

- 25 SYNC CHECK RELAY
27/59 OVER/UNDER VOLTAGE
32 REVERSE POWER RELAY
40 LOSS OF EXCITATION RELAY
47 UNDERVOLTAGE PHASE SEQUENCE RELAY
50 INSTANTANEOUS OVERCURRENT RELAY
51 TIME OVERCURRENT RELAY
52 CIRCUIT BREAKER
59 OVERVOLTAGE RELAY
62 TIME DELAY RELAY
65 GOVERNOR
810/U OVER/UNDER FREQUENCY RELAY
86 LOCKOUT RELAY
87 DIFFERENTIAL RELAY
A AMPERE
A4-E4 ADEM ENGINE CONTROLLER
AC ALTERNATING CURRENT
ADEM ADVANCED DIGITAL ENGINE MANAGEMENT
AI ANALOG INPUT
ALT ALTERNATOR
AMR AUTO MODE RELAY (EMCP IN AUTO)
ANNUN ANNUNCIATOR
AD ANALOG OUTPUT
ASR AUTO START RELAY
AR ARBITRATION RELAY
ATS AUTOMATIC TRANSFER SWITCH
AUX AUXILIARY
AUTO AUTOMATIC
BATT BATTERY
B3CB BEST BATTERY CIRCUIT BREAKER
BBSR BEST BATTERY SOURCE RELAY
BC BATTERY CHARGER
B- BATTERY NEGATIVE
B+ BATTERY POSITIVE
CAR COMMON ALARM RELAY
CB CIRCUIT BREAKER
CBC CIRCUIT BREAKER CLOSE
CBM CIRCUIT BREAKER MAIN (DC)
CBOR CIRCUIT BREAKER OPEN RELAY
CBS CIRCUIT BREAKER SWITCH
CBT CIRCUIT BREAKER TRIP
CCB CUSTOMER CONNECTION BUS
CDL CAT DATA LINK
CDVR CATERPILLAR DIGITAL VOLTAGE REGULATOR
CDTR COLDSTART TIMER RELAY
CLFSD CRITICAL LOW FUEL SHUTDOWN
CONN CONNECTOR
CT CURRENT TRANSFORMER
CTSB CT SHORTING BLOCK
D DIODE
DBR DEAD BUS RELAY
DDI DEDICATED DIGITAL INPUT
DI DIGITAL INPUT
DIDI DEDICATED ISOLATED DIGITAL INPUT
DID DIGITAL INPUT/OUTPUT MODULE
DO DIGITAL OUTPUT
ECM ENGINE CONTROL MODULE
EMCP ELECTRONIC MODULAR CONTROL PANEL
EPR EMCP POWER RELAY
ERR ENGINE RUN RELAY
ESPB EMERGENCY STOP BUTTON
E-STOP EMERGENCY STOP
EXC EXCITER
EXT EXTERNAL
F FUSE
FAR FUEL ALARM RELAY
FCS FUEL TRANSFER CONTROL SWITCH
FLG FUEL LEVEL GAUGE
FLT FAULT
FMS FUEL TRANSFER MODE SWITCH
FMR FREQUENCY MODE RELAY
FMRX FREQUENCY MODE RELAY SLAVE
FS FUEL SENSOR
FSR FUEL SOURCE RELAY
FTR FUEL TANK RUPTURE
GCB GEN CIRCUIT BREAKER
GCBR GENERATOR CIRCUIT BREAKER RELAY
GCM GAUGE CONTROL MODULE
GCT GROUND SENSE CURRENT TRANSFORMER
GEN (G) GENERATOR
GMR GENERATOR MULTIFUNCTION RELAY
GND GROUND
GPC GENERATOR PARALLELING CONTROL
GPS GAS PRESSURE SENSOR
GRR GLOBAL RUN REQUEST
GSH GENERATOR SPACE HEATER
GSHR GENERATOR SPACE HEATER RELAY
GSR GAS SOURCE RELAY

- HC HEATER CONTACTOR
HWDBA HARD WIRED DEAD BUS ARBITRATION
HWLSLD HARD WIRED LOAD SENSE LOAD DEMAND
HVL HIGH VOLTAGE LIGHT
IDI ISOLATED DIGITAL INPUT
IRS IDLE/RATED SWITCH
JWH JACKET WATER HEATER
KSR KEY SWITCH RELAY
KVSIR KVAR SHARE INHIBIT RELAY
kW KILOWATT
LBR LINKBOARD RELAY
LBS LINKBOARD SWITCH
LDS LOAD DROD SOLENOID
LFLSA LOW FUEL LEVEL SWITCH ALARM
LMR LEGACY MODE RELAY
LDLS LOW OIL LEVEL SWITCH
LPGV LIQUID PETROLEUM GAS VALVE
LR LOAD RELAY (FUEL)
LRX LOAD RELAY SLAVE (FUEL)
LVL LOW VOLTAGE LIGHT
MAN MANUAL
MCH SPRING CHARGING MOTOR (GCB)
MCM 1000 CIRCULAR MILS
MMR MANUAL MODE RELAY (EMCP IN RUN)
MN UNDERVOLTAGE TRIP (GCB)
MPU MAGNETIC PICK-UP
NAC NORMAL AFTER CLOSE
NDRM AFTER TRIP
N.C. NORMALLY CLOSED
NGPS NATURAL GAS PRESSURE SWITCH
NGV NATURAL GAS VALVE
NIA NOT IN AUTO
NEU (N) NEUTRAL
N.O. NORMALLY OPEN
DFS OVERFLOW SWITCH (FUEL TANK)
DIP OPERATOR INTERFACE PANEL
DMR OFF MODE RELAY (EMCP IN OFF)
DVL OVERLOAD
PAR PARALLELED WITH UTILITY RELAY
PCS PARALLELING CONTROLS SWITCH (ON/OFF)
PF POWER FACTOR
PGV PROPANE GAS VALVE
PIR PARALLELING INHIBIT RELAY
PICR PARALLEL INTERCONNECT RELAY
PICRX PARALLEL INTERCONNECT RELAY SLAVE
PLL PUMP LOAD LIGHT
PS PINION SOLENOID
PSHD PRIMARY UNIT SHIELD
PMG PERMANENT MAGNET GENERATOR
POT POTENTIOMETER
PPS PRIMING PUMP SWITCH
PSS PERSONNEL SAFETY SWITCH
PT POTENTIAL TRANSFORMER
PTL PULL TO LOCK
PUL PRIMARY UNIT LIGHT
PULL PUMP UNLOAD LIGHT
PUR PRIMARY UNIT RELAY
PVM PULSE WIDTH MODULATION
PWO PULSE WIDTH OUTPUT
PWUR PARALLELED W/ UTILITY RELAY
RBS RUPTURE BASIN SWITCH
R RELAY
RDBA RELAY DEAD BUS ARBITRATION
RES RESISTOR
REF REFERENCE
RSES REMOTE START ENABLE SWITCH
RSS REMOTE START SWITCH
RSR REMOTE START RELAY
RTN RETURN
SC SHUNT COIL
SCN SCREEN (SHIELD)
SDE BELL ALARM CONTACT
SHD SHIELD/SHIELDED
SHDN SHUTDOWN
SM STARTER MOTOR
SPSR SHORE POWER SENSING RELAY
SPWR SHORE POWER
SM STARTER MOTOR
SMMS STARTER MOTOR MAGNETIC SWITCH
SP SPEED POTENTIOMETER
SR SLAVE RELAY
SSB STARTING SYSTEM BREAKER
SSR SOURCE SELECTOR RELAY
TERM TERMINATION
TR TRIP UNIT (GCB)
UCBR UTILITY CIRCUIT BREAKER RELAY
UMR UTILITY MULTIFUNCTION RELAY
UR UNLOAD RELAY (FUEL)
URX UNLOAD RELAY SLAVE (FUEL)
UTTR UTILITY TRANSFER TRIP RELAY
VAR VOLT-AMPERES REACTIVE
VAS VOLTAGE ADJUST SWITCH
VFS VOLTAGE/FREQUENCY SELECT SWITCH
VP VOLTAGE POTENTIOMETER
VFSS CLOSE COIL (GCB)
X a NORMALLY OPEN CONTACT
b NORMALLY CLOSED CONTACT
c AND b WITH COMMON
mA MILLIAMPERE
mV MILLIVOLT
A A PHASE
B B PHASE
C C PHASE

INPUT/OUTPUT CONTENTS
I/O# FUNCTION
R01 EMCP RELAYS (DIGITAL OUTPUTS)
R02 STARTER RELAY
R03 FUEL ENABLE
R04 REDUCED POWER MODE OFF (NOTE 1)
R05 OFF MODE
R06 AUTO MODE
R07 VDLTS/HERTZ WITHIN LIMITS
R08 DISABLE AUX AC
R09 LIVE BUS INDICATION
R10 VOLTAGE SELECTION IS LOW
R11 FREQUENCY SELECTION IS LOW
R12 CUSTOM EVENT (MIL LAMP / DI-06)
R13 CUSTOM EVENT (PROPANE FUEL SOURCE)
R14 AVAILABLE
R15 AVAILABLE
R16 AVAILABLE
R17 AVAILABLE

EMCP ANALOG INPUTS
A11 AVAILABLE
A12 AVAILABLE
A13 AVAILABLE
A14 AVAILABLE

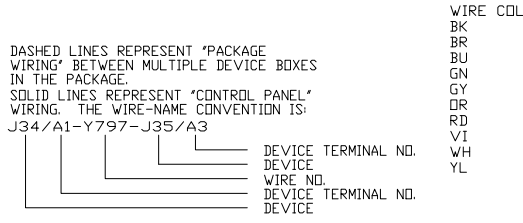
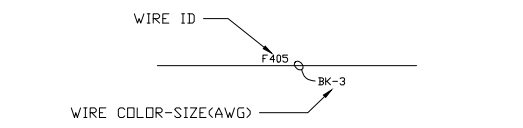
EMCP ANALOG OUTPUTS
AD1 AVAILABLE
AD2 AVAILABLE
AD3 AVAILABLE

EMCP PWM OUTPUTS
PWD1 AVAILABLE
PWD2 INTEGRATED VOLTAGE REGULATOR

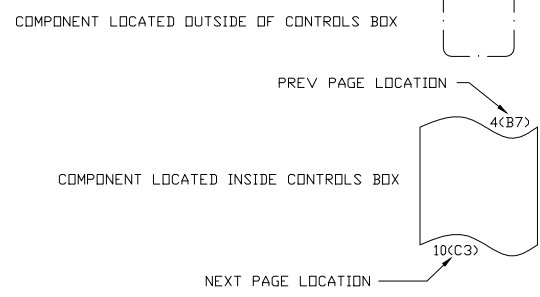
GROUP SELECTION
SELECTION VFSS LINKBOARD GROUP#
600V 60Hz 2 HV 1
240V 60Hz 2 LV 2
480V 60Hz 1 HV 3
208V 60Hz 1 LV 4

480V 60Hz 600V 60Hz
208V 60Hz 240V 60Hz
POSITION 1 POSITION 2

CONTROL PANEL WIRING
INTERCONNECT WIRING
CUSTOMER WIRING
ALL CONTROL PANEL WIRING GY-16, UNLESS OTHERWISE NOTED.
ALL INTERCONNECT WIRING BK-14, UNLESS OTHERWISE NOTED.



- NOTE A:
NOTE B:
NOTE C:
NOTE D:
NOTE E:
NOTE G: SHIELD WIRES SHOULD BE CONNECTED TO TERMINAL BLOCKS ON PRIMARY UNIT ONLY. ON MIDDLE UNITS, CONNECT SHIELDS TOGETHER. ON END UNIT, DO NOT CONNECT SHIELD WIRES.
NOTE H:
NOTE I:
NOTE J: END USER TO INSTALL JUMPER ON FIRST UNIT ONLY WHEN CONNECTED FOR PARALLELING

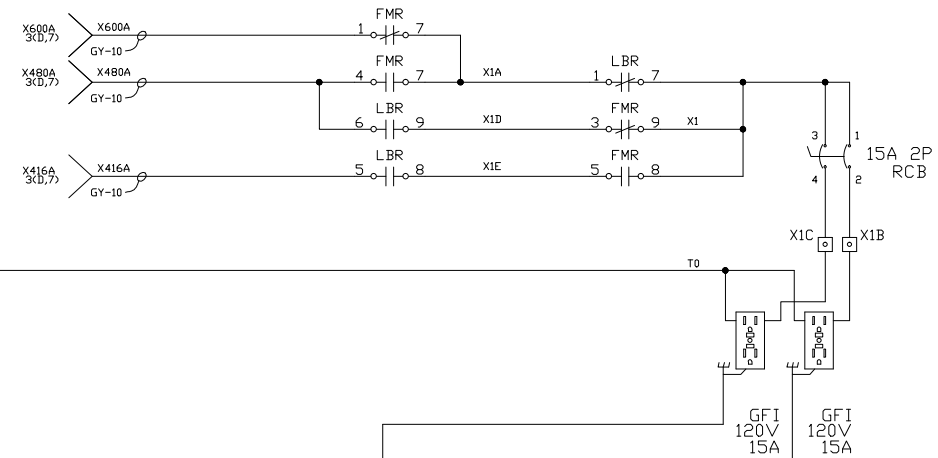


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FILE DF/69E PROJECT REFERENCE APS290G
SCALE/SHEET SIZE 1=40/D DRAWN BY D. RICHARDSON QUOTE NUMBER -
ANGLE PROJECTION 1=40/D DATE 6/30/2016 WORK ORDER NUMBER -
SHEET 1 DF 18
TITLE SCHEMATIC DRAWING NUMBER
APS290G W/EMCP 4.4 & PSI 14 L 69E100

GENERATOR

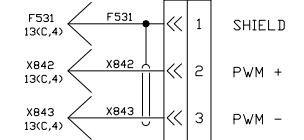
N T1 T2 T3



DUAL-VOLT LINK BOARD

3(A,5) GND BAR

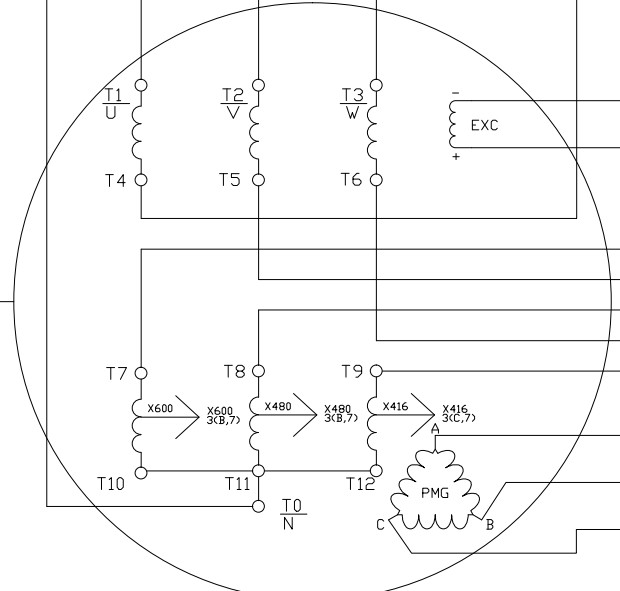
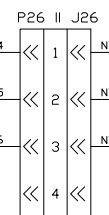
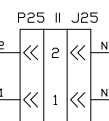
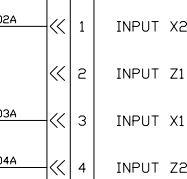
IVR



P2-J2



P6-J6

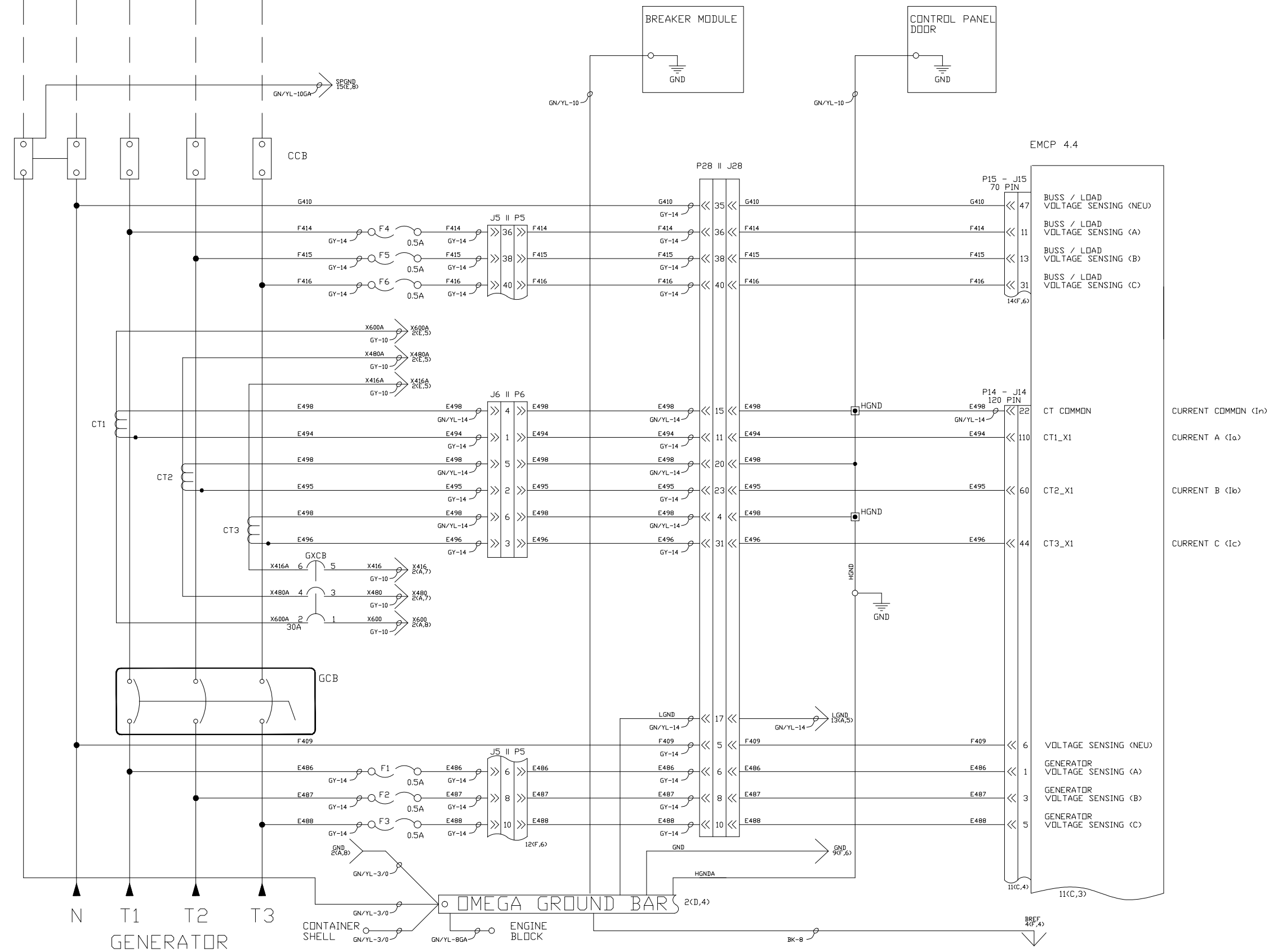


GENERATOR  
PHASE ROTATION L1-L2-L3  
U-V-W

AC GENERATOR AND REGULATOR SENSING  
FOR NOTES SEE SHEET ONE  
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: .XX ± 0.100 .XXX ± 0.060 ANGULAR ± 1°	THIRD ANGLE PROJECTION 	FILE: DF/69E SCALE/SHEET SIZE: 1=40/D SHEET: 2 DF 18	PROJECT REFERENCE: APS290G DRAWN BY: D. RICHARDSON DATE: 6/30/2016
CHANGE NOTICE DATE BY	TITLE: SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L	QUOTE NUMBER: - WORK ORDER NUMBER: - DRAWING NUMBER: 69E100	DRAWING NUMBER: 69E100

BUS // LOAD  
GND N L1 L2 L3

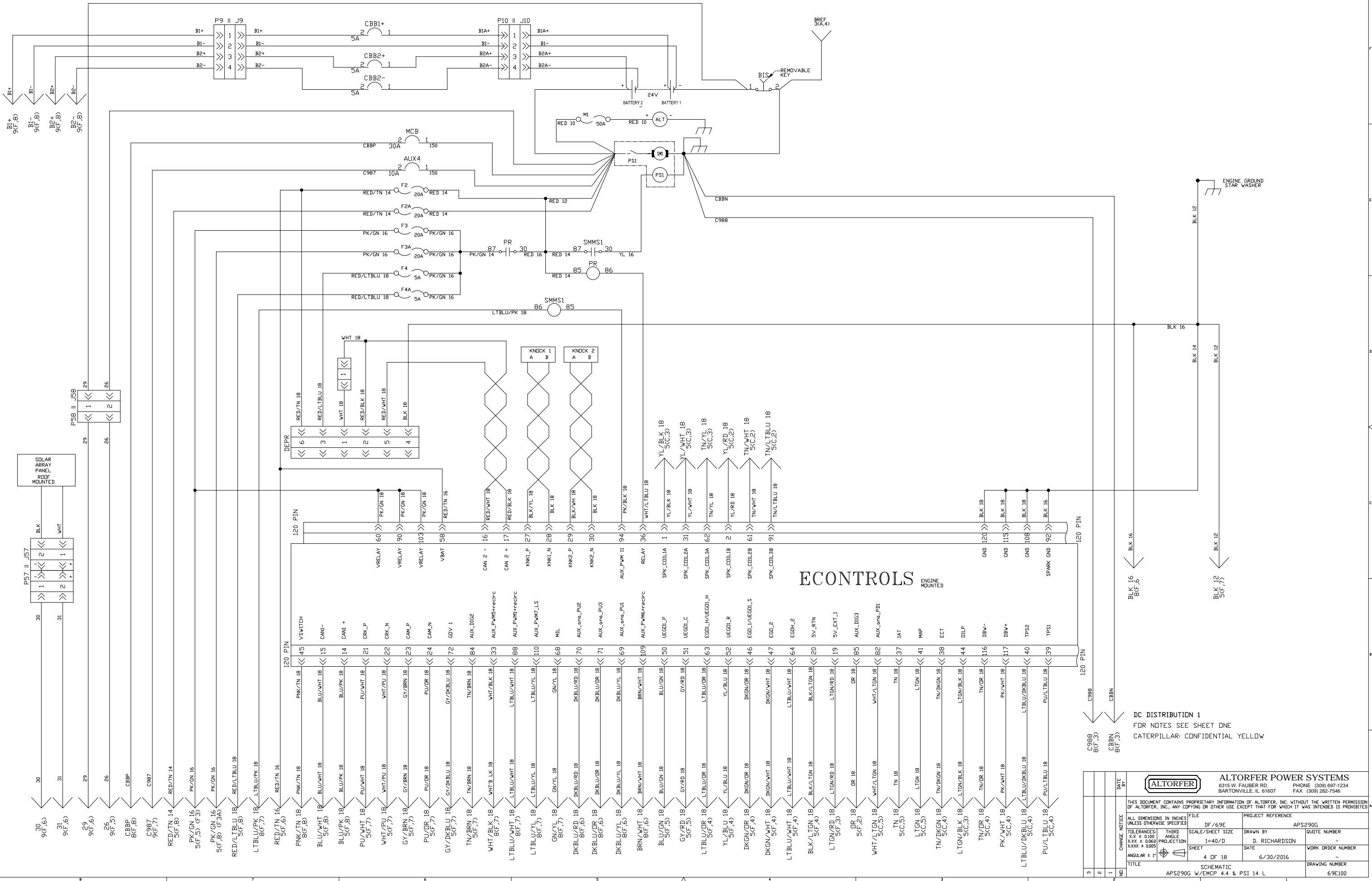


AC EMCP SENSING  
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DATE BY		FILE		PROJECT REFERENCE	
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	TOLERANCES	THIRD ANGLE PROJECTION	SCALE/SHEET SIZE	DRAWN BY	QUOTE NUMBER
XXX ± 0.100	XXX ± 0.060	XXX ± 0.005	1=40/D	D. RICHARDSON	-
ANGULAR ± 1'			SHEET	DATE	WORK ORDER NUMBER
			3 DF 18	6/30/2016	-
TITLE				DRAWING NUMBER	
SCHEMATIC				69E100	
APSP290G W/EMCP 4.4 & PSI 14 L					



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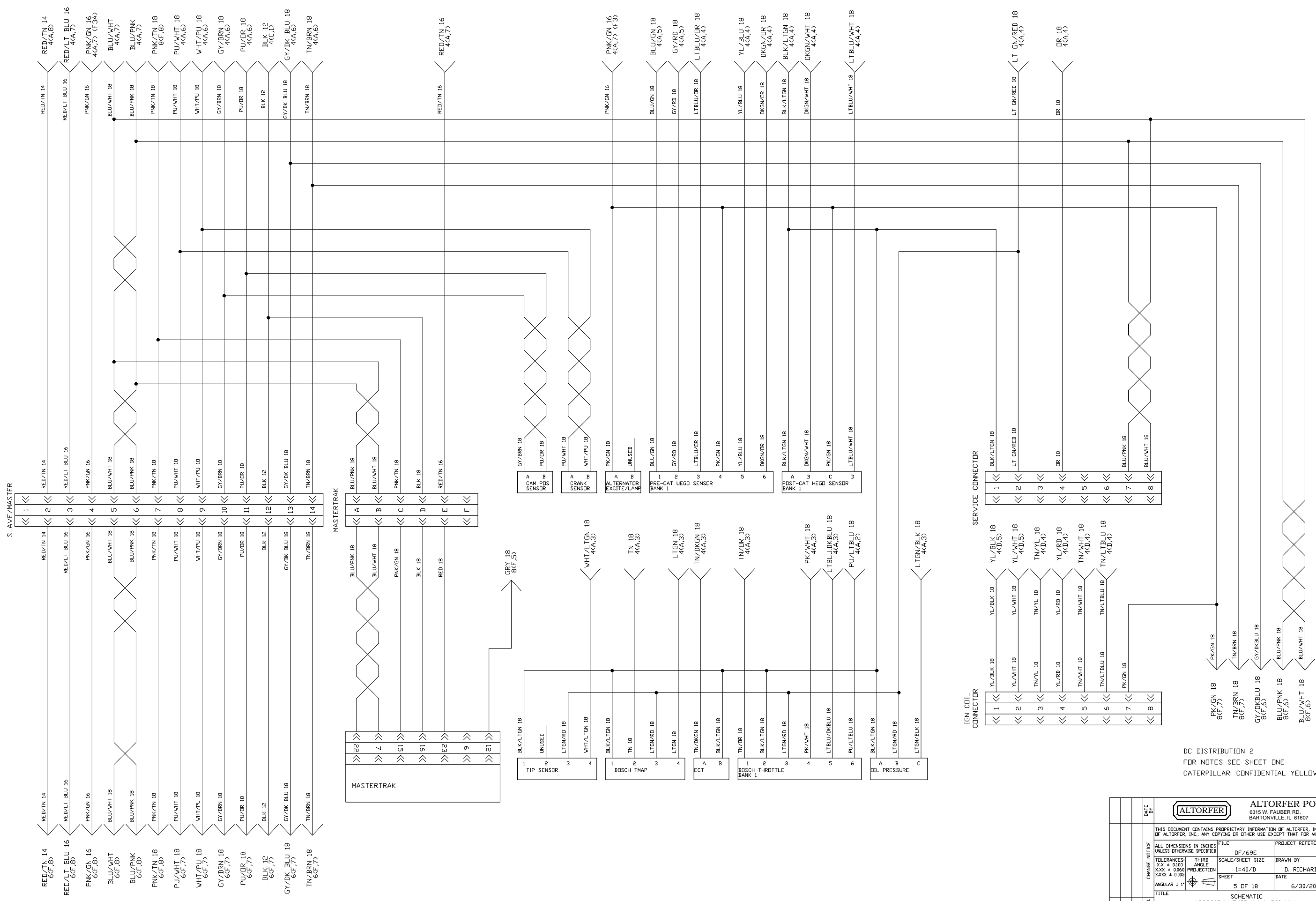
**ECONTROLS**  
ENGINE MOUNTED

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3	DATE	FILE	PROJECT REFERENCE
2	BY	DF/69E	APS290G
1		SCALE/SHEET SIZE	DRAWN BY
1		1=40/D	D. RICHARDSON
1		PROJECTION	DATE
1		4 DF 18	6/30/2016
1		ANGLE	WDRK ORDER NUMBER
1		ANGULAR ± 1'	
1		TOLERANCES	DRAWING NUMBER
1		XXX ± 0.10	69E100
1		XXXX ± 0.005	
1		ANGULAR ± 1'	
1		TITLE	
1		SCHMATIC	
1		APS290G W/EMCP 4.4 & PSI 14 L	

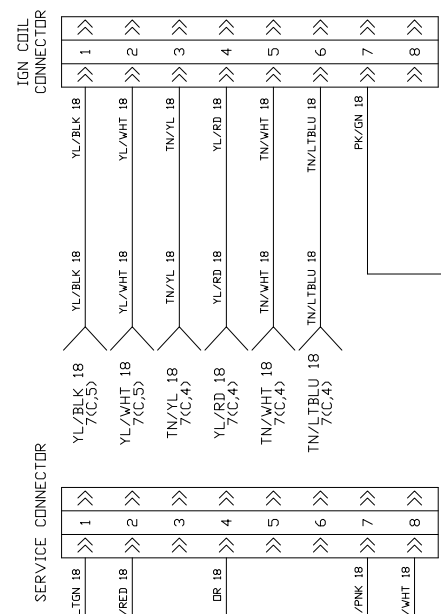
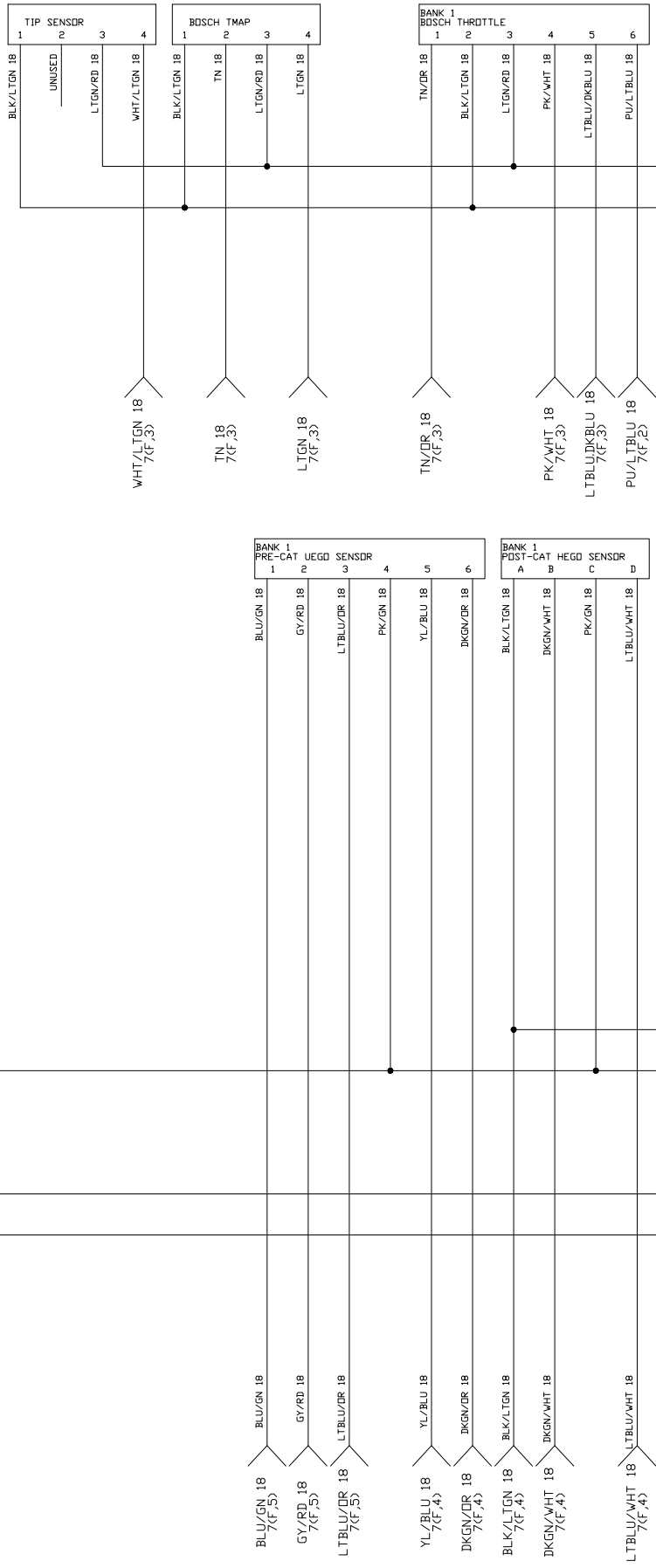
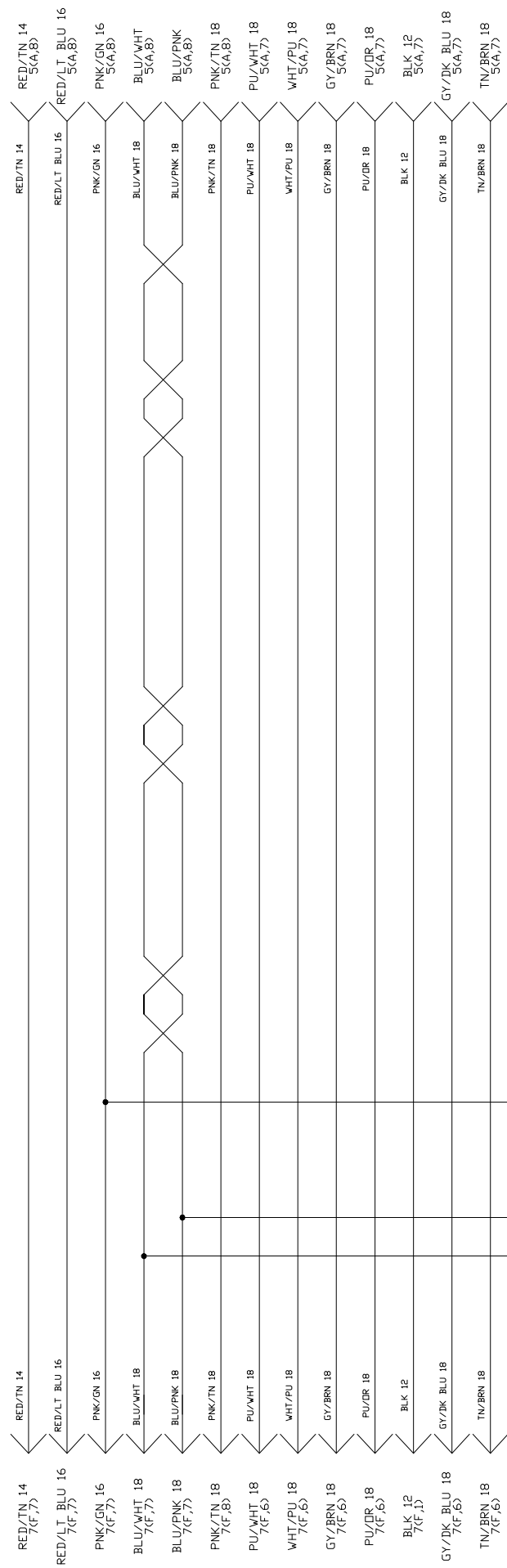
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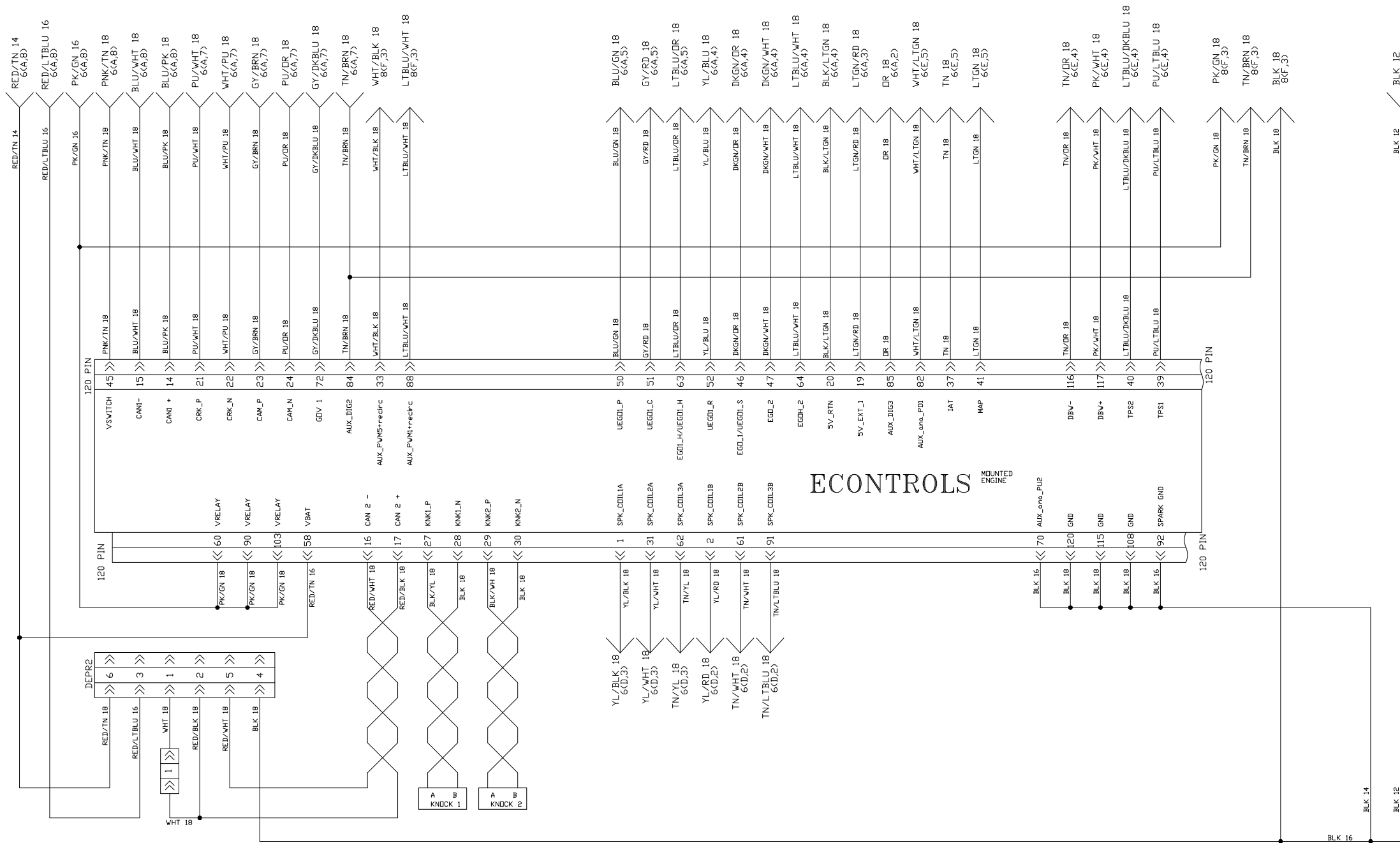
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TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L		CHANGE NOTICE 1 2	



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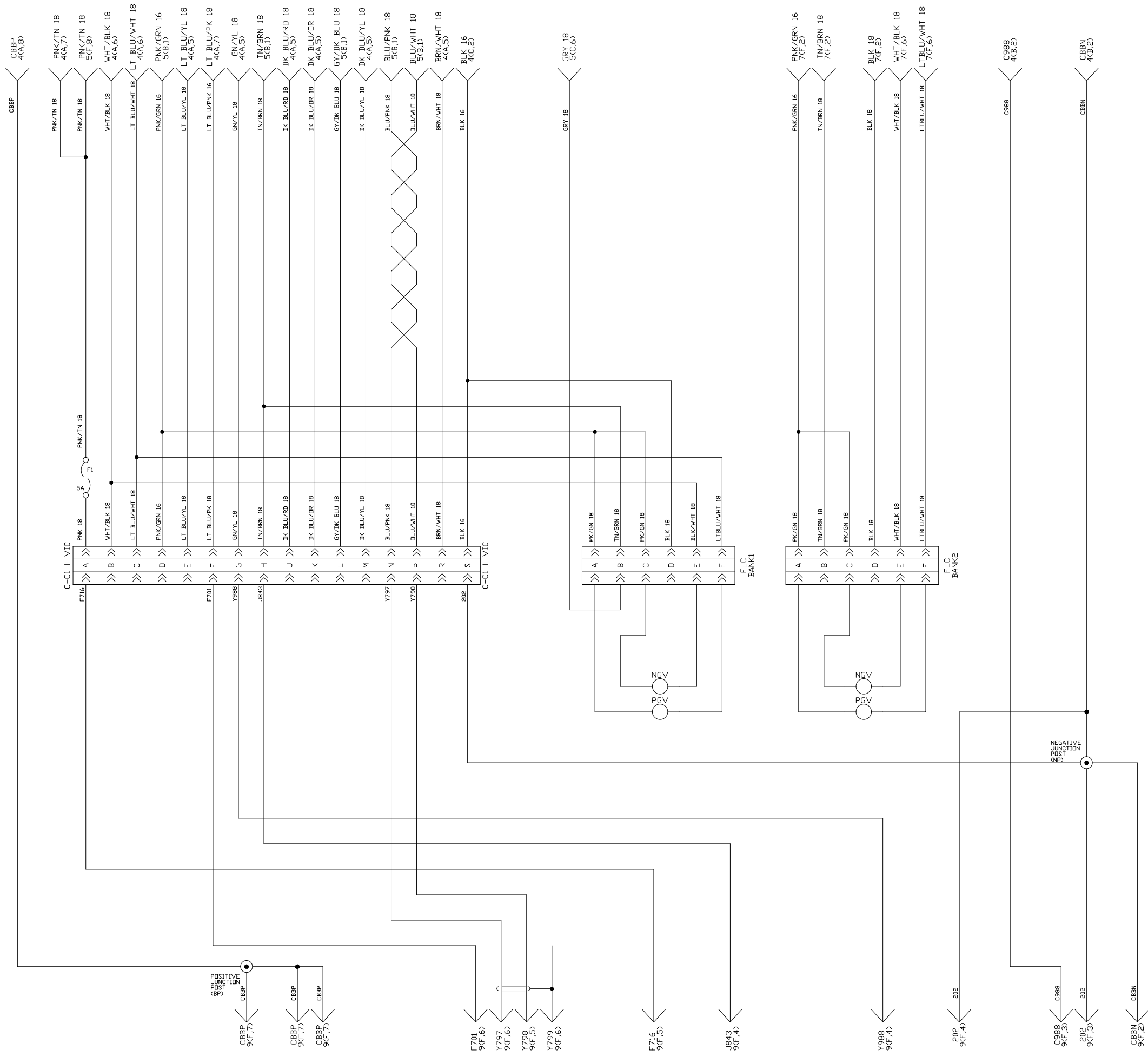
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: XX ± 0.100 XXX ± 0.060 ANGULAR ± 1°	THIRD ANGLE PROJECTION 	SCALE/SHEET SIZE 1=40/D SHEET 6 DF 18	DRAWN BY D. RICHARDSON DATE 6/30/2016
CHANGE NOTICE 1 2 3 4	TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L	QUOTE NUMBER - WORK ORDER NUMBER - DRAWING NUMBER 69E100	



ECONTROLS MOUNTED ENGINE

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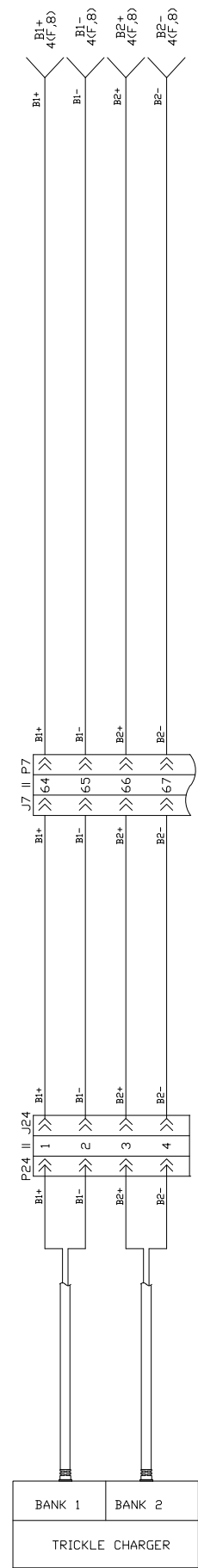
DATE		BY	
<b>ALTORFER POWER SYSTEMS</b> 6315 W. FAUBER RD. PHONE (309) 697-1234 BARTONVILLE, IL 61807 FAX (309) 282-7546			
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE	PROJECT REFERENCE	
TOLERANCES XX ± 0.10 XXX ± 0.060 XXXX ± 0.005	DF / 69E	APS290G	
ANGLE	SCALE/SHEET SIZE	DRAWN BY	QUOTE NUMBER
PROJECTION	1=40/D	D. RICHARDSON	-
SHEET	DATE	DATE	WORK ORDER NUMBER
ANGULAR ± 1'	7 DF 18	6/30/2016	-
TITLE	SCHEMATIC		DRAWING NUMBER
APS290G W/EMCP 4.4 & PSI 14 L			69E100



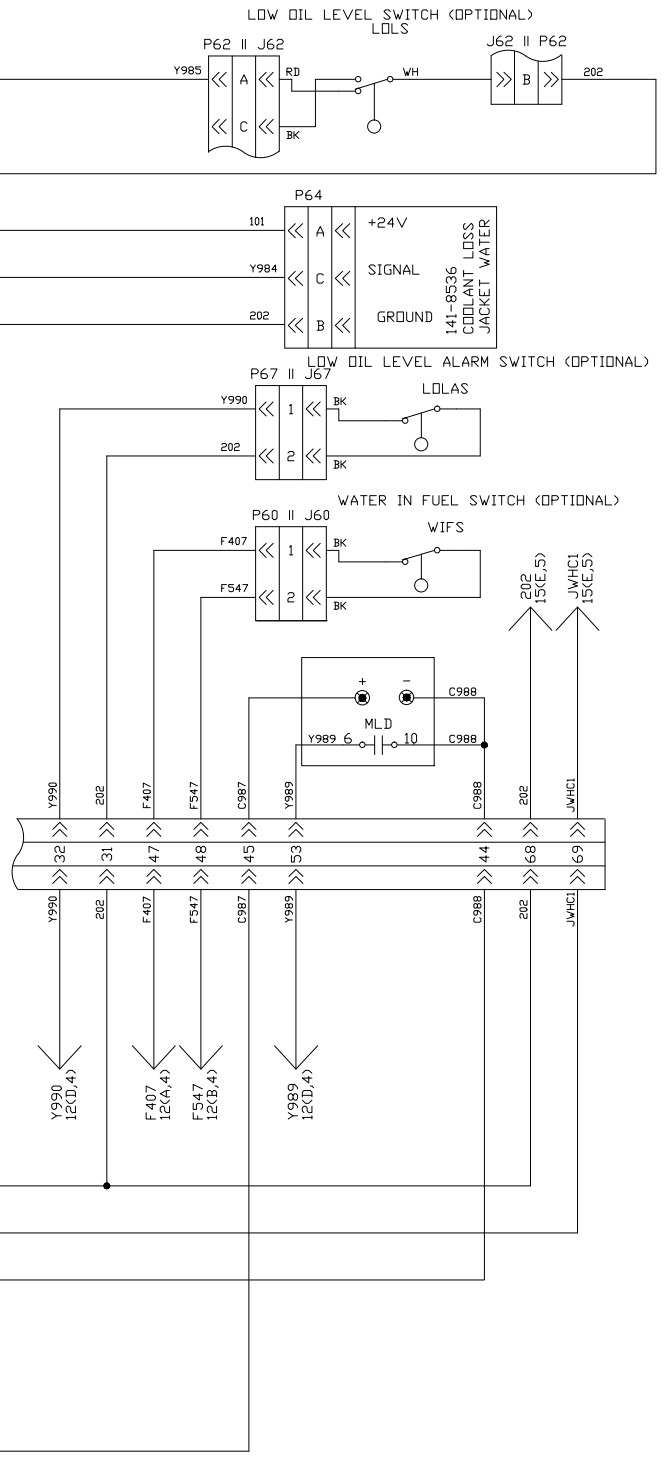
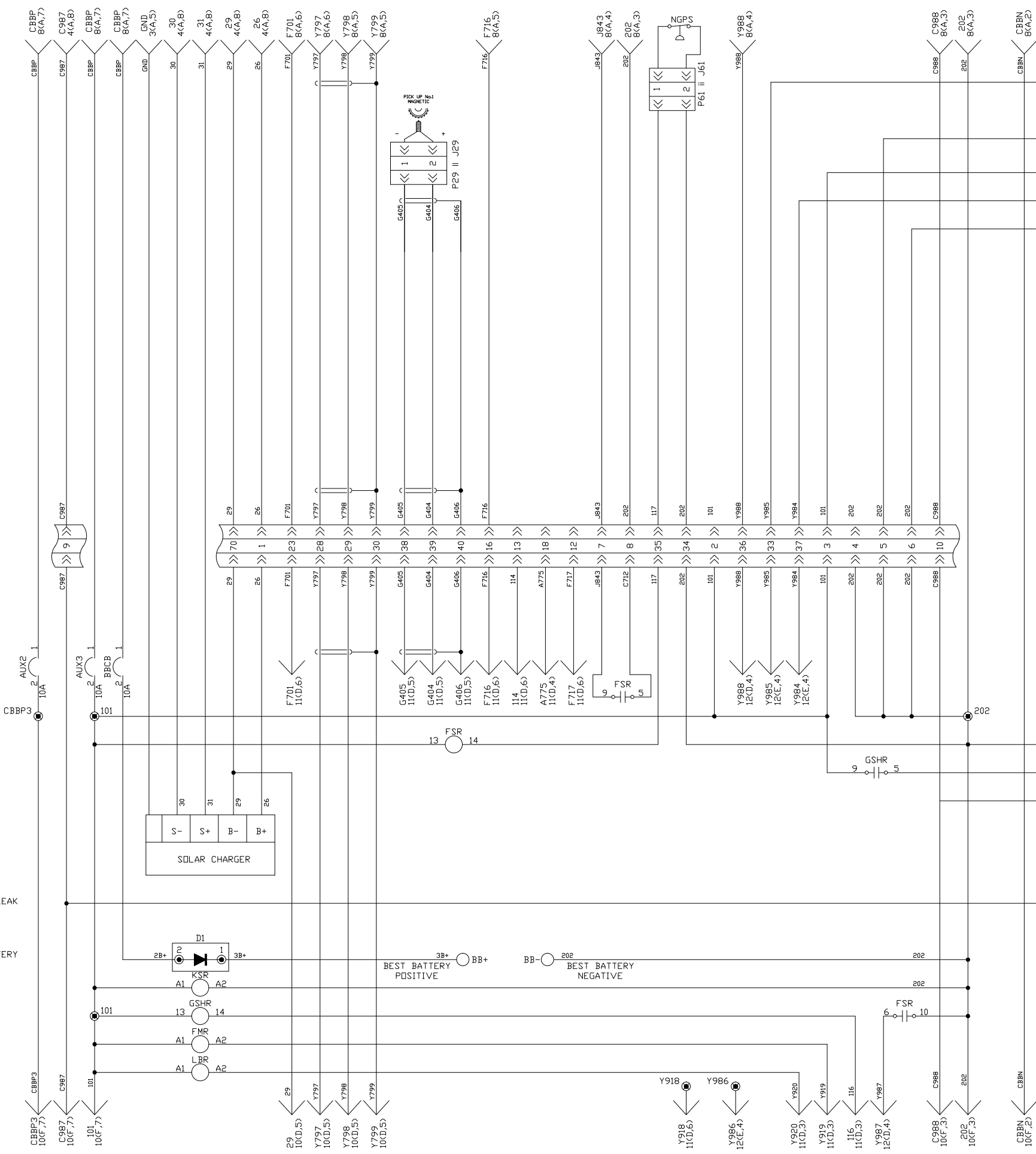
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TOLERANCES XX ± 0.10 XXX ± 0.060 XXXX ± 0.005	THIRD ANGLE PROJECTION 	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON
CHANGE NOTICE 1 2	SHEET 8 DF 18	DATE 6/30/2016	QUOTE NUMBER - WORK ORDER NUMBER - DRAWING NUMBER 69E100
TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L			DRAWING NUMBER 69E100





METHANE LEAK DETECTOR  
BEST BATTERY SUPPLY

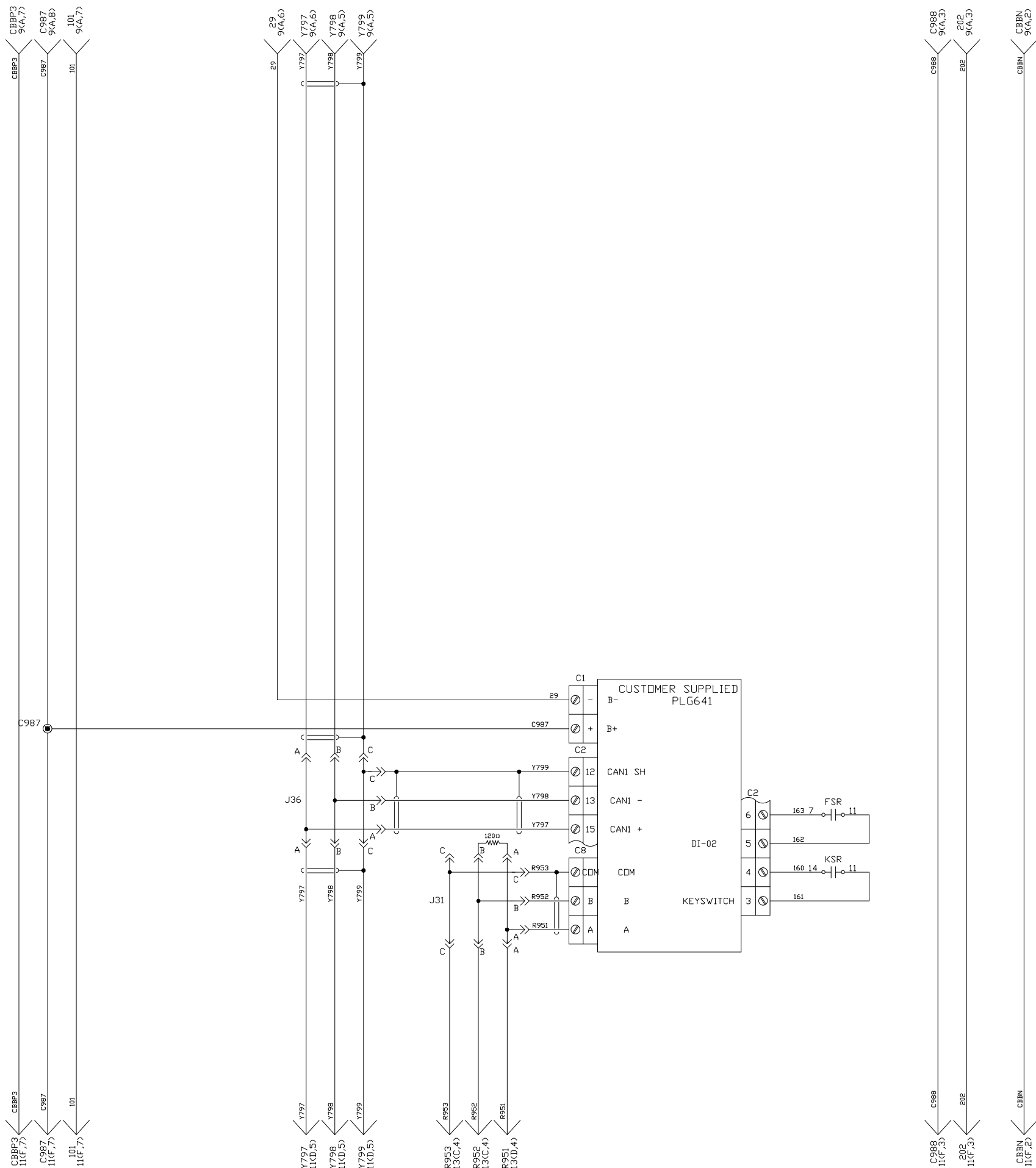


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CHANGE NOTICE		DATE	BY
1			
2			

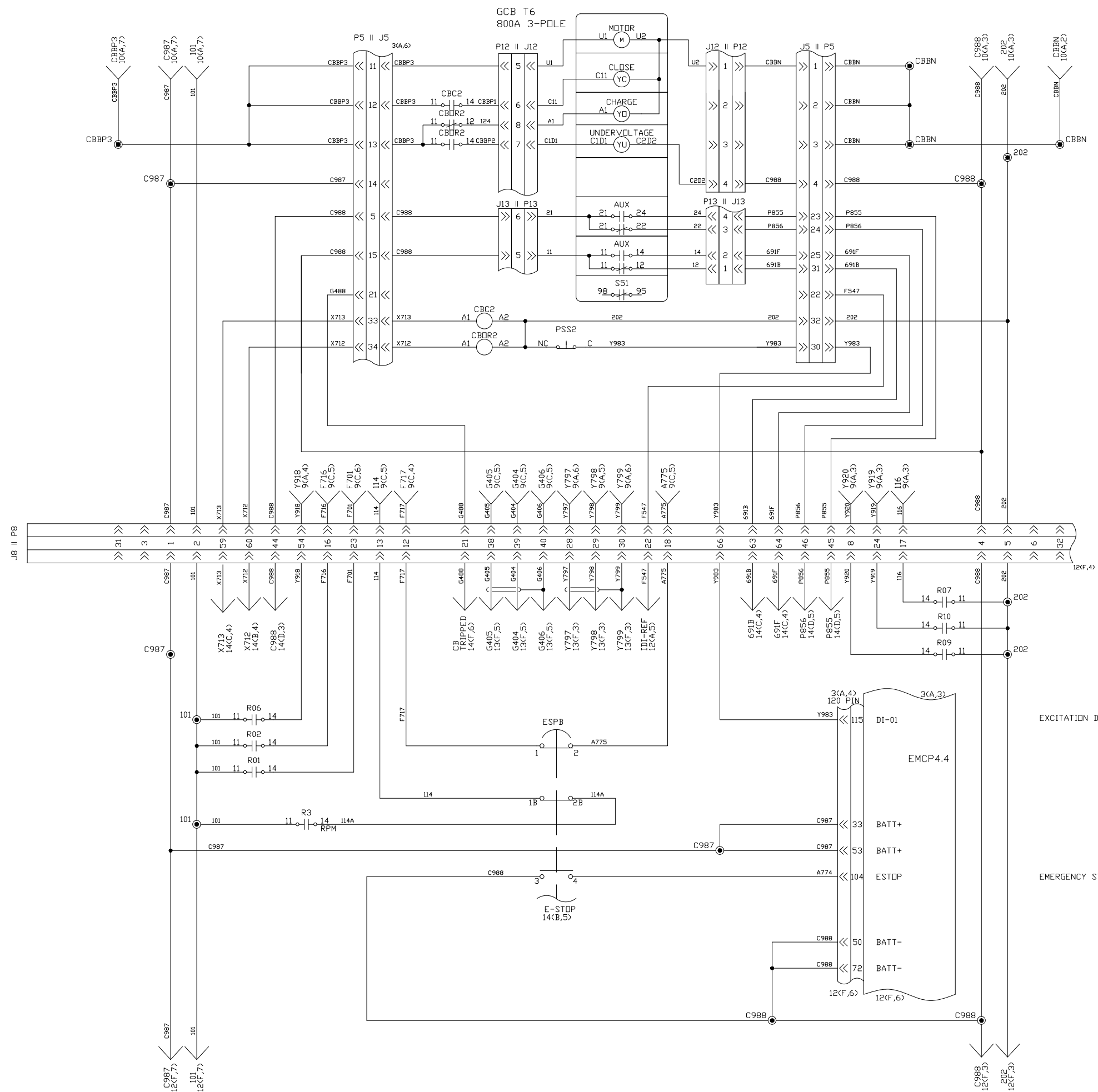
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FILE	DF/69E	PROJECT REFERENCE	APS290G
SCALE/SHEET SIZE	1=40/D	DRAWN BY	D. RICHARDSON
THIRD ANGLE PROJECTION		DATE	6/30/2016
SHEET	9 DF 18	WORK ORDER NUMBER	
TITLE			DRAWING NUMBER
SCHEMATIC			69E100
APS290G W/EMCP 4.4 & PSI 14 L			



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CHANGE NOTICE 1 2 3 4	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE DF/69E	PROJECT REFERENCE APS290G	
	TOLERANCES: XX ± 0.100 .XXX ± 0.060 ANGULAR ± 1°	THIRD ANGLE PROJECTION 	SCALE/SHEET SIZE 1=40/D SHEET 10 DF 18	DRAWN BY D. RICHARDSON
			DATE 6/30/2016	QUOTE NUMBER - WORK ORDER NUMBER -
	TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L			DRAWING NUMBER 69E100

GENERATOR  
CIRCUIT  
BREAKER



EXCITATION DISABLE

EMERGENCY STOP

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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON	QUOTE NUMBER -
TOLERANCES .XX ± 0.100 .XXX ± 0.060 .XXXX ± 0.005	THIRD ANGLE PROJECTION SHEET	DATE 6/30/2016	WORK ORDER NUMBER -
CHANGE NOTICE 11 OF 18	TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L	DRAWING NUMBER 69E100	

ETHERNET PORT

COOLANT LOSS

LOW OIL LEVEL SHUTDOWN

EXTERNAL E-STOP

CUSTOM EVENT (PROPANE FUEL SOURCE)

CUSTOM EVENT (MIL LAMP INPUT)

CUSTOM EVENT (METHANE DETECTION INPUT)

LOW OIL LEVEL ALARM

STARTER RELAY

FUEL ENABLE

REDUCED POWER MODE

OFF MODE

AUTO MODE

VOLTS/ HERTZ WITHIN LIMITS

DISABLE AUX AC

LIVE BUS INDICATION

VOLTAGE SELECTION IS LOW

FREQUENCY SELECTION IS LOW

COMMON ALARM

CUSTOM EVENT (PROPANE FUEL SOURCE)

VOLTAGE SELECTION IS LOW

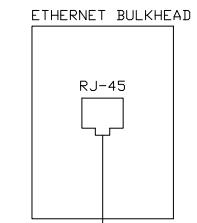
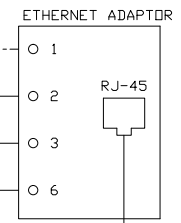
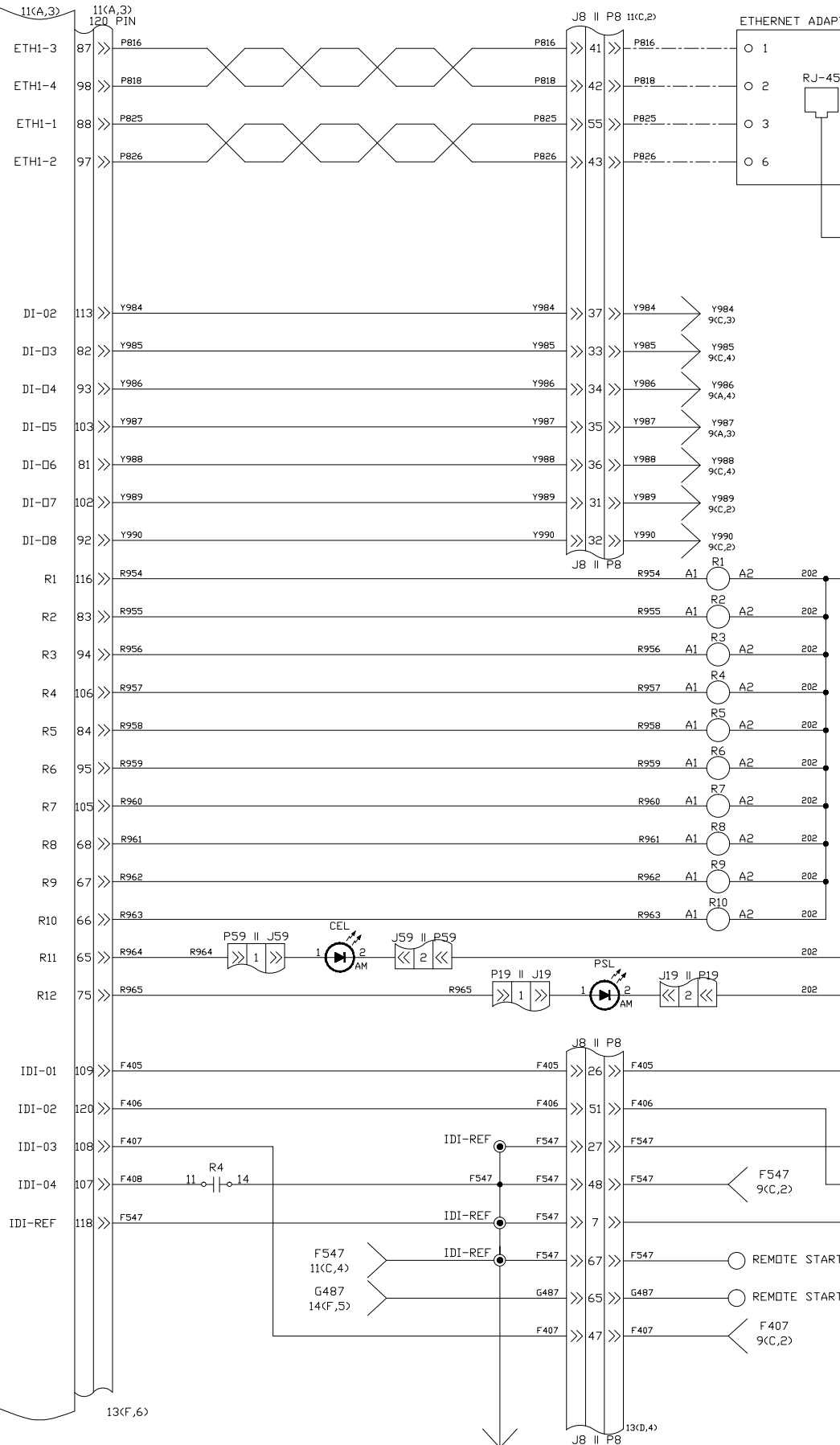
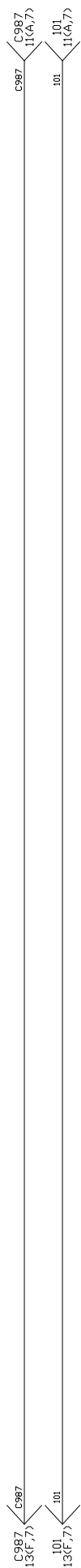
FREQUENCY SELECTION IS LOW

WATER IN FUEL

SMS IN CHECK

ISOLATED DIGITAL INPUT REFERENCE

EMCP 4.4



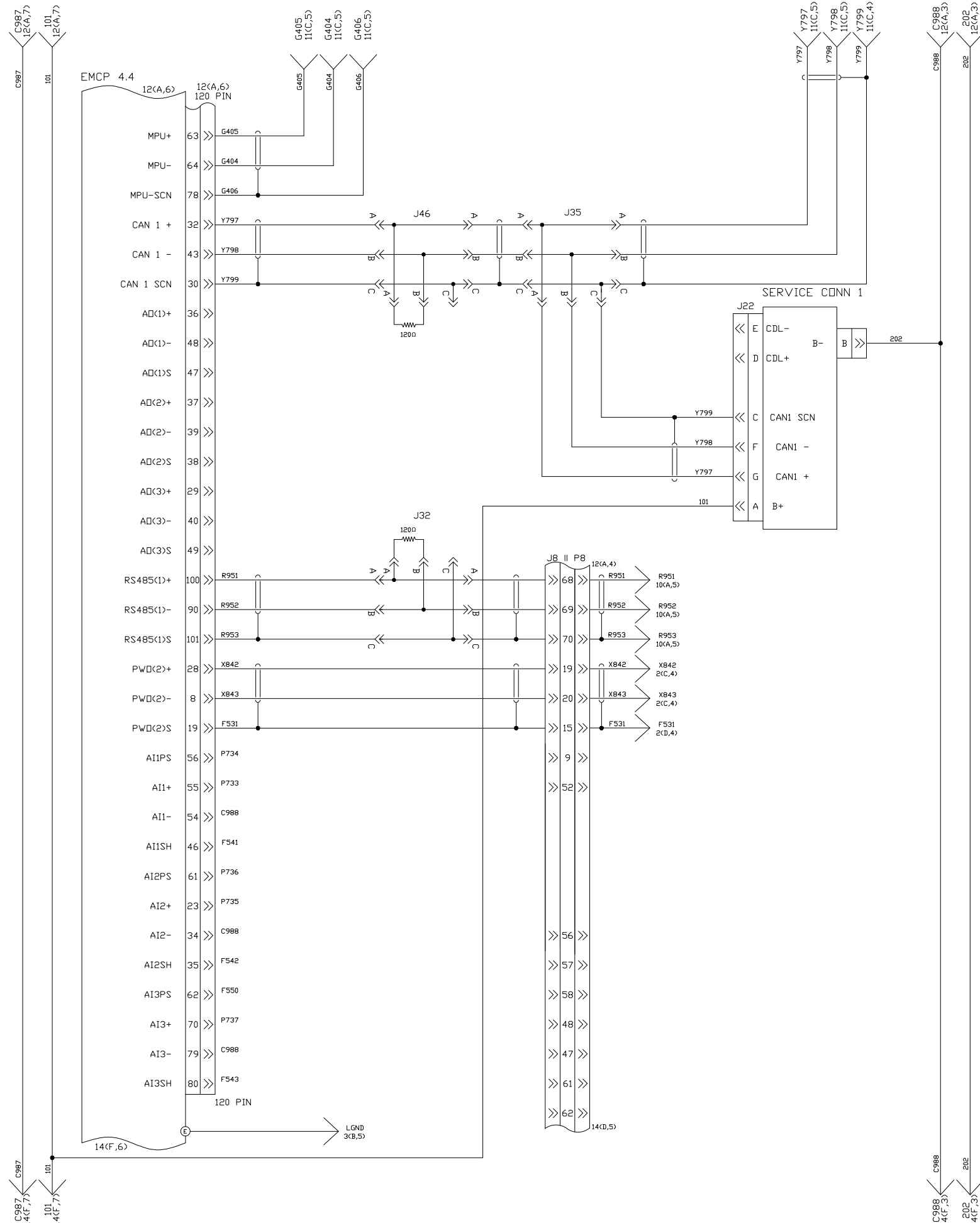
DC DISTRIBUTION 9  
FOR NOTES SEE SHEET ONE  
CATERPILLAR: CONFIDENTIAL YELLOW

DATE		BY		FILE		PROJECT REFERENCE	
				DF/69E		APS290G	
TOLERANCES		THIRD ANGLE		SCALE/SHEET SIZE		DRAWN BY	
XX ± 0.100		PROJECTION		1=40/D		D. RICHARDSON	
XXX ± 0.060		SHEET		DATE		WORK ORDER NUMBER	
ANGULAR ± 1'		12 DF 18		6/30/2016		-	
TITLE		SCHEMATIC		DRAWING NUMBER		69E100	
APS290G W/EMCP 4.4 & PSI 14 L							

**ALTORFER** ALTORFER POWER SYSTEMS  
6315 W. FAUBER RD. PHONE (309) 697-1234  
BARTONVILLE, IL 61807 FAX (309) 282-7546

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ANALOG DUPUT 1 +  
 ANALOG OUTPUT 1 -  
 ANALOG OUTPUT 1 SCN  
 ANALOG DUPUT 2 +  
 ANALOG OUTPUT 2 -  
 ANALOG OUTPUT 2 SCN  
 ANALOG DUPUT 3 +  
 ANALOG OUTPUT 3 -  
 ANALOG OUTPUT 3 SCN  
 MODBUS #1 +  
 MODBUS #1 -  
 MODBUS #1 SCN  
 PWM DUPUT 2 +  
 PWM OUTPUT 2 -  
 PWM OUTPUT 2 SCN  
 ANALOG INPUT 1 POWER  
 ANALOG INPUT 1 +  
 ANALOG INPUT 1 -  
 ANALOG INPUT 1 SCN  
 ANALOG INPUT 2 POWER  
 ANALOG INPUT 2 +  
 ANALOG INPUT 2 -  
 ANALOG INPUT 2 SCN  
 ANALOG INPUT 3 POWER  
 ANALOG INPUT 3 +  
 ANALOG INPUT 3 -  
 ANALOG INPUT 3 SCN



DC DISTRIBUTION 10  
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE DF/69E	PROJECT REFERENCE APS290G	
TOLERANCES: .XX ± 0.100 .XXX ± 0.060 .XXXX ± 0.005	THIRD ANGLE PROJECTION	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON
ANGULAR ± 1°		SHEET 13 OF 18	DATE 6/30/2016
TITLE	SCHEMATIC		DRAWING NUMBER
APS290G W/EMCP 4.4 & PSI 14 L			69E100

GROUP START INPUT  
BELL ALARM  
(CIRCUIT BREAKER TRIPPED)

GENERATOR CIRCUIT BREAKER  
TRIP COMMAND  
GENERATOR CIRCUIT BREAKER  
CLOSE COMMAND  
CIRCUIT BREAKER CLOSE

CIRCUIT BREAKER TRIP

CIRCUIT BREAKER  
CLOSED POSITION

CIRCUIT BREAKER  
OPEN POSITION

AVAILABLE

CIRCUIT BREAKER  
TRIP LOGIC

PERSONNEL SAFETY SWITCH

CIRCUIT BREAKER  
CLOSED INDICATOR

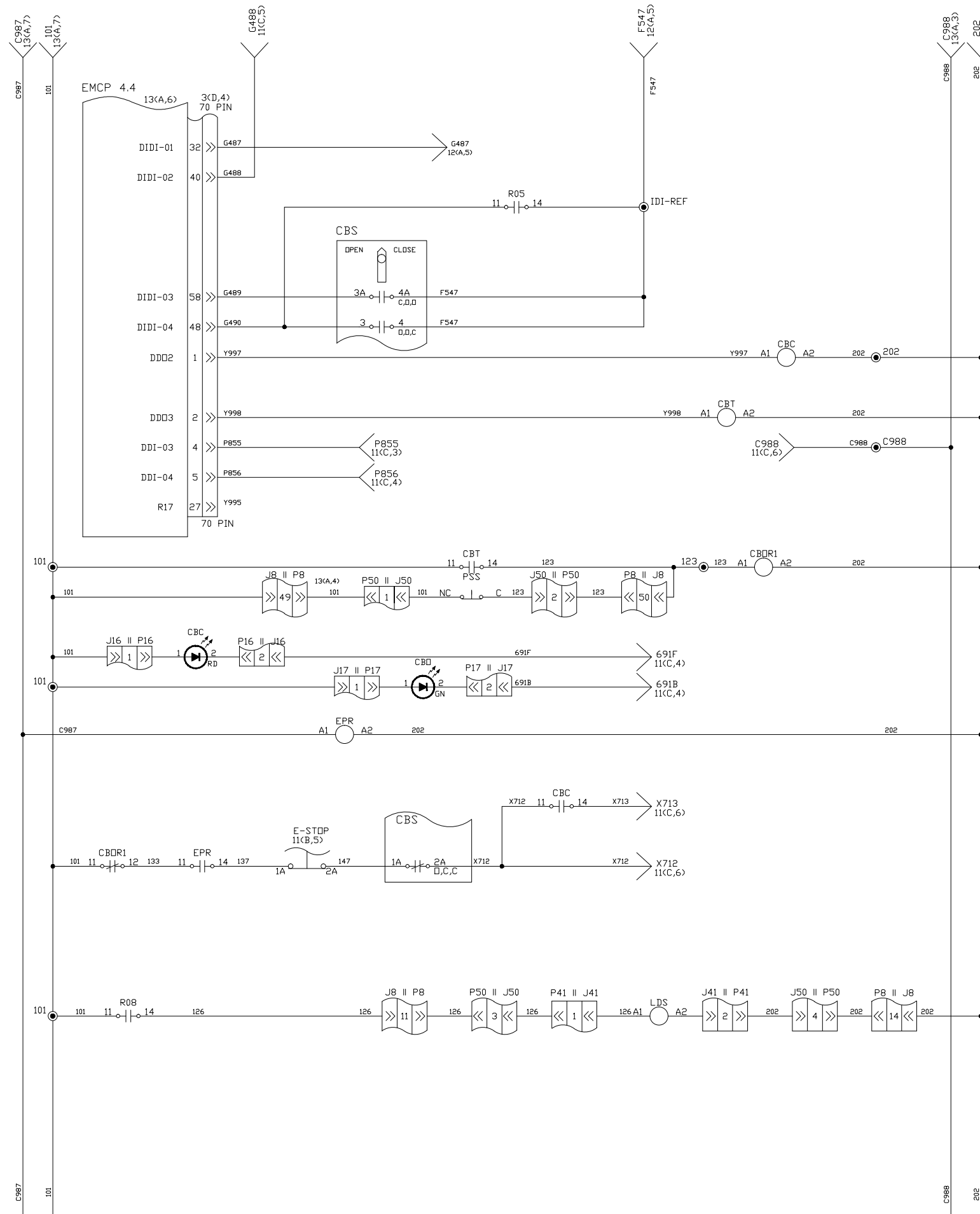
CIRCUIT BREAKER  
OPEN INDICATOR

EMCP POWER RELAY

CIRCUIT BREAKER CLOSE

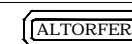
CIRCUIT BREAKER OPEN

LOAD DOOR SOLENOID



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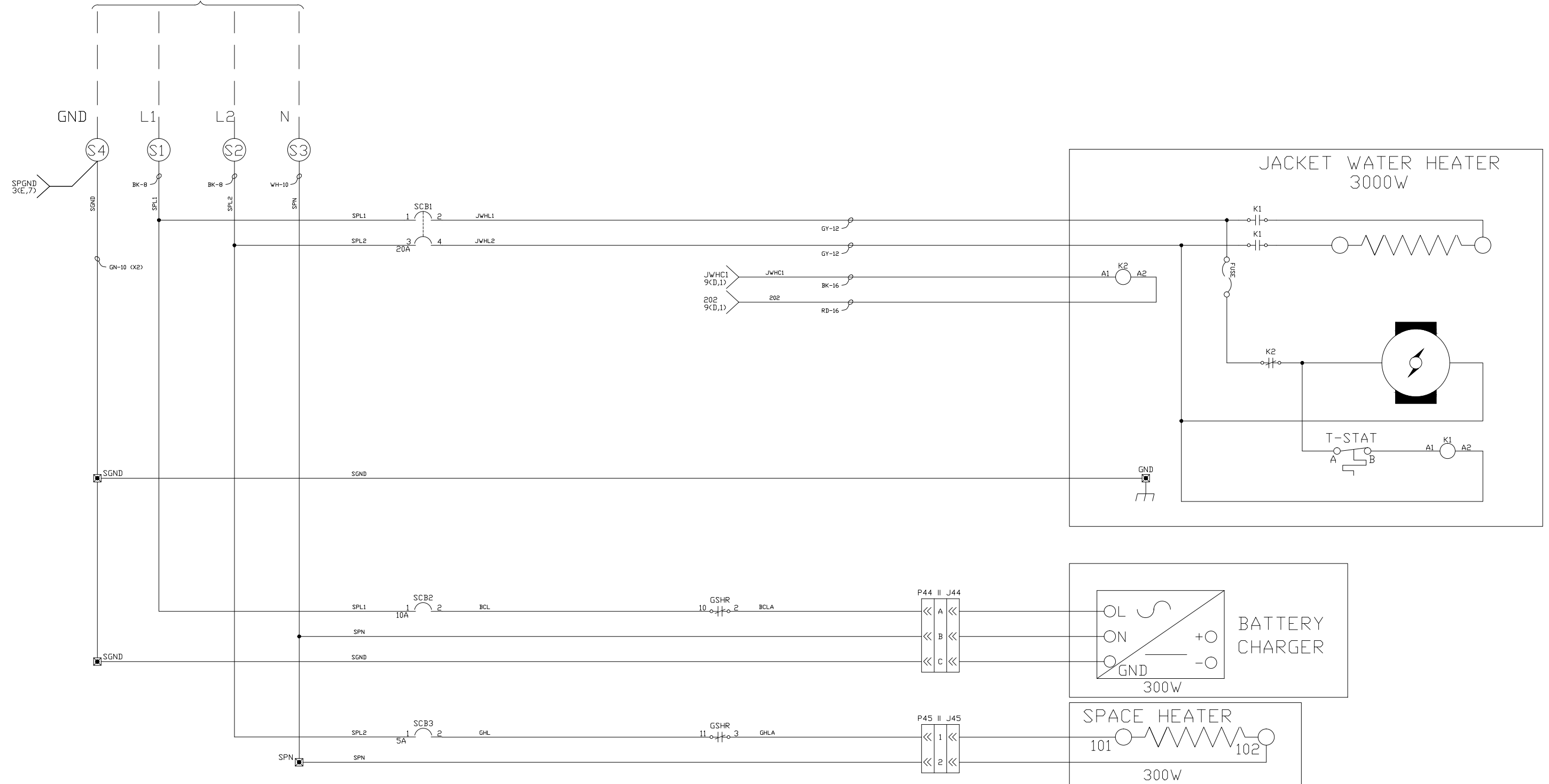
DATE		BY		FILE		PROJECT REFERENCE	
CHANGE NOTICE		TOLERANCES		SCALE/SHEET SIZE		DRAWN BY	
UNLESS OTHERWISE SPECIFIED		XXX ± 0.100		1=40/D		D. RICHARDSON	
ANGLE		PROJECTION		DATE		JOB ORDER NUMBER	
X.XX ± 0.060		14 DF 18		12/21/2015		-	
X.XXX ± 0.005		SHEET		TITLE		DRAWING NUMBER	
ANGULAR ± 1'		14		SCHEMATIC		69E100	
TITLE		APPS290G W/EMCP 4.4 & PSI 14 L		DRAWING NUMBER		69E100	



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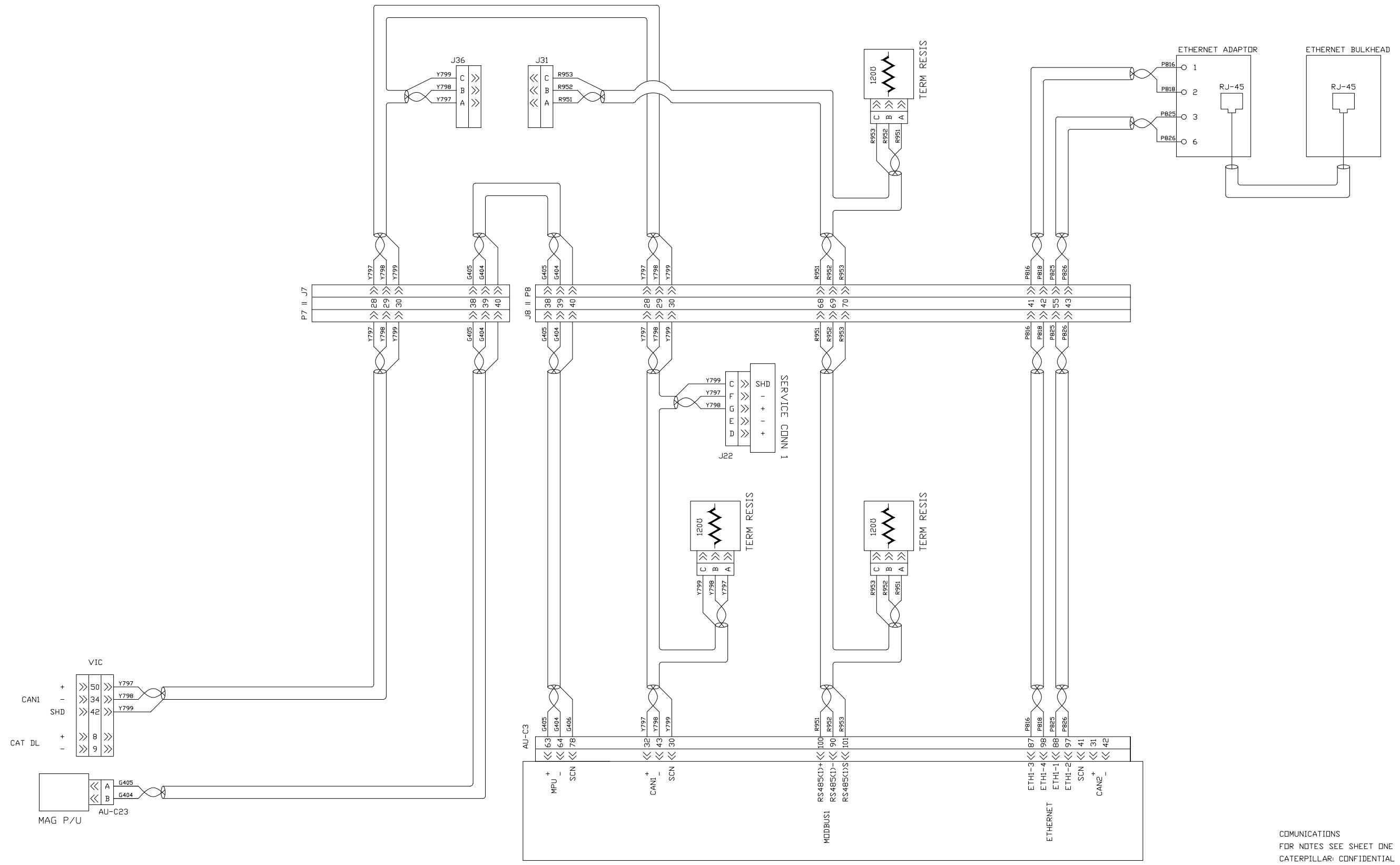
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40A 240V SHORE POWER



AC SHORE POWER DISTRIBUTION  
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CHANGE NOTICE ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: .XX ± 0.100 ANGLE: .XXX ± 0.060 PROJECTION: .XXX ± 0.005 ANGULAR ± 1°	FILE DF/69E	PROJECT REFERENCE APS290G	
	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON	QUOTE NUMBER -
	SHEET 15 DF 18	DATE 6/30/2016	WORK ORDER NUMBER -
	TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L		DRAWING NUMBER 69E100

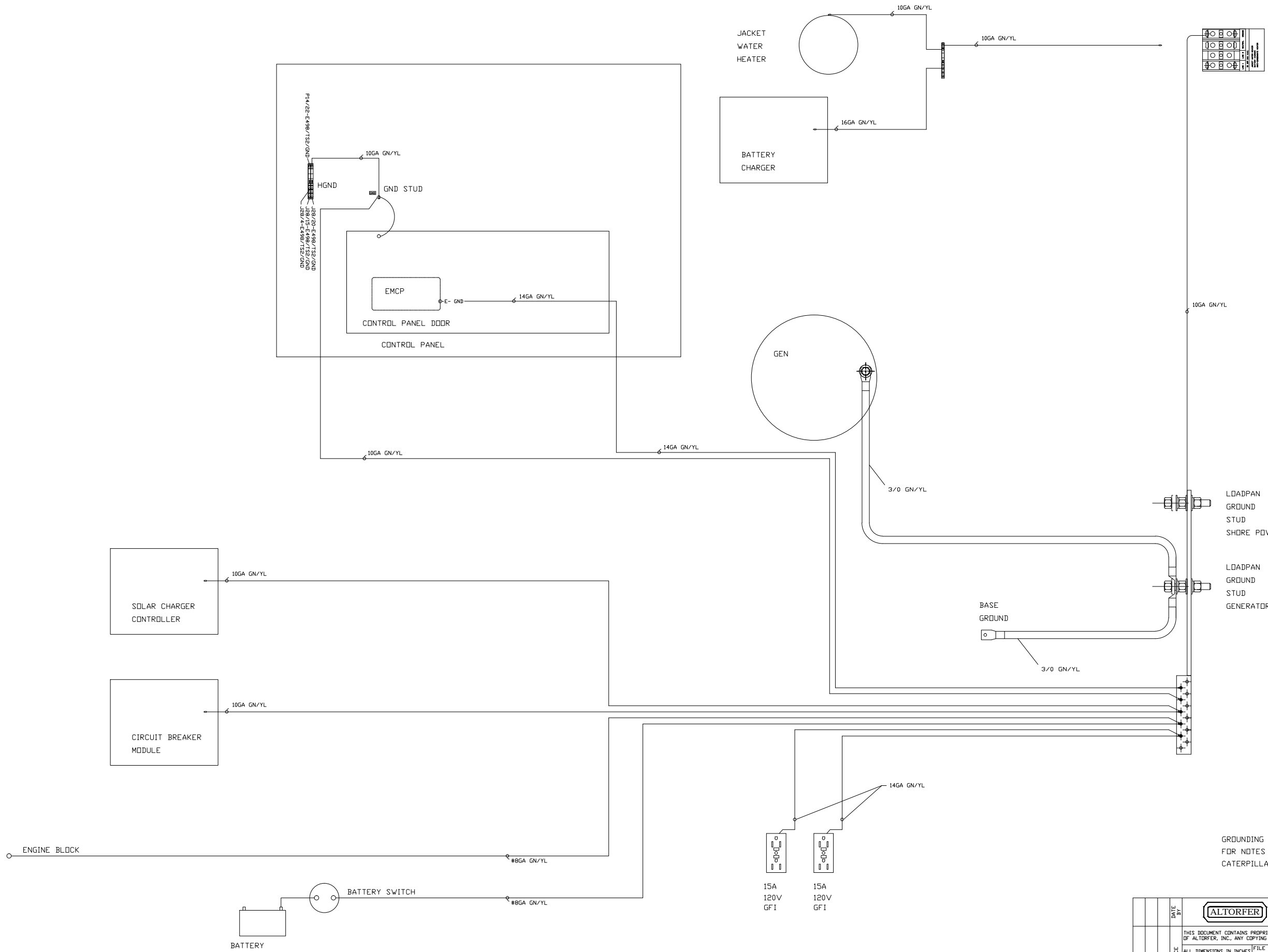


EMCP 4.4

COMMUNICATIONS  
FOR NOTES SEE SHEET ONE  
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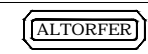
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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE DF/69E	PROJECT REFERENCE APS290G	
TOLERANCES XX ± 0.100 XXX ± 0.060 XXXX ± 0.005	THIRD ANGLE PROJECTION 	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON
CHANGE NOTICE 16 DF 18	SHEET 16 DF 18	DATE 6/30/2016	QUOTE NUMBER - WORK ORDER NUMBER - DRAWING NUMBER 69E100
TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L			





GROUNDING  
FOR NOTES SEE SHEET ONE  
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DATE		BY		FILE		PROJECT REFERENCE	
				DF/69E		APS290G	
TOLERANCES		THIRD	SCALE/SHEET SIZE	DRAWN BY		QUOTE NUMBER	
XXX ± 0.100		ANGLE	1=40/D	D. RICHARDSON		-	
X.XX ± 0.060		PROJECTION	DATE	WORK ORDER NUMBER		-	
X.XXX ± 0.005		SHEET	17 OF 18	6/30/2016		-	
ANGULAR ± 1'							
TITLE		SCHEMATIC		DRAWING NUMBER		69E100	
APS290G W/EMCP 4.4 & PSI 14 L							



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SHORE POWER CONNECTION - 240 VOLT

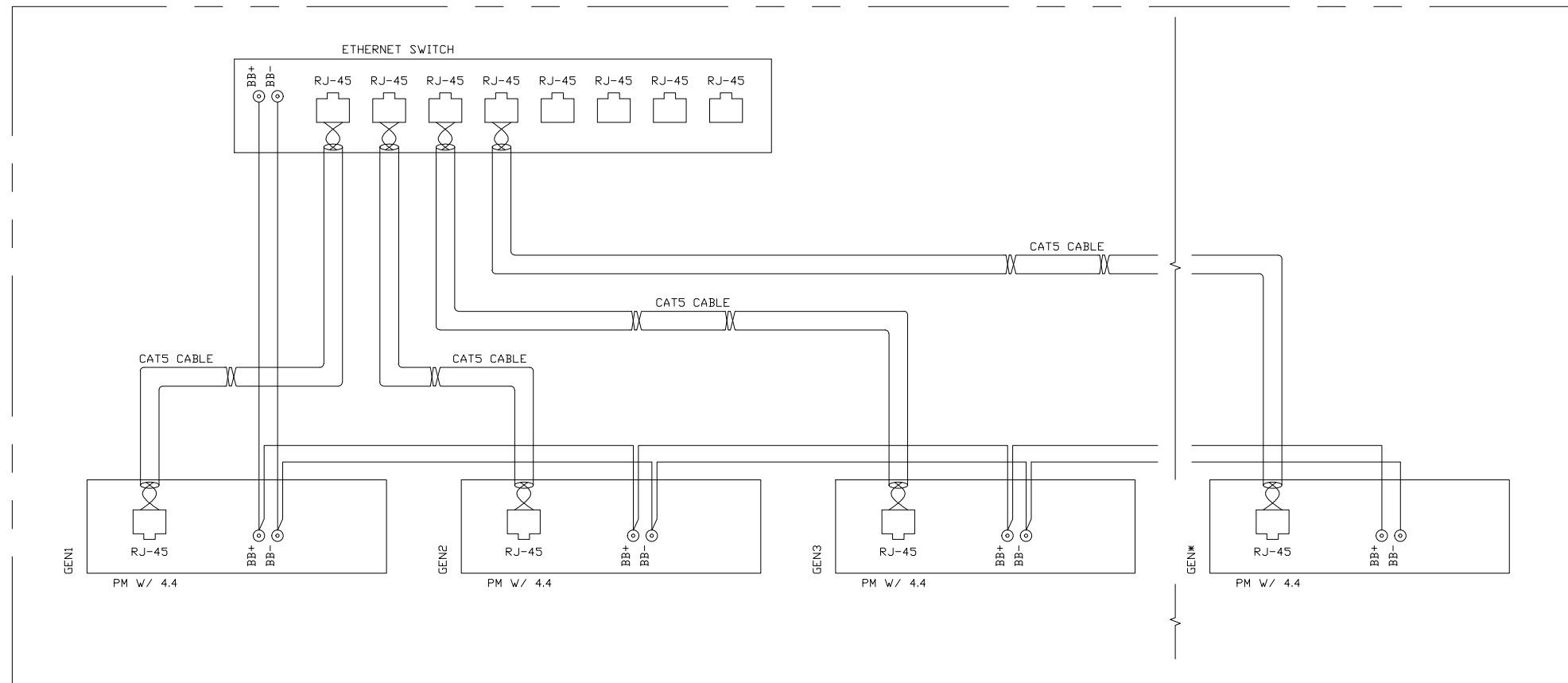
POWER MODULE INTERCONNECT BOX - AC TERMINALS

40A 250/125V  
 BATTERY CHARGER  
 GENERATOR HEATER  
 JACKET WATER HEATER



40 AMP / #8 GA WIRE

LOAD SHARE CONNECTIONS--(ALL EMCP 4.4 UNITS)



CUSTOMER CONNECTIONS  
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CHANGE NOTICE 1 2 3 4	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE DF/69E	PROJECT REFERENCE APS290G	
	TOLERANCES .XX ± 0.100 .XXX ± 0.060 .XXXX ± 0.005	THIRD ANGLE PROJECTION SHEET 18 OF 18	SCALE/SHEET SIZE 1=40/D	DRAWN BY D. RICHARDSON
	ANGULAR ± 1°		DATE 6/30/2016	QUOTE NUMBER - WORK ORDER NUMBER -
	TITLE SCHEMATIC APS290G W/EMCP 4.4 & PSI 14 L		DRAWING NUMBER 69E100	