

- 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
- CBCL 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
- DDI 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 DODOR 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
- NAT NORMAL 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
- PWM PULSE WIDTH MODULATION
- PWD 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
- VFSS VOLTAGE/FREQUENCY SELECT SWITCH
- VP VOLTAGE POTENTIOMETER
- XF CLOSE COIL (GCB)
- a NORMALLY OPEN CONTACT
- b NORMALLY CLOSED CONTACT
- c a AND b WITH COMMON
- mA MILLIAMPERE
- mV MILLIVOLT
- A A PHASE
- B B PHASE
- C C PHASE

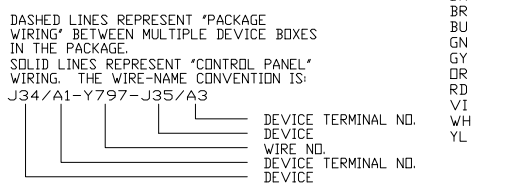
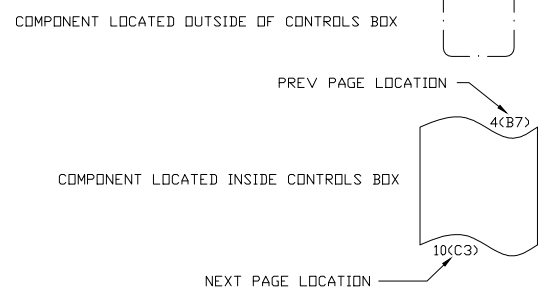
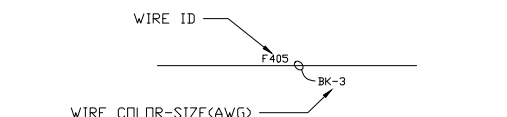
INPUT/OUTPUT CONTENTS

I/O#	FUNCTION	VOLTAGE	CONNECTION	I kW	I kVA	I HZ	I AMPS	I CB TRIP
R01	EMCP RELAYS (DIGITAL OUTPUTS)	600/ 347	WYE	180	287	60	216	0.40
R02	STARTER RELAY	480/ 277	WYE	180	287	60	270	0.48
R03	FUEL ENABLE	240/ 139	WYE	180	287	60	541	0.92
R04	REDUCED POWER MODE OFF (NOTE 1)	208/ 120	WYE	173	216	60	600	1.0
R05	OFF MODE							
R06	AUTO MODE							
R07	VOLTS/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							
DDI-01	EMCP INPUTS							
DDI-02	EMERGENCY STOP INPUT							
DDI-03	REMOTE INITIATE COMMAND							
DDI-04	GENERATOR CIRCUIT BREAKER AUX a							
	GENERATOR CIRCUIT BREAKER AUX b							
DI-01	EXCITATION DISABLE							
DI-02	COOLANT LOSS							
DI-03	LOW OIL LEVEL SHUTDOWN							
DI-04	EXTERNAL E-STOP							
DI-05	CUSTOM EVENT (PROPANE FUEL SOURCE)							
DI-06	CUSTOM EVENT (MIL LAMP INPUT)							
DI-07	METHANE DETECTION							
DI-08	LOW OIL LEVEL ALARM							
DDI-01	VOLTAGE SELECTION IS LOW							
DDI-02	FREQUENCY SELECTION IS LOW							
DDI-03	WATER IN FUEL SHUTDOWN							
DDI-04	SMS IN CHECK							
DDI-01	GROUP START INPUT							
DDI-02	BELL ALARM							
DDI-03	GENERATOR CIRCUIT BREAKER TRIP COMMAND							
DDI-04	GENERATOR CIRCUIT BREAKER CLOSE COMMAND							
A11	EMCP ANALOG INPUTS							
A12	AVAILABLE							
A13	AVAILABLE							
A14	AVAILABLE							
AO1	EMCP ANALOG OUTPUTS							
AO2	AVAILABLE							
AO3	AVAILABLE							
PWD1	EMCP PWM OUTPUTS							
PWD2	AVAILABLE							
	INTEGRATED VOLTAGE REGULATOR							

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

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

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



- WIRE COLORS:
- BK BLACK
 - BR BROWN
 - BU BLUE
 - GN GREEN
 - GY GREY
 - OR ORANGE
 - RD RED
 - VI VIOLET
 - WH WHITE
 - YL YELLOW

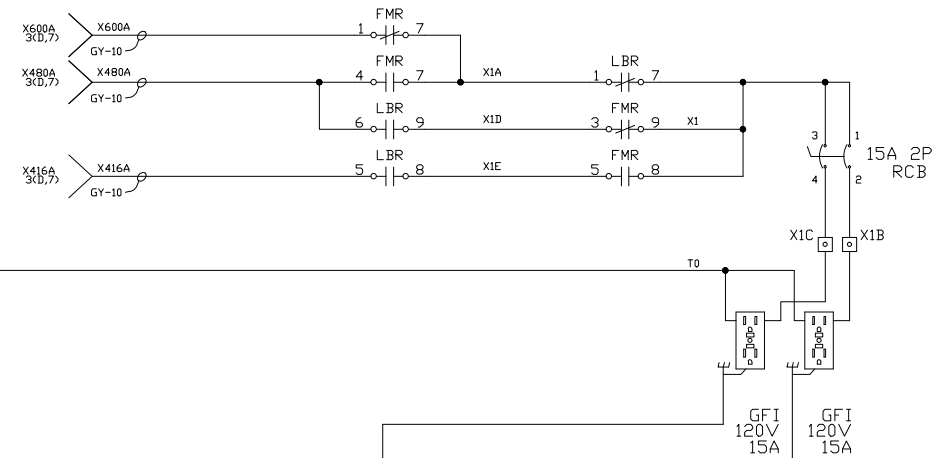
- NOTE A:
 NOTE B:
 NOTE C:
 NOTE D:
 NOTE E:
 NOTE G: SHIELD WIRES SHOULD BE CONNECTED TO TERMINAL BLOCKS ON PRIMARY UNIT ONLY. ON MIDDLE UNITS, CONNECT SHIELDS TOGETHER. ON END UNIT, DO NOT CONNECT SHIELD WIRES.
 NOTE H:
 NOTE I:
 NOTE J: END USER TO INSTALL JUMPER ON FIRST UNIT ONLY WHEN CONNECTED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

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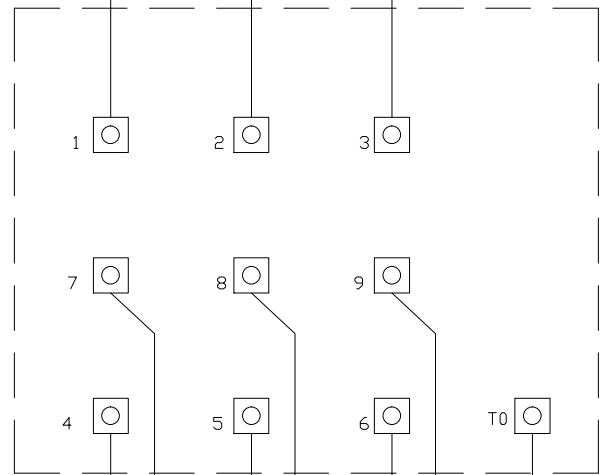
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[Signature]		DF/73E		APS230G	
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TOLERANCES: .XX ± 0.100 ANGLE .XXX ± 0.060 PROJECTION .XXX ± 0.005		SCALE/SHEET SIZE 1=40/D		QUOTE NUMBER -	
ANGULAR ± 1'		SHEET 1 DF 16		DATE 7/14/2016	
TITLE SCHEMATIC		DRAWING NUMBER		73E100	
APS230G W/EMCP 4.4 & PSI 11 L					

GENERATOR

N T1 T2 T3

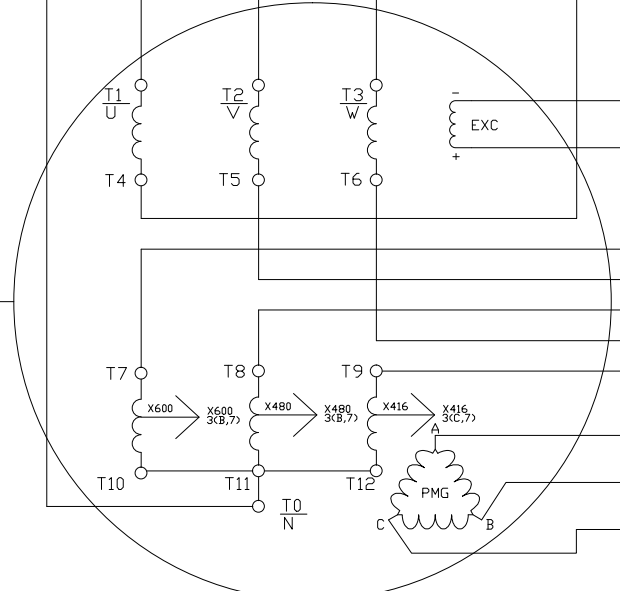
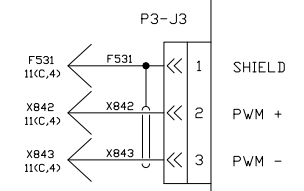


DUAL-VOLT LINK BOARD



3(A,5) GND BAR

IVR

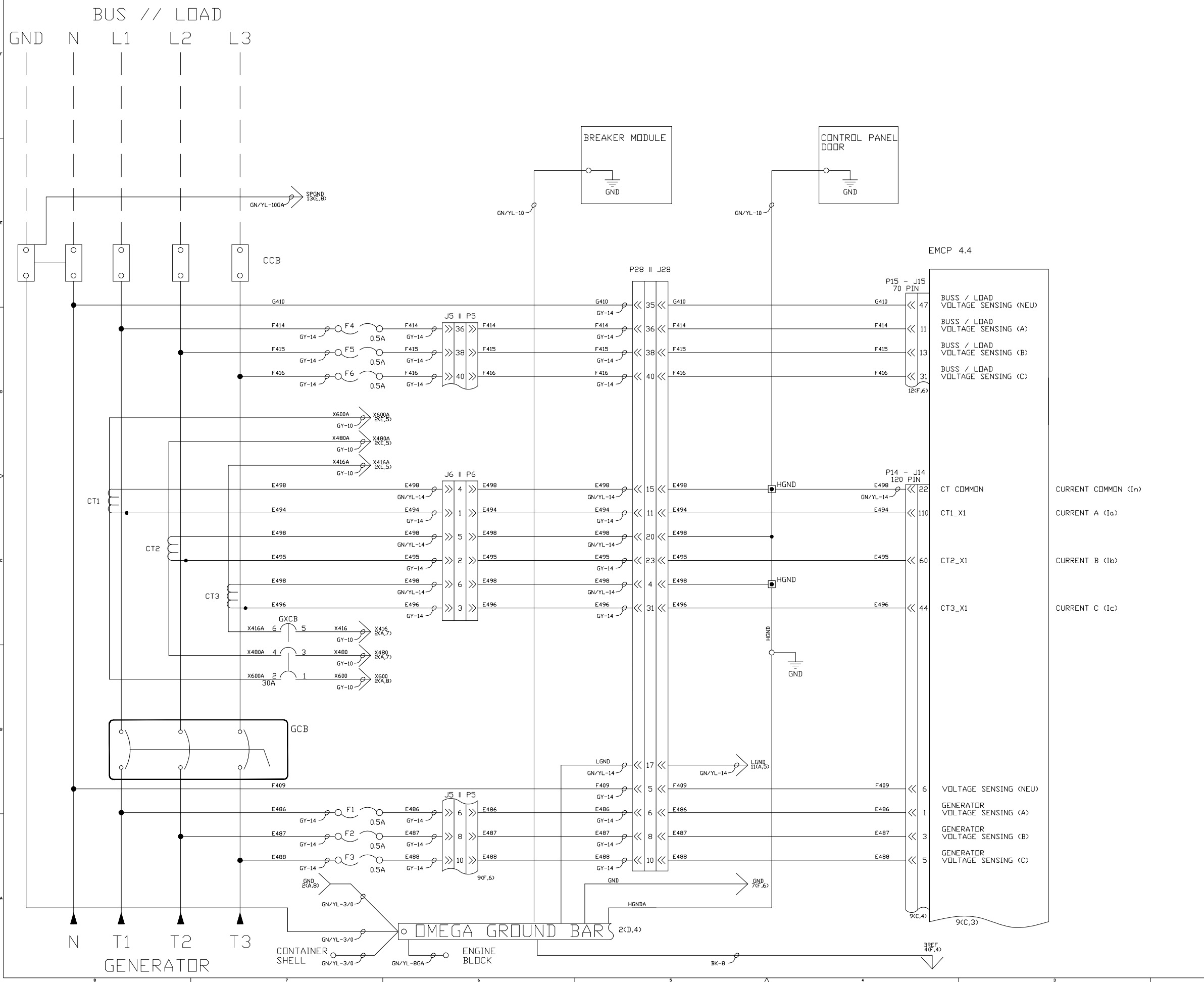


GENERATOR
PHASE ROTATION L1-L2-L3
U-V-W

AC GENERATOR AND REGULATOR SENSING
FOR NOTES SEE SHEET ONE
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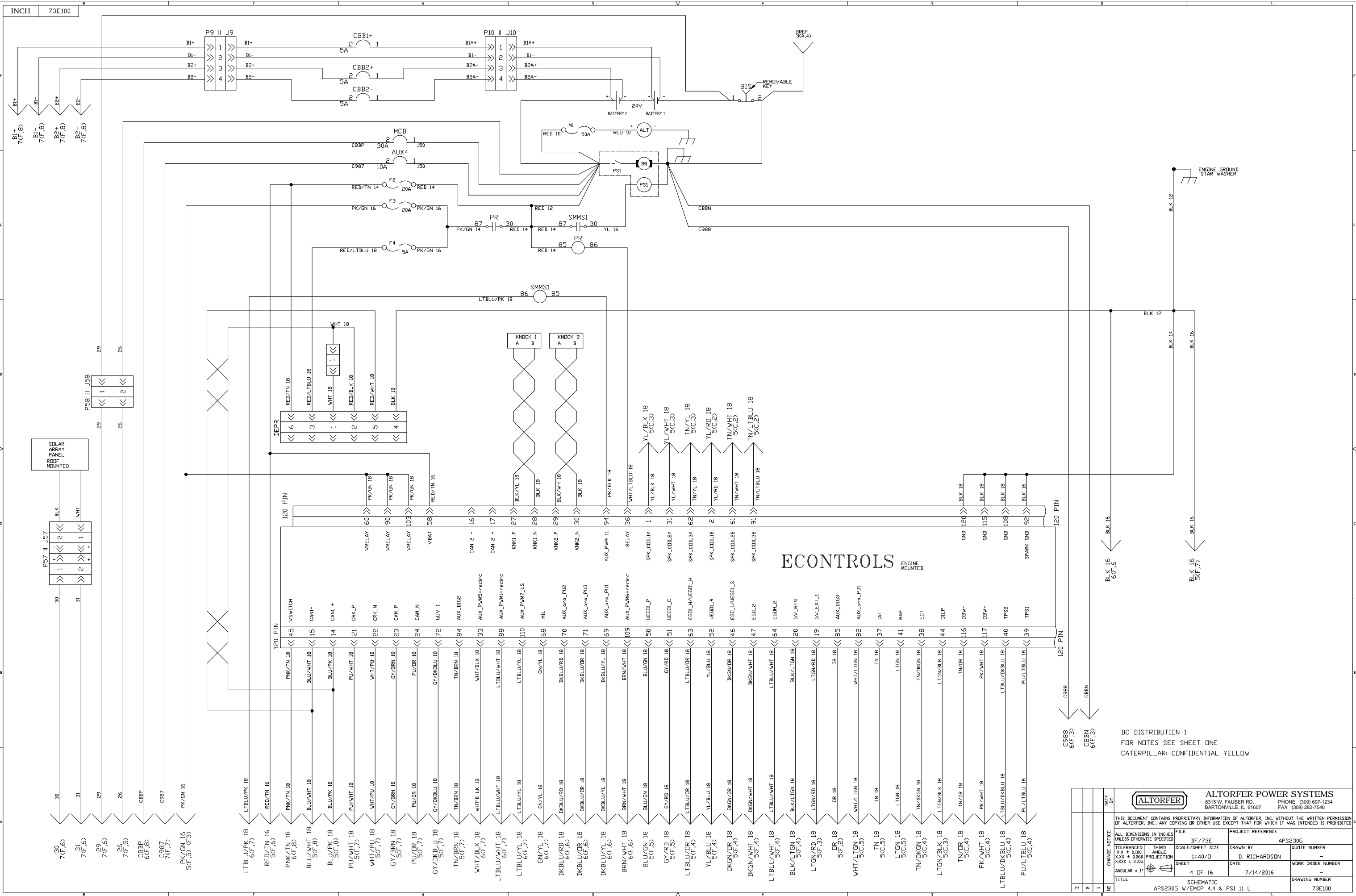
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TOLERANCES	THIRD ANGLE	SCALE/SHEET SIZE	DRAWN BY	DATE	QUOTE NUMBER		
XXX ± 0.100	PROJECTION	1=40/D	D. RICHARDSON	7/14/2016	-		
XXX ± 0.060	SHEET	2 DF 16			WORK ORDER NUMBER		
ANGULAR ± 1'					-		
TITLE				DRAWING NUMBER			
SCHEMATIC				73E100			
APS230G W/EMCP 4.4 & PSI 11 L							

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AC EMCP SENSING
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TOLERANCES: .XX ± 0.100 .XXX ± 0.060 .XXXX ± 0.005	THIRD ANGLE PROJECTION SHEET 3 OF 16	DRAWN BY D. RICHARDSON	QUOTE NUMBER -
ANGULAR ± 1°	DATE 7/14/2016	WORK ORDER NUMBER -	DRAWING NUMBER 73E100
TITLE SCHEMATIC APS230G W/EMCP 4.4 & PSI 11 L		DRAWING NUMBER 73E100	



ECONTROLS ENGINE MOUNTED

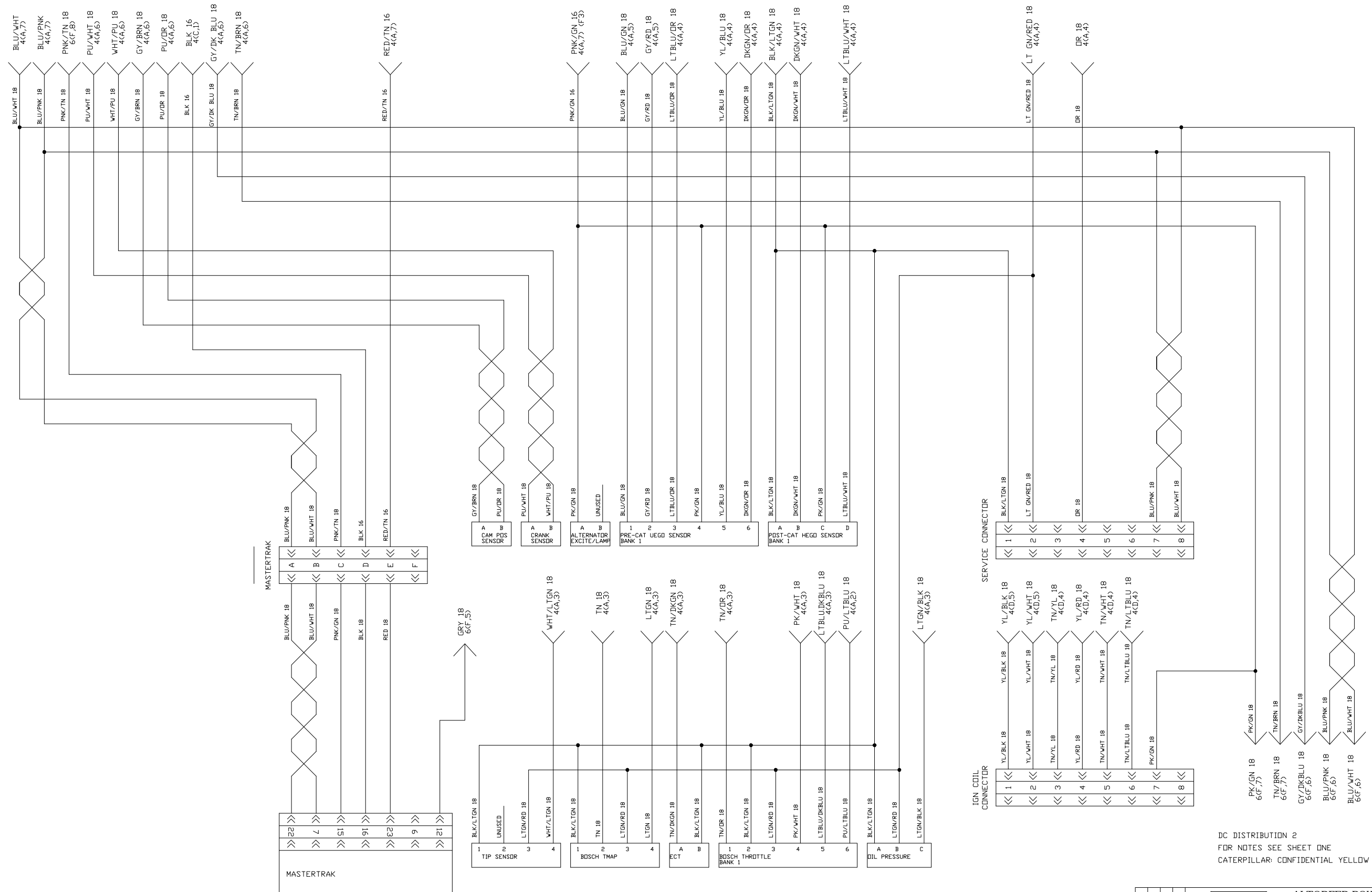
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30 7(F.16)	31 7(F.16)	29 7(F.6)	26 7(F.5)	CBBP 6(F.8)	C987 7(F.7)	PK/GN 16 5(F.5) (F.5)	LTBLU/PK 18 6(F.7)	RED/TN 16 5(F.6)	PK/TN 18 6(F.8)	BLU/VHT 18 5(F.8)	BLU/PK 18 5(F.8)	PU/VHT 18 5(F.7)	WHT/PU 18 5(F.7)	GY/BRN 18 5(F.7)	PU/DR 18 5(F.7)	GY/DKBLU 18 5(F.7)	TN/BRN 18 5(F.7)	WHT/BLK 18 6(F.7)	LTBLU/VHT 18 6(F.7)	LTBLU/YL 18 6(F.7)	GN/YL 18 6(F.7)	DKBLU/RD 18 6(F.6)	DKBLU/DR 18 6(F.6)	DKBLU/YL 18 6(F.6)	BRN/VHT 18 6(F.6)	BLU/GN 18 5(F.5)	GY/RD 18 5(F.5)	LTBLU/DR 18 5(F.4)	YL/BLU 18 5(F.4)	DKGN/DR 18 5(F.4)	DKGN/VHT 18 5(F.4)	LTBLU/VHT 18 5(F.4)	BLK/LGN 18 5(F.4)	LTGN/RD 18 5(F.3)	DR 18 5(F.2)	WHT/LGN 18 5(C.5)	TN 18 5(C.5)	LGN 18 5(C.5)	TN/DKGN 18 5(C.4)	LTGN/BLK 18 5(C.3)	TN/DR 18 5(C.4)	PK/VHT 18 5(C.4)	LTBLU/DKBLU 18 5(C.4)	PU/LTBLU 18 5(C.4)
PS7 II JS7		PS8 II JS8		C988 6(F.3)		CBBN 6(F.3)		BLK 16 6(F.6)		BLK 16 5(F.7)		BLK 12		BLK 14		BLK 16		BLK 12		BLK 14		BLK 16		BLK 12		BLK 14		BLK 16		BLK 12		BLK 14		BLK 16		BLK 12		BLK 14		BLK 16				

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TOLERANCES: .XX ± 0.10 ANGLE .XXX ± 0.060 PROJECTION 4 DF 16	SCALE/SHEET SIZE	1=40/D	AP230G
ANGULAR ± 1'	SHEET	DATE	WORK ORDER NUMBER
		7/14/2016	
TITLE	SCHEMATIC		DRAWING NUMBER
AP230G W/EMCP 4.4 & PSI 11 L			73E100

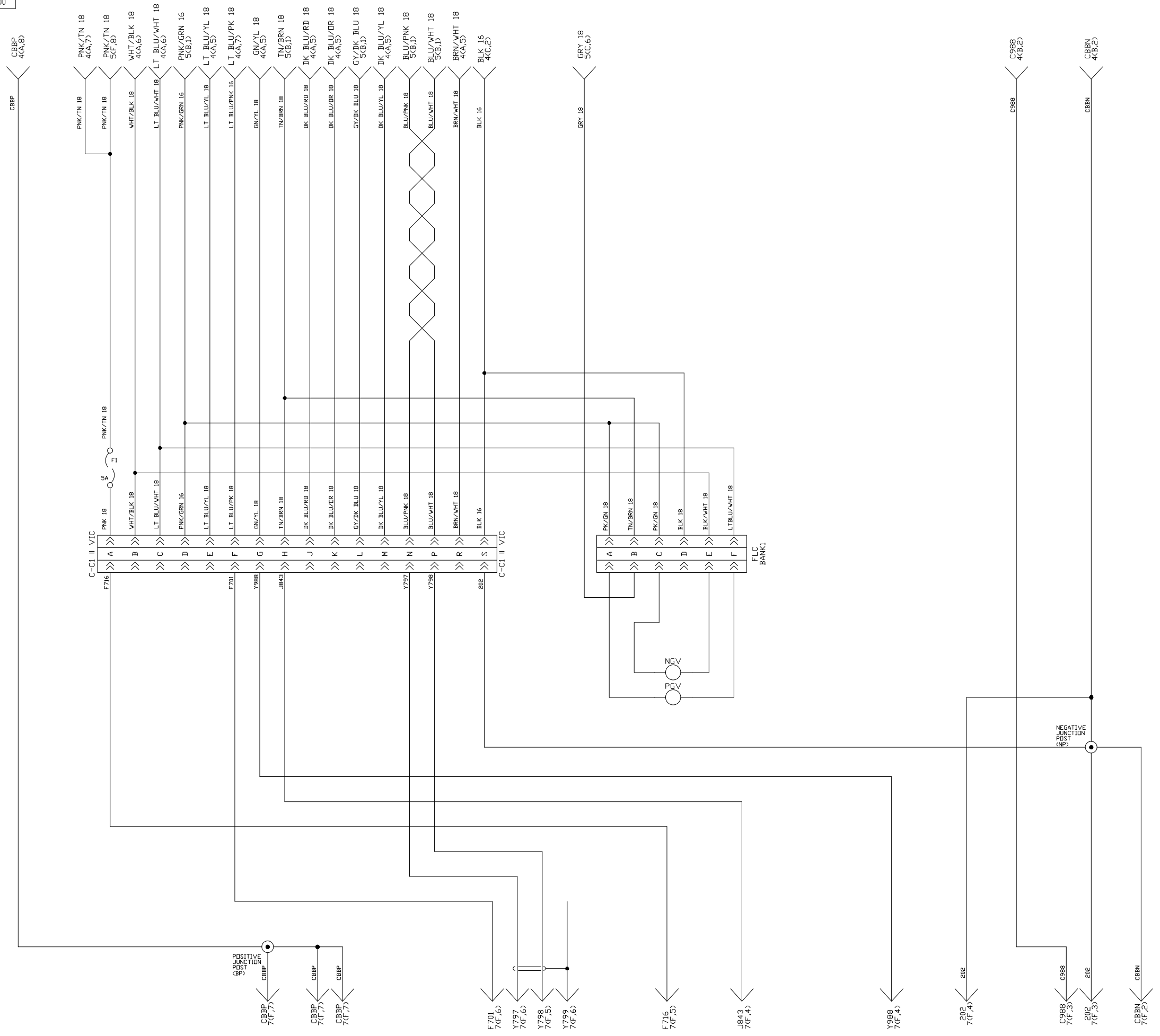
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INCH 73E100



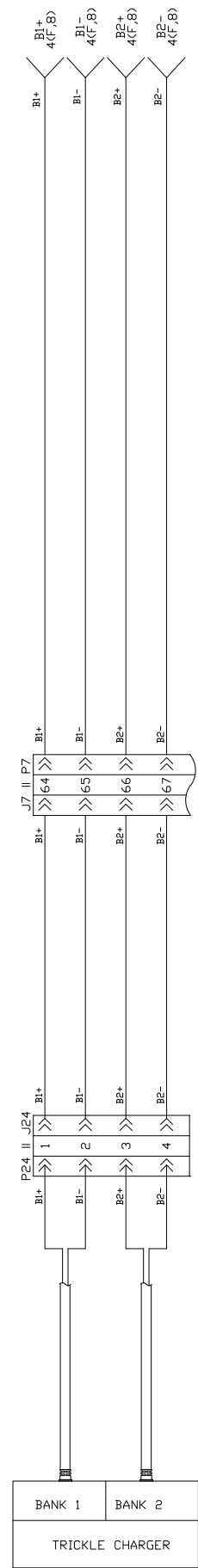
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TITLE APS230G W/EMCP 4.4 & PSI 11 L		Schematic	

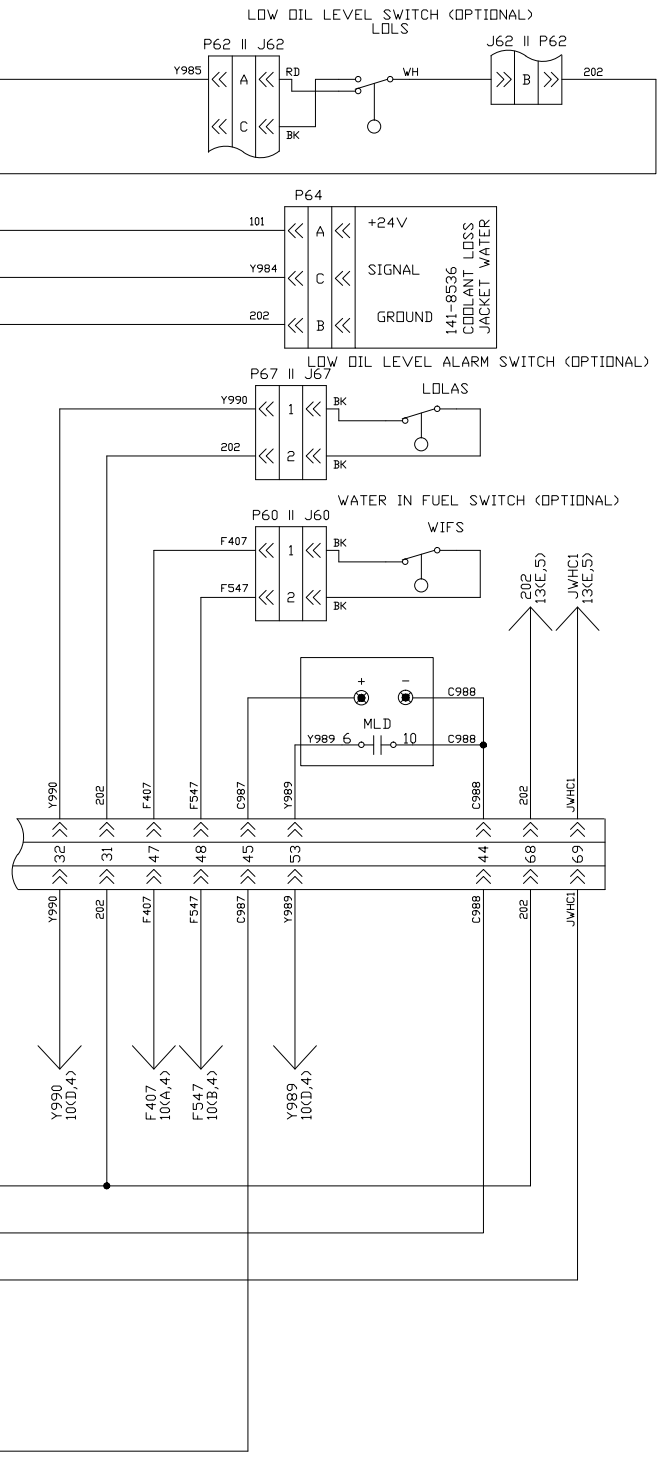
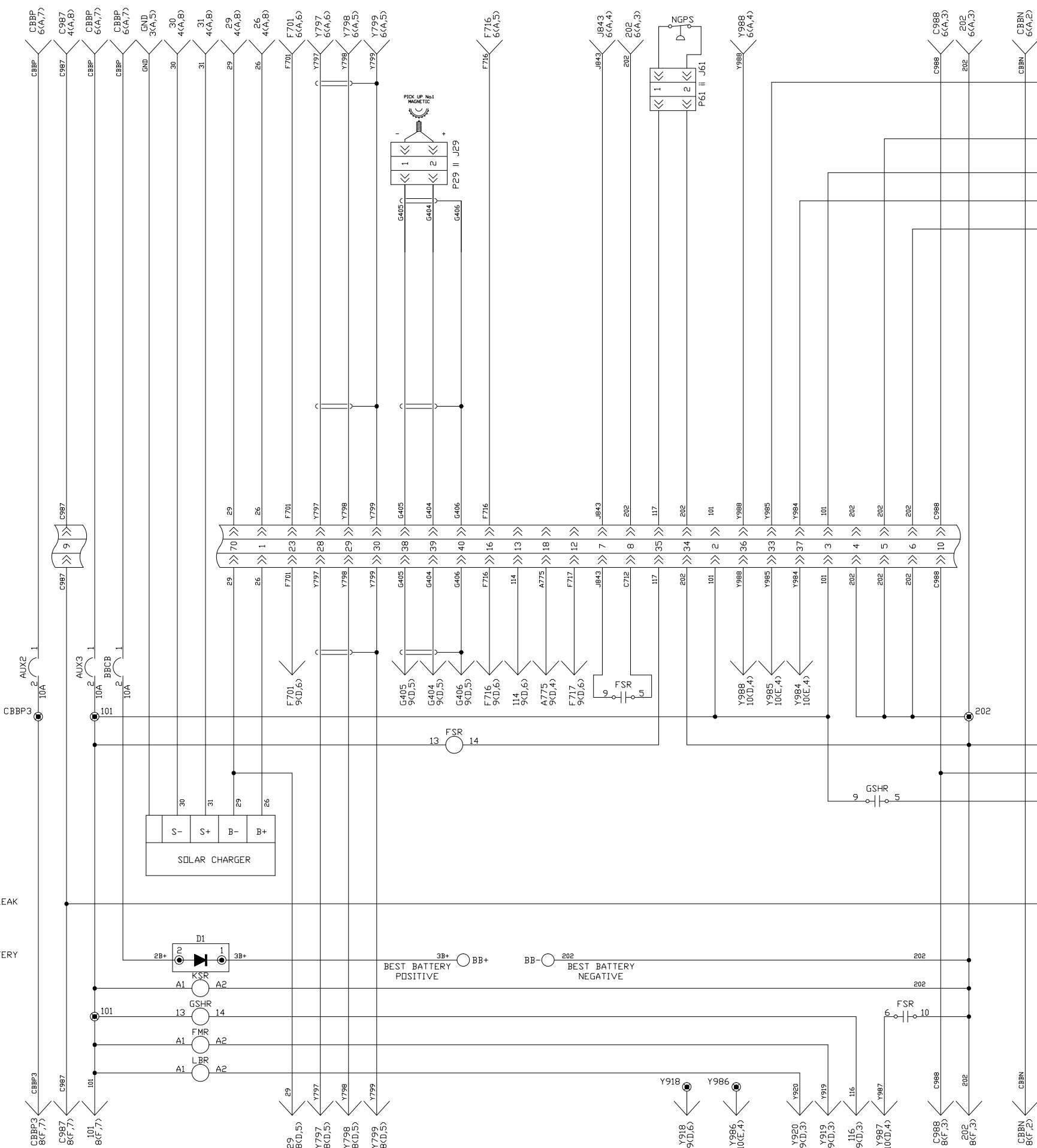


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TOLERANCES XX ± 0.100 XXX ± 0.060 XXXX ± 0.005		SCALE/SHEET SIZE 1=40/D	
ANGLE ANGULAR ± 1°		DRAWN BY D. RICHARDSON	
PROJECTION FIRST ANGLE		DATE 7/14/2016	
SHEET 6 DF 16		WORK ORDER NUMBER -	
TITLE SCHEMATIC APS230G W/EMCP 4.4 & PSI 11 L		DRAWING NUMBER 73E100	

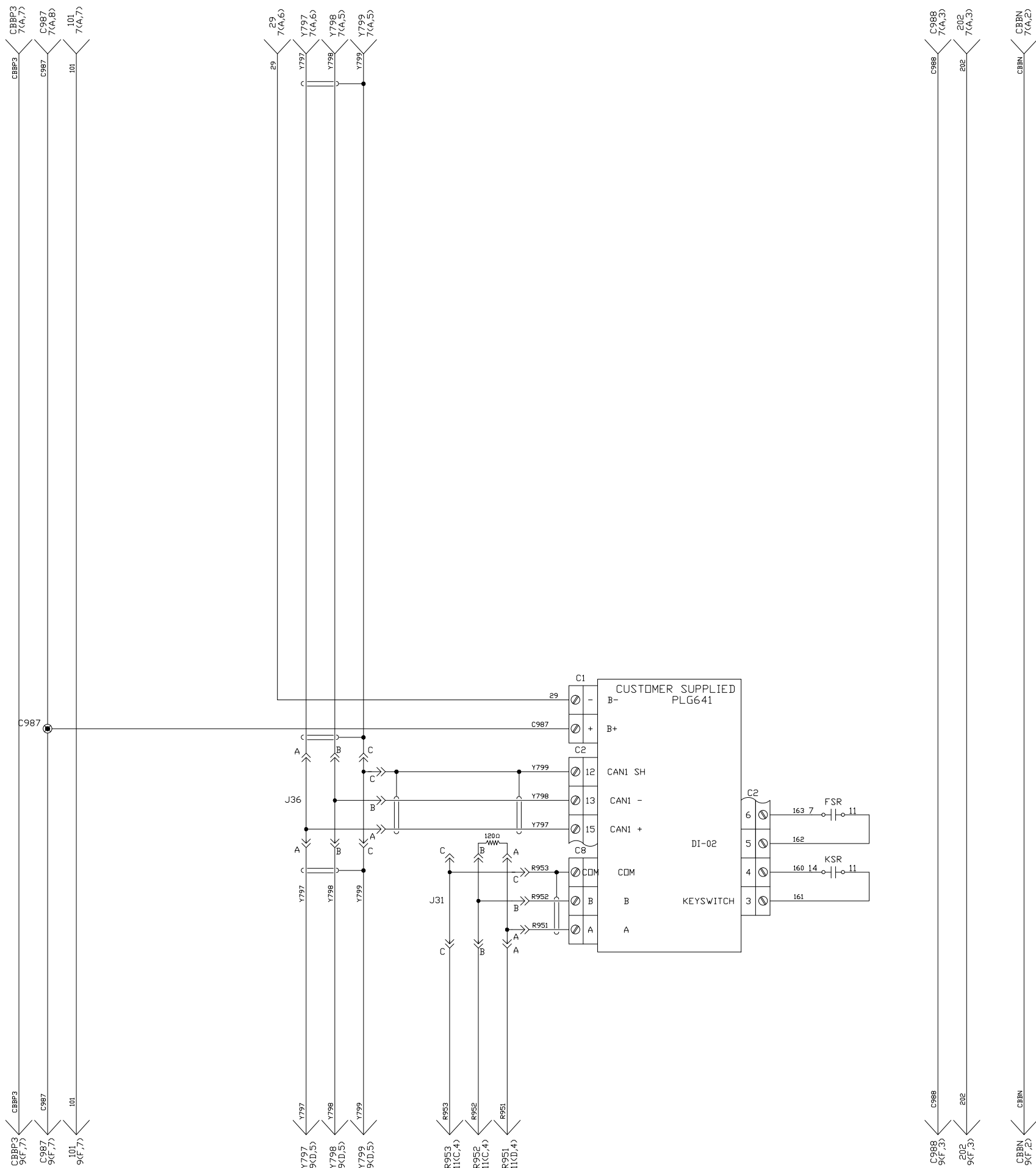


METHANE LEAK DETECTOR
BEST BATTERY SUPPLY



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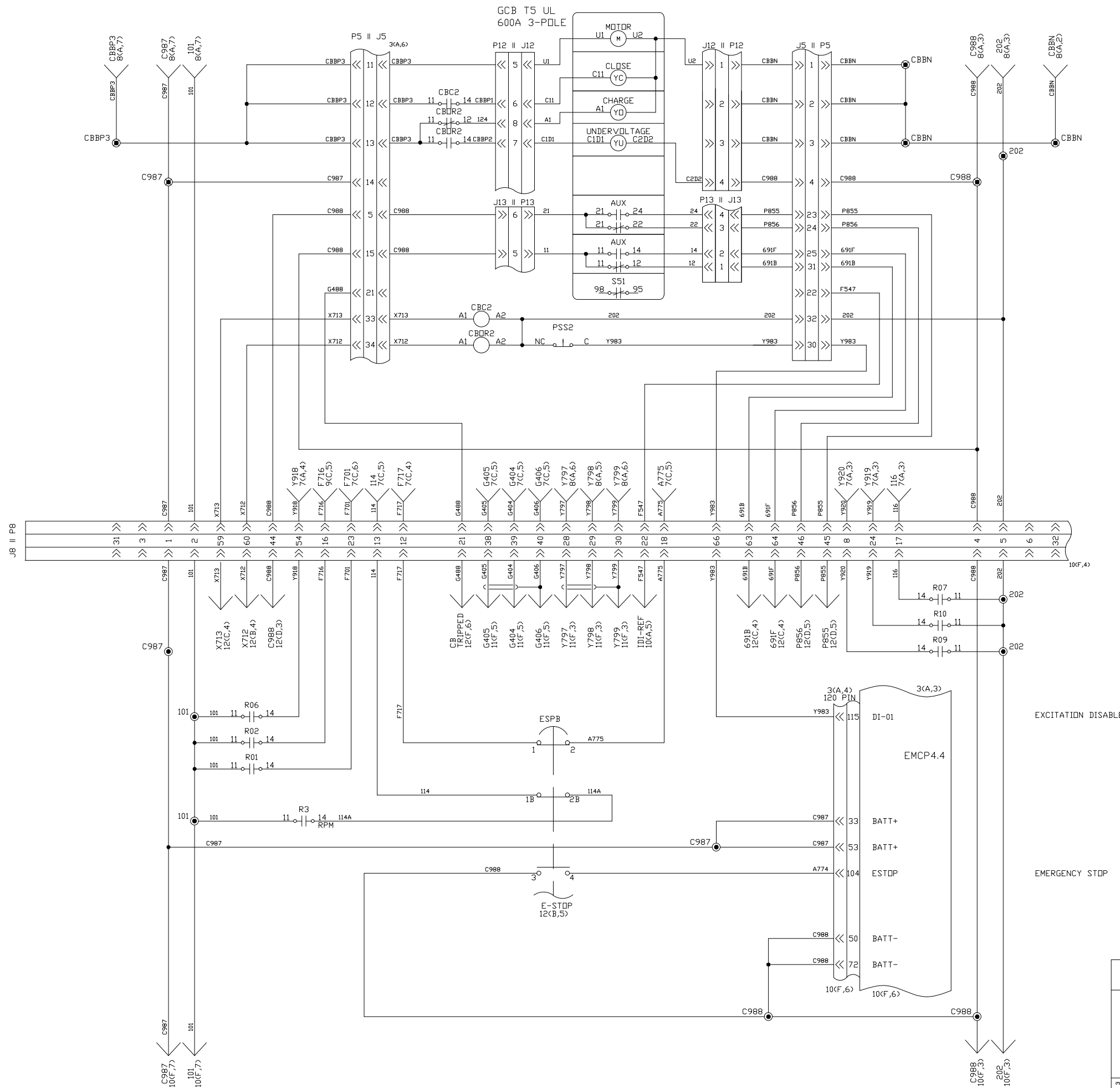
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CHANGE NOTICE	FILE	PROJECT REFERENCE	DATE
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TOLERANCES: .XX ± 0.100	SCALE/SHEET SIZE	DRAWN BY	QUOTE NUMBER
.XXX ± 0.060	1=40/D	D. RICHARDSON	-
ANGULAR ± 1°	PROJECTION	DATE	WORK ORDER NUMBER
	7 DF 16	7/14/2016	-
TITLE			DRAWING NUMBER
SCHEMATIC			73E100
APS230G W/EMCP 4.4 & PSI 14 L			



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TITLE SCHEMATIC APS230G W/EMCP 4.4 & PSI 14 L		DRAWING NUMBER 73E100	

GENERATOR
CIRCUIT
BREAKER



EXCITATION DISABLE

EMERGENCY STOP

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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	TOLERANCES	THIRD ANGLE PROJECTION	SCALE/SHEET SIZE	DRAWN BY	QUOTE NUMBER
	XX ± 0.100		1=40/D	D. RICHARDSON	-
	XXX ± 0.060		DATE		WORK ORDER NUMBER
	XXXX ± 0.005		9 DF 16	7/14/2016	-
ANGULAR ± 1'					DRAWING NUMBER
TITLE					73E100
AP230G SCHEMATIC W/EMCP 4.4 & PSI 11 L					



ALTORFER POWER SYSTEMS
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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

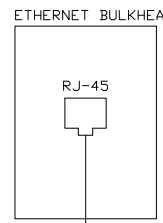
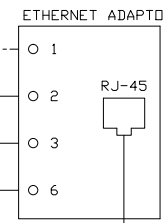
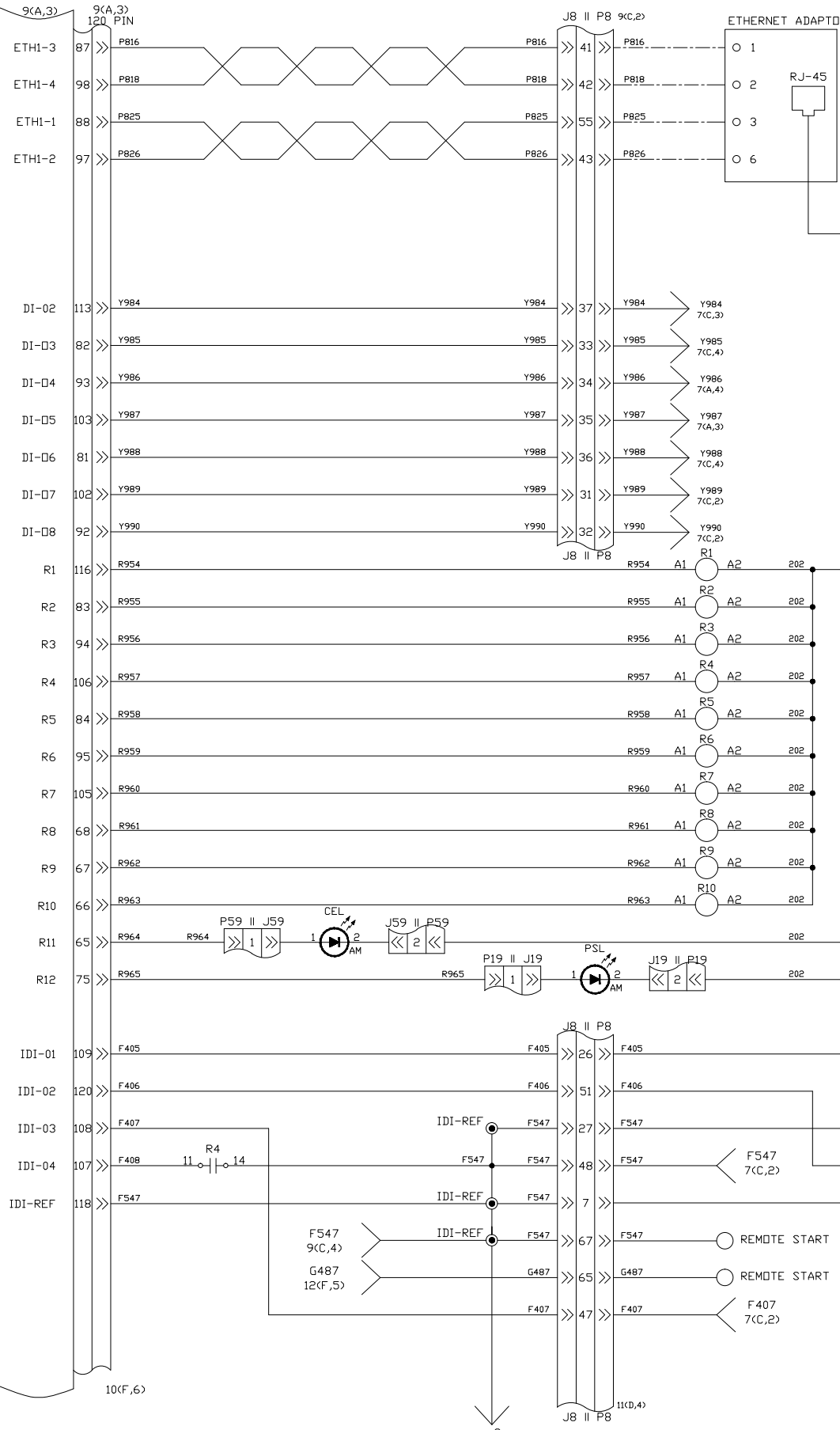
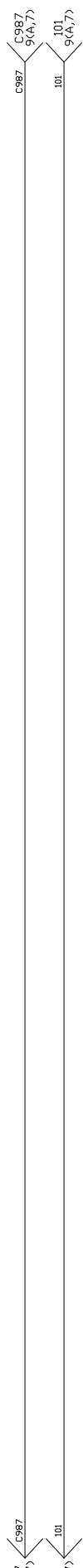
FREQUENCY SELECTION IS LOW

WATER IN FUEL

SMS IN CHECK

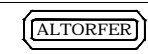
ISOLATED DIGITAL INPUT REFERENCE

EMCP 4.4



DC DISTRIBUTION 9
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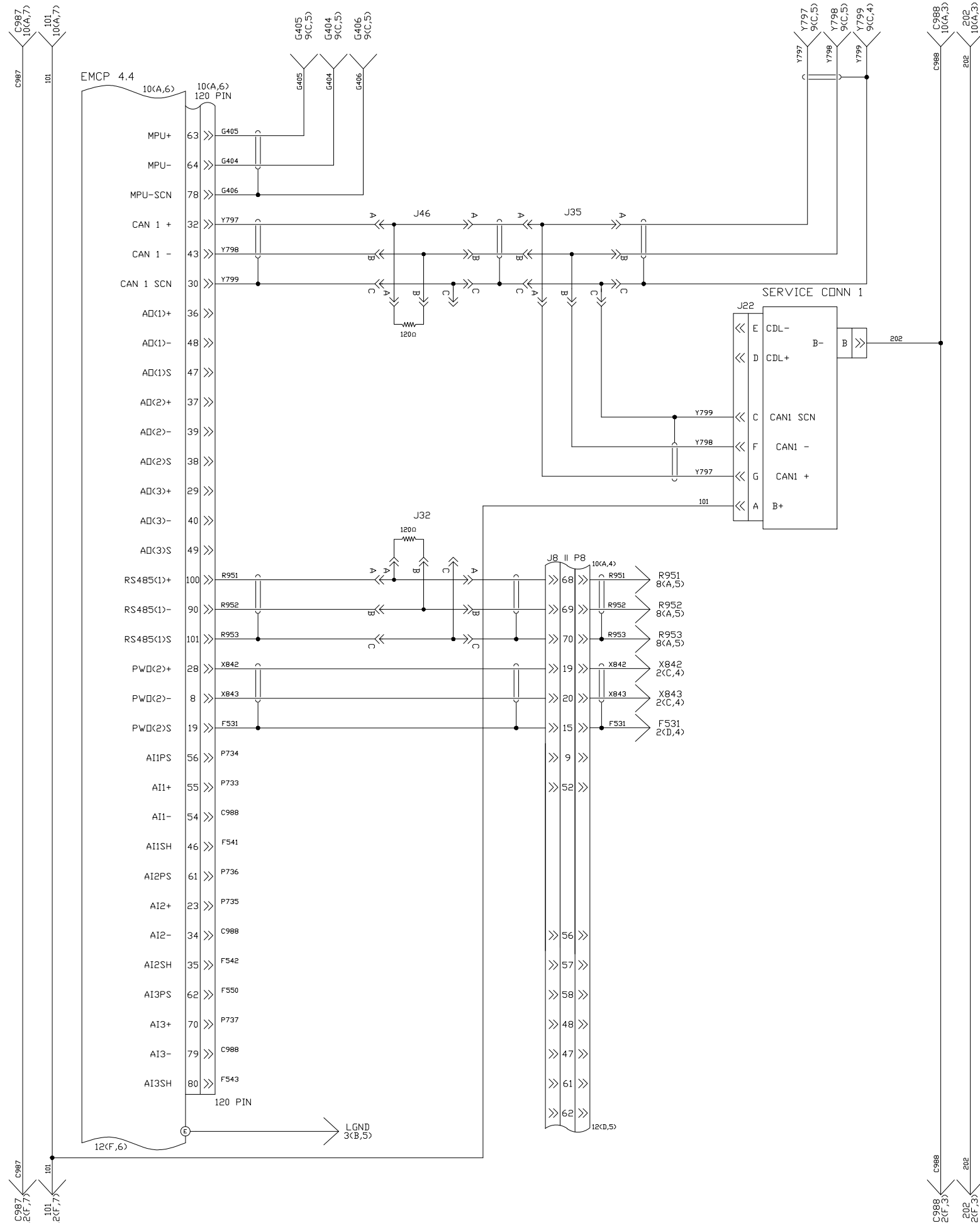
DATE		BY		FILE		PROJECT REFERENCE	
				DF/73E		APS230G	
TOLERANCES		THIRD ANGLE PROJECTION		SCALE/SHEET SIZE		DRAWN BY	
XX ± 0.100				1=40/D		D. RICHARDSON	
XXX ± 0.060				DATE		7/14/2016	
XXXX ± 0.005				SHEET		10 DF 16	
ANGULAR ± 1°							
TITLE		SCHEMATIC		DRAWING NUMBER		73E100	
APS230G W/EMCP 4.4 & PSI 14 L							



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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



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ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	FILE DF / 73E	PROJECT REFERENCE APS230G	
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 11 DF 16	DATE 7/14/2016
CHANGE NOTICE	DATE BY	QUOTE NUMBER -	WDRK ORDER NUMBER -
TITLE SCHEMATIC APS230G W/EMCP 4.4 & PSI 11 L	DRAWING NUMBER 73E100		

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

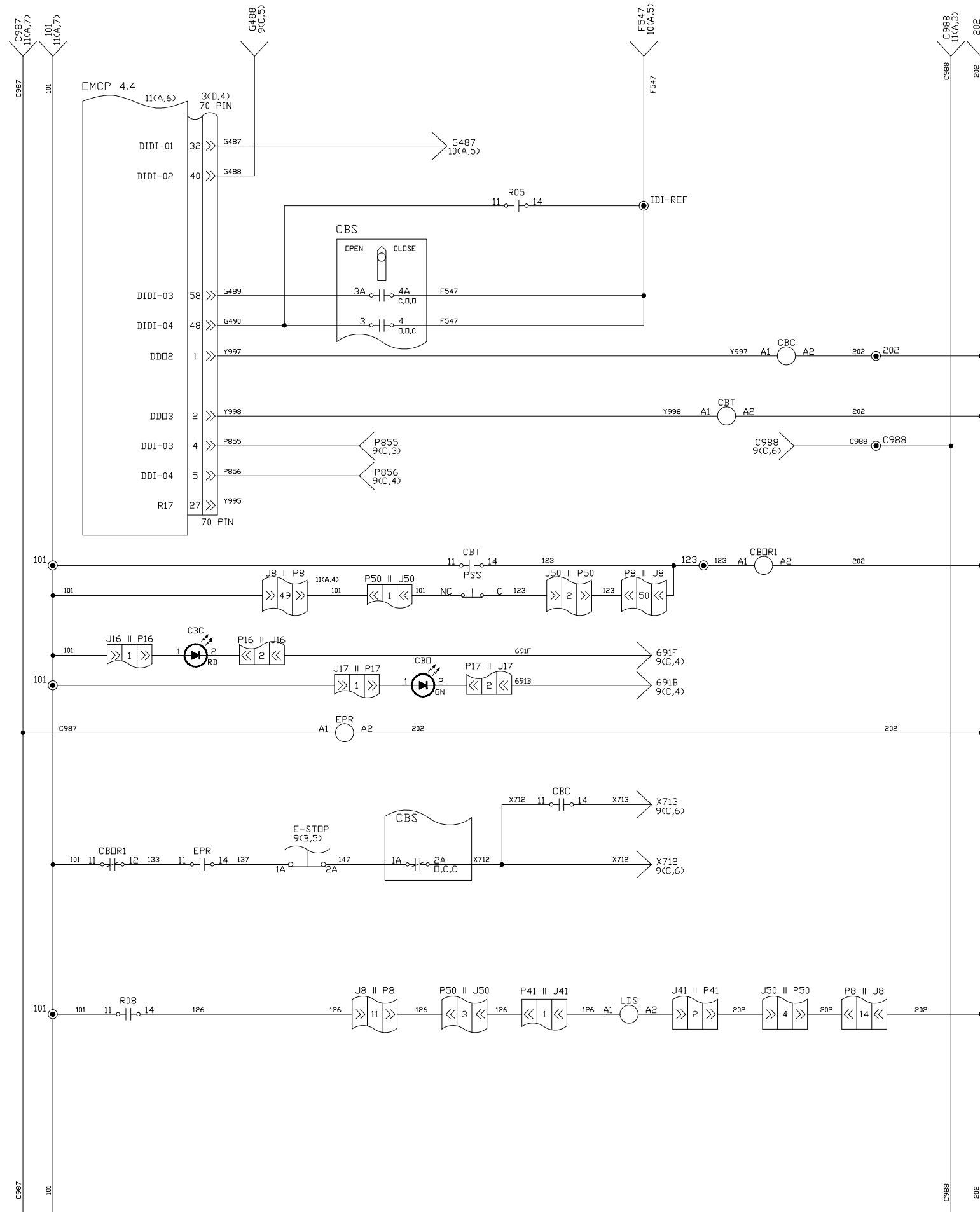
CIRCUIT BREAKER
CLOSED INDICATOR
CIRCUIT BREAKER
OPEN INDICATOR

EMCP POWER RELAY

CIRCUIT BREAKER CLOSE

CIRCUIT BREAKER OPEN

LOAD DOOR SOLENOID



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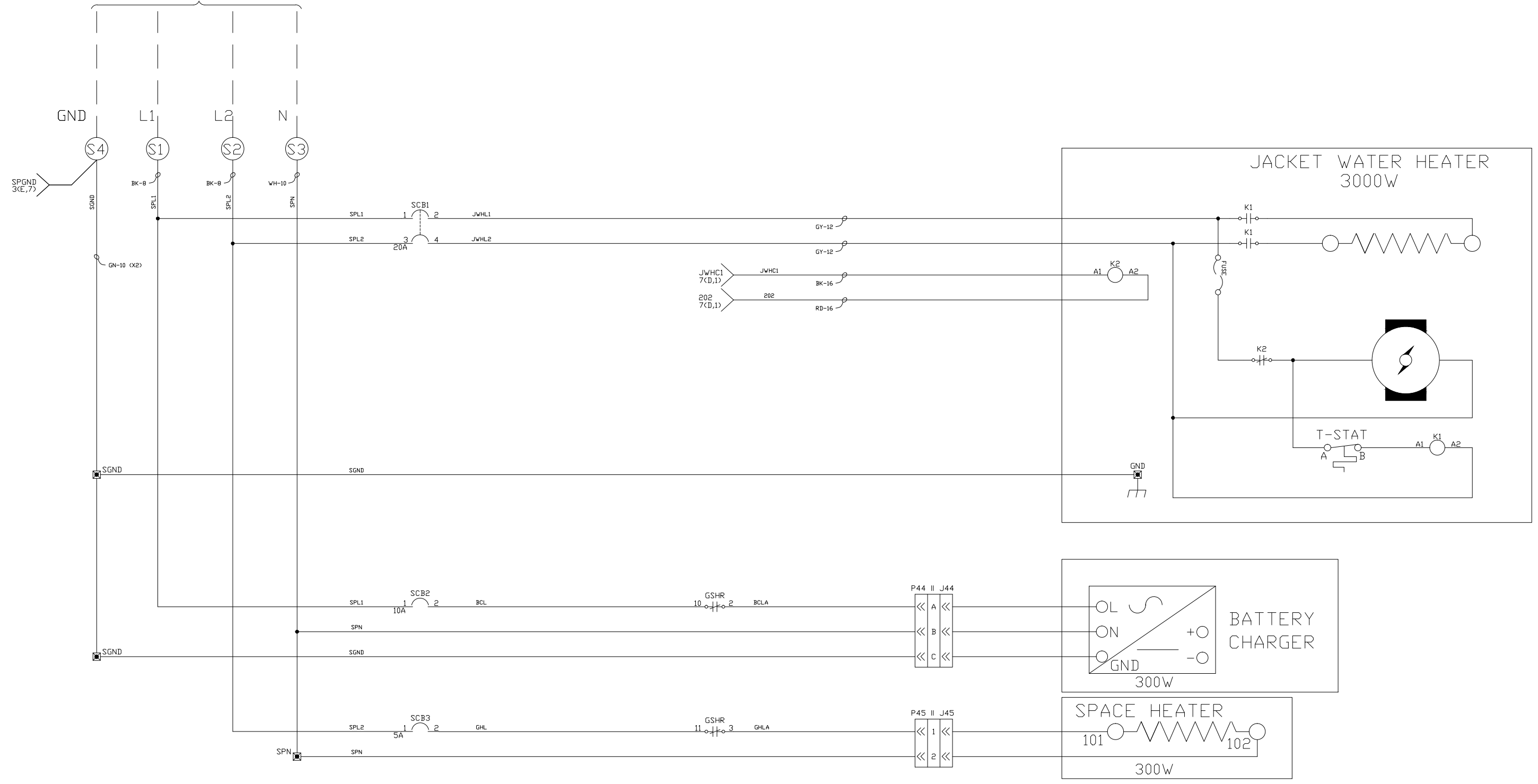
DATE		BY		FILE		PROJECT REFERENCE	
				DF/73E		APS230G	
TOLERANCES		THIRD ANGLE PROJECTION		SCALE/SHEET SIZE		DRAWN BY	
.XX ± 0.100		1=40/D		D. RICHARDSON		QUOTE NUMBER	
.XXX ± 0.060		DATE		7/14/2016		WORK ORDER NUMBER	
.XXX ± 0.005		SHEET		12 OF 16			
ANGULAR ± 1'		TITLE		SCHEMATIC		DRAWING NUMBER	
		APS230G W/EMCP 4.4 & PSI 11 L				73E100	



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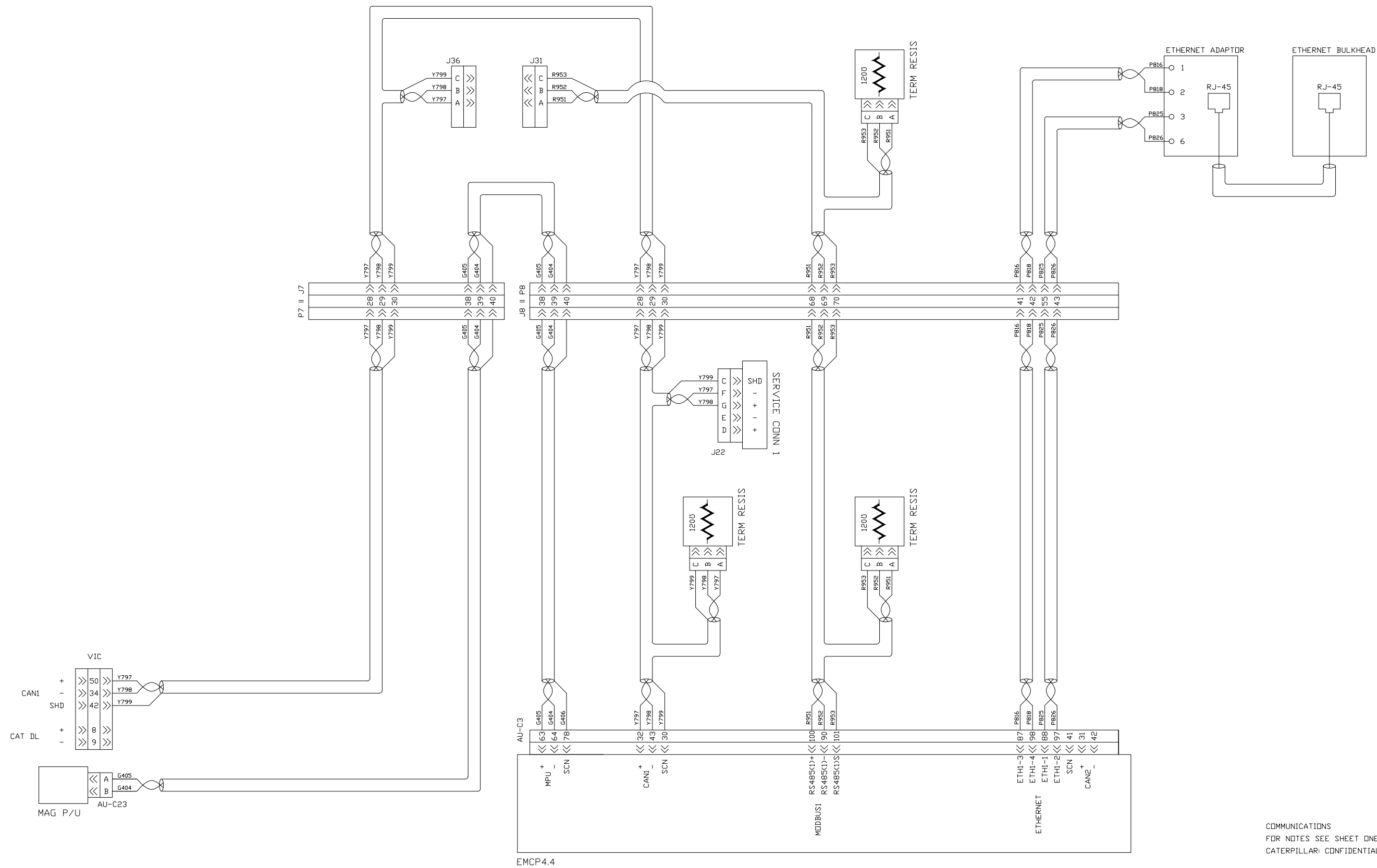
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40A 240V SHORE POWER



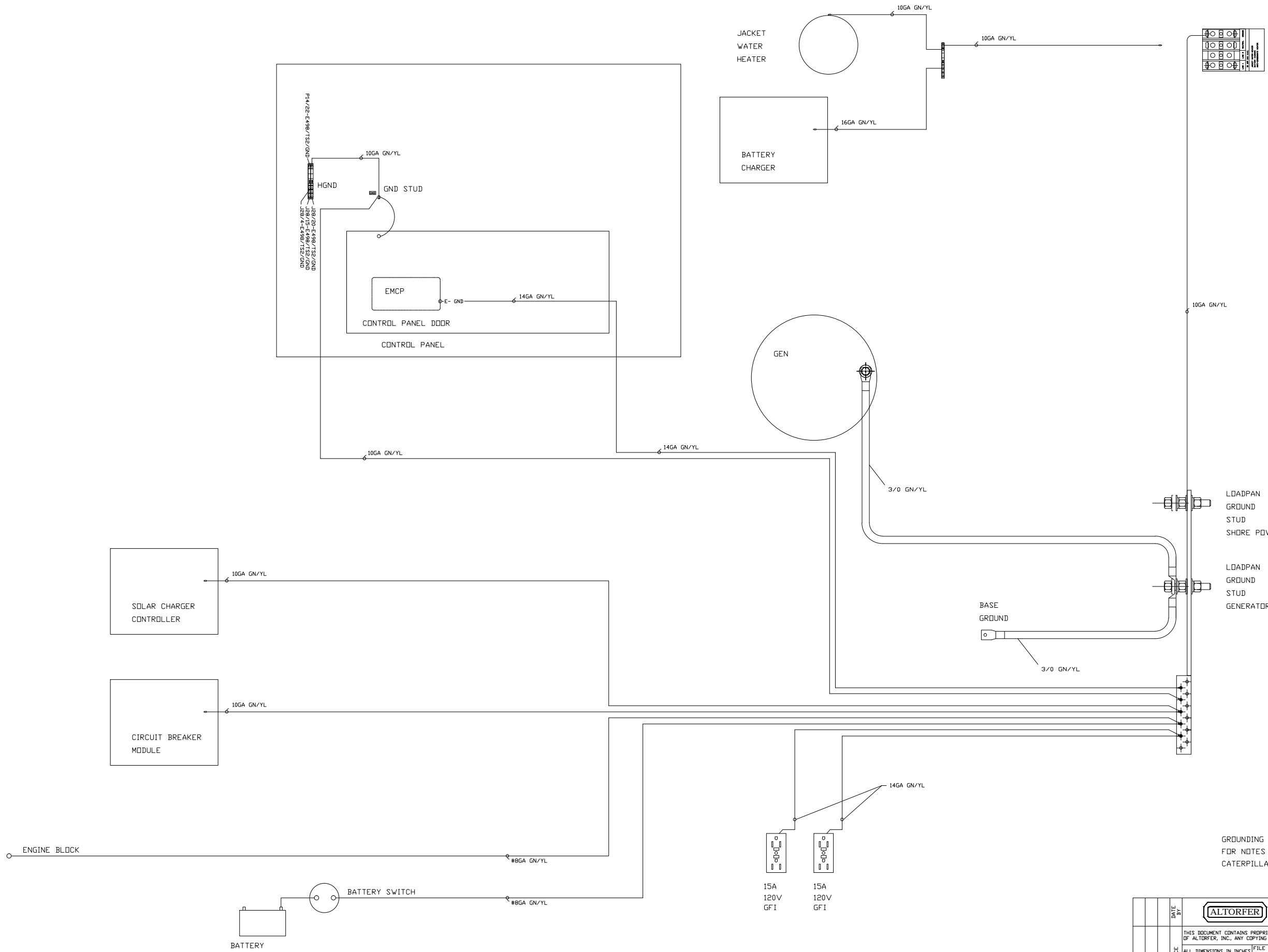
AC SHORE POWER DISTRIBUTION
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DATE		BY		FILE		PROJECT REFERENCE	
NOTICE		THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF ALTORFER, INC. WITHOUT THE WRITTEN PERMISSION OF ALTORFER, INC., ANY COPYING OR OTHER USE EXCEPT THAT FOR WHICH IT WAS INTENDED IS PROHIBITED.		SCALE/SHEET SIZE		DRAWN BY	
UNLESS OTHERWISE SPECIFIED		ALL DIMENSIONS IN INCHES		1=40/D		D. RICHARDSON	
TOLERANCES		THIRD ANGLE PROJECTION		DATE		WORK ORDER NUMBER	
XX ± 0.100		SHEET		13 DF 16		7/14/2016	
XXX ± 0.060		TITLE		SCHEMATIC		DRAWING NUMBER	
ANGULAR ± 1°		APPS230G W/EMCP 4.4 & PSI 11 L		73E100			



COMMUNICATIONS
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DATE		BY		FILE		PROJECT REFERENCE	
APR 14 2016		D. RICHARDSON		DF/73E		APS230G	
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'		14 DF 16		7/14/2016		-	
TITLE		SCHEMATIC		DRAWING NUMBER		73E100	
APS230G W/EMCP 4.4 & PSI 11 L							



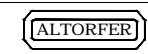
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

LOADPAN
GROUND
STUD
SHORE POWER

LOADPAN
GROUND
STUD
GENERATOR

GROUNDING
FOR NOTES SEE SHEET ONE
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DATE		BY		FILE		PROJECT REFERENCE	
				DF / 73E		APS230G	
TOLERANCES		THIRD	SCALE/SHEET SIZE	DRAWN BY		QUOTE NUMBER	
XXX ± 0.100		ANGLE	1=40/D	D. RICHARDSON		-	
XXX ± 0.060		PROJECTION	DATE	WORK ORDER NUMBER		-	
XXX ± 0.005		SHEET	15 OF 16	7/14/2016		-	
ANGULAR ± 1'							
TITLE		SCHEMATIC		DRAWING NUMBER		73E100	
APS230G W/EMCP 4.4 & PSI 11 L							



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SHORE POWER CONNECTION - 240 VOLT

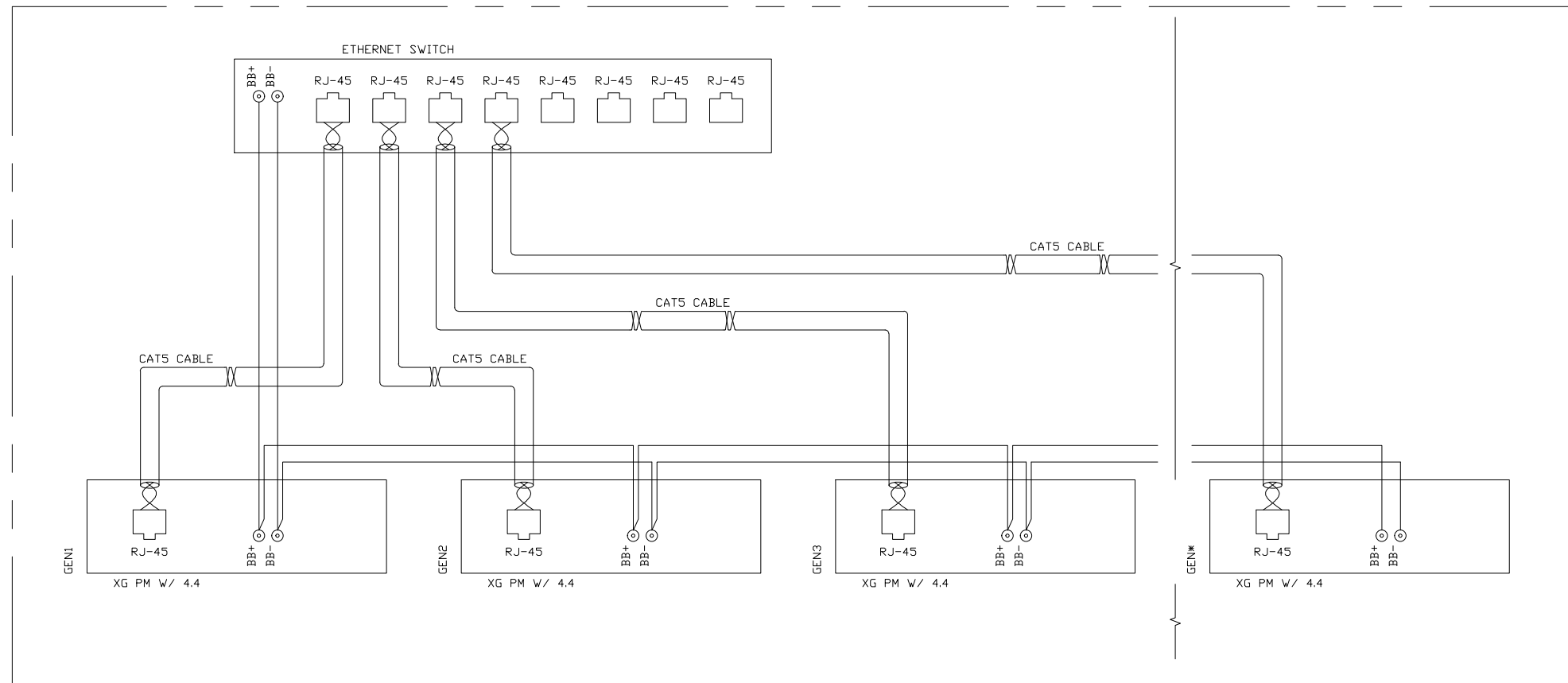
POWER MODULE INTERCONNECT BOX - AC TERMINALS

40A 240V
 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/73E	PROJECT REFERENCE APS230G	
	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 16 OF 16	DATE 7/14/2016
	TITLE SCHEMATIC APS230G W/EMCP 4.4 & PSI 11 L		DRAWING NUMBER 73E100	