

**POWER WIRE COLORS**

GRN = GROUND  
 BLK = 120V LINE  
 WHT = 120V NEUTRAL

**SIGNAL WIRE COLORS**

GRN = RS-485 SHIELD  
 ORG = RS-485 A(+) BLU = RS-485 B(-)  
 RED = +15V DC  
 BLK = DC COMMON  
 WHT = -15V DC

USER SUPPLIED WIRE:  
 12 AWG FOR 120V  
 24 AWG OR GREATER, SHIELDED,  
 TWISTED PAIR FOR RS-485.  
 FOR DC POWER SEE TABLE BELOW.

DISTANCE PROBE TO CONTROLLER	WIRE SIZE (AVG.)	NOMINAL WIRE SIZE
60 FT / 18M	#16	1.5mm
90 FT / 27M	#14	2.5mm
150 FT / 46M	#12	4mm
240 FT / 73M	#10	6mm

\*FOR DISTANCES EXCEEDING 240 FT THE MAC PROBE JUNCTION BOX WITH +/- 15V POWER SUPPLY IS RECOMMENDED

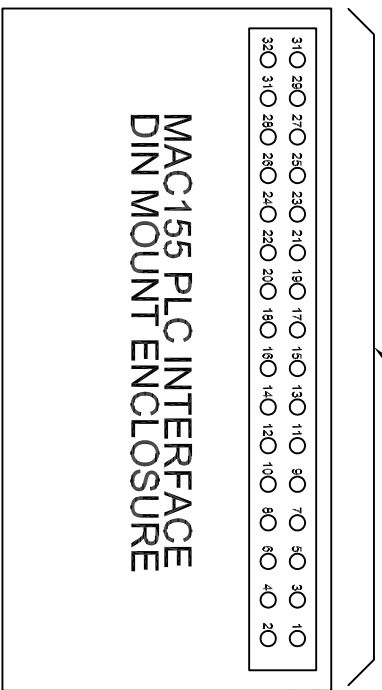
**MAC INSTRUMENTS**  
 A DIVISION OF  
**Machine Applications Corporation**  
 3410 Tiffin Ave. Sandusky, Ohio 44870  
 PHONE: (419)621-2322 FAX: (419) 621-2321

TITLE  
**MAC155 WIRING DIAGRAM**

DRAWN	SCW	SIZE	DRAWING NUMBER	REV./SIC
CHECKED		A	155/01/0005	A3
APPROVED				

SHEET 1 OF 1

NOTE: ALL CONTACTS ARE 24Vdc NOMINAL (18-56 Vdc)  
 ODD NUMBERED TERMINALS ARE + Vdc AND  
 EVEN NUMBERED TERMINALS ARE - Vdc



**OUTPUT**

- 1,2 = RUN
- 3,4 = ALARM GENERAL
- 5,6 = MOISTURE SENSOR OUT OF RANGE
- 7,8 = PRESSURE SENSOR OUT OF RANGE
- 9,10 = LOW WATER
- 11,12 = IN-MAINTENANCE MODE

**INPUT**

- 23(+),24 = N/C
- 25(+),26 = CALIBRATION CHECK
- 27(+),28 = CALIBRATION
- 29(+),30 = IN-MAINTENANCE MODE AUX ACTIVATE
- 31(+),32 = 50% LOOP OUTPUT ANALOG TEST

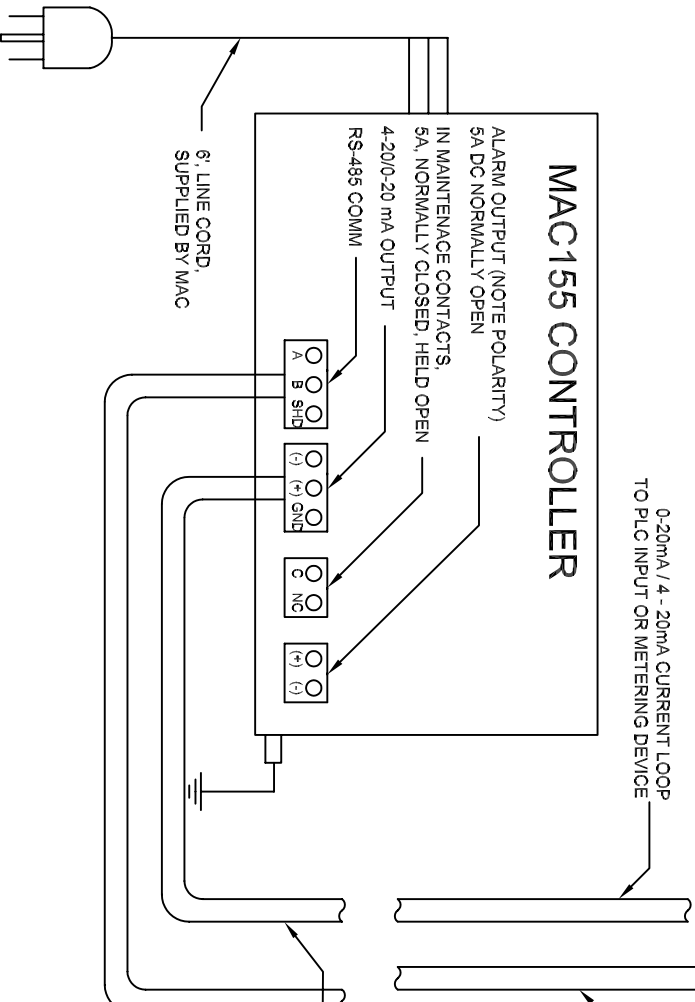
**COMMUNICATION**

- 15 = RS485 (A)
- 16 = RS485 (B)

**POWER**

- 19 = (+) 24V DC SUPPLY
- 20 = DC COMMON & RS485 SHIELD

**MAC155 CONTROLLER**



0-20mA / 4 - 20mA CURRENT LOOP  
 TO PLC INPUT OR METERING DEVICE

RS-485 COMMUNICATIONS

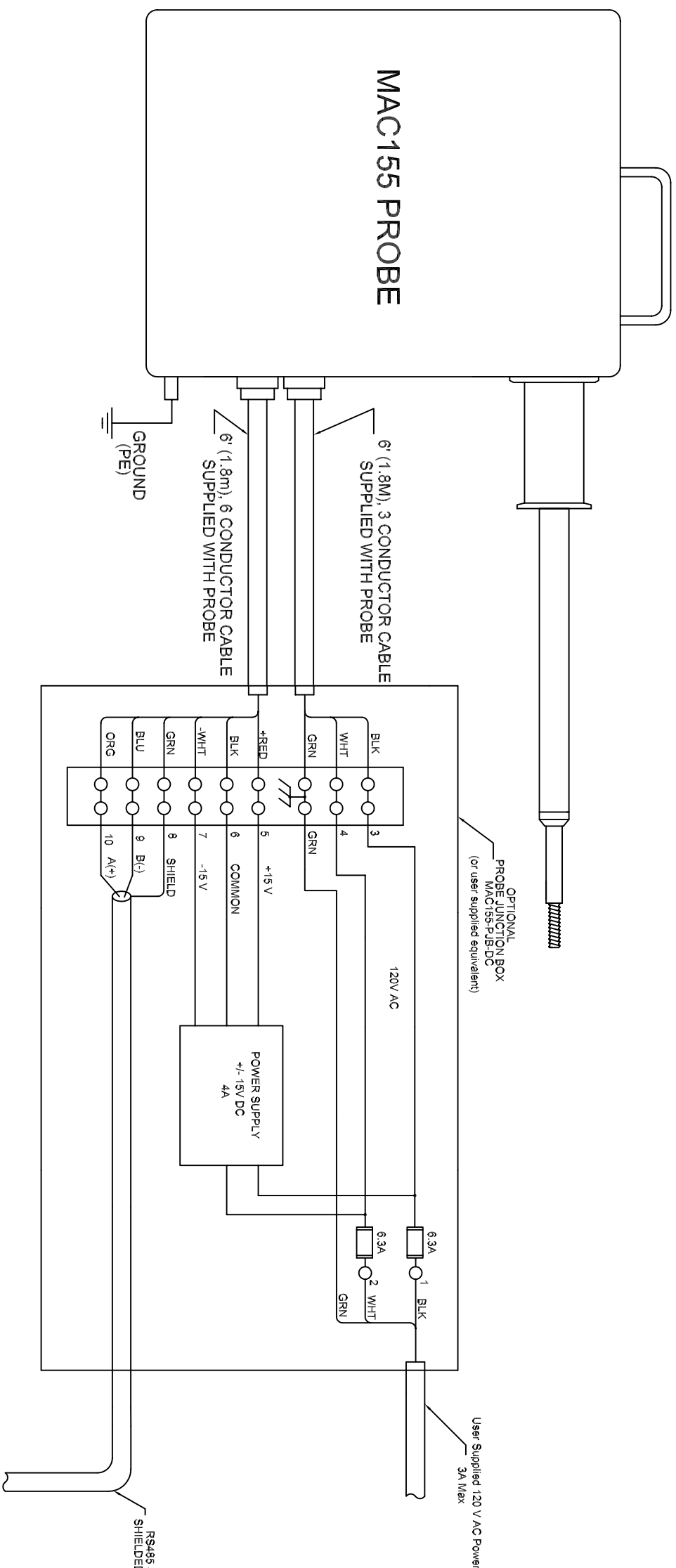
USER SUPPLIED WIRE,  
 24 AWG OR GREATER, SHIELDED,  
 TWISTED PAIR FOR RS-485  
 AND 0-20mA / 4-20mA LOOP

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TITLE  
**MAC155 PLC INTERFACE  
 WIRING DIAGRAM**

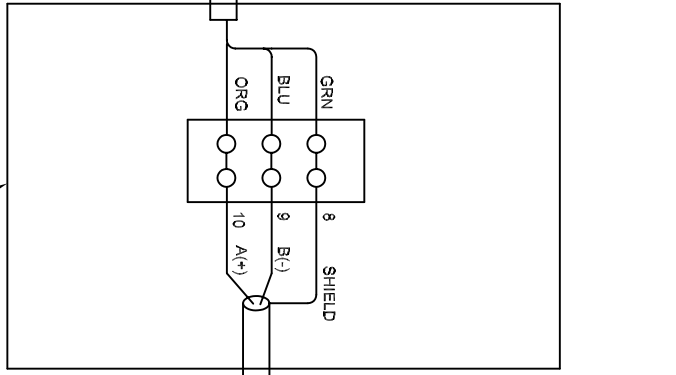
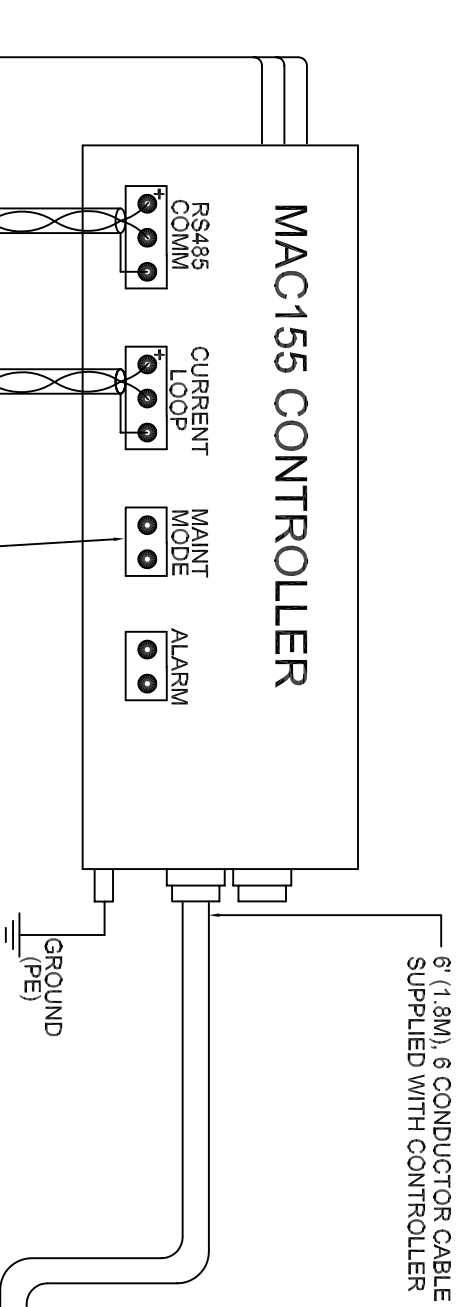
DRAWN	DTT	SIZE	DRAWING NUMBER	REQ/ISSN
CHECKED		A	155/01/0006	A2
APPROVED				SHEET OF 1





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 WHT = 120V NEUTRAL

**SIGNAL CABLE COLORS**  
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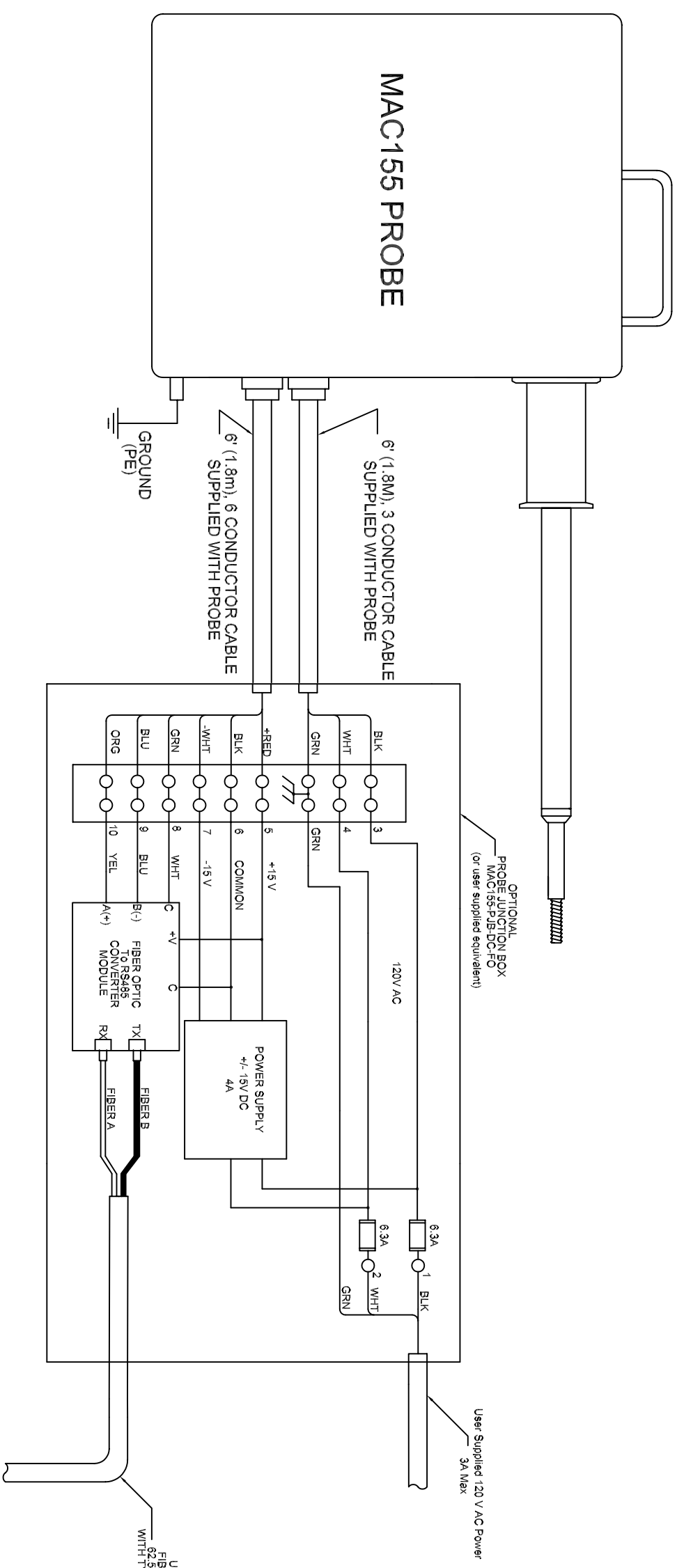


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**MAC155 WIRING DIAGRAM**  
 Remote Probe DC Power

DESIGNED	JAW	DATE	1/89
CHECKED	JGW	SIZE	B
DRAWING NUMBER	155/01/0010	REVISION	A1

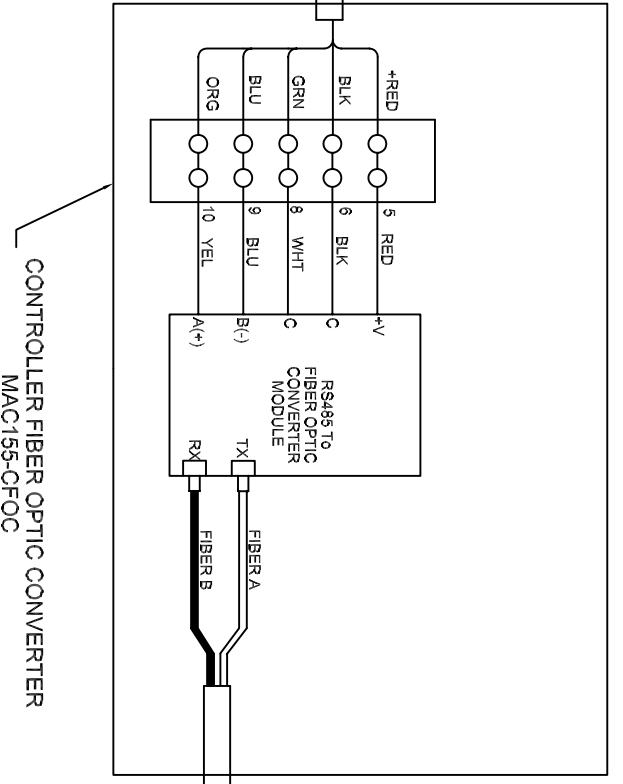
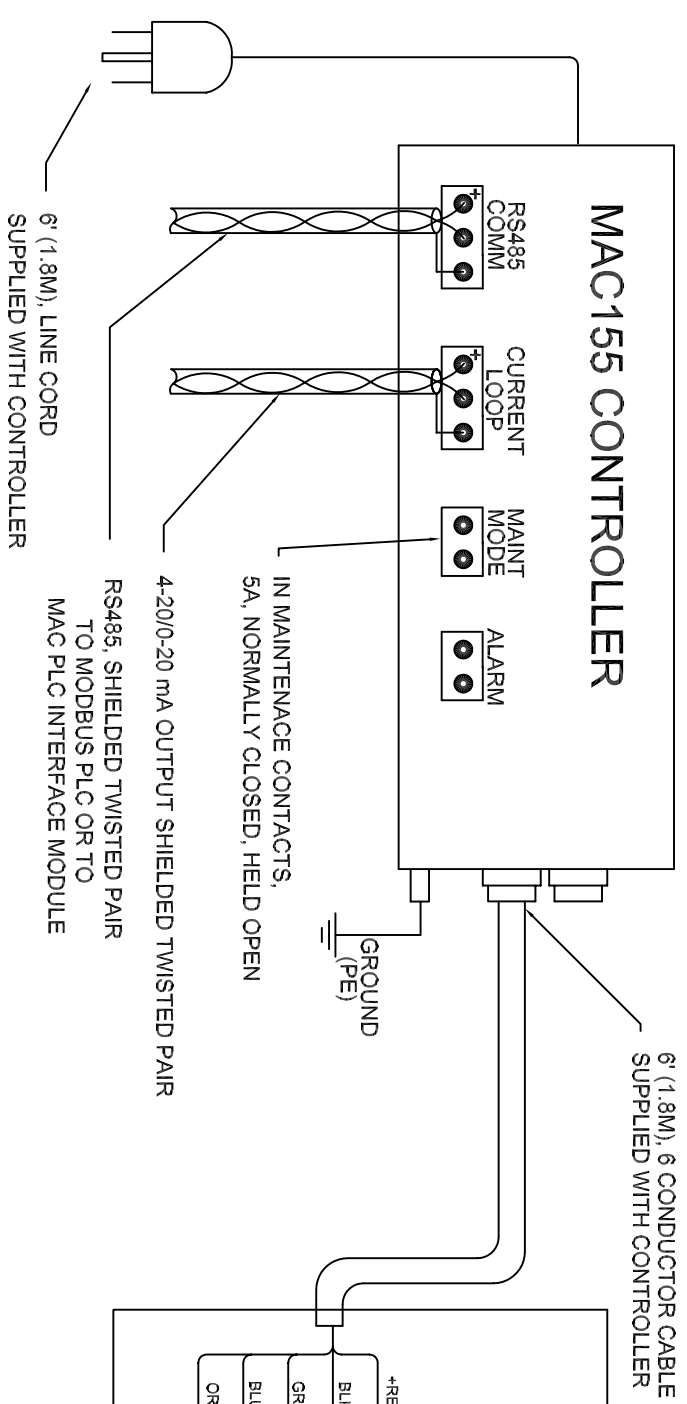
SHEET 1 OF 1



**POWER CABLE COLORS**  
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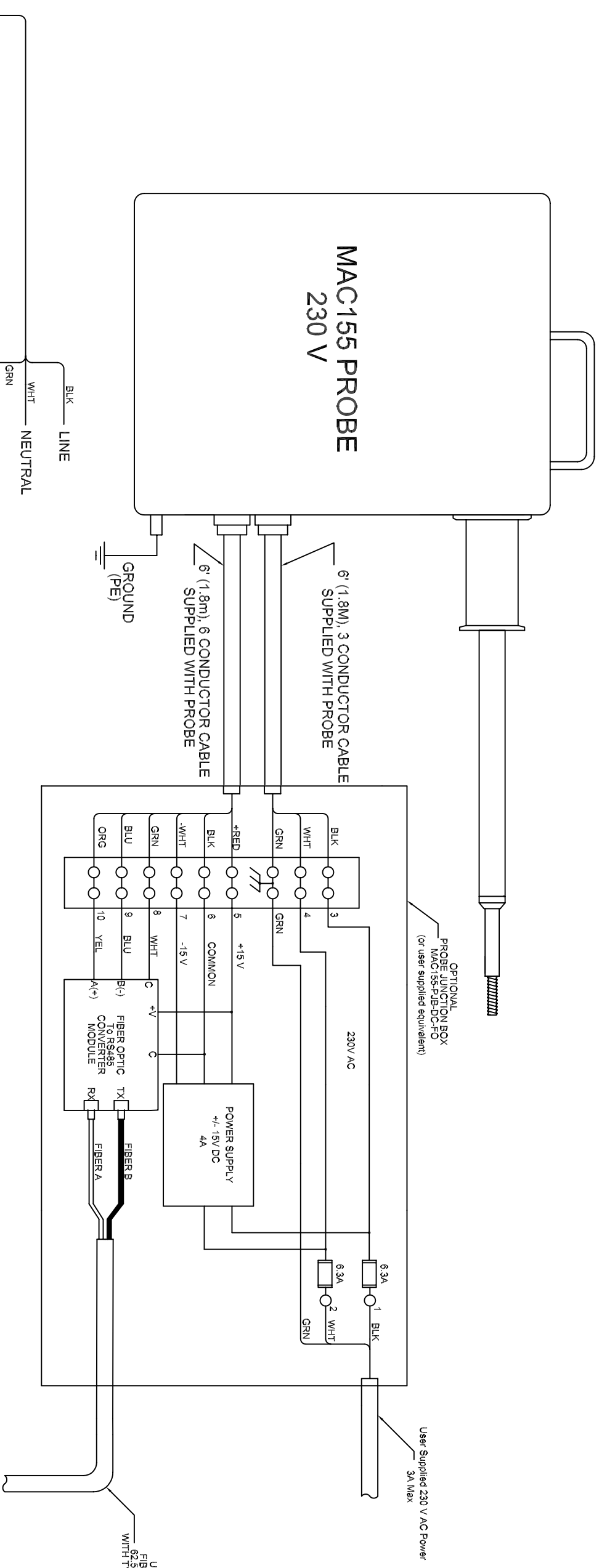
USER SUPPLIED  
 FIBER OPTIC CABLE  
 62.5/125µm MULTIMODE  
 WITH TYPE ST CONNECTORS



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**TITLE**  
 MAC155 WIRING DIAGRAM  
 120V With Fiber Optic Comm

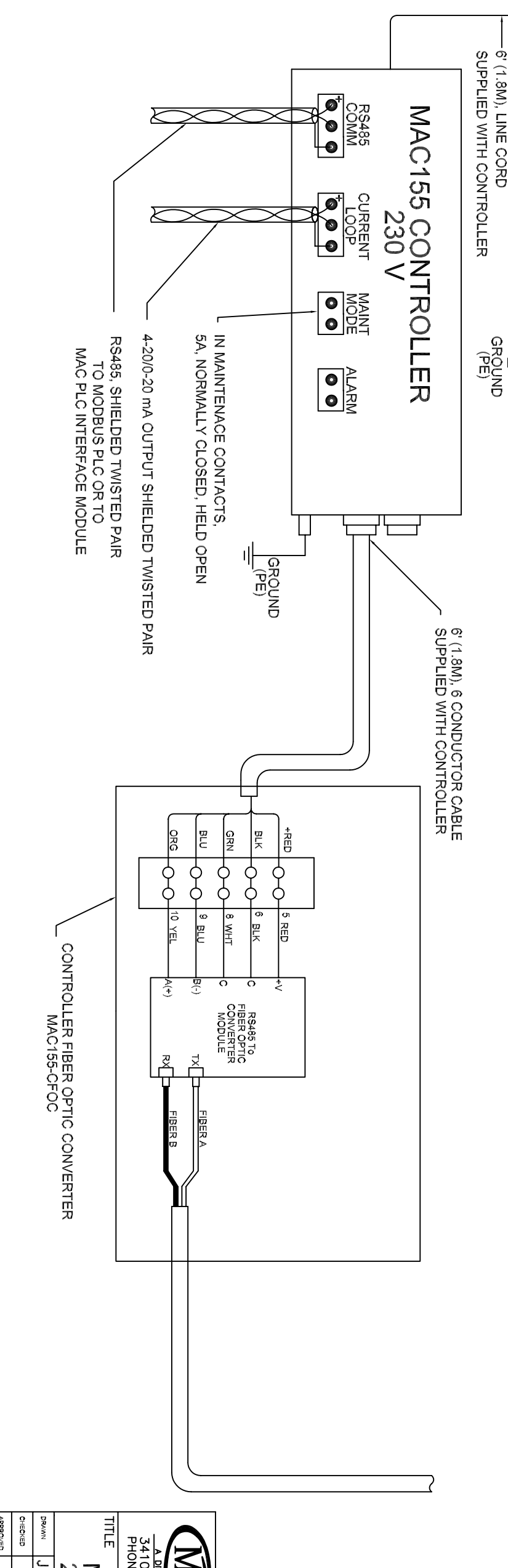
DESIGNED	JGW	SIZE	B	DRAWING NUMBER	155/01/0011	REVISION	A1
CHECKED							
APPROVED							



**POWER CABLE COLORS**  
 GRN = GROUND (PE)  
 BLK = 230V LINE  
 WHT = 230V NEUTRAL

**SIGNAL CABLE COLORS**  
 GRN = RS-485 SHIELD  
 ORG = RS-485 A(+)  
 BLU = RS-485 B(-)  
 RED = +15V DC  
 BLK = DC COMMON  
 WHT = -15V DC

USER SUPPLIED  
 FIBER OPTIC CABLE  
 62.5/125µm MULTIMODE  
 WITH TYPE ST CONNECTORS



CONTROLLER FIBER OPTIC CONVERTER  
 MAC155-CFOC

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**TITLE**  
 MAC155 WIRING DIAGRAM  
 230V With Fiber Optic Comm

DESIGNED	JGW	SIZE	B	DRAWING NUMBER	155/01/0012	REVISION	A1
CHECKED							
APPROVED							

