

600A Automatic Transfer Switch

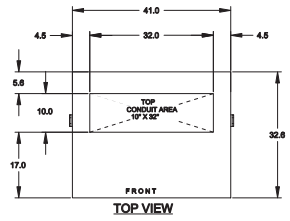
Transfer Switch Details

#2	ATS	AMPS: 0600	QTY: 3
Product	: Series 300	Catalog Number	: J03AUSB30600NGXM
Service Voltage / Hz	: 480V/60Hz	Optional Accessories	: 11BE,44G
Bypass Isolation	: Not Applicable	Product Description	: 300 Series, Automatic Service Entrance Transfer Switch
No. of Switched Poles: 4	: 4	Neutral Configuration	: Switched [B]
Withstand Rating:	: See WCR Table Below	No. of Cables & Lug Size	: See Applicable Outline Drawing
Frame = J, Switch Rating = 0600, Series = 300			
Enclosure	: 3R(M)-UL Type 3R secure double door enclosure (See Disclaimer 3)	Service	: Three Phase, 4-wire
Extended Warranty	: Not Included	Markings	:

#	ACCESSORY DESCRIPTIONS	
	Accessory Code	Description
1	11BE	Adds the following features to the Group G controller: (1) Serial RS-485 Modbus Communications (2) Multi-Schedule Engine Exerciser (3) a 300 Entry Event Log and (4) a common alarm output function. When applied on 3-phase systems it also enables: (1) 3-Phase Emergency Source VLL sensing (2) Phase Rotation Monitoring (3) Emergency Source VLL Unbalance Monitoring.
2	44G	Strip heater w/ thermostat, wired to load terminals: 208-600 volts

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GENERAL NOTES

- FLOOR MOUNTED ENCLOSURE.
TYPE 3R CONSTRUCTED FROM CODE GAUGE STEEL.
FINISH: TYPE 3R, ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.
TYPE 3RX EXTERIOR CONSTRUCTED FROM CODE GAUGE STAINLESS STEEL.
(R) EXTERIOR CONSTRUCTED FROM TYPE 304 STAINLESS STEEL.
(S) EXTERIOR CONSTRUCTED FROM TYPE 316 STAINLESS STEEL.
- EXTERIOR DOORS HAVE PADLOCKABLE HANDLES WITH 3-POINT LATCH
- DESIGNED FOR FRONT ACCESS ONLY.
- RECOMMENDED CLEARANCES: FRONT: 30" REAR: NONE.
- LIFTING PLATES: SECTIONS ARE SUPPLIED WITH LIFTING PLATES. INSPECT PLATES FOR DAMAGE AND TORQUE BOLTS TO 45 FT LBS BEFORE USE. REFER TO ANSINEMA PB 2.1 FOR PROPER HANDLING OF EQUIPMENT. AFTER INSTALLATION OF SECTION, REMOVE LIFTING PLATES. REINSTALL BOLTS INTO EXTERIOR HOLES AND TORQUE TO APPROXIMATELY 20 FT LBS.
- SECTION 1 & SECTION 1T SHIP AS 1 UNIT.
- CENTER OF GRAVITY.
- APPROXIMATE WEIGHT: 1383 LBS (627 KG).

SYSTEM NOTES

- SYSTEM RATING: 600 AMPS, 3φ, 4W OR 1φ, 3W.
SHORT CIRCUIT RATING: 50,000 RMS SYM @ 480V.
THE EMERGENCY SOURCE MUST BE PROTECTED BY A REMOTE OVERCURRENT PROTECTION DEVICE AS LISTED ON THE MARKINGS ON THE TRANSFER SWITCH.
- ALL BUS IS SILVER-PLATED COPPER, BASED ON 1000A PER SQ. IN. DENSITY.
- GROUND: 20% RATED.
- NEUTRAL: 100% RATED.
- APPLICABLE LABEL(S): U.L. 891, SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.

TRANSFER SWITCH

- J FRAME AUTOMATIC TRANSFER SWITCH.
- TRANSFER SWITCH RATING: 600 AMPS
SHORT CIRCUIT RATING WHEN PROTECTED BY A CIRCUIT BREAKER
TIME RESPONSE, MAXIMUM 0.05 SECONDS:
42,000 RMS SYM @ 480V (SWITCHED AND SOLID NEUTRAL).
35,000 RMS SYM @ 480V (OVERLAPPING NEUTRAL).
SPECIFIC BREAKER RATING: 50,000 RMS SYM @ 480V.
- A FULL RATED NEUTRAL CONNECTION FOR EACH SOURCE AND THE LOAD IS OPTIONAL. WHEN PROVIDED IT IS IN ONE OF THE FOLLOWING FORMATS.
A. SOLID NEUTRAL
B. SWITCHED NEUTRAL POLE
C. OVERLAPPING NEUTRAL POLE
- U.L. 1008

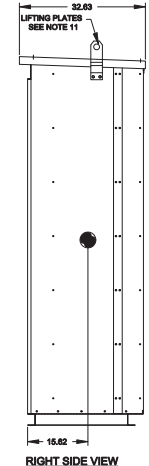
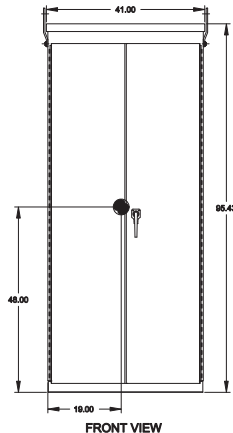
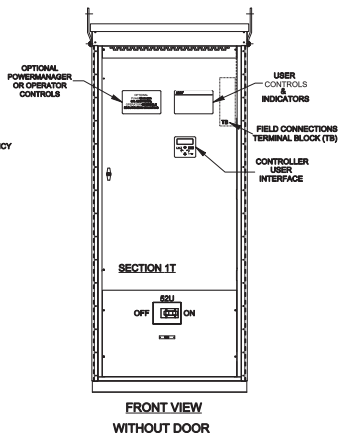
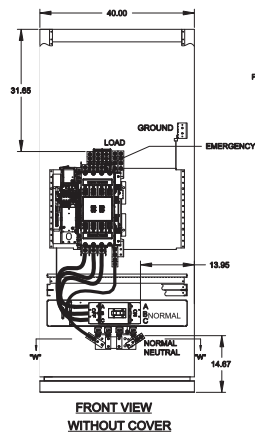
TERMINATIONS 600A

- SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
NORMAL: (2) 20 - 500MCM PER PHASE & NEUTRAL
LOAD: (2) #2 - 600MCM PER PHASE & NEUTRAL
EMERGENCY: (2) #2 - 600MCM PER PHASE & NEUTRAL
GROUND: (6) 1/0 - 600MCM
A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
- OPTIONAL LUGS MAY BE SUPPLIED.

CIRCUIT BREAKER: ITEM 52U

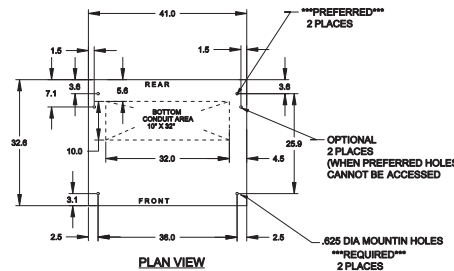
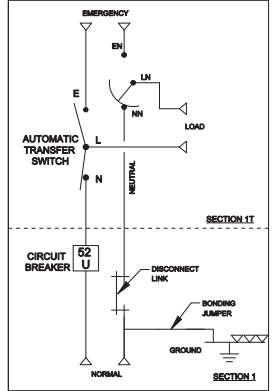
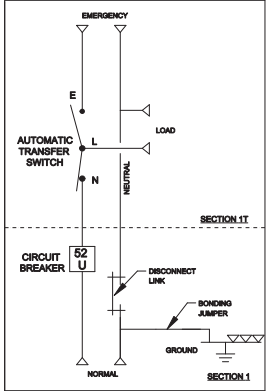
- SQUARE "D" 80% RATED TYPE "LJL", 600AF/800AT MANUALLY OPERATED, ELECTRONIC TRIP WITH LONG DELAY AND INSTANTANEOUS TRIP SETTINGS.
SHORT CIRCUIT RATING: AIC 65,000 RMS SYM @ 480V.
- U.L. 489

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ONE LINE DIAGRAMS



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B	307450	NK	MCH	02/01/24
SEE ECH				
A	309920	NK	MCH	12/02/23
SEE ECH				
==	200200	REP	RM	07-14-21
==				NEW ISSUE

PROJECT NAME:		MOUNTING	
OUTLINE:		JAUS 600A, L.L. SERVICE ENTRANCE BREAKER ON NORMAL TYPE 3R/3RX, 86 X 41 X 33, SECTION 1 AND 1T	
DESIGNED BY:	DATE:	MANUFACTURING TO BE MADE IN ACCORDANCE WITH EACH PROCEDURE BY NAME.	ASSEMB. REF. NO.:
CHECKED BY:	DATE:	FOR PLASTIC PARTS SEE REFERENCE.	COMPUTER GENERATED DRAWING
PROJECT APPROVAL:	DATE:	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE: 11 DS
FINAL APPROVAL:	DATE:	ASCOPowerTechnologies, L.P. FLORHAM PARK, NEW JERSEY 07952 U.S.A.	DWG. NO.: 862678-058
			REV. DATE: 307450

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THREE PHASE WIRING FOR ASCO³⁰⁰ SERIES TRANSFER SWITCHES (J3ATS/J3NTS) 600 AMPERES WITH GROUP G CONTROLS

GENERAL INFORMATION

D

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

THE GROUP G CONTROLLER PROVIDES EITHER AUTOMATIC (ASATS) OR NON-AUTOMATIC (MANUAL) (SNTS) 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, 1RX, 2IG) 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 SNTS, SATS, SNTS & SNTS, J-DESIGN 150-800 A TRANSFER SWITCHES, PART NUMBER 381333-404.

C

ENGINE CONTROL CONTACTS

FEATURE 7: A FEATURE 8: ONE SET OF FORM C CONTACTS "NR" (FEAT. 7 INC. FEAT. 8 INC) 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 NC CONTACT (FEATURE 7).

AN ADDITIONAL SET OF ENGINE STARTING CONTACTS ARE AVAILABLE ON THE GROUP G CONTROLLER WHEN THE FEATURE SETTING OF THE CONTROLLER OUTPUT CONTACTS "OP1" IS SET TO OPERATE AS "NR2".

ADDITIONAL, OPTIONAL ENGINE STARTING CONTACTS "NR2" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 16RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" AND/OR "OP3" WILL PROVIDE 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 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, OPTIONAL LOAD DISCONNECT CONTACTS "FEATURE 31" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 16RX (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.

B

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 16RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "TLY" (EMERGENCY SOURCE AVAILABLE) AND "TLP" (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.

A

NOTES

- SWITCH SHOWN DE-ENERGIZED CONNECTED TO NORMAL SOURCE.
- DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUB. ICS 1, PART 1-101A.
- ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.
- INDICATES CUSTOMER CONNECTION POINTS.
- INDICATES FACTORY CONNECTION POINTS.
- CONNECTION POINTS THAT HAVE BOTH CUSTOMER CONNECTIONS AND FACTORY CONNECTIONS ARE SHOWN OPEN AS CUSTOMER CONNECTION POINTS.
- 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.
- AN OPERATOR'S MANUAL IS FURNISHED WITH EACH AUTOMATIC TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE SWITCH.
- GROUND STRAP ON CONTROL PANEL IS AFFIXED TO CHASSIS (ENCLOSURE) AT LOWER LEFT CONTROL PANEL MOUNTING STUD.

COMMON ALARM & NOT IN AUTO SIGNALING FEATURES

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

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

WHEN OPTIONAL ACCESSORY 11BE "SOFTWARE BUNDLE" IS PART OF THE TRANSFER SWITCH ASSEMBLY, "OP1" MAY ALTERNATIVELY BE 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 16RX (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 8 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 16RX (RELAY EXPANSION MODULE) OR
- OPTIONAL ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY MODULE)

EXTERNAL 24 VDC POWER SUPPLY 100%
AN EXTERNAL 24 VDC POWER SUPPLY MAY BE USED TO POWER THE CONTROLLER WHEN ACCESSORY 16RX (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 "1C". ADDITIONALLY, JUMPERS MUST BE RECONFIGURED ON ACCESSORY 16RX (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" NC CONTACT SWITCHES CUSTOMER PROVIDED 24 VDC FROM THE EXTERNAL POWER SUPPLY TO THE CONTROLLER.

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

ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY)
WHEN OPTIONAL ACCESSORY 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 ASSEMBLY 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 300J) - 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.

EXTERNAL POWER SUPPLY COMPATIBILITY

USE OF AN EXTERNAL POWER SUPPLY IS USEFUL WHEN REQUIRED TO EXTEND THE FOLLOWING CONTROLLER TIME DELAYS BEYOND 8 SECONDS:

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- OPTIONAL ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY MODULE)

EXTERNAL 24 VDC POWER SUPPLY 100%
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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" NC CONTACT SWITCHES CUSTOMER PROVIDED 24 VDC FROM THE EXTERNAL POWER SUPPLY TO THE CONTROLLER.

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

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

TS FRAME	CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE	EXPLANATION OF CATALOG NUMBER CODES	
									NEUTRAL TYPE	VOLTAGE CODES 3 PHASE (3 OR 4 WIRES) OR 2P
J	SATS	A	3	600		G	X		BLANK FOR NONE	BLANK FOR OPEN TYPE
	SNTS	B								

CODE	DESCRIPTION	CODE	TYPE	DESCRIPTION	ENCLOSURE CODES	
					CODE	TYPE
A	SOLID SWITCHING			OPEN TYPE (NO ENCLOSURE) GENERAL PURPOSE, INDOOR		
B		C	1	INDOOR/OUTDOOR, WATER TIGHT & DUST TIGHT TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)		
		D	3R	INDOOR, INDUSTRIAL ENVIRONMENTS, OIL TIGHT & DUST TIGHT		
		F	4			
		G	4X			
		H	12			
		J		(SECURE ENCLOSURES)		
		K	3R	INDOOR/OUTDOOR, WATER TIGHT & DUST TIGHT TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)		
		L	4			
		M	4X			
		N	12			
		O		(SECURE ENCLOSURES)		
		P	3R	INDOOR, INDUSTRIAL ENVIRONMENTS, OIL TIGHT & DUST TIGHT		
		Q	4			
		R	4X			
		S	12			

CATALOG NUMBER CERTIFIED TO ASCO S.O.

DATE _____

FORM REV. G

PROJECT NAME: _____

WIRING _____ DIAGRAM _____

300 SERIES J3ATS/J3NTS, THREE PHASE 600 AMPERS

"J" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

ASCO P OVER TECHNOLOGIES, L.P. FLORENCE, MISSOURI 64508 U.S.A.

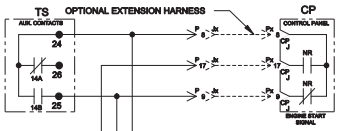
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REV. G INC. 278668

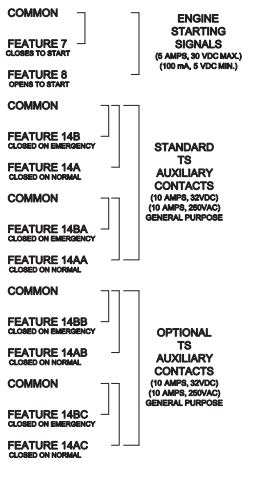
1 of 6

G	278668	TR	8K	06/2018
F	278211	TR	8K	10/18/18
E	268406	MKA	JPB	04/10/17
D	242380	BDH	BDH	4/14/14
C	242325	AE	AE	10/18/14
B	242325	BDH	BDH	6/6/13
A	242380	BDH	BDH	6/6/13

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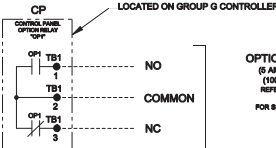


LOCATED ON FRONT OF TRANSFER SWITCH FRAME
TB (FIELD CONNECTIONS), WIRE RANGE: 22-12 AWG



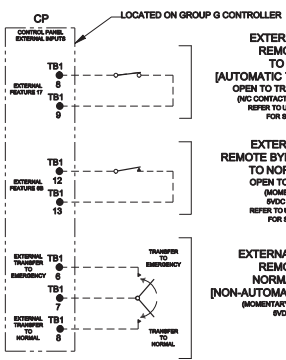
C

CONTROLLER OPTION RELAY "OP1" (STANDARD)



OPTION RELAY "OP1"
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 88133-400
FOR SETTING INFORMATION.

CONTROLLER REMOTE CONTROL FEATURES



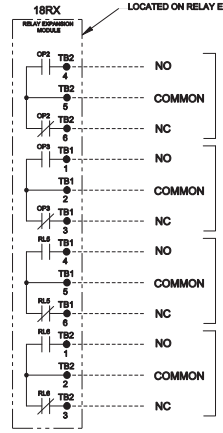
EXTERNAL FEATURE 17
REMOTE TRANSFER
TO EMERGENCY
[AUTOMATIC TRANSFER TYPE ONLY]
OPEN TO TRANSFER TO EMERGENCY
(N/C CONTACT, 5VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PH 88133-400
FOR SETTING INFORMATION.

EXTERNAL FEATURE 6B
REMOTE BYPASS OF RETRANSFER
TO NORMAL TIME DELAY
OPEN TO BYPASS TIME DELAY
(N/C CONTACT, 5VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PH 88133-400
FOR SETTING INFORMATION.

EXTERNAL MANUAL TRANSFER
REMOTE TRANSFER TO
NORMAL OR EMERGENCY
[NON-AUTOMATIC TRANSFER TYPE ONLY]
BIBRENTARY SPST, CENTER-OFF CONTACT,
(5VDC LOW ENERGY RATING)

A

OPTIONAL ACCESSORY 1BRX (RELAY EXPANSION MODULE)

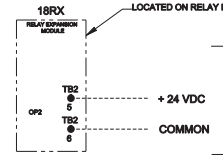


OPTION RELAY "OP2"
AS OUTPUT RELAY
SET JUMPERS
J1: 1 & 2-4
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 88133-400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 88133-400
FOR SETTING INFORMATION.

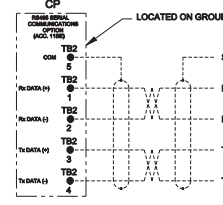
EMERGENCY SOURCE
ACCEPTABLE
SIGNAL
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)

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



OPTION RELAY "OP2"
AS EXTERNAL POWER
SUPPLY INPUT
"IG"
SET JUMPERS AS FOLLOWS:
REMOVE JUMPERS "1" & 2 & "3" & 4
CONNECT JUMPERS "1" & 3 & "3" & 4
(24 VDC NOM., 15 W MAX.)
INPUT RANGE: 21.6 VDC MIN
27.8 VDC MAX.
REFER TO USER'S GUIDE PH 88133-400
FOR SETTING INFORMATION.

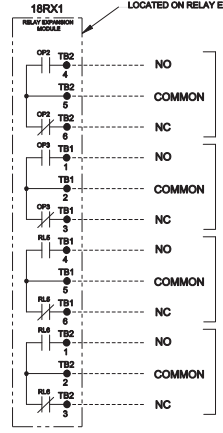
RS485 SERIAL COMMUNICATIONS OPTION
AVAILABLE WITH OPTIONAL ACCESSORY 11BX, ADVANCED-FUNCTION SOFTWARE BUNDLE
REFER TO USER'S GUIDE PH 88133-400 FOR SETTING INFORMATION.



TO OTHER ASCO SERIAL
COMMUNICATIONS
DEVICES

- NOTES:
- EARTH GROUND SHIELD AT HOST DEVICE ONLY.
 - FIELD WIRING: USE UL LISTED, STRANDED, TWISTED PAIR, OVERALL FOL SHIELD WITH STRANDED DRAIN WIRE SUITABLE FOR R9422 EQUIVALENT TO: (STANDARD 90°C) BELDEN 9842 OR 9829 OR ALPHA 6223C OR 6222C (PLENUM RATED) BELDEN 69729 OR 62729 OR ALPHA 6962

OPTIONAL ACCESSORY 1BRX1 (SECOND RELAY EXPANSION MODULE)



OPTION RELAY "OP2"
SET JUMPERS
J1: 1 & 2-4
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 88133-400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(5 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 88133-400
FOR SETTING INFORMATION.

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

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

G	27868	TR	IK	05/03/18
SEE ECH				
F	27821	TR	IK	10/18/18
SEE ECH				
E	26846	MKA	JPB	04/10/17
SEE ECH				
D	26120	AJ	MM	10/17/14
SEE ECH				
C	24770	BDH	BDH	4/14/14
SEE ECH				
B	24628	AE	IK	12/18/14
SEE ECH				
A	24280	BDH	BDH	5/20/13
SEE ECH				
--	24255	BDH	BDH	5/6/13
ISSUE				

PROJECT NAME: _____

WIRING _____ DIAGRAM _____

300 SERIES JSATS/JSNTS, THREE PHASE 600 AMP

"J" FRAME, GROUP G CONTROLS

DESIGNED BY	SDH	DATE	08/19	MANUFACTURING TOLERANCES TO BE ACCORDANCE WITH ASCO PROCEDURES BY REV. FOR PLASTIC PARTS SEE 88133-400.	ASCO, REF. NO.	COMPUTER GENERATED DRAWING
CHECKED BY	SDH	DATE	08/19	PROPERTY OF ASCO POWER TECHNOLOGIES, LLC. THIS DRAWING IS LOANED TO YOU FOR YOUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE	1:1
APPROVED BY	SDH	DATE	08/19		DRWG. NO.	978745
DATE	08/19				ISSUE	G

ASCO P. OVER TECHNOLOGIES, L.P.
FLOOR 1700, NEW JERSEY 07090 U.S.A.

REV. G

D

C

B

A

8 7 6 5 4 3 2 1

MAIN POWER POLES

TS OPERATOR CIRCUIT

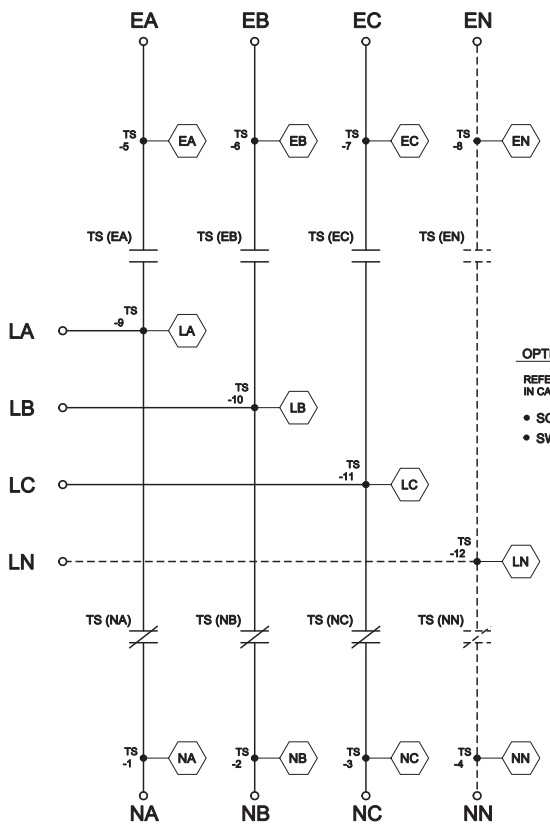
EMERGENCY

NORMAL

D
C
B
A

D
C
B
A

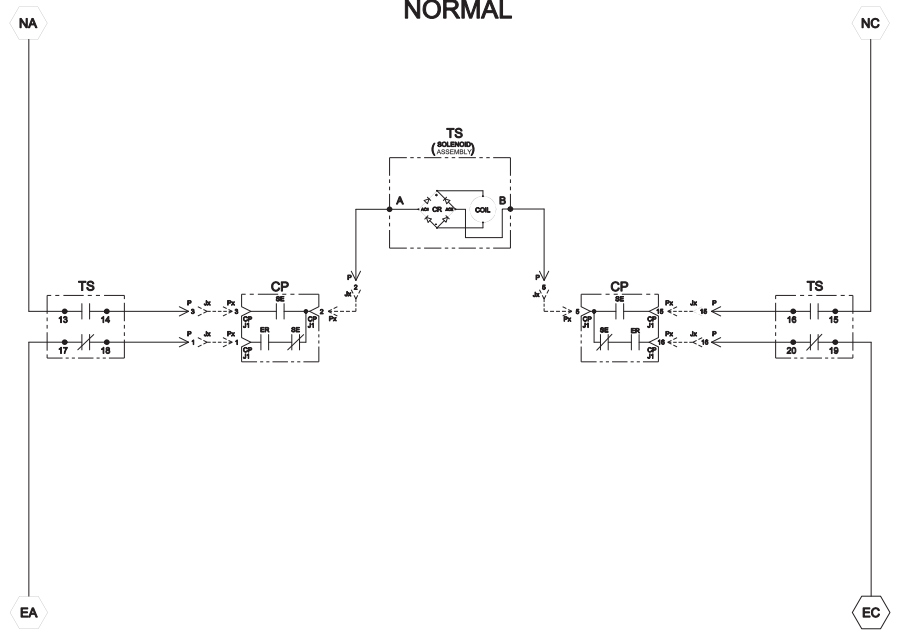
LOAD



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

- SOLID BUS PLATE
- SWITCHING CONTACTS

NOTE:
ATS SHOWN CLOSED ON NORMAL SOURCE.



TS CONTROL CONTACTS	
SOLENOID POSITION	
TS	SOLENOID POSITION
	CLOSED BEFORE NORMAL TOCK > < BEFORE CLOSED EMERG
13-14	
15-16	
17-18	
19-20	

TDC (TOP DEAD CENTER)
TRIPPER SWITCH TEST & ADJUSTMENT PROCEDURES
SPECIFIED CONTROL CUT-OFF (CONTACT OPENING)
SETTING.

G	276985	TR	BK	05/03/18
F	276211	TR	BK	10/18/18
E	266405	MKA	JPB	04/10/17
D	261210	AJ	MM	10/17/14
C	247770	SDH	BDH	4/14/14
B	246528	AE	BK	12/18/14
A	242880	SDH	BDH	5/20/13
	242595	SDH	BDH	5/21/13
	181646			

PROJECT NAME:		DIAGRAM	
WIRING 300 SERIES JSATS/JNITS, THREE PHASE 600 AMPS			
"J" FRAME, GROUP G CONTROLS			
DESIGNED BY	DATE	MANUFACTURING TOLERANCES TO BE BY	ASSEMB. REF. NO.
SDH	5/17/13	ADHERING WITH ASCO PROCEDURES BY HAND.	
CHECKED BY	DATE	FOR PLASTIC PARTS SEE 8P-0488	COMPUTER GENERATED DRAWING
SDH	5/17/13		
PROJECT APPROVAL		PRIORITY OF ASCO POWER TECHNOLOGIES, LLC IS PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE: 4:00 DS
DATE			978745
SDH	5/17/13		REV. G
		ASCO POWER TECHNOLOGIES, L.P. FLOORING PARK, NEW JERSEY 07068 U.S.A.	REV. G
			REV. G

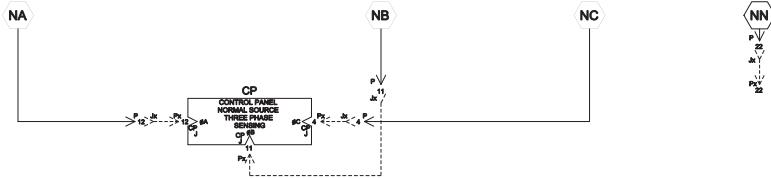
8 7 6 5 4 3 2 1

A

3 OF 8

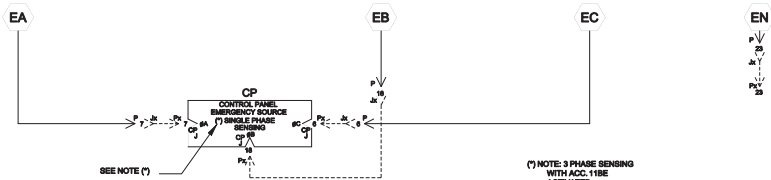
NORMAL SOURCE CIRCUITS

NORMAL



EMERGENCY SOURCE CIRCUITS

EMERGENCY

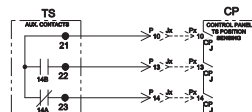


LOAD TERMINAL CIRCUITS

LOAD

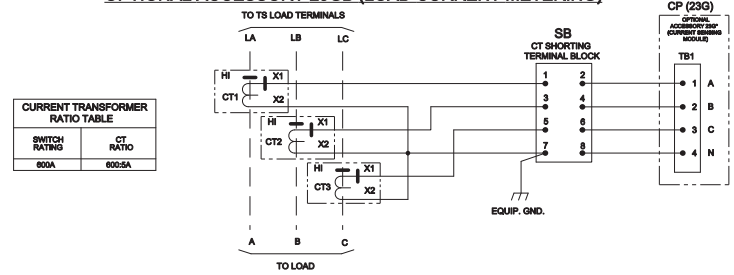


CONTROL SIGNALS & INDICATION



ADDITIONAL CIRCUITS

OPTIONAL ACCESSORY 23GB (LOAD CURRENT METERING)



G	276985	TR	IK	05/03/18
	SEE ECH			
F	276214	TR	IK	10/18/18
	SEE ECH			
E	266405	MKA	JPB	04/10/17
	SEE ECH			
D	261210	AJ	MM	10/17/14
	SEE ECH			
C	247770	SDH	BDH	4/14/14
	SEE ECH			
B	246325	AE	IK	10/18/14
	SEE ECH			
A	242380	SDH	BDH	5/20/13
	SEE ECH			
	242395	SDH	BDH	5/21/13
	ISSUE			

PROJECT NAME:		REV. TO	REV. NO.	BY	APP.	DATE
WIRING		DIAGRAM				
300 SERIES JSATS/JNITS, THREE PHASE 600 AMPS				THIRD ANGLE PROJECTION		
"J" FRAME, GROUP G CONTROLS				COMPUTER GENERATED DRAWING		
DESIGNED BY	SDH	DATE	05/03/18	MANUFACTURING TOLERANCES TO BE AS ACCORDANCE WITH ASCO PROCEDURES BY USER. FOR PLASTIC PARTS SEE 89-0088	ASCO REF. NO.	
CHECKED				PRIORITY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE	1:1
APPROVAL					DRWG. NO.	978745
					REV.	G
					ISSUE	IC: 276568
						SHEET 4 OF 6

