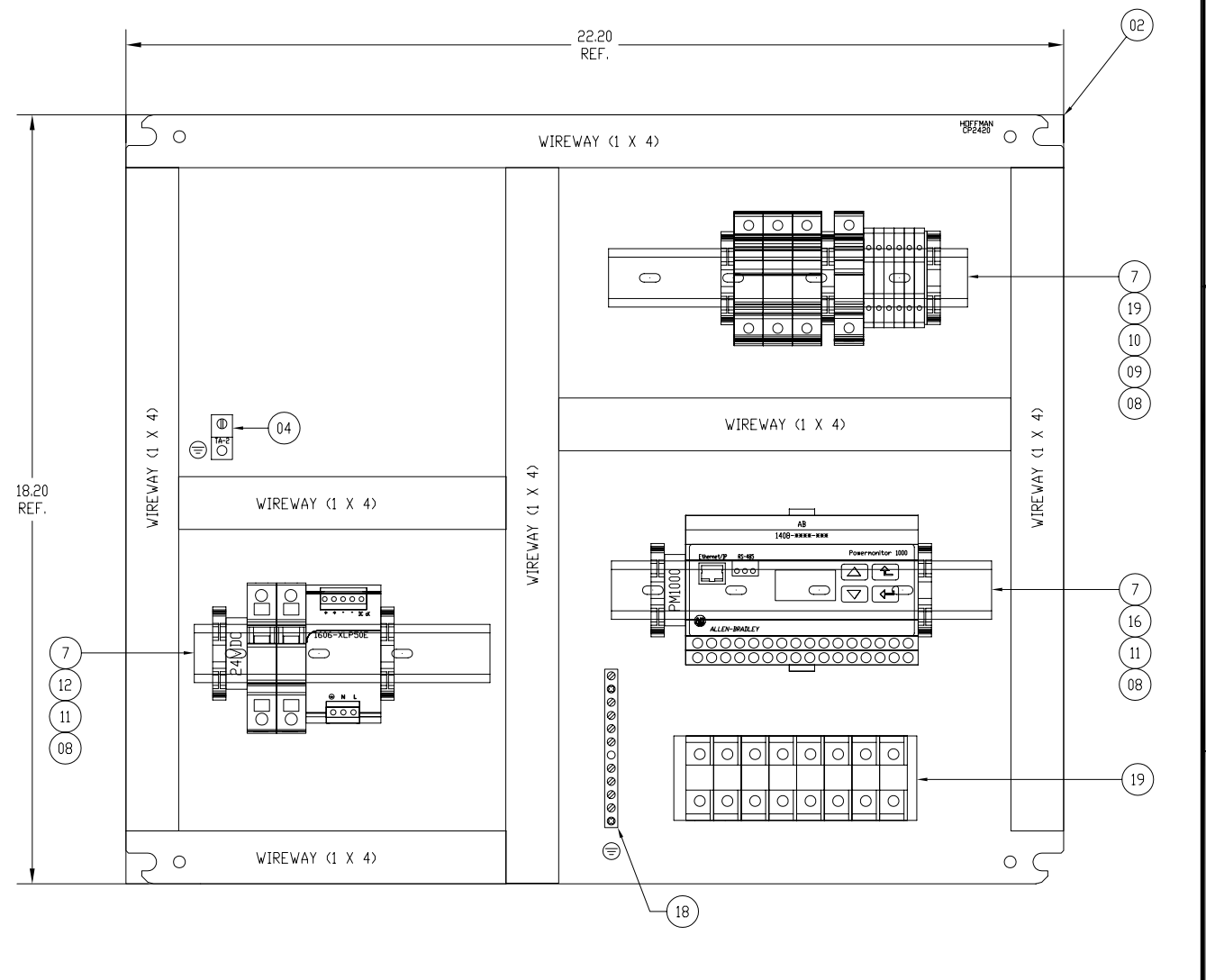
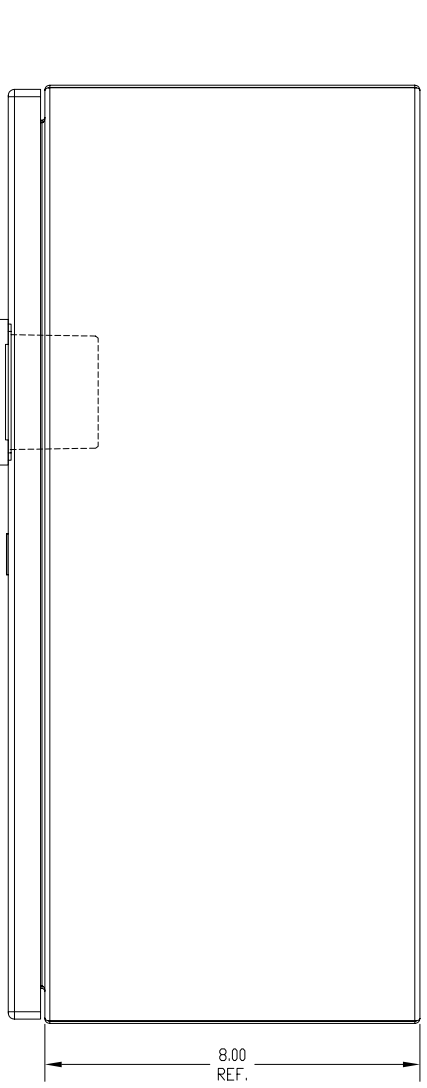
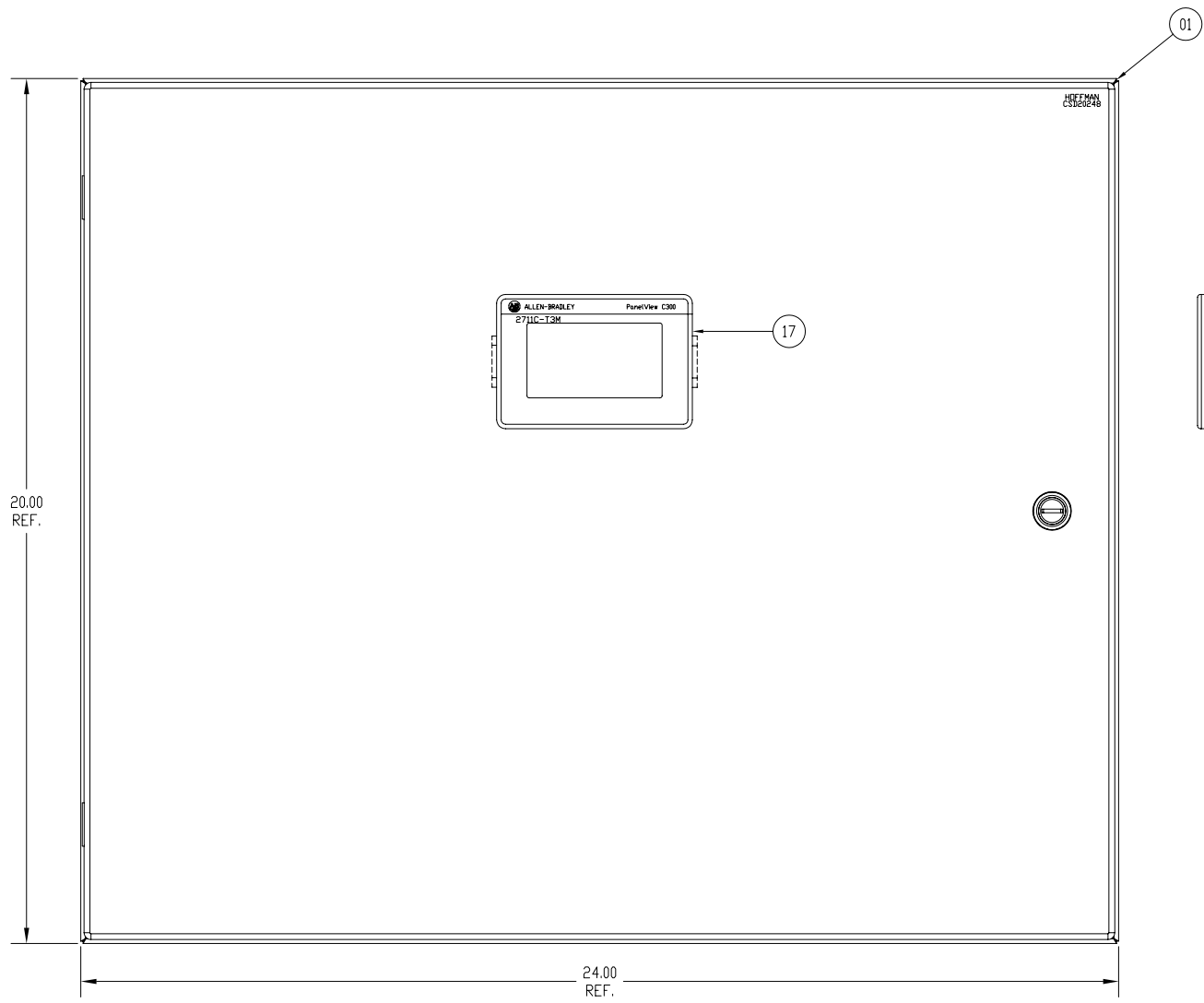
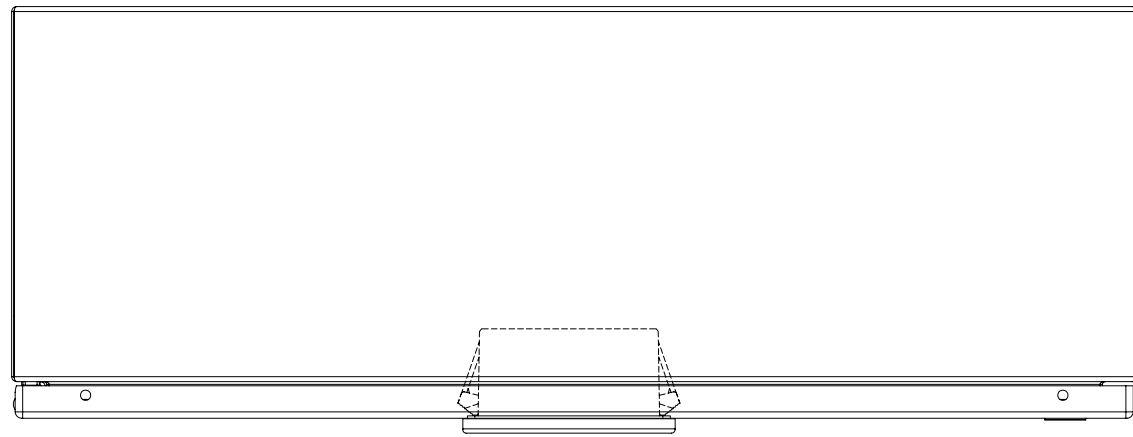


ITEM	QTY	DESCRIPTION	MFG	CATALOG
01	1	CONCEPT WALL-MOUNT ENCLOSURE	HOFFMAN	CSD20248
02	1	24" X 20" SUBPAN	HOFFMAN	CP2420
03	7	1X4 GRAY SLOT WIRE DUCT	PANDUIT	F1X4LG6
04	1	PANEL GROUND LUG #8AWG	ILSCO	TA-2
05				
06				
07	A/R	RAIL, DIN MTG, 25MM, 1M	AB	199-DR1
08	8	END ANCHOR	AB	1492-EAJ35
09	6	SCREW CONNECTION TERMINAL BLOCK; 1492-J	AB	1492-J4
10	1	END BARRIER; 1492-J	AB	1492-EBJ3
11	3	GROUP MARKER CARRIER	AB	1492-GM35
12	2	1AMP CIRCUIT BREAKER	AB	1492-SP1D010
13	1	PS, COMPACT, 50 W, 24-28V	AB	1606-XLP50E
14				
16	1	ENERGY MONITOR EM3, 120/240VAC, SERIAL RS-485	AB	1408-EM3A-ENT
17	1	3" MONOCHROME TOUCHSCREEN	AB	2711C-T3M
18	1	GROUNDING BAR SYSTEM, 9 POS	SQUARE-D	PK9GTA
19	1	FUSE AND SHORTING BLOCK KIT	AB	1400-PM-ACC

KIT 1400-PM-ACC

ITEM	QTY	DESCRIPTION	MFG	CATALOG
01	1	3 POLE FUSE BLOCK	AB	1492-FB3C30
02	1	1 POLE FUSE BLOCK	AB	1492-FB1C30
03	7	SHORTING BLOCK, 8 POLE	AB	PN-54132



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CONNECTED COMPONENTS PM1000 STANDALONE w/3" LOCAL TOUCH DISPLAY ENCLOSURE/PANEL LAYOUT	DWG NO EXAMPLE	DATE 11-06-09	DWG REV A
COMPANY NAME	SHEET 01	OF 09	DATE

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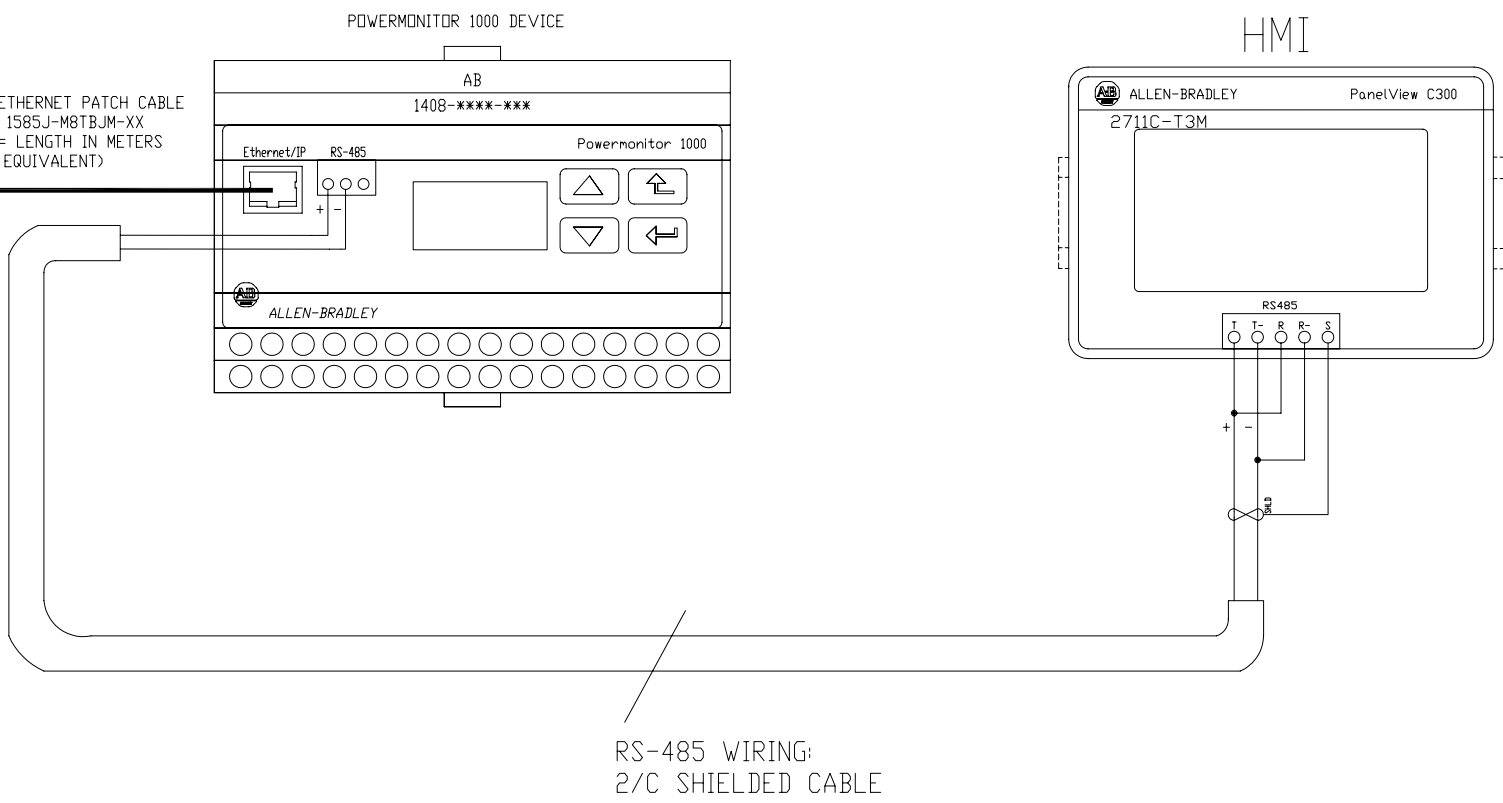
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CUSTOMER SUPPLIED ETHERNET SWITCH / FIBER TO ETHERNET / OR ETHERNET DROP CONNECTION. USED FOR DATA LOGGING TO RSEnergyMetrix / RSPower / OR OTHER SOFTWARE APPLICATIONS SUCH AS HMI, OR CONTROLLER PROGRAMS.

AB ETHERNET PATCH CABLE
P/N 1585J-M8TBJM-XX
XX = LENGTH IN METERS
(OR EQUIVALENT)



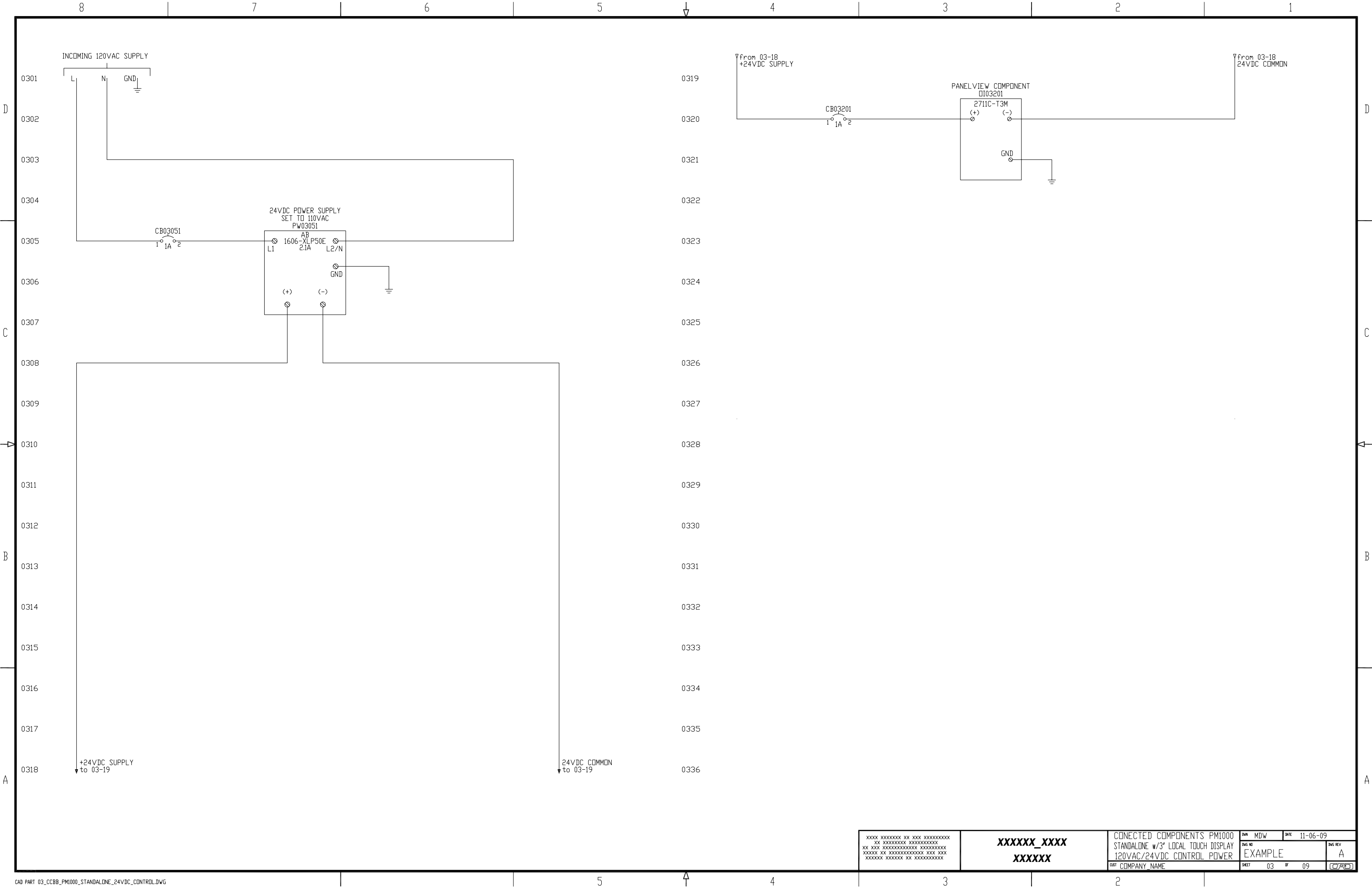
RS-485 WIRING:
2/C SHIELDED CABLE

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CONNECTED COMPONENTS PM1000
STANDALONE w/3" LOCAL TOUCH DISPLAY
COMMUNICATION DIAGRAM

DWG NO	DATE	DWG REV
EXAMPLE	11-06-09	A
SHEET	OF	DATE
02	09	09



XXXX XXXXXXXX XX XXX XXXXXXXXXXXX XX XXXXXXXXXXXX XXXXXXXXXXXX XXXXX XX XXXXXXXXXXXXXXX XXX XXX XXXXXXX XXXXXXX XX XXXXXXXXXXXX	XXXXXX_XXXX XXXXXX	CONNECTED COMPONENTS PM1000 STANDALONE w/3" LOCAL TOUCH DISPLAY 120VAC/24VDC CONTROL POWER <small>DRW COMPANY NAME</small>	<small>DRW</small> MDW <small>DATE</small> 11-06-09 <small>DRG NO</small> EXAMPLE <small>DRG REV</small> A <small>SHEET</small> 03 <small>OF</small> 09
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480V, 3PH, 3-WIRE GROUNDED WYE, DIRECT CONNECT

VOLTAGE MODE = WYE

NOTE: DIRECT CONNECT MAY BE USED WITH LOW IMPEDANCE GROUNDED NEUTRAL ONLY

(600VAC LINE TO LINE
347VAC LINE TO NEUTRAL MAXIMUM)
POWER MONITOR 1000
PM5021

480V, 3PH, 3-WIRE WYE
W/3CTS, DIRECT CONNECT
VOLTAGE MODE = WYE

CT NOTES:

1. THE DOT ON THE CURRENT/POTENTIAL TRANSFORMERS INDICATES PHASING/POLARITY.
2. CONNECT THE CT SECONDARY CIRCUIT TO A LOW-IMPEDANCE EARTH GROUND AT ONE POINT ONLY.
3. CT WIRING GUIDE ASSUMES 4 AMPERES SECONDARY CURRENT

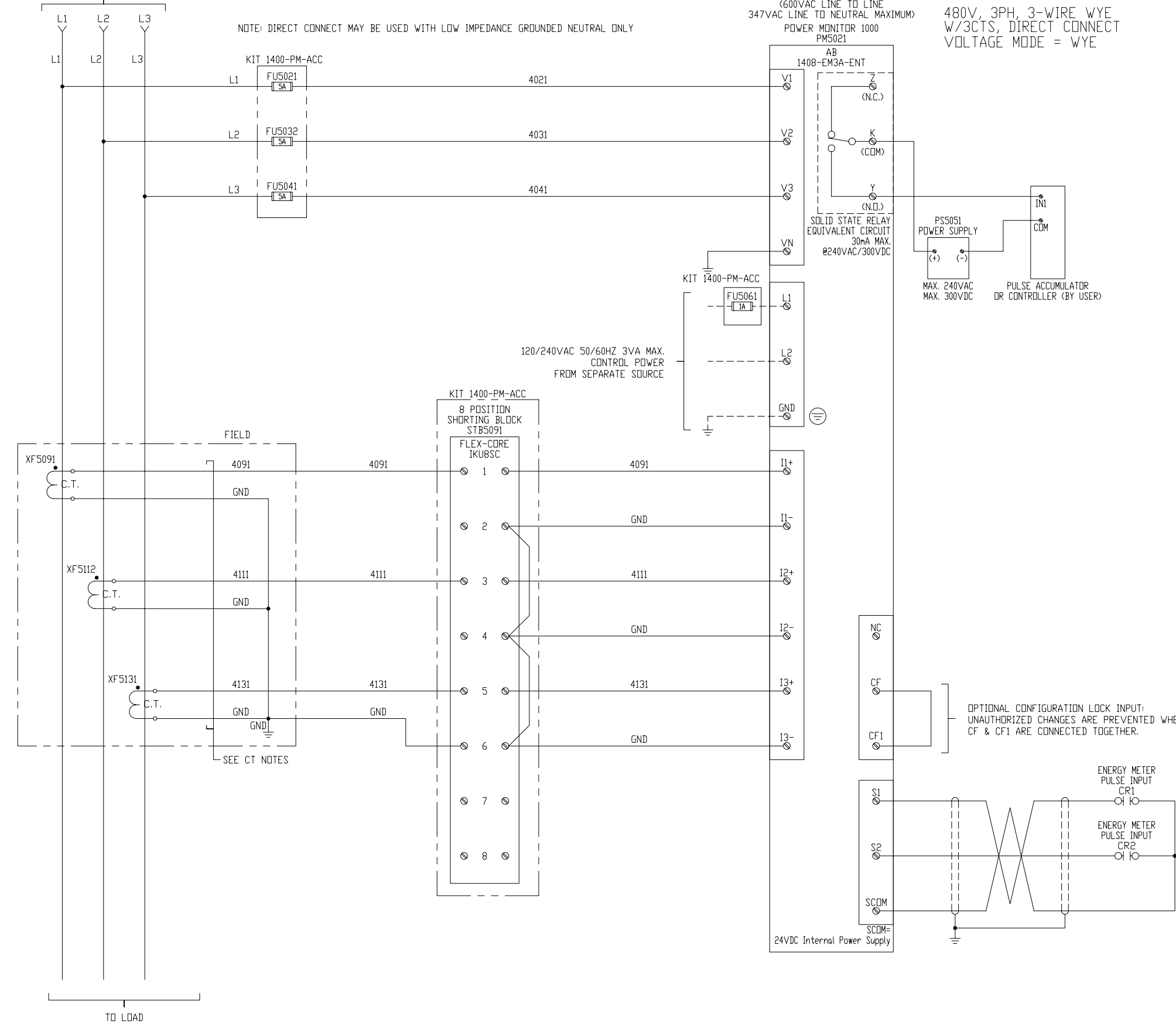
WIRE SIZE	14 AWG	12 AWG	10 AWG
CT BURDEN, VA	MAXIMUM	CIRCUIT LENGTH, FT.	
2.5	26	42	66
5	53	84	132
10	105	167	265
20	210	334	530
30	316	501	794

MAXIMUM CIRCUIT LENGTH IS WIRE ROUTING DISTANCE FROM THE CURRENT TRANSFORMER 'CT' TO THE POWER MONITOR.

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OPTIONAL CONFIGURATION LOCK INPUT:
UNAUTHORIZED CHANGES ARE PREVENTED WHEN TERMINALS
CF & CF1 ARE CONNECTED TOGETHER.

STATUS INPUTS NOTE:

- PULSE INPUT (DRY CONTACT) CAN BE USED TO CONNECT THESE INPUTS:
 - PULSE SIGNAL (KYZ) FROM REVENUE METERS (ELECTRIC/GAS/WATER)
 - S2 INPUT CAN BE USED FOR DEMAND SYNCHRONIZATION WHERE END OF INTERVAL (EOI) PULSE IS USED.
- SHIELDED TWISTED PAIR WIRE SHOULD BE USED WITH THE SHIELD CONNECTED TO THE GROUND BUS OR OTHER LOW IMPEDANCE EARTH GROUND AT ONE END ONLY.

XXXX XXXXXXXX XX XXX XXXXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXX XX XXXXXXXXXXXXXXXXXXXX XXXXXXXX XXXXXXX XXX XXXXXXXXXXXX	XXXXXX_XXXX XXXXXX	CONNECTED COMPONENTS PM1000 STANDALONE w/3" LOCAL TOUCH DISPLAY 480V,3PH,3-WIRE,WYE DIRECT	DWG DRN DATE 01-26-10 DWG REV EXAMPLE A
COMPANY NAME	SHEET 04	OF 09	DATE

480V, 3PH, 4-WIRE WYE, DIRECT CONNECT

VOLTAGE MODE = WYE

NOTE: DIRECT CONNECT MAY BE USED WITH LOW IMPEDANCE GROUNDED NEUTRAL ONLY

(600VAC LINE TO LINE
347VAC LINE TO NEUTRAL MAXIMUM)
POWER MONITOR 1000
PM6021

480V, 3PH, 4-WIRE WYE
W/3CTS, DIRECT CONNECT
VOLTAGE MODE = WYE

CT NOTES:

1. THE DOT ON THE CURRENT/POTENTIAL TRANSFORMERS INDICATES PHASING/POLARITY.
2. CONNECT THE CT SECONDARY CIRCUIT TO A LOW-IMPEDANCE EARTH GROUND AT ONE POINT ONLY.
3. CT WIRING GUIDE ASSUMES 4 AMPERES SECONDARY CURRENT

WIRE SIZE	14 AWG	12 AWG	10 AWG
CT BURDEN, VA	MAXIMUM	CIRCUIT LENGTH, FT.	
2.5	26	42	66
5	53	84	132
10	105	167	265
20	210	334	530
30	316	501	794

MAXIMUM CIRCUIT LENGTH IS WIRE ROUTING DISTANCE FROM THE CURRENT TRANSFORMER 'CT' TO THE POWER MONITOR.

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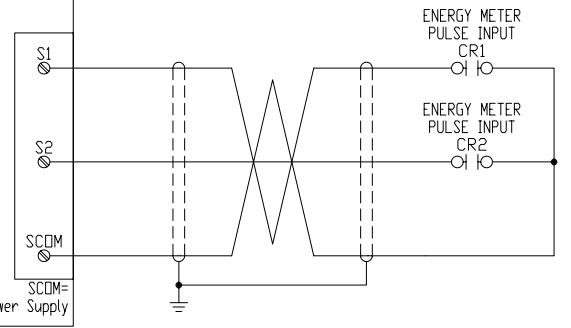
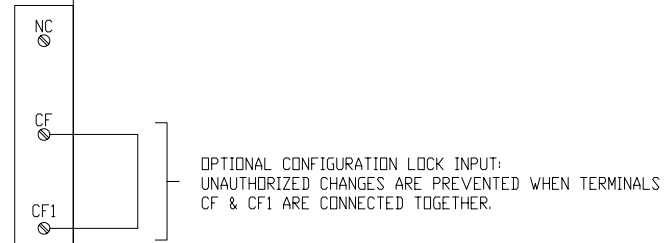
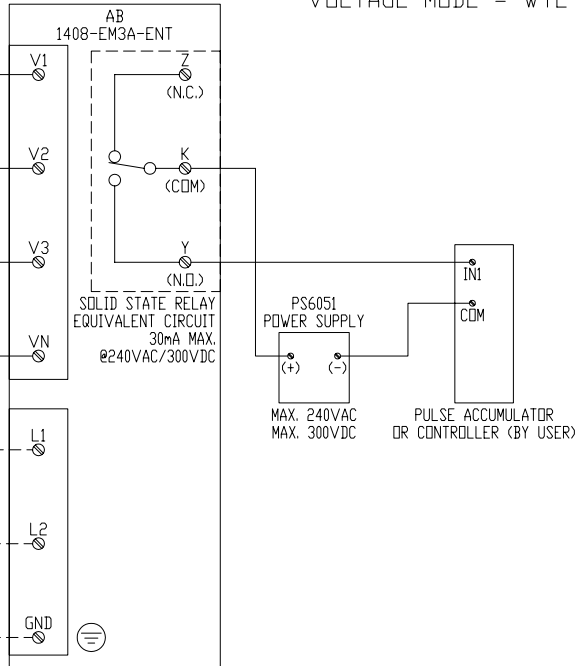
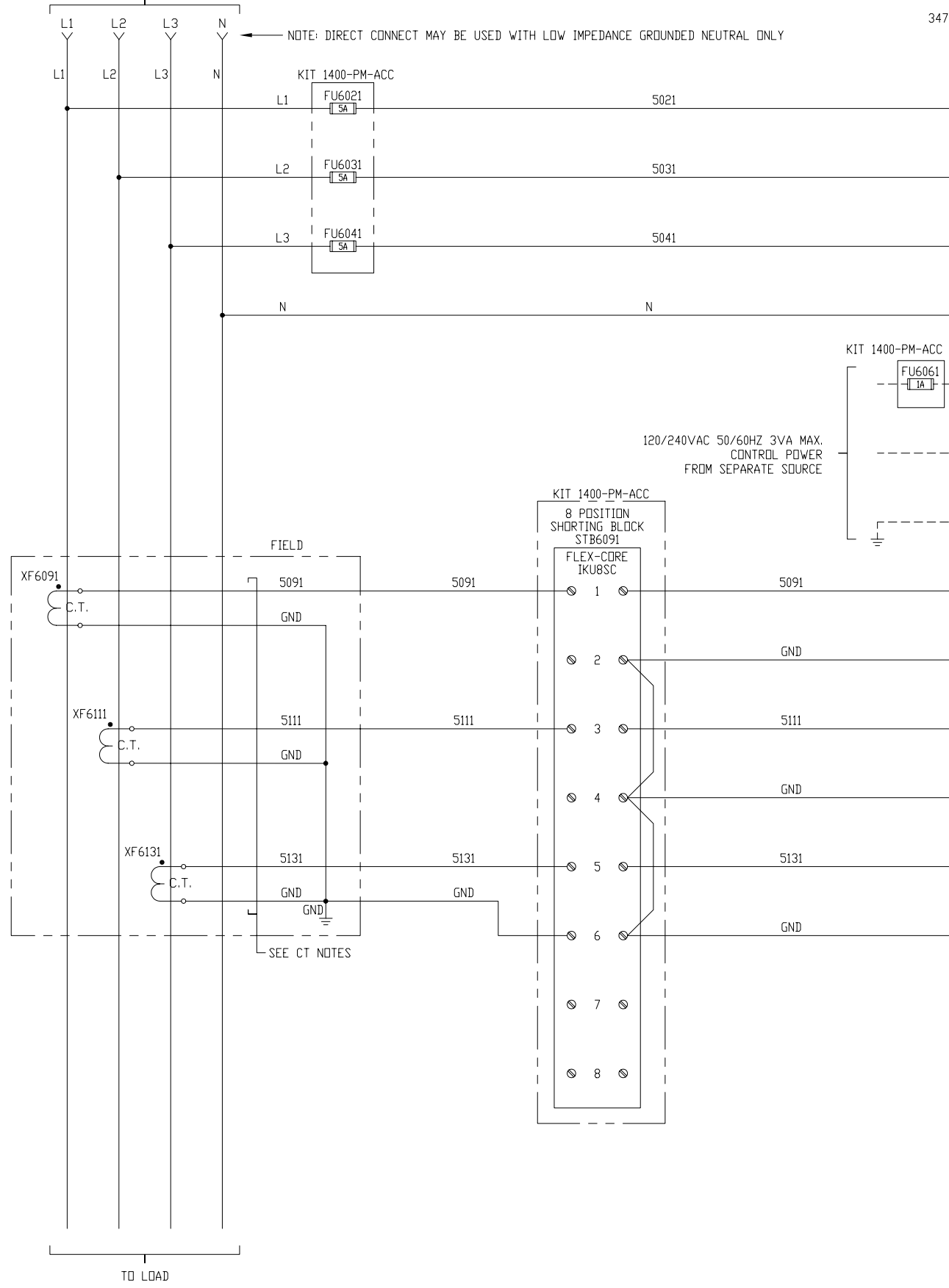
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STATUS INPUTS NOTE:

- PULSE INPUT (DRY CONTACT) CAN BE USED TO CONNECT THESE INPUTS:
- PULSE SIGNAL (KYZ) FROM REVENUE METERS (ELECTRIC/GAS/WATER)
- S2 INPUT CAN BE USED FOR DEMAND SYNCHRONIZATION WHERE END OF INTERVAL (EOI) PULSE IS USED.

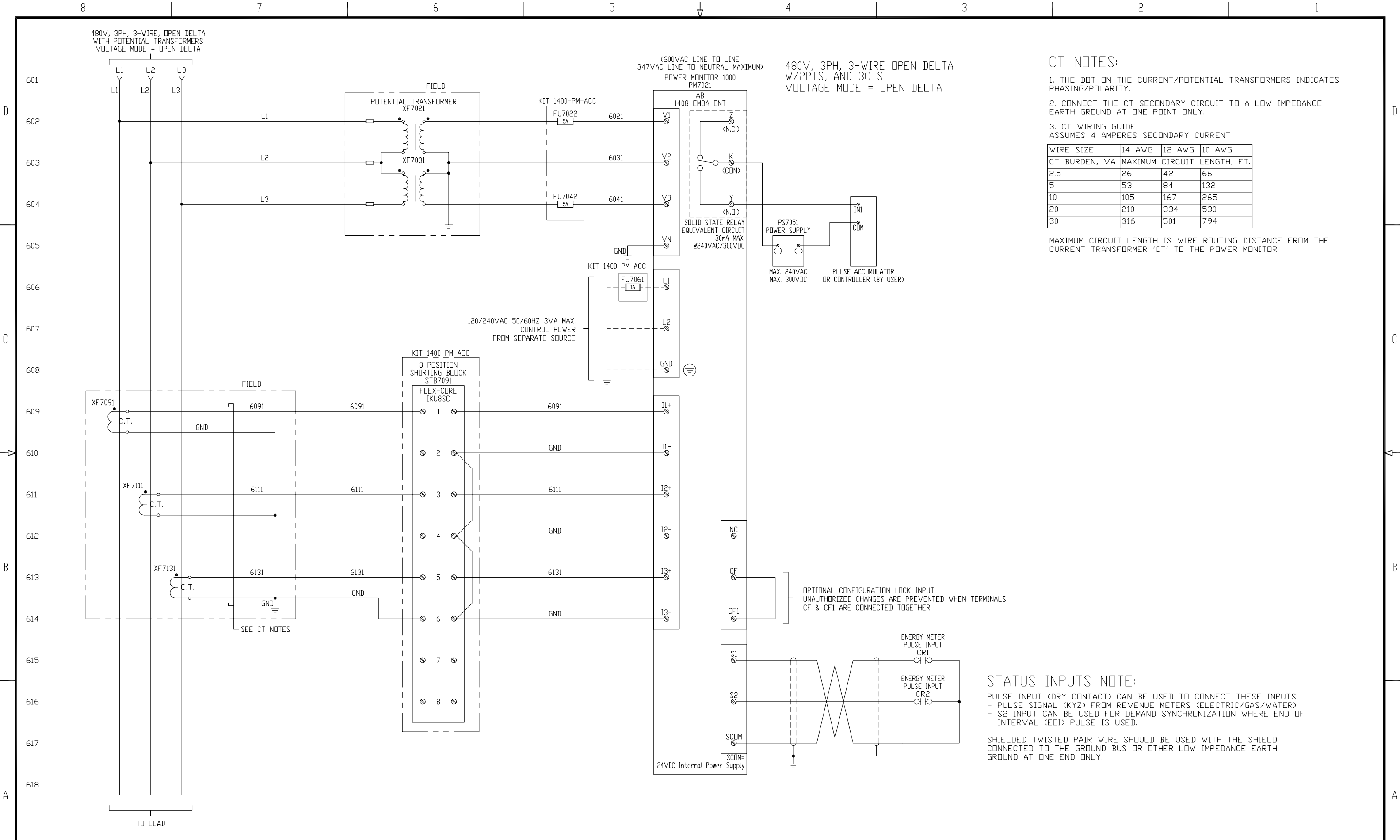
SHIELDED TWISTED PAIR WIRE SHOULD BE USED WITH THE SHIELD CONNECTED TO THE GROUND BUS OR OTHER LOW IMPEDANCE EARTH GROUND AT ONE END ONLY.

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CONNECTED COMPONENTS PM1000
STANDALONE w/3" LOCAL TOUCH DISPLAY
480V,3PH,4-WIRE,WYE DIRECT

DWG DRN	DATE 01-26-10	DWG REV	A
EXAMPLE			
SHEET 05	OF 09		



CT NOTES:

1. THE DOT ON THE CURRENT/POTENTIAL TRANSFORMERS INDICATES PHASING/POLARITY.
2. CONNECT THE CT SECONDARY CIRCUIT TO A LOW-IMPEDANCE EARTH GROUND AT ONE POINT ONLY.
3. CT WIRING GUIDE ASSUMES 4 AMPERES SECONDARY CURRENT

WIRE SIZE	14 AWG	12 AWG	10 AWG
CT BURDEN, VA	MAXIMUM	CIRCUIT LENGTH, FT.	
2.5	26	42	66
5	53	84	132
10	105	167	265
20	210	334	530
30	316	501	794

MAXIMUM CIRCUIT LENGTH IS WIRE ROUTING DISTANCE FROM THE CURRENT TRANSFORMER 'CT' TO THE POWER MONITOR.

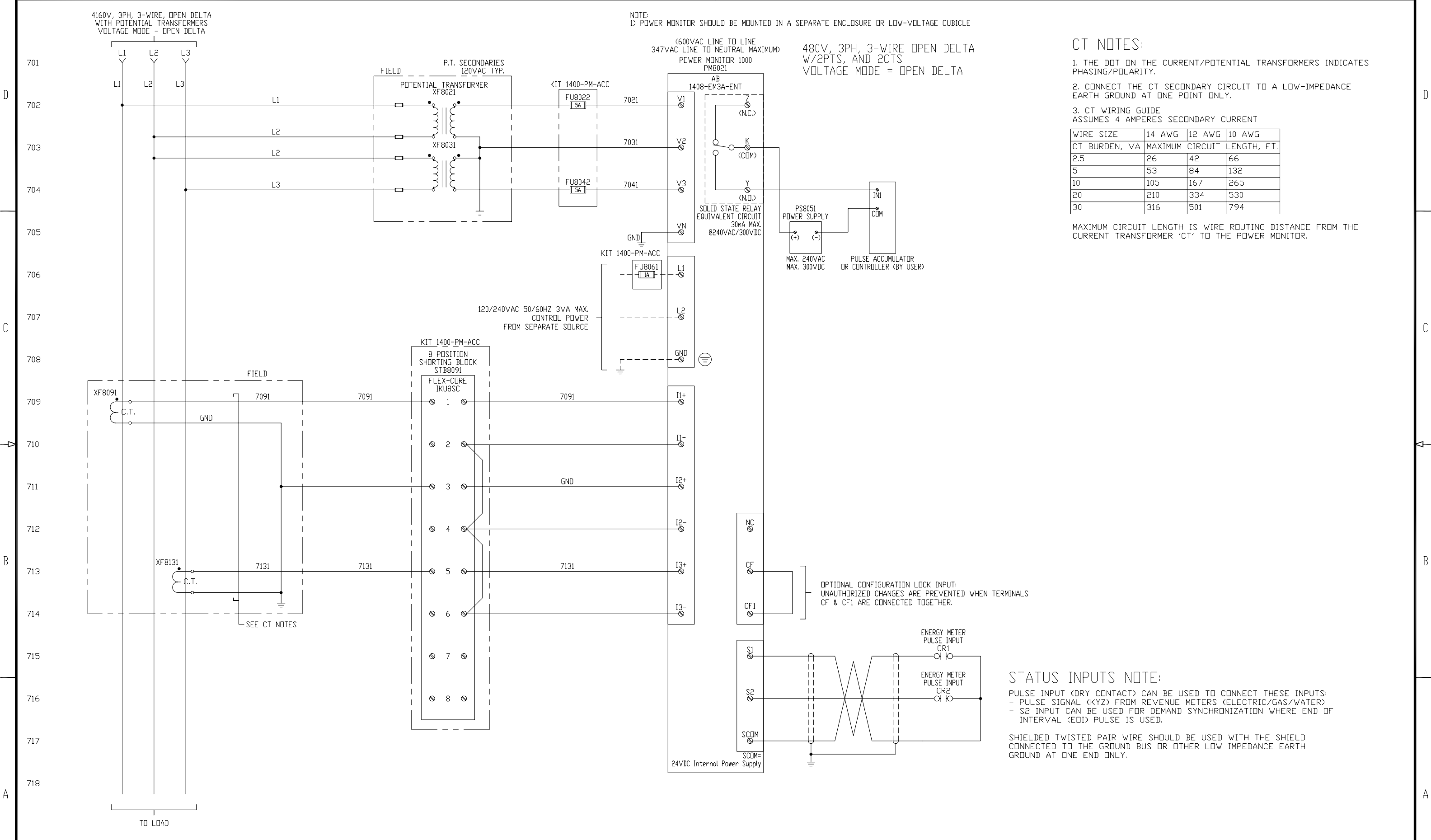
OPTIONAL CONFIGURATION LOCK INPUT:
UNAUTHORIZED CHANGES ARE PREVENTED WHEN TERMINALS CF & CF1 ARE CONNECTED TOGETHER.

STATUS INPUTS NOTE:

- PULSE INPUT (DRY CONTACT) CAN BE USED TO CONNECT THESE INPUTS:
- PULSE SIGNAL (KYZ) FROM REVENUE METERS (ELECTRIC/GAS/WATER)
- S2 INPUT CAN BE USED FOR DEMAND SYNCHRONIZATION WHERE END OF INTERVAL (EOI) PULSE IS USED.

SHIELDED TWISTED PAIR WIRE SHOULD BE USED WITH THE SHIELD CONNECTED TO THE GROUND BUS OR OTHER LOW IMPEDANCE EARTH GROUND AT ONE END ONLY.

XXXX XXXXXXXX XX XXX XXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXX XX XXXXXXXXXXXXXXXXXXXX XXXXXXXX XXXXXXX XXXXXXXXXXXXXXX	XXXXXX_XXXX XXXXXX	CONNECTED COMPONENTS PM1000 STANDALONE w/3" LOCAL TOUCH DISPLAY 480V, 3WIRE, OPEN DELTA 3CT's	DWG DRN DATE 01-26-10 DWG REV EXAMPLE A
DWT COMPANY NAME		SHEET 06 OF 09	(C/C)



240V/120V, SINGLE PHASE, DIRECT CONNECT

VOLTAGE MODE = SINGLE PHASE

NOTE: DIRECT CONNECT MAY BE USED WITH LOW IMPEDANCE GROUNDED NEUTRAL ONLY

(600VAC LINE TO LINE
347VAC LINE TO NEUTRAL MAXIMUM)
POWER MONITOR 1000
PM9021

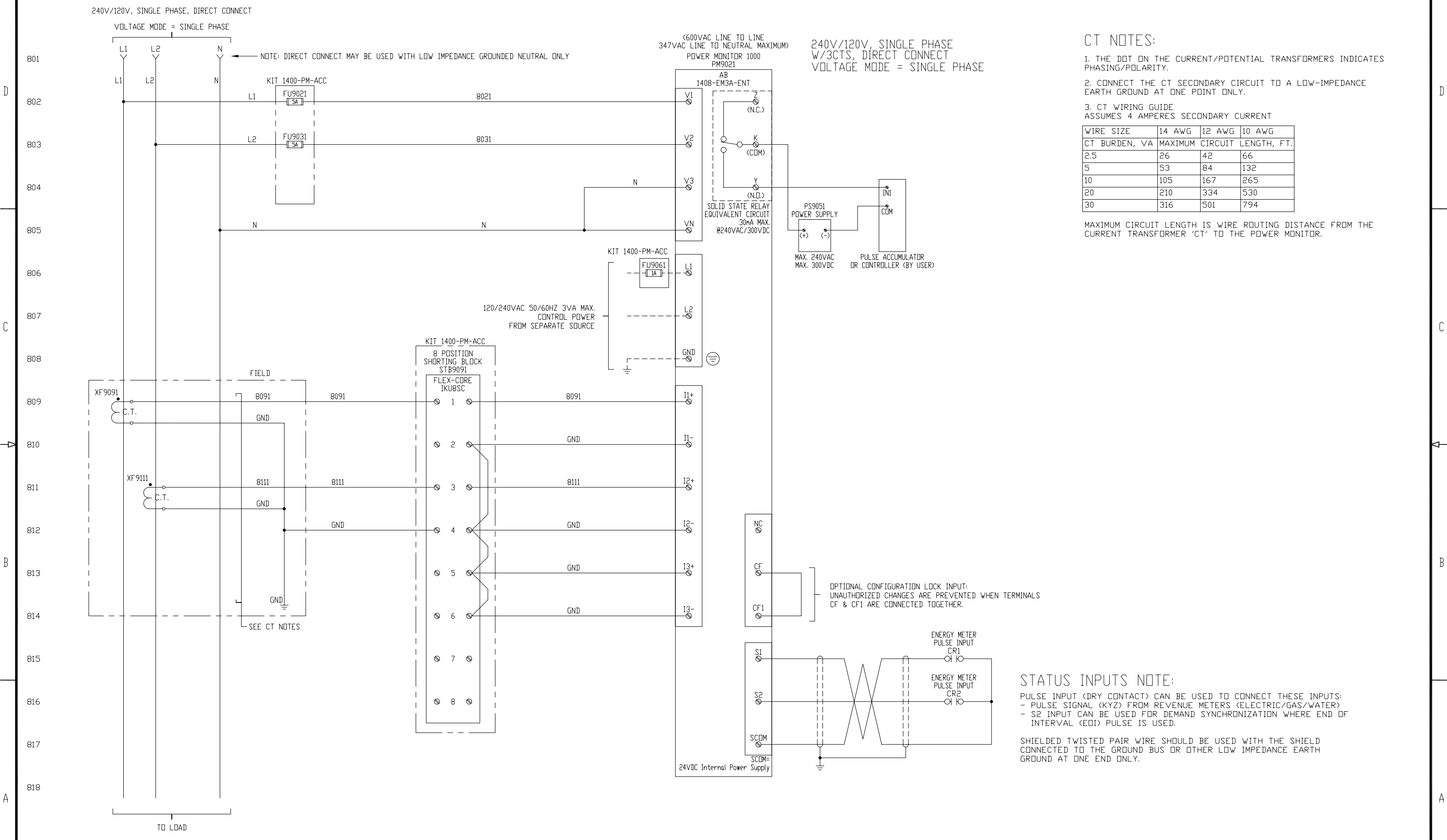
240V/120V, SINGLE PHASE
W/3CTS, DIRECT CONNECT
VOLTAGE MODE = SINGLE PHASE

CT NOTES:

1. THE DOT ON THE CURRENT/POTENTIAL TRANSFORMERS INDICATES PHASING/POLARITY.
2. CONNECT THE CT SECONDARY CIRCUIT TO A LOW-IMPEDANCE EARTH GROUND AT ONE POINT ONLY.
3. CT WIRING GUIDE ASSUMES 4 AMPERES SECONDARY CURRENT

WIRE SIZE	14 AWG	12 AWG	10 AWG
CT BURDEN, VA	MAXIMUM	CIRCUIT LENGTH, FT.	
2.5	26	42	66
5	53	84	132
10	105	167	265
20	210	334	530
30	316	501	794

MAXIMUM CIRCUIT LENGTH IS WIRE ROUTING DISTANCE FROM THE CURRENT TRANSFORMER 'CT' TO THE POWER MONITOR.



OPTIONAL CONFIGURATION LOCK INPUT:
UNAUTHORIZED CHANGES ARE PREVENTED WHEN TERMINALS
CF & CF1 ARE CONNECTED TOGETHER.

STATUS INPUTS NOTE:

- PULSE INPUT (DRY CONTACT) CAN BE USED TO CONNECT THESE INPUTS:
- PULSE SIGNAL (KYZ) FROM REVENUE METERS (ELECTRIC/GAS/WATER)
- S2 INPUT CAN BE USED FOR DEMAND SYNCHRONIZATION WHERE END OF INTERVAL (EOI) PULSE IS USED.

SHIELDED TWISTED PAIR WIRE SHOULD BE USED WITH THE SHIELD CONNECTED TO THE GROUND BUS OR OTHER LOW IMPEDANCE EARTH GROUND AT ONE END ONLY.

XXXXX XXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	XXXXXX_XXXX XXXXXX	CONNECTED COMPONENTS PM1000 STANDALONE w/3" LOCAL TOUCH DISPLAY 240V/120V, 1PH, DIRECT CONNECT	DWG DRN DATE 01-26-10 DWG REV EXAMPLE A
CAD PART 08_CCBB_PM1000_STANDALONE_120_240V_1PH_DIRECT.DWG		COMPANY NAME	SHEET 08 OF 09

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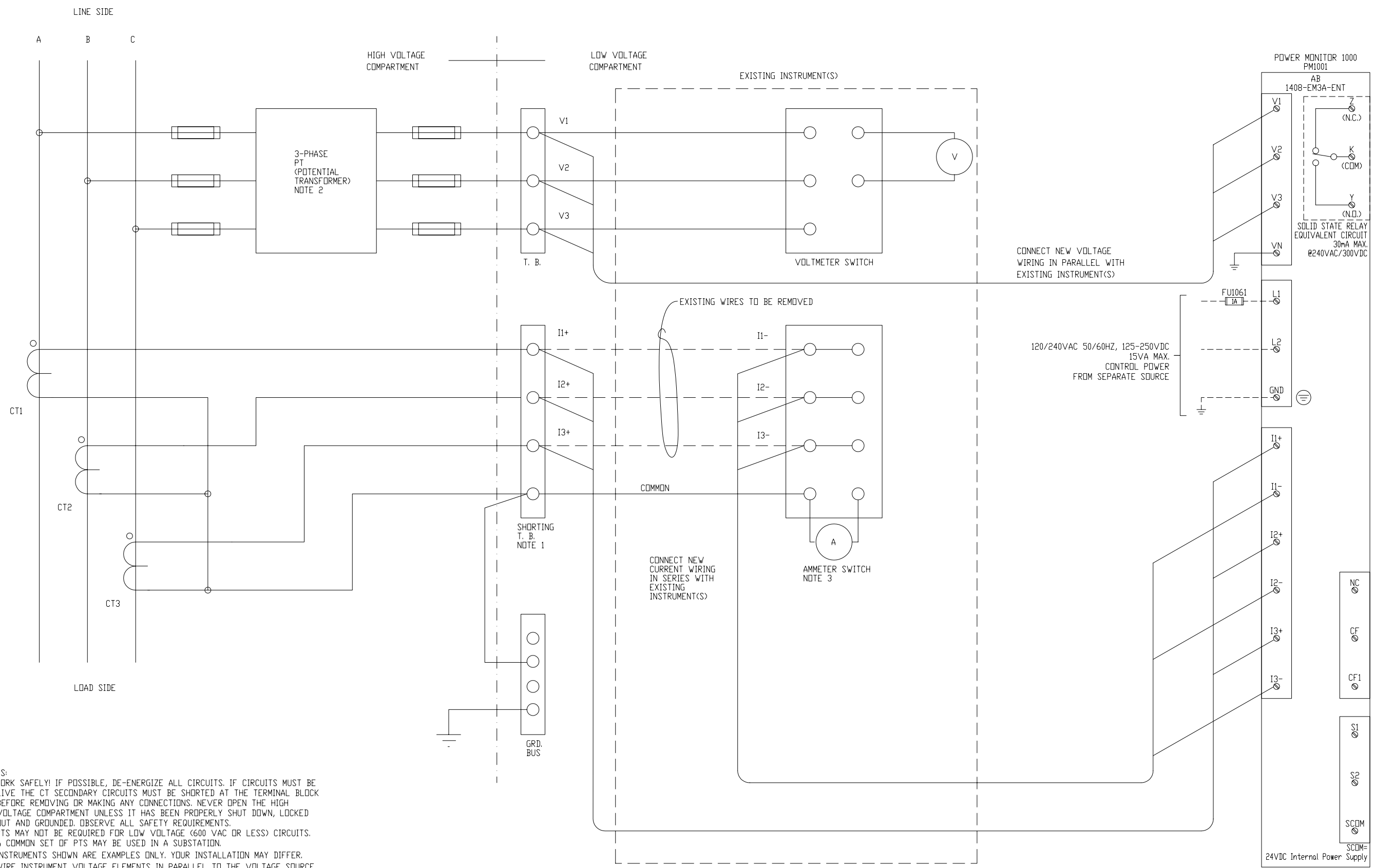
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- NOTES:
- 1.) WORK SAFELY! IF POSSIBLE, DE-ENERGIZE ALL CIRCUITS. IF CIRCUITS MUST BE LIVE THE CT SECONDARY CIRCUITS MUST BE SHORTED AT THE TERMINAL BLOCK BEFORE REMOVING OR MAKING ANY CONNECTIONS. NEVER OPEN THE HIGH VOLTAGE COMPARTMENT UNLESS IT HAS BEEN PROPERLY SHUT DOWN, LOCKED OUT AND GROUNDED. OBSERVE ALL SAFETY REQUIREMENTS.
 - 2.) PTS MAY NOT BE REQUIRED FOR LOW VOLTAGE (600 VAC OR LESS) CIRCUITS. A COMMON SET OF PTS MAY BE USED IN A SUBSTATION.
 - 3.) INSTRUMENTS SHOWN ARE EXAMPLES ONLY. YOUR INSTALLATION MAY DIFFER. WIRE INSTRUMENT VOLTAGE ELEMENTS IN PARALLEL TO THE VOLTAGE SOURCE. EXAMPLES OF INSTRUMENTATION INCLUDE KILOWATT-HOUR METERS, THIRD-PARTY POWER MONITORS, AND POWER, CURRENT OR VOLTAGE TRANSMITTERS. WIRE INSTRUMENT CURRENT ELEMENTS IN SERIES WITH EACH OTHER AND THE CURRENT SOURCE. MAINTAIN POLARITY AS SHOWN.
 - 4.) 3-WIRE SYSTEM SHOWN. CONNECT A 4-WIRE SYSTEM USING SIMILAR METHODS.
 - 5.) REFER TO A-B PUBLICATION 1408-IN001 FOR DETAILED INSTALLATION INSTRUCTIONS.

CONNECT NEW VOLTAGE WIRING IN PARALLEL WITH EXISTING INSTRUMENT(S)

120/240VAC 50/60HZ, 125-250VDC 15VA MAX. CONTROL POWER FROM SEPARATE SOURCE

CONNECT NEW CURRENT WIRING IN SERIES WITH EXISTING INSTRUMENT(S)

1408 POWERMONITOR 1000 TYPICAL RETROFIT WIRING USING EXISTING INSTRUMENT TRANSFORMERS

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		SHEET 09 OF 09	COMPANY NAME