

ATS Submittal

Transfer Switch Details

#4	ATS	AMPS: 2000	QTY: 2
Product	: Series 300	Catalog Number	: G03AUSB32000NGXM
Service Voltage / Hz	: 480V/60Hz	Optional Accessories	: 11BE,44G,119M1
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 = G, Switch Rating = 2000, 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
3	119M1	Internally powered Energy Reducing Maintenance Switch (ERMS) ERMS lowers the instantaneous pickup setting, utilizes a faster acting instantaneous trip function, or activates an alternate set of trip settings on a breaker to provide reduced arc flash incident energy. To be used on service entrance rated switches containing Square D breakers with MicroLogic 5.0/6.0 P/H trip units Customer is responsible for all trip unit settings.

D

C

B

A

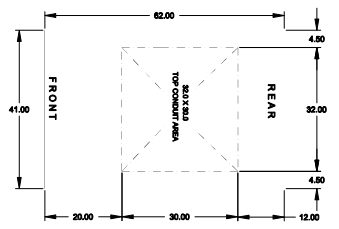
D

C

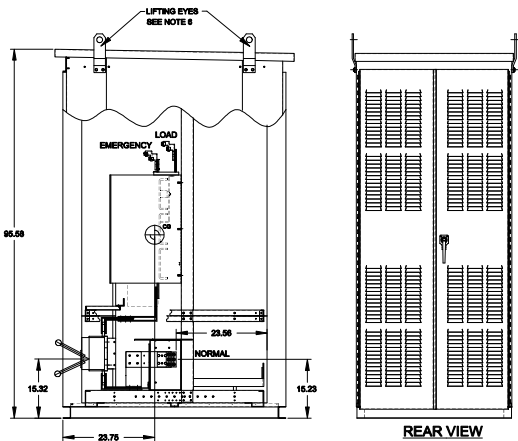
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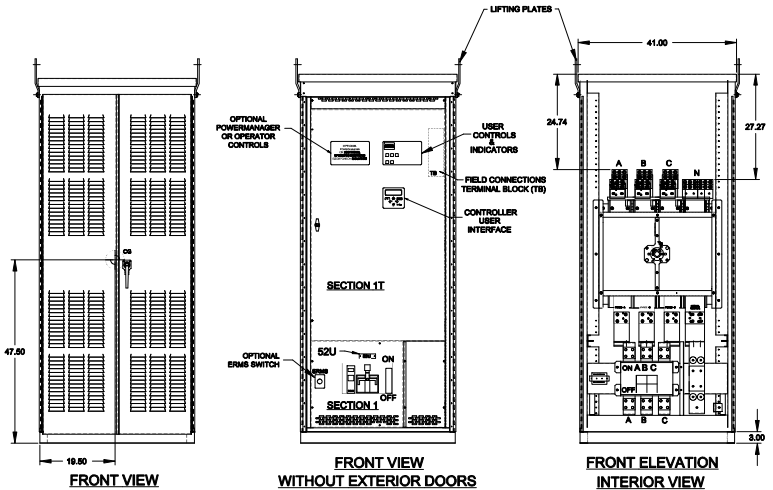
8 7 6 5 4 3 2 1



TOP VIEW



RIGHT SIDE VIEW



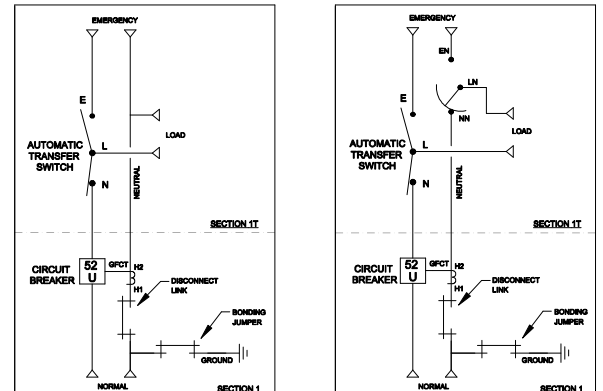
FRONT VIEW
WITHOUT EXTERIOR DOORS

FRONT ELEVATION
INTERIOR VIEW

FRONT VIEW

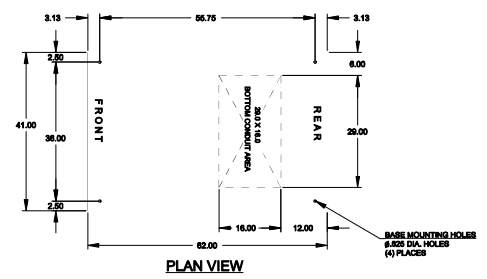
REAR VIEW

ONE LINE DIAGRAMS



(WITH SOLID NEUTRAL)

(WITH SWITCHED/OVERLAPPING NEUTRAL)



PLAN VIEW

BASE MOUNTING HOLES
ALSO DIA HOLES
(4) PLACES

GENERAL NOTES

1. 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.
(B) EXTERIOR CONSTRUCTED FROM TYPE 316 STAINLESS STEEL.
2. EXTERIOR DOORS HAVE PADLOCKABLE HANDLES WITH 3-POINT LATCH
3. DESIGNED FOR FRONT & REAR ACCESS.
4. RECOMMENDED CLEARANCES: FRONT: 36" REAR: 36"
5. EXTERIOR VENTS:
1000A - 1600A: NO VENTS.
2000A: VENTS ARE SUPPLIED WITH POLYESTER DUST FILTERS.
6. LIFTING PLATES: SECTIONS ARE SUPPLIED WITH LIFTING PLATES. INSPECT PLATES FOR DAMAGE AND TORQUE BOLTS TO 45 FT LBS BEFORE USE. REFER TO ANSINEMA PG 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.
7. CENTER OF GRAVITY
8. APPROXIMATE WEIGHT : 2400 Lbs

SYSTEM NOTES

1. SYSTEM RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS, 2000 AMPS, 3p, 4W OR 1p 3W.
SHORT CIRCUIT RATING: 65,000 RMS SYM AMPERES @ 480V.
THE EMERGENCY SOURCE INPUT MUST BE PROTECTED BY A REMOTE OVERCURRENT PROTECTION DEVICE AS LISTED ON THE MARKINGS ON THE TRANSFER SWITCH.
2. ALL BUS IS SILVER-PLATED COPPER, BASED ON 1000A PER SQ. IN. DENSITY.
3. GROUND: 20% RATED.
4. NEUTRAL: 100% RATED.
5. APPLICABLE LABEL(S): U.L. 891, SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.

TRANSFER SWITCH

1. G FRAME AUTOMATIC TRANSFER SWITCH.
2. TRANSFER SWITCH RATING: 1000 AMPS, 1200 AMPS, 1600 AMPS AND 2000 AMPS.
SHORT CIRCUIT RATING WHEN PROTECTED BY A CIRCUIT BREAKER
TIME RESPONSE, MAXIMUM 0.05 SECONDS: 65,000 RMS SYM @ 480V.
3. A FULL RATED NEUTRAL CONNECTION FOR EACH SOURCE AND THE LOAD IS OPTIONAL WHEN PROVIDED IT IS IN ONE OF THE FOLLOWING FORMATS.
A. SOLID NEUTRAL
B. SWITCHED NEUTRAL POLE
C. OVERLAPPING NEUTRAL POLE
4. UL 1008

TERMINATIONS 1000A - 1200A

1. SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
NORMAL: (4) 1/0 - 600MCM PER PHASE & NEUTRAL
LOAD: (4) 1/0 - 600MCM PER PHASE & NEUTRAL
EMERGENCY: (4) 1/0 - 600MCM PER PHASE & NEUTRAL
GROUND: (12) 1/0 - 600MCM
2. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
3. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
4. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.

TERMINATIONS 1600A - 2000A

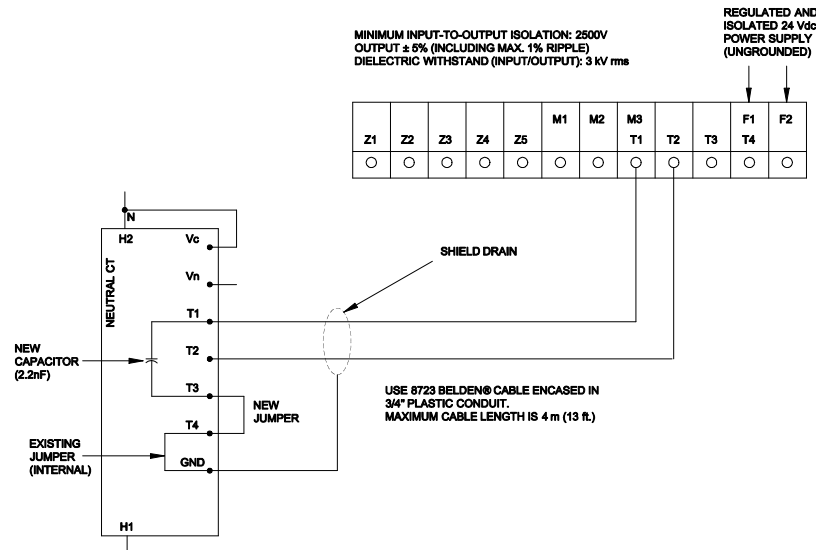
1. SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
NORMAL: (6) 1/0 - 600MCM PER PHASE & NEUTRAL
LOAD: (6) 1/0 - 600MCM PER PHASE & NEUTRAL
EMERGENCY: (6) 1/0 - 600MCM PER PHASE & NEUTRAL
GROUND: (18) 1/0 - 600MCM
2. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
3. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
4. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.

CIRCUIT BREAKER: ITEM 52U

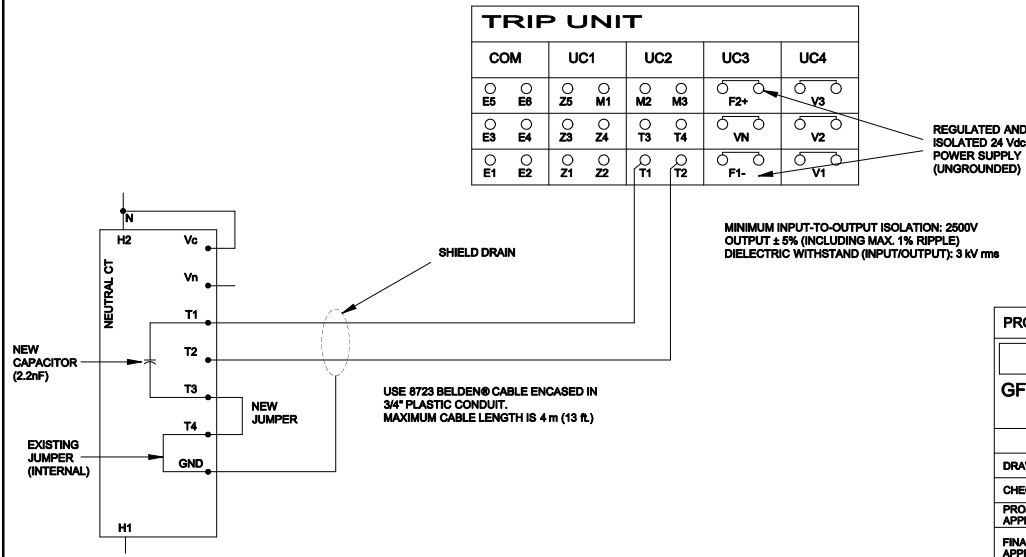
1. SQUARE "D" 80% RATED, TYPE "R" 3000AF/1000AT, 3000AF/1200AT, 3000AF/1800AT (PIN RUF38180U44A) OR 3000AF/2000AT (PIN RUF38200U44A)
STATIONARY MOUNTED, MANUALLY OPERATED BREAKER WITH LONG DELAY, SHORT DELAY, INSTANTANEOUS AND GROUND FAULT TRIP SETTINGS.
SHORT CIRCUIT RATING: AIC 65,000 RMS SYM @ 480V.
2. OPTIONAL 100% RATED BREAKER MAY BE SUPPLIED.
3. OPTIONAL ENERGY REDUCTION MAINTENANCE SETTING MAY BE SUPPLIED
4. U.L. 489

PROJECT NAME:		MOUNTING	
OUTLINE		GAUS 1000A - 2000A, RUF SE BREAKER	
TYPE 3R/3RX 95.5 X 41 X 62 SECTION 1 & 1T			
DESIGNED BY	DATE	MANUFACTURING TOLERANCES TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED.	APPROVED BY
CHECKED BY	DATE	FOR PLASTIC PARTS USE 30% MIN.	
APPROVED BY	DATE	PROPERTY OF ASCO POWER TECHNOLOGIES, L.P. NOT TO BE LOANED, REPRODUCED OR COPIED WITHOUT WRITTEN PERMISSION OF ASCO POWER TECHNOLOGIES, L.P.	
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WIRING SCHEMATIC FOR POWERPACT P- & R-FRAME CIRCUIT BREAKERS



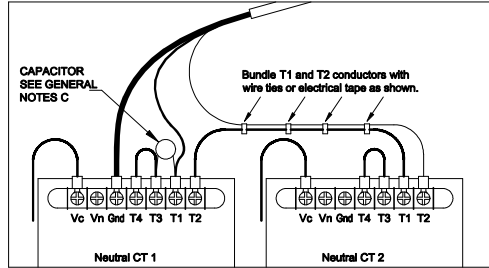
WIRING SCHEMATIC FOR 800-3000 A NT/NW CIRCUIT BREAKERS



F E D C B -	257850	TRD	MM	10/23/15
	SEE ECN			
	227403	TRD	WK	05/13/10
	SEE ECN			
	228452	AE	BK	03/16/10
	SEE ECN			
	223197	DAJ	BK	10/20/09
	211947	MJB	BK	2/7/07
	SEE ECN			
	167055	CC	BK	05/13/04
	ISSUE			

PROJECT NAME:				REV. TO SHEET	ECN NO.	BY	APP.	DATE
<div> <div> <p>THIRD ANGLE PROJECTION</p> </div> </div>								
GFS CIRCUITRY.								
DRAWN BY	CC	DATE	05/13/04	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-4-055			ASSEM. REF. NO.	
CHECKED	BK	DATE	05/13/04	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED. <div> <p>ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.</p> </div>				
PROJECT APPROVAL	BK	DATE	05/13/04					
FINAL APPROVAL								
				COMPUTER GENERATED DRAWING		SCALE		
						SIZE BS		
				DWG. NO.		758574		
				DRAWING REV.		ECN NO. 257850		SHEET 1 OF 2

WIRING SCHEMATIC FOR 3200-6000 A NW CIRCUIT BREAKERS

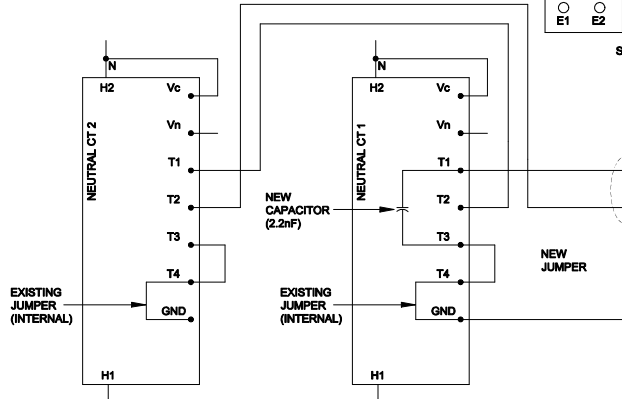


TRIP UNIT									
COM		UC1		UC2		UC3		UC4	
○ E5	○ E6	○ Z5	○ M1	○ M2	○ M3	○ F2+	○ V3		
○ E3	○ E4	○ Z3	○ Z4	○ T3	○ T4	○ VN	○ V2		
○ E1	○ E2	○ Z1	○ Z2	○ T1	○ T2	○ F1-	○ V1		

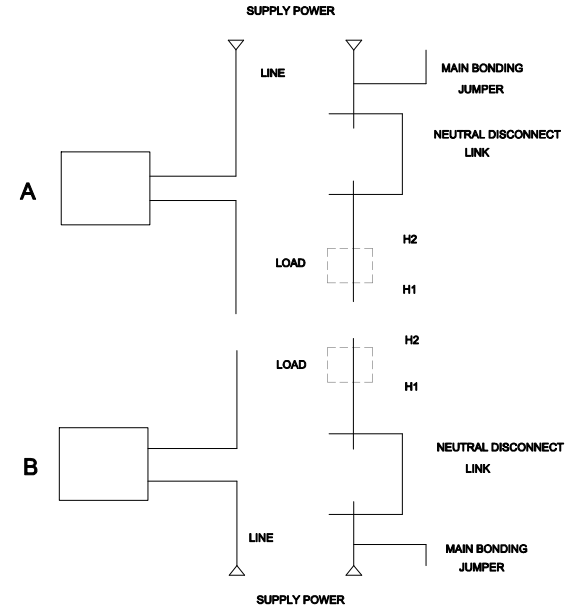
REGULATED AND ISOLATED 24 Vdc POWER SUPPLY (UNGROUNDING)

MINIMUM INPUT-TO-OUTPUT ISOLATION: 2500V
OUTPUT ± 5% (INCLUDING MAX. 1% RIPPLE)
DIELECTRIC WITHSTAND (INPUT/OUTPUT): 3 kV rms

USE 8723 BELDEN® CABLE ENCASED IN 3/4" PLASTIC CONDUIT.
MAXIMUM CABLE LENGTH IS 4 m (13 ft.)



LINE DIAGRAM FOR NW BREAKER



F	257650	TRD	MM	10/23/15
	SEE ECN			
E	227403	TRD	WK	05/13/10
	SEE ECN			
D	226452	AE	BK	03/16/10
	SEE ECN			
C	223197	DAJ	BK	10/20/09
	SEE ECN			
B	211947	MJB	BK	2/7/07
	SEE ECN			
-	167055	CC	BK	05/13/04
	ISSUE			

GENERAL NOTES

- IF LOAD IS CONNECTED TO LOWER END OF CIRCUIT BREAKER, CONNECT THE LOAD NEUTRAL TO THE H1 END OF THE NEUTRAL CURRENT TRANSFORMER.
- IF SUPPLY POWER IS CONNECTED TO THE LOWER END OF THE CIRCUIT BREAKER, CONNECT THE SUPPLY NEUTRAL TO THE H1 END OF THE NEUTRAL CURRENT TRANSFORMER.
- CAPACITOR 2.2NF IS PROVIDED WITH CIRCUIT BREAKER.

PROJECT NAME:

REV. TO SHEET ECN NO. BY APP. DATE

GFS CIRCUITRY.



BY		DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005		ASSEM. REF. NO.	COMPUTER GENERATED DRAWING	
DRAWN BY	CC	05/13/04				SCALE	SIZE BS
CHECKED	BK	05/13/04	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			DWG. NO.	
PROJECT APPROVAL	BK	05/13/04				758574	
FINAL APPROVAL						DRAWING REV.	ECN NO. 257650 SHEET 2 OF 2

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