

ATS Submittal

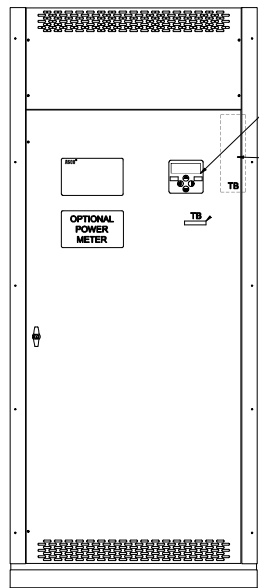
Transfer Switch Details

#8	ATS	AMPS: 3000	QTY: 4
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:	: See WCR Table Below	No. of Cables & Lug Size	: 12, 3/0 to 600 MCM
Frame = G, Switch Rating = 3000, 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	:

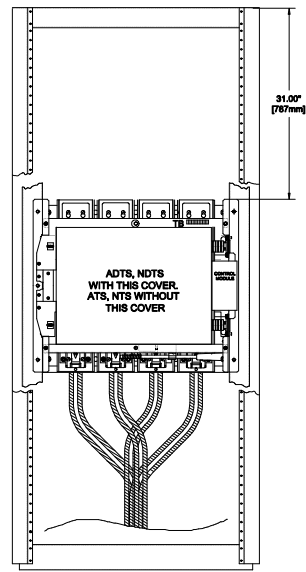
#	ACCESSORY DESCRIPTIONS	
	Accessory Code	Description
1	11BE	Adds the following features to the Group G controller: (1) Serial RS-485 Modbus Communications (2) Multi-Schedule Engine Exerciser (3) a 300 Entry Event Log and (4) a common alarm output function. When applied on 3-phase systems it also enables: (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

8 7 6 5 4 3 2 1
 OUTLINE FOR **ASCO** SERIES 2600-3000 AMPERE "G" FRAME (3ATS,3NTS,3NDTS,3ADTS) REAR CONNECTED TRANSFER SWITCHES TYPE 3R SECURE ENCLOSURE

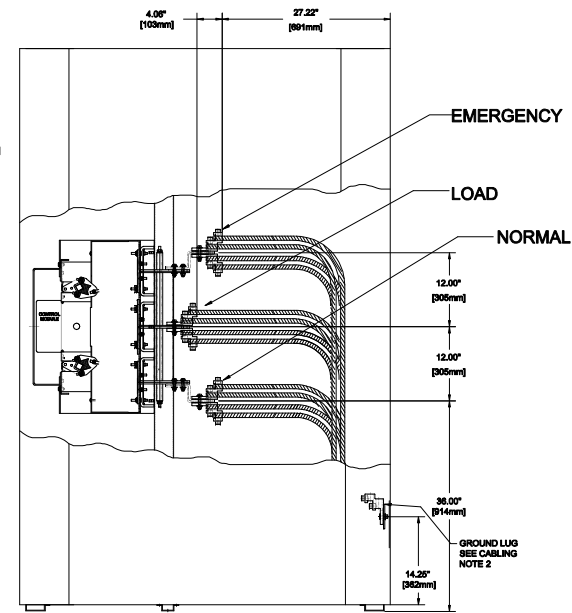
D
C
B
A



"FRONT VIEW WITH COVERS"



"FRONT VIEW W/O COVERS"



"RIGHT SIDE VIEW W/O N3R-SKINS"

E	30000	LY	9/12/04
SEE ECU			
D	26502	AB	TR 045022
SEE ECU			
C	27645	BK	BK 132719
SEE ECU			
B	26423	WK	BK 042916
SEE ECU			
A	24803	AE	BK 621114
SEE ECU			
==	24810	AE	BK 121013
==	18140		

PROJECT NAME:		REV. TO	REV. NO.	BY	APP.	DATE
OUTLINE		REV. TO	REV. NO.	BY	APP.	DATE
300 SERIES TS "G"		THIRD ANGLE PROJECTION				
2600-3000 AMP. "G" FRAME TYPE 3R SECURE		COMPUTER GENERATED DRAWING				
DRAWN BY	AE	DATE	MANUFACTURING TOLERANCES TO BE AS ACCORDANCE WITH ASCO PRACTICES SHALL BE MAINTAINED UNLESS OTHERWISE SPECIFIED.	ASCO REF. NO.	SCALE	MODE
CHECKED	BK	12/10/04	PROPERTY OF ASCO POWER TECHNOLOGIES, INC. IS HEREBY LOANED TO YOU. WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		1001395-003	DS
APPROVED	BK	12/10/04			1001395-003	
DATE					REV. E	REV. 300000
						2 OF 2

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

GENERAL INFORMATION

D

THIS WIRING APPLIED 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 (11P, 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 3A18 & 3A19, G-DESIGN 1000-3200 A TRANSFER SWITCHES, PART NUMBER 381333-406.

C

ENGINE CONTROL CONTACTS

FEATURE 2 A FEATURE IS ONE SET OF FORM C CONTACTS "NR" (FEAT. 7 INC. FEAT. 8 INC) THAT CHANGE POSITION ON EXPIRATION OF THE FEATURE 1G, 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.

B

LOAD DISCONNECT FEATURE

FEATURE 31: INCLUDES SUB-FEATURES 31F, 31G, 31M, 31H

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
- 31H - 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 31H.

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.

A

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.

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. INDICATES CUSTOMER CONNECTION POINTS.

4. INDICATES FACTORY CONNECTION POINTS.

5. CONNECTION POINTS THAT HAVE BOTH CUSTOMER CONNECTIONS AND FACTORY CONNECTIONS ARE SHOWN BOTH AS CUSTOMER CONNECTION POINTS.

6. 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.

7. AN OPERATOR'S MANUAL IS FURNISHED WITH EACH AUTOMATIC TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE SWITCH.

8. GROUND STRAP ON CONTROL PANEL, IS AFFIXED TO CHASSIS (ENCLOSURE) AT LOWER LEFT CONTROL PANEL MOUNTING STUD.

COMMON ALARM & NOT IN AUTO SIGNALING FEATURES

A SET OF FORM C CONTACTS IS PROVIDED ON THE GROUP G CONTROLLER AS "OP1". THE FEATURE SETTING OF "OP1" CAN BE SET TO OPERATE THE CONTACTS AS "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 1G - 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 11P (UNINTERRUPTIBLE POWER SUPPLY MODULE)

EXTERNAL 24 VDC POWER SUPPLY "10C"

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 "10C". 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.

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.

CATALOG NUMBER SUFFIXES				EXPLANATION OF CATALOG NUMBER CODES							
TS	CATALOG FRAME	NEUTRAL TYPE	PHASE TYPE	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE	NEUTRAL TYPE	VOLTAGE CODES # PHASE (G OR W) WIRES	ENCLOSURE CODES
				1000	C	D		C	A	208	BLANK
				1200	E	E		F	B	220	C 1
				1600	F	F		G		230	
				2000	G	G		H		240	
				2600	H	H		I		277	
				3000	I	I		J		300	
				3200	J	J		K		415	
					K	K		L		440	
					L	L		M		460	
					M	M		N		480	
					N	N		O		500	
					O	O		P		575	
					P	P		Q		600	
					Q	Q		R			

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 6 VDC LOW ENERGY CIRCUIT.

EXTERNAL FEATURE 1J: 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 9A "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 9B: REMOTE BYPASS OF RETRANSFER TO NORMAL TIME DELAY - REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT BYPASSES FEATURE 9A "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

OPTIONAL ACCESSORY 11P (UNINTERRUPTIBLE POWER SUPPLY MODULE)

OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE)

OPTIONAL ACCESSORY 23GB (LOAD CURRENT METERING)

OPTIONAL ACCESSORY 11BE (SOFTWARE BUNDLE)

CATALOG NUMBER CERTIFIED TO

ASCO S.O.

BY _____

DATE _____

FORM REV J

PROJECT NAME _____

WIRING _____

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

THIRD ANGLE PROJECTION

COMPUTER GENERATED DRAWING

SCALE: _____

DATE: _____

1001682

ASCO P. OVER TECHNOLOGIES, L.P. FLORENCE, TEXAS, 75761-0908 U.S.A.

270211 TR BK 10/16/18

280913 TR BK 10/17/17

284970 TR BK 06/28/18

289247 MPP BK 12/29/14

247772 SDH BK 07/14/14

247946 TR BK 3/4/14

249820 AE BK 05/16/14

249211 AE BK 01/07/14

249869 BK BK 12/29/13

249372 BK BK 10/28/13

270211 TR BK 10/16/18

280913 TR BK 10/17/17

284970 TR BK 06/28/18

289247 MPP BK 12/29/14

247772 SDH BK 07/14/14

247946 TR BK 3/4/14

249820 AE BK 05/16/14

249211 AE BK 01/07/14

249869 BK BK 12/29/13

249372 BK BK 10/28/13

1001682

ASCO P. OVER TECHNOLOGIES, L.P. FLORENCE, TEXAS, 75761-0908 U.S.A.

270211 TR BK 10/16/18

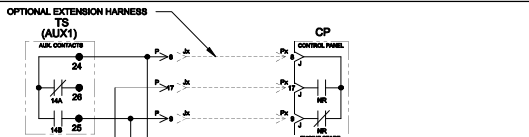
8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

FIELD CONNECTIONS



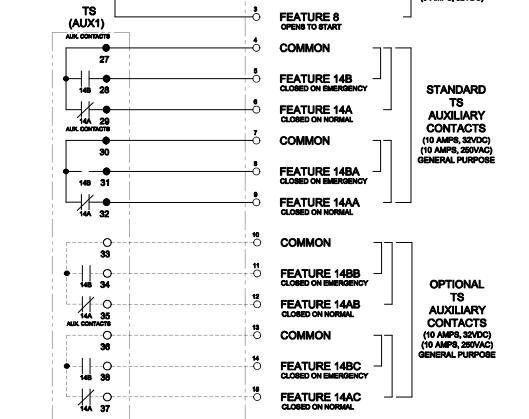
LOCATED ON FRONT OF TRANSFER SWITCH FRAME

TB (FIELD CONNECTIONS), WIRE RANGE: 22-12 AWG

ENGINE STARTING SIGNALS (6 AMP, 28VDC)

STANDARD TS AUXILIARY CONTACTS (10 AMP, 28VDC) (10 AMP, 250VAC) GENERAL PURPOSE

OPTIONAL TS AUXILIARY CONTACTS (10 AMP, 28VDC) (10 AMP, 250VAC) GENERAL PURPOSE



CONTROLLER OPTION RELAY "OP1" (STANDARD)

LOCATED ON GROUP G CONTROLLER

OPTION RELAY "OP1"
(6 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 81328-400
FOR SETTING INFORMATION.

CONTROLLER REMOTE CONTROL FEATURES

LOCATED ON GROUP G CONTROLLER

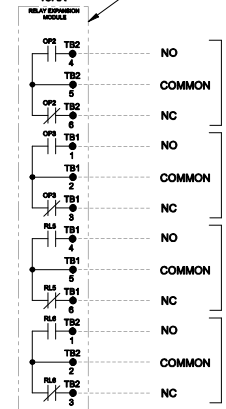
EXTERNAL FEATURE 17
REMOTE TRANSFER
TO EMERGENCY
[AUTOMATIC TRANSFER TYPE ONLY]
OPEN TO TRANSFER TO EMERGENCY
(NO CONTACT, 8VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PH 81328-400
FOR SETTING INFORMATION.

EXTERNAL FEATURE 88
REMOTE BYPASS OF RETRANSFER
TO NORMAL TIME DELAY
OPEN TO BYPASS TIME DELAY
(SECONDARY NO CONTACT,
8VDC LOW ENERGY RATING)
REFER TO USER'S GUIDE PH 81328-400
FOR SETTING INFORMATION.

EXTERNAL MANUAL TRANSFER
REMOTE TRANSFER TO
NORMAL OR EMERGENCY
[NON-AUTOMATIC TRANSFER TYPE ONLY]
(SECONDARY NO CONTACT,
8VDC LOW ENERGY RATING)

OPTIONAL ACCESSORY 1BRX (RELAY EXPANSION MODULE)

LOCATED ON RELAY EXPANSION MODULE



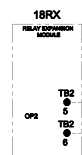
OPTION RELAY "OP2"
AS OUTPUT RELAY
SET JUMPERS
J1: 1 & 2
(6 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 81328-400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(6 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 81328-400
FOR SETTING INFORMATION.

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

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

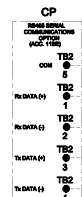
"OP2"
OPTIONAL
USES



LOCATED ON RELAY EXPANSION MODULE

OPTION RELAY "OP2"
AS EXTERNAL POWER
SUPPLY INPUT
"IG"
SET JUMPERS AS FOLLOWS:
REMOVE JUMPERS "J1" & "J2"
CONNECT JUMPERS "J3" & "J4"
(24 VDC NOM., 15 W MAX.)
INPUT RANGE: 21 & 24 VDC MIN.
27 & 28 VDC MAX.
REFER TO USER'S GUIDE PH 81328-400
FOR SETTING INFORMATION.

RS485 SERIAL COMMUNICATIONS OPTION
AVAILABLE WITH OPTIONAL ACCESSORY 11BR. ADVANCED FUNCTION SOFTWARE BUNDLE
REFER TO USER'S GUIDE PH 81328-400 FOR SETTING INFORMATION.



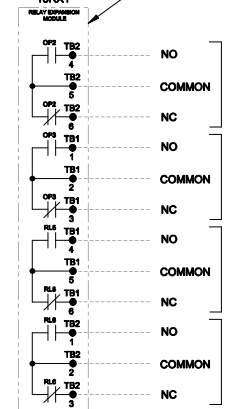
LOCATED ON GROUP G CONTROLLER

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 RS485 EQUIVALENT TO: (STANDARD 80°C) BELDEN 9842 OR 9829 OR ALPHA 8222C OR 8222C (PLENUM RATED) BELDEN 89729 OR 82729 OR ALPHA 9892

OPTIONAL ACCESSORY 1BRX1 (SECOND RELAY EXPANSION MODULE)

LOCATED ON RELAY EXPANSION MODULE



OPTION RELAY "OP2"
SET JUMPERS
J1: 1 & 2
(6 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 81328-400
FOR SETTING INFORMATION.

OPTION RELAY "OP3"
(6 AMP, 30 VDC MAX.)
(100 mA, 5 VDC MIN.)
REFER TO USER'S GUIDE
PH 81328-400
FOR SETTING INFORMATION.

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

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

J	27821	TR	10/19/18
SEE ECH			
H	26913	TR	10/17/17
SEE ECH			
G	25470	TR	08/28/16
SEE ECH			

PROJECT NAME:				DIAGRAM			
WIRING:				300 SERIES (3GATS/3GNTS) 3PH 1000-3200 AMP			
"G" FRAME, GROUP G CONTROLS				COMPUTER GENERATED DRAWING			
BY	DATE	APPROVED	DATE	SCALE	SHEET	OF	DS
DJL	10/19/18	SK	10/19/18	100% (1:1)	1001662	2	7
DESIGNED	BY	CHECKED	BY	DATE	ASCO P		
SK	10/19/18	SK	10/19/18	10/19/18	ASCO P		
DESIGNED	BY	CHECKED	BY	DATE	ASCO P		
SK	10/19/18	SK	10/19/18	10/19/18	ASCO P		
DESIGNED	BY	CHECKED	BY	DATE	ASCO P		
SK	10/19/18	SK	10/19/18	10/19/18	ASCO P		

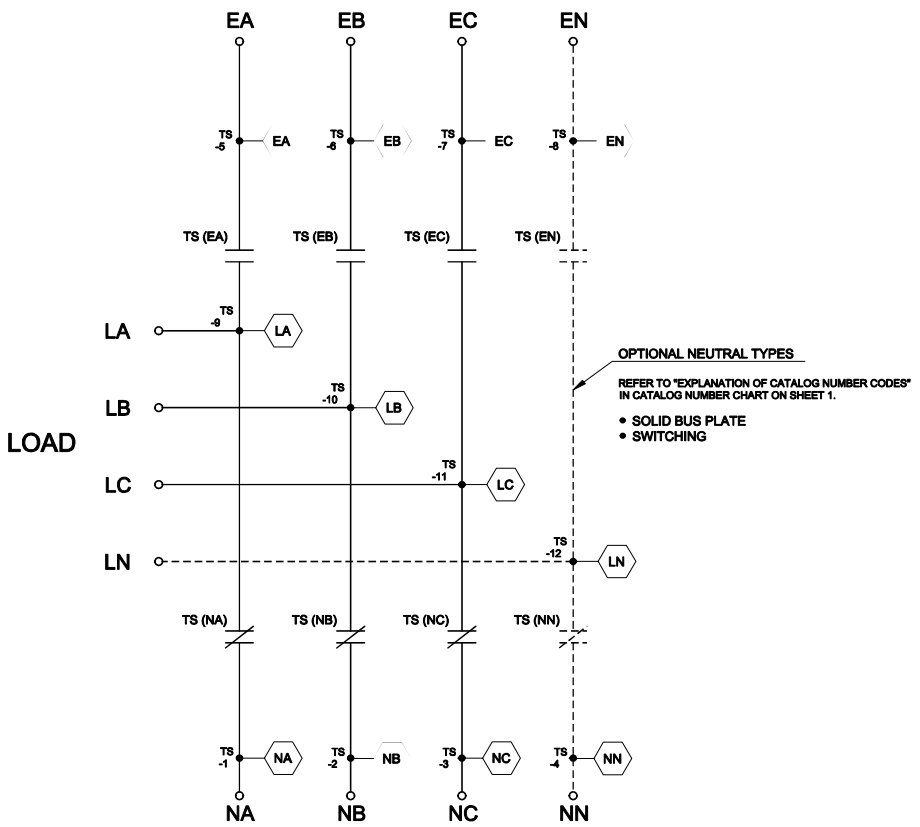
ASCO P ASCO P GROUP TECHNOLOGIES, L.P.
FLOOR 1000, NEW JERSEY 07003 U.S.A.

MAIN POWER POLES

TS OPERATOR CIRCUIT

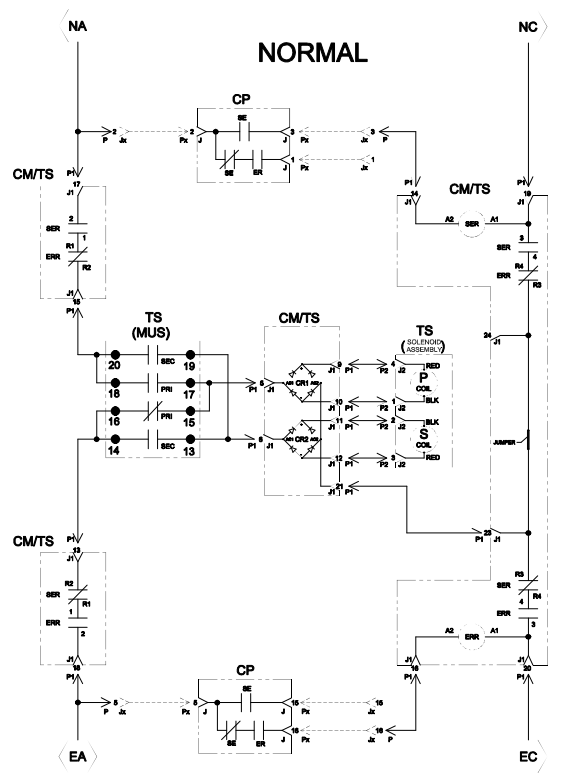
EMERGENCY

NORMAL



OPTIONAL NEUTRAL TYPES
 REFER TO "EXPLANATION OF CATALOG NUMBER CODES" IN CATALOG NUMBER CHART ON SHEET 1.
 • SOLID BUS PLATE
 • SWITCHING

NOTE:
 ATSN/NTS SHOWN CLOSED ON NORMAL SOURCE.



EMERGENCY

TS (MUS) CONTACTS SOLENOID POSITION				
MUS	NORM	AFTER TRIP	EMER	EMER
13-14				
15-16				
17-18				
19-20				

* AFTER SOLENOID PASSES THROUGH TOP DEAD CENTER POSITION.

PROJECT NAME: _____
 WIRING _____
 300 SERIES (3GATS/3GNTS) 3PH 1000-3200 AMPS
 "G" FRAME, GROUP G CONTROLS

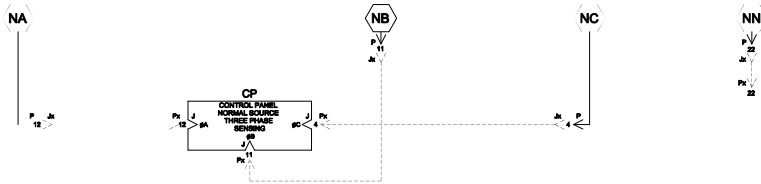
DESIGNED BY	DATE	MANUFACTURING TOLERANCES TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED.	ASSEMB. REF. NO.
CHECKED BY	DATE	PRIORITY OF ASCO POWER TECHNOLOGIES, INC. IS RESERVED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	COMPUTER GENERATED DRAWING
APPROVED BY	DATE		SCALE: _____
			DRG. NO. 1001662
			REV. J

ASCO POWER TECHNOLOGIES, L.P.
 PLACER PARK, NEW JERSEY 07093 U.S.A.

REL. TO SHEET: _____
 BOX NO.: _____
 BY: _____
 DATE: _____
 SHEET 3 OF 7

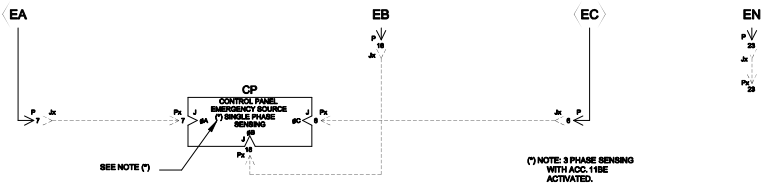
NORMAL SOURCE CIRCUITS

NORMAL



EMERGENCY SOURCE CIRCUITS

EMERGENCY

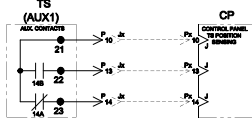


LOAD TERMINAL CIRCUITS

LOAD



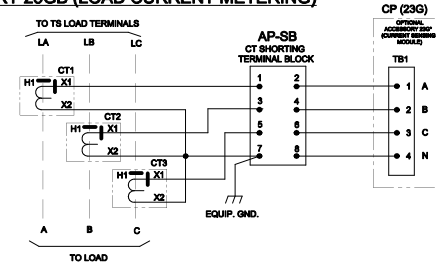
CONTROL SIGNALS & INDICATION



ADDITIONAL CIRCUITS

OPTIONAL ACCESSORY 23GB (LOAD CURRENT METERING)

SWITCH RATING	CT RATIO
1200A	1200:5A
1500A	1500:5A
1800A	2000:5A
2000A	3000:5A
2500A	3000:5A
3000A	4000:5A
3200A	4000:5A



J	278214	TR	8K	10/18/18
	SEE ECH			
H	288313	TR	8K	10/17/17
	SHIT 4 SINGLE PHASE EMGR.			
G	258370	TR	8K	08/08/16
	SEE ECH			

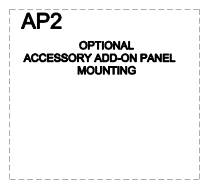
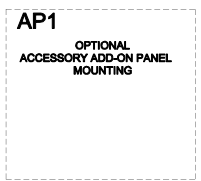
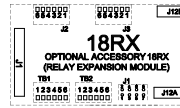
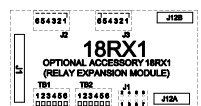
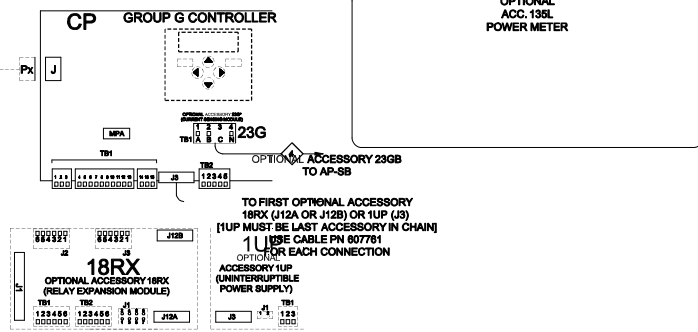
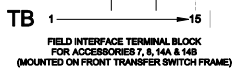
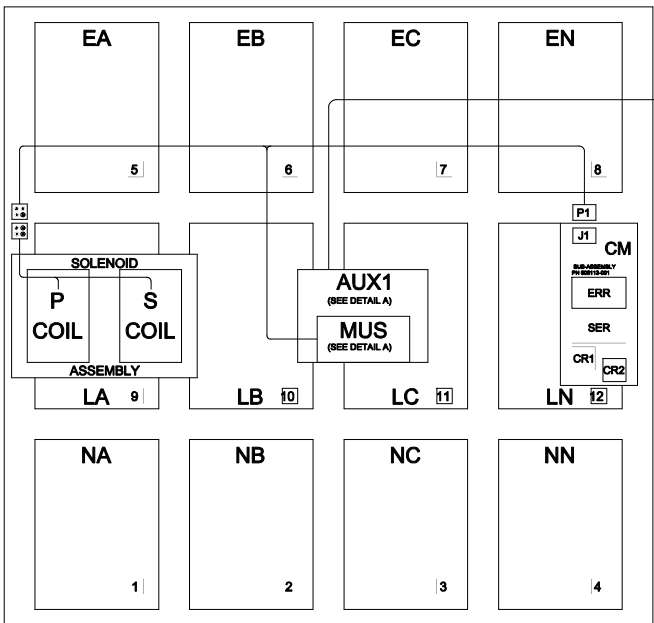
PROJECT NAME:		DIAGRAM	
300 SERIES (GSATS/GSNTS) 3PH 1000-3200 AMPS			
"G" FRAME, GROUP G CONTROLS			
BY	DATE	MANUFACTURING TO BE DONE TO BE IN ACCORDANCE WITH ASCO TECHNOLOGIES' LABEL FOR PLASTIC PARTS SEE 30-100	ASCO REF. NO.
DESIGNED BY	DATE	PROPERTY OF ASCO POWER TECHNOLOGIES, LLC. NO REUSE OR REPRODUCTION OF THIS DRAWING IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF ASCO POWER TECHNOLOGIES, LLC.	COMPUTER GENERATED DRAWING
CHECKED BY	DATE	THIRD ANGLE PROJECTION	SCALE
APPROVED BY	DATE	ASCO	1001662
DATE	REV.	ASCO P. OVER TECHNOLOGIES, L.P.	4 OF 7

PHYSICAL DIAGRAM

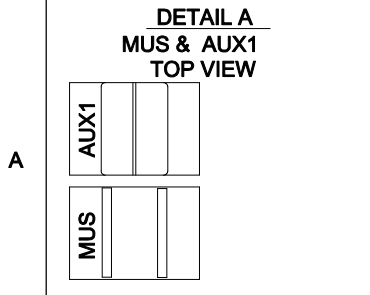
ENCLOSURE

DOOR, INSIDE

TS (TRANSFER SWITCH)



NOTE: PHYSICAL MAY VARY BASED ON ENCLOSURE PROVIDED.



J	278211	TR	8K	10/18/18
	SEE EGN			
H	289313	TR	8K	12/17/17
	SMT 4 SINGLE PHASE 500V			
G	254975	TR	8K	05/26/16
	SEE EGN			

PROJECT NAME:		DIAGRAM		DATE	
WIRING		300 SERIES (3GATS/3GNTS) 3PH 1000-3200 AMPS		THIRD ANGLE PROJECTION	
"G" FRAME, GROUP G CONTROLS		COMPUTER GENERATED DRAWING		SCALE: 1001682	
BY:	DATE:	APPROVED BY:	DATE:	SCALE:	DATE:
DESIGNED BY:	DATE:	CHECKED BY:	DATE:	SCALE:	DATE:
DRAWN BY:	DATE:	APPROVED BY:	DATE:	SCALE:	DATE:
PROJECT APPROVAL:	DATE:	APPROVED BY:	DATE:	SCALE:	DATE:
ASCO		ASCO P. OVER TECHNOLOGIES, L.P.		1001682	
PLAZA PARK, NEW JERSEY 07093		PLAZA PARK, NEW JERSEY 07093		REV: J	
				278211	
				5 OF 7	

PHYSICAL DIAGRAM (CONTINUED)

REAR CONNECTED SWITCH
1000 - 3200 AMP. TS REAR VIEW

OPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)

MAIN BUS STABS/TERMINALS (TYPICAL)

EN
EMERGENCY
NEUTRAL

EC
EMERGENCY
PHASE C

EB
EMERGENCY
PHASE B

EA
EMERGENCY
PHASE A

LN
LOAD
NEUTRAL

LC
LOAD
PHASE C

LB
LOAD
PHASE B

LA
LOAD
PHASE A

NN
NORMAL
NEUTRAL

NC
NORMAL
PHASE C

NB
NORMAL
PHASE B

NA
NORMAL
PHASE A

FRONT CONNECTED SWITCH
1000 - 2000 AMP. TS TOP VIEW

OPTIONAL ACCESSORY 23GB
(LOAD CURRENT METERING)

LA
LOAD
PHASE A

LB
LOAD
PHASE B

LC
LOAD
PHASE C

LN
LOAD
NEUTRAL

CT1
(H1 TOWARDS TS)

CT2
(H1 TOWARDS TS)

CT3
(H1 TOWARDS TS)

STANDARD:
EMERGENCY & LOAD OUT
OF THE TOP AND NORMAL
OUT THE BOTTOM.

TO SB (AP)

MAIN BUS STABS/TERMINALS (TYPICAL)

EA
EMERGENCY
PHASE A

EB
EMERGENCY
PHASE B

EC
EMERGENCY
PHASE C

EN
EMERGENCY
NEUTRAL

BOTTOM VIEW

NA
NORMAL
PHASE A

NB
NORMAL
PHASE B

NC
NORMAL
PHASE C

NN
NORMAL
NEUTRAL

LA
LOAD
PHASE A

LB
LOAD
PHASE B

LC
LOAD
PHASE C

LN
LOAD
NEUTRAL

CT1
(H1 TOWARDS TS)

CT2
(H1 TOWARDS TS)

CT3
(H1 TOWARDS TS)

OPTIONAL:
EMERGENCY OUT OF THE TOP
AND NORMAL & LOAD
OUT THE BOTTOM.

TO SB (AP)

J	278214	TR	8K	10/18/14
SEE ECH				
H	269313	TR	8K	10/17/17
SHY 4 SINGLE PHASE EMGR.				
G	258475	TR	8K	05/25/16
SEE ECH				

PROJECT NAME:		DIAGRAM		DATE	
WIRING					
300 SERIES (3SATS/3SNTS) 3PH 1000-3200 AMPS					
"G" FRAME, GROUP G CONTROLS					
BY	DATE	MANUFACTURING TOLERANCES TO BE AS ACCORDANCE WITH ASME Y14.5M-2018.	ASSEMB. REF. NO.	COMPUTER GENERATED DRAWING	
DRAWN BY	DJS	10/18/14		SCALE	AS IS
CHECKED	BK	10/18/14		DRAW. NO.	DS
DESIGNED	BK	10/18/14		1001662	
APPROVED				ISSUED BY	J
DATE				DATE	10/27/21
PRIORITY OF ASCO POWER TECHNOLOGIES, LLC IS PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			THIRD ANGLE PROJECTION		
ASCO [®] ASCO P [®] OVER TECHNOLOGIES, L.P. FLORENCE, PA, NEW JERSEY 07033 U.S.A.			SHEET 8 OF 7		

