ASCO Transfer Switches are available with a standard, 2-position, open transition models that reliably transfer loads in a "break-before-make" sequence in less than 100 milliseconds. Open transition switches are suitable for a wide range of applications.

- 30 to 4000 amps
- Single-operator switching mechanism prevents simultaneous connection of both sources
- Available In-Phase Monitor can be activated for transferring motor loads

Delayed Transition Transfer Switching

ASCO Delayed Transition Transfer Switches transfer loads between power sources using a timed, load, disconnect position with an adjustable delay. Applications include older variable frequency drives, rectifier banks, and load management applications.

- 150 through 4000 amps
- Mechanical interlocks to prevent interconnection of both sources
- LED Indicator for load disconnect position
- Adjustable time delay for load disconnect position

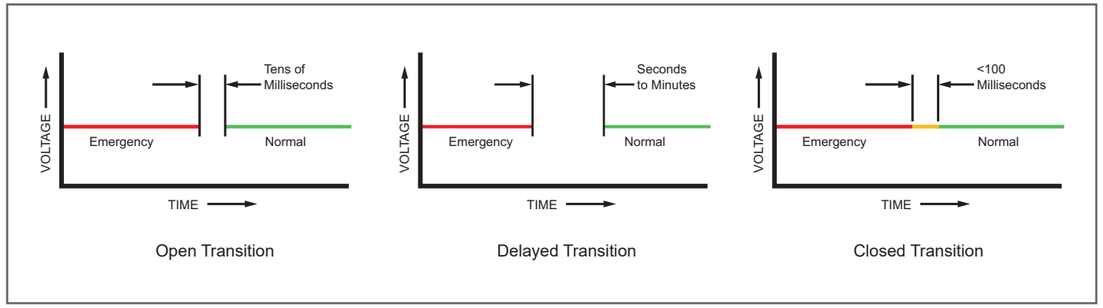
Closed Transition Transfer Switching

ASCO Automatic Closed Transition Transfer Switches overlap the normal and emergency source to transfer without power interruption. The switch transfers in a make-before-break sequence if both power sources are within acceptable parameters. Control logic continuously monitors source conditions and automatically selects open or closed transition according to real-time values.

- Available 150 through 4000 amps
- Closed Transition Transfer occurs passively without directly controlling the engine-generator set
- Overlap time is less than 100 milliseconds
- Indications for failure-to-synchronize and extended parallel time

Power Knowledge

- Transferring Motor Loads between Power Sources
- Transition Mode Basics
- Transferring Loads with Zero Power Interruption



7000 SERIES Bypass-Isolation Switches

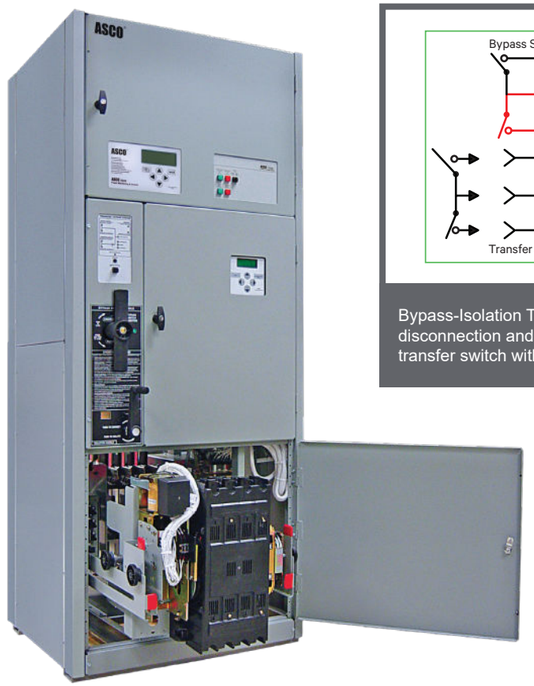
Bypass-Isolation Automatic Transfer Switches

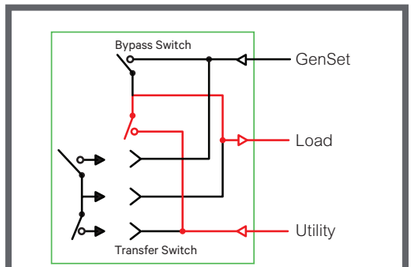
ASCO Bypass-Isolation Automatic Transfer Switches are available in open transition, closed transition, and delayed transition designs. The bypass-isolation features allow the primary automatic transfer switch to be inspected, tested, and maintained without interrupting power to the load. They also provide redundant power transfer if the ATS is disabled or removed from service.

- 150 to 4000 amps
- Bypass switch and transfer switch have identical electrical ratings
- Mechanical interlocks prevent unintended operation
- Bypass contacts carry current only during bypass operation
- Draw-out design eases transfer switch maintenance
- Bypass switch is rated for use as a 3-position manual transfer switch
- Bypass and isolation functions require only two permanently mounted operating handles
- Mechanical indicators show bypass and transfer switch positions
- Shallow depth, front-connected, or rear-connected designs

Power Knowledge

3D Bypass Switch Animation





Bypass-Isolation Transfer Switch allow disconnection and draw-out of the primary transfer switch without disrupting power to loads.

Bypass-Isolation Transfer Switch, J-Frame, 150-600 amps

Product Details

Bypass-Isolation Transfer Switches

7000 SERIES Service Entrance Switches

Service Entrance Power Transfer Switches

The ASCO Service Entrance Power Transfer Switch combines automatic power switching with a disconnect and over-current protection device for the utility source. These switches are installed at facilities that have a single utility feed and a single emergency power source. A circuit breaker serves as the utility disconnect. This product is available up to 600V and 4000 amps in Standard, Delayed, Closed Transition, and Bypass-Isolation configurations.

- Available from 70 to 4000 amps, up to 600V
  - 70 - 400 amp listed to UL 1008
  - 600 - 4000 amp listed to UL 891
- UL 1008 Listed transfer mechanism
- Disconnect and over-current protective device on the utility source. 70 to 2000 amp models use molded case circuit breakers; 2500 to 4000 amp models use insulated case circuit breakers.
- Disconnect links on Neutral and Ground
- Internet-enabled monitoring and control

Power Knowledge

Applications for Service Entrance Automatic Transfer Switches

Service Entrance Breaker

Product Details

Service Entrance Transfer Switches

Custom-Engineered Transfer Switches

Optimized Solutions for Mission-Critical Performance

Create an exact power control solutions by integrating service equipment and protective devices and incorporating distribution equipment while accommodating unique application requirements. Custom engineered devices can save space, reduce delivery times, streamline installation and commissioning, enhance quality control, and reduce overall cost.

Power Knowledge

Benefits of Custom-Engineered Transfer Switches

Integrated Distribution Breakers

Common distribution breaker applications include:

- Panels to house molded case circuit breakers
- Insulated case circuit breakers, with or without drawout capability
- Manually or electrically operated circuit breakers

Automatic Transfer Switchboard

- Connects multiple automatic transfer switches together in a common switchboard
- Two ASCO 2000 ampere automatic bypass-isolation transfer switches
- Circuit breakers on the normal and load sides of each switch
- An ammeter and voltmeter are also located on the load side of each switch

Three Source System

- Sequential transfer switches select between alternative power sources
- Normal, emergency, and/or load circuit breakers
- Protective relays, when required
- Available metering for normal, emergency

Transfer Switches can be custom-engineered to integrate service entrance equipment, distribution equipment, and more.

"The maintenance is top notch and the technical support is amazing. ASCO service techs ... do what's right for the hospital, not just the job."

Mark Y., Electrical Management Supervisor

Additional Available Custom Features

These examples are just a few of the configurations and features available through custom-engineered solutions. Additional possibilites include:

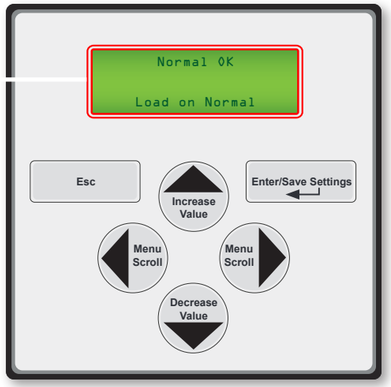
- Custom Metering
- Source Fusing
- Bus Riser
- Utility-Specified Compartments

For more information, contact an authorized ASCO Power Technologies Representative.

7000 SERIES Controls and Indicators

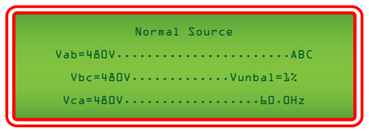
Group 5 Controller

The 7000 SERIES Group 5 Controller is reliable and field-proven. It provides all of the voltage, frequency, control, timing, and diagnostic functions required for most emergency and standby power applications.

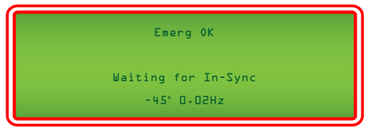


- Touch pad programming
- Displays active timers
- On-board diagnostics
- Password protection
- Voltage and frequency sensing
- Status and control functions

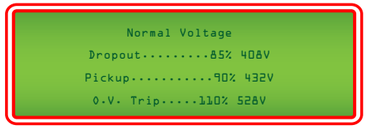
Source Status



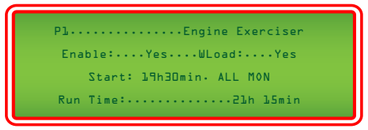
In-phase Transfer Status



Voltage and Frequency Settings



Engine Exerciser

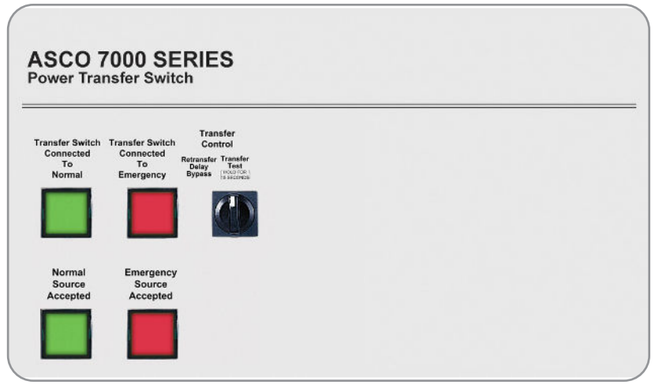


Product Details

Group 5 Controller

Control Switches and Indicating Lights

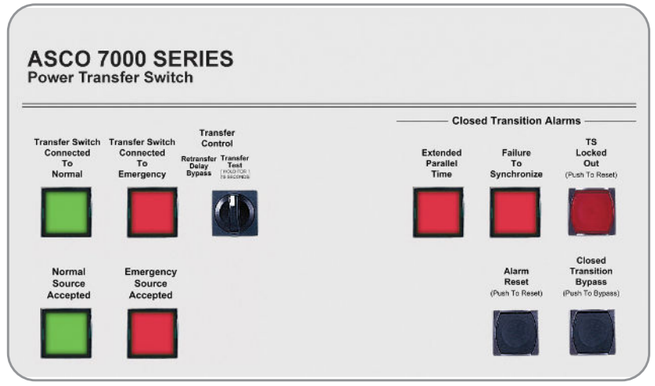
- Switch position indicating lights
- Source acceptability indicator lights
- Three-position selector switch:
  - Automatic: Normal position
  - Test: Simulate normal source failure
  - Reset Delay Bypass: Bypass transfer and re-transfer time delays



Control Switches and Indicating Lights for Closed Transition Switches

Additional controls and Indicators for:

- *Extended Parallel Time* - Provides visual indication when the pre-set extended parallel time has been exceeded. The controls automatically open the emergency or normal main contacts. Separate contact also available to shunt trip external breaker.
- *Failure To Synchronize* - Visually displays a failure to synchronize alarm if the time delay settings are exceeded during closed transition transfer operation.
- *Transfer Switch Locked Out* - Prevents transfer in either direction if the extended parallel time is exceeded.
- *Alarm Reset* - Resets extended parallel and failure to synchronize alarms.
- *Closed Transition Bypass* - Pushbutton allows transfer between sources in an open transition mode.



Transfer Switch Communications and Metering

Options to Customize Functionality and Increase Value

Product Details

- 5300 SERIES Annunciators
- 5700 SERIES Annunciator

Remote Annunciation

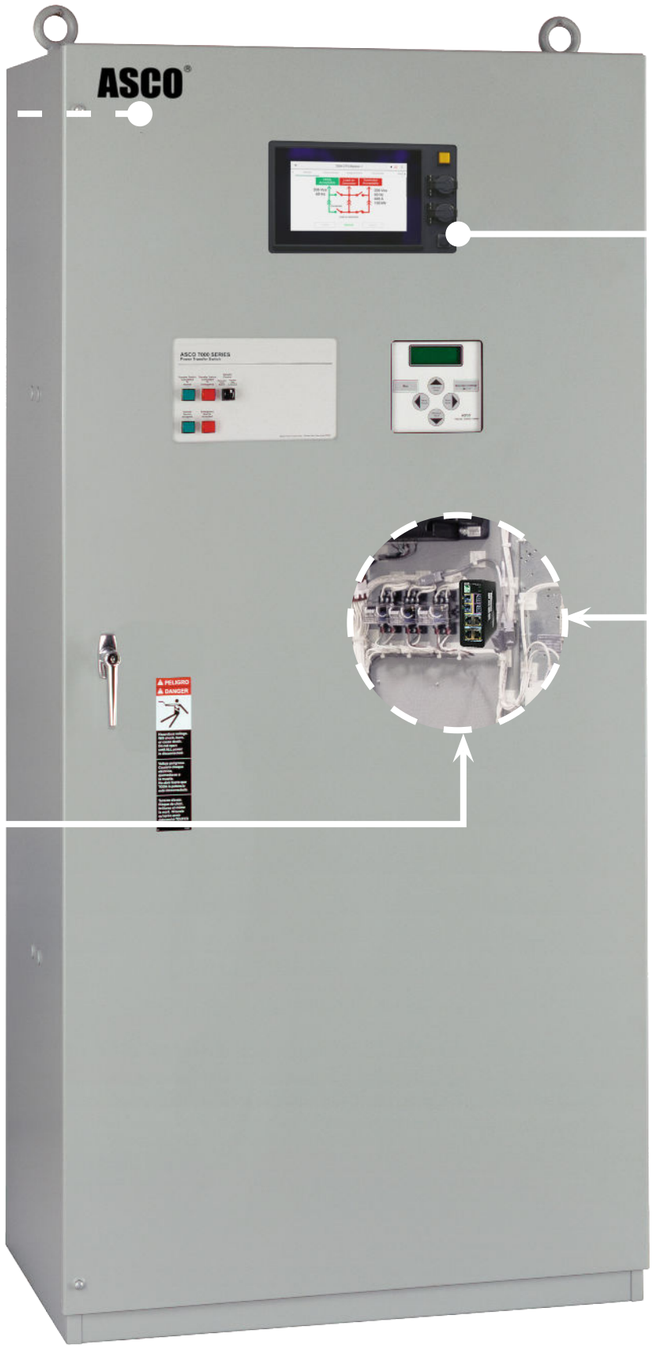
Monitor Power Equipment Status from Anywhere

Monitoring and control transfer switches from across the room, building, or from Internet.

5310 – LED annunciator – Single ATS

5350 – LED annunciator – up to 8 ATSs

5705 – Interactive CPMA-based graphical annunciator – up to 8 ATSs



Product Details

- 5170 Connectivity Module
- 5701 Gateway

Communication

Turn Transfer Switches into Power Information Portals

5170 Connectivity Module – Makes status and power information from a single switch available to via ModBUS, SNMP, and web pages.

5701 8 Device Gateway – Provides centralized monitoring of up to 8 power devices through a transfer switch. Connects generators, transfer switches, load banks, and more to web pages for increased monitoring and control.

Touch Display Interface

Advanced Graphical Display and Control

5370 – Graphically displays information from transfer switches and power devices. Touch display transfers, re-transfers, initiates engine start, and configures transfer switch settings.

Product Details

- 5370 Touch Display Interface

Metering

Transfer Switches are the Perfect Place to Monitor Power Flow, Power Conditions, and Power Events

5210 Power Meter – Provides deeper insight into circuit status and conditions.

PowerLogic PM 8000 – Schneider Electric's compact, high-performance, power meter simplifies power quality and maximizes versatility.

Product Details

- 5210 Power Meter
- PowerLogic PM 8000

7000 SERIES Optional Accessories

Time Delays and Extended Control Power	
1G1	Auxiliary power connections provide for external 24VDC source to power control panel and power manager/meter when normal and emergency sources are not present or the switch is in isolation mode. Allows for use of full range of extended engine starting time delay feature 1C (0-60min 59 sec).
1GB1	Same as accessory 1G1 except using 120-volt AC external input.
1PS1	Extended control power ride-through (approx. 25 seconds) for Group 5 ATS controller and select communications and metering accessories, e.g. Acc. 72EE2, 72FC, 135L, etc.
Manual Controls for Automatic Transfer Switches	
6DL	Selector switch for automatic/manual re-transfer to normal. Automatic bypass if emergency fails.
Indicators	
18B	Two-pole, double-throw contacts operate when emergency source voltage is present at transfer switch terminals.
18G	Two-pole, double-throw contacts operate when normal source voltage is present at transfer switch terminals.
99	"Push-to-Test" feature on all pilot light indicators.
Customer Control Circuits	
30A	Load-shed circuit initiated by opening of a customer-supplied contact.
30B3	24 VDC load-shed circuit initiated by removal of customer-supplied control voltage. (6, 12, 48, 120 VDC and 120 VAC also available).
31Z	Selective load disconnect control contacts that operate with time delay prior to and/or after load transfer and re-transfer.
Communications	
72EE2	Offers remote Ethernet monitoring via open Mod bus and SNMP protocols, email notifications and embedded monitoring web pages. (Catalog No. 5170 for stand-alone product).
107G	Provides Building Monitoring Systems with transfer switch, bypass, and load power metering information in Modbus TCP/IP, BACnet IP, and SNMP Protocols. Compatible with any Accessory 150 Technology Package or 72EE2.
Surge Protection : ASCO 430 TVSS, rated 200 kA per phase	
73CC1	Normal source protection. (3Ø, 4wire WYE)
73CC2	Emergency source protection. (3Ø, 4wire WYE)
73CC3	Load side protection. (3Ø, 4wire WYE) Note: Other distribution voltages and kA ratings available.
Special Applications	
29A	Manual selector switch for designating one of two utility feeds as the preferred source.
111A	Generator - to - Generator for Standby Applications
125A	Seismic Certification to International Building Code for electrical equipment
131	Certification of compliance with the American Recovery & Reinvestment Act (Buy American Provision)
Bypass-Isolation Switch Options	
14A1	Auxiliary contact to close in "Bypass to Normal" position.
14B1	Auxiliary contact to close in "Bypass to Emergency" position.
14T	Auxiliary contact to close when transfer switch is in "Automatic" position.
14U	Auxiliary contact to close when transfer switch is in "Isolate" position.
14V	Auxiliary contact to close when transfer switch is in "Test" position.
82E	LED Bypass status indicator, optional on G frame, 1600 to 4000 amps only. Standard for all other switches.
Meter and Communication Combinations	
135L	ASCO Digital Power Meter monitors load source voltage, frequency, and current and calculating Power, Energy, and Power Factor.
150A	ASCO Digital Power Meter (Acc. 135L), Backup Power Source (Acc. 1PS1), Communications Module (Acc. 72EE2)
150B	5210 Power Meter with Moxa IO (Acc. 135SB), Backup Power Source (Acc. 1PS1), Comm. Module (Acc. 72EE2)
Heater	
44A	120VAC, 208-240VAC and/or 440-480VAC Accessory 44 Strip heater designed to keep humidity and/or temperature inside ATS enclosure within acceptable levels. Includes mounting bracket with strip heater, thermostat, and terminal block.

Withstand and Closing Ratings

Withstand and Closing Ratings for all 7000 SERIES Power Transfer Switches, including 0.5 second (30-cycle) designs.

Frame	Switch Rating (Amps)		Current Limiting Fuses				Specific Breaker			Time Based				Short Time Ratings[1] (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.	0.13	0.2	0.3	0.5	0.1	0.13	0.3	0.5
D	30	-	100kA	-	300	J	22kA	22kA	10kA	0.025	10kA	10kA	10kA	-				-			
			200kA	35kA	200	J															
			35kA	35kA	200	RK1															
D	70, 100	-	35kA	35kA	200	RK1	150kA	85kA	25kA	0.025	10kA	10kA	10kA	-				-			
			200kA	35kA	200	J															
D	150	-	35kA	35kA	200	RK1	150kA	85kA	25kA	0.025	10kA	10kA	10kA	-				-			
			200kA	35kA	200	J															
D	200	-	200kA	35kA	200	J	200kA	85kA	14kA	0.025	10kA	10kA	10kA	-				-			
			35kA	35kA	200	RK1															
D	230	-	100kA	-	300	J	200kA	85kA	14kA	0.025	10kA	10kA	-	-				-			
J	150, 200, 260	150, 200, 230, 260	200kA	200kA	600	J	200kA	200kA	42kA	0.05	65kA	42kA[2]	35kA	7.5kA		-		-			
					800	L															
J	400	400	200kA	200kA	600	J	65kA	50kA	42kA	0.05	65kA	42kA[2]	35kA	7.5kA		-		-			
					800	L															
J	600	600	200kA	200kA	800	L	65kA	85kA	42kA	0.05	65kA	42kA[2]	35kA	7.5kA[3]		-		-			
			200kA	200kA	600	J															
H[4]	600	600	200kA	200kA	1600	L	65kA	150kA	65kA	0.05	50kA	50kA	50kA	36kA		-		36kA		-	
P[4]	600	600	200kA	200kA	1600	L	65kA	150kA	65kA	0.05	50kA	50kA	50kA	36kA		30kA		36kA		-	
P[4]	800	800 - 1200	200kA	200kA	1600	L	65kA	150kA	65kA	0.05	50kA	50kA	50kA	36kA		30kA		36kA		-	
H	800 - 1200	800 - 1200	200kA	200kA	1600[5]	L	65kA	150kA	65kA	0.05	50kA	50kA	50kA	36kA		-		36kA		-	
Q[4]	600-1600	600-1600	200kA	200kA	2000	L	65kA	65kA	65kA	0.05	65kA	65kA	65kA	50kA				50kA			
S[4]	800 - 1200	800 - 1200	200kA	200kA	2500	L	100kA	100kA	65kA	0.05	100kA	100kA	65kA	65kA				65kA			
G[4]	1000 - 1200	1000 - 1200	200kA	200kA	2000	L	85kA	85kA	85kA	0.05	85kA	85kA	85kA	-				-			
G	1600 - 2000 (Front Connected TS Only)		200kA	200kA	2500	L	85kA	85kA	85kA	0.05	85kA	85kA	85kA	42kA		36kA		-			
G[4]	1600 - 2000	1600 - 2000	200kA	200kA	3000	L	200kA	200kA	100kA	0.05	100kA	100kA	100kA	42kA		36kA		42kA		-	
S[4]	1600 - 2000	1600 - 2000	200kA	200kA	2500	L	100kA	100kA	85kA	0.05	100kA	100kA	85kA	85kA		65kA		85kA		65kA	
G	2600 - 3000	2600 - 3000	200kA	200kA	4000	L	125kA[6]	125kA[6]	100kA	0.05	100kA	100kA	100kA	42kA		36kA		42kA		-	
G[4]	3200	-	200kA	-	4000	L	100kA	100kA	-	0.05	100kA	100kA	-	-				-			
G	4000	4000	200kA	200kA	5000	L	100kA	100kA	100kA	0.05	100kA	100kA	100kA	85KA		65kA		65kA			
U[4]	2600 - 4000	2600 - 4000	200kA	200kA	5000	L	125kA	125kA	125kA	0.05	125kA	125kA	125kA	100kA				100kA			

Notes:

1. Short Time Ratings are provided for selective coordination of overcurrent protection devices.
2. Switches utilizing overlapping neutral (code C) have 35kA, 0.05-second, time-based rating at 480V max.
3. Short Time Rating applies to 600A bypass switch only. The 600A transfer switch does not have a Short Time Rating.
4. These frames are only available in the 7000 SERIES product line.
5. Max. fuse rating is 1200A on front-connected H-frame switches.
6. Rating shown is for bypass switches only. Transfer switch rating is 100kA.

All units are RMS Symmetrical Amperes.

All Withstand and Closing Rating (WCR) values are established by testing in accordance with UL 1008. For the latest raings, including transfer switch ratings when used with specific circuit breakers, see **ASCO Publication 1128** for more WCR information.

Application characteristics may permit higher WCRs for certain switch sizes. Contact ASCO Power Technologies for more information.

Contact ASCO for Service Entrance Switch ratings.

Power Knowledge

- UL 1008 Transfer Switch Withstand and Closing Ratings
- Performance Testing for Transfer Switches

Additional 7000 SERIES Transfer Switch Information

Transfer Switches	Controls	Technical Information	
Bypass-Isolation	Group 5 Controller & Power Control Center	Drawings	Withstand and Closing Ratings
Service Entrance		Wiring Diagrams	Weights, Dimensions & Ordering Info

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Publication 3040 R20. Printed in the U.S.A.