

SCADA RTU MODEM SHELF

MODEL 108048C0

120 VDC INPUT +/-12VDC OUTPUT



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1. GENERAL

1.01 This practice provides application, specification, circuits and mechanical description, maintenance, installation, and warranty information relating to Accurate Electronics' SCADA RTU Modem Shelf, Model 108048C0.

1.02 Accepts two (2) Modem Cards.

WARNING: Two rear edge connectors for insertion of larger Modem Card PCB are open on right side and pin alignment must be observed during straight PCB insertion.

1.03 Internal power supply provides input of 120VDC and outputs of --12VDC (0.9A) and +12VDC (1.2A).

1.04 A toggle switch is provided for power on/off.

1.05 Two power barrel fuses are provided for each modem card.

1.06 Shelf provides mounts in 19.00", 3.5" position. A clear, plastic front cover folds down for easy modem card insertion.

1.07 Rear of panel provides fused power input and both +/- switched output. Both modems have 25-pin D-sub connectors provided. Terminal block outputs are provided to facilitate RXT, RXR, TXT and TXR connections.

2. SPECIFICATIONS

2.01 Electrical

Number of Circuits:	2
Input Voltage Range:	120VDC nominal (85-140VDC) 25 watts
Input Fuse:	1 A, 200V two (2), single barrel type 3AG
Power Supply Input Fuse:	open case-soldered in 3A, 200V
Switching Frequency:	50 kHz typical
Efficiency:	75 % typical
Isolation (input-output-case)	50M ohm (500VDC)

Output:	-- 12 VDC, 0.9A + 12 VDC, 1.2A
voltage adjustment:	+/- 5%
line regulation: (full input range)	0.8%
load regulation: (no load-full load)	0.9%

ripple and noise (DC-100MHz):	5% of V out & 50mV p-p
Temperature Coefficient:	0.03%/oC
Overvoltage protection:	zener diode
Short circuit protection:	foldback current limit
EMI / RFI:	metal case

2.02 Environmental

Operating Temperature:	0 - 50° C
Humidity:	up to 95% R.H. / no condensation

2.03 Physical

Dimensions:	17.500"W x 3.500"H x 12.875"D 44.450 cmW x 8.890 cmH x 32.703 cmD
Weight:	3.1 lbs. / 1.4 kg
Finish:	black anodized / white lettering
Mounting Hole Configuration:	18.310"W x 3.000"H 46.507 cmW x 7.620 cmH (1.25" EIA spacing)

Ship-with-kit:	(4) 12/24 x 3/4 phillips screws, (4) #12 hex nuts, (4) #12 flat washers
Terminal Blocks:	T1A/T1B: 6/32 phil machine screws TB2: 8/32 phil machine screws

3. CIRCUIT DESCRIPTION

3.01 See FIGURE 1.

4. MECHANICAL OUTLINE

4.01 See FIGURE 2.

5. INSTALLATION/chassis mounting

5.01 Four (4) 12/24 x 3/4 slotted screws, four (4) # 12 hex nuts and four (4) # 12 flat washers are furnished with each panel to mount it firmly to the frame.

5.02 Flip power switch off.

5.03 Check two barrel fuses for 1-amp and continuity.

5.04 Attach input power to screw terminals on TB2.

5.05 Terminals are provided as connecting points for the circuits. See FIGURE 2 for circuit terminal assignments T1A, T1B, J1A, and J1B.

5.06 Insert horizontally into PCB guide rails, one or two modem cards.

5.07 Flip switch to "on" position.

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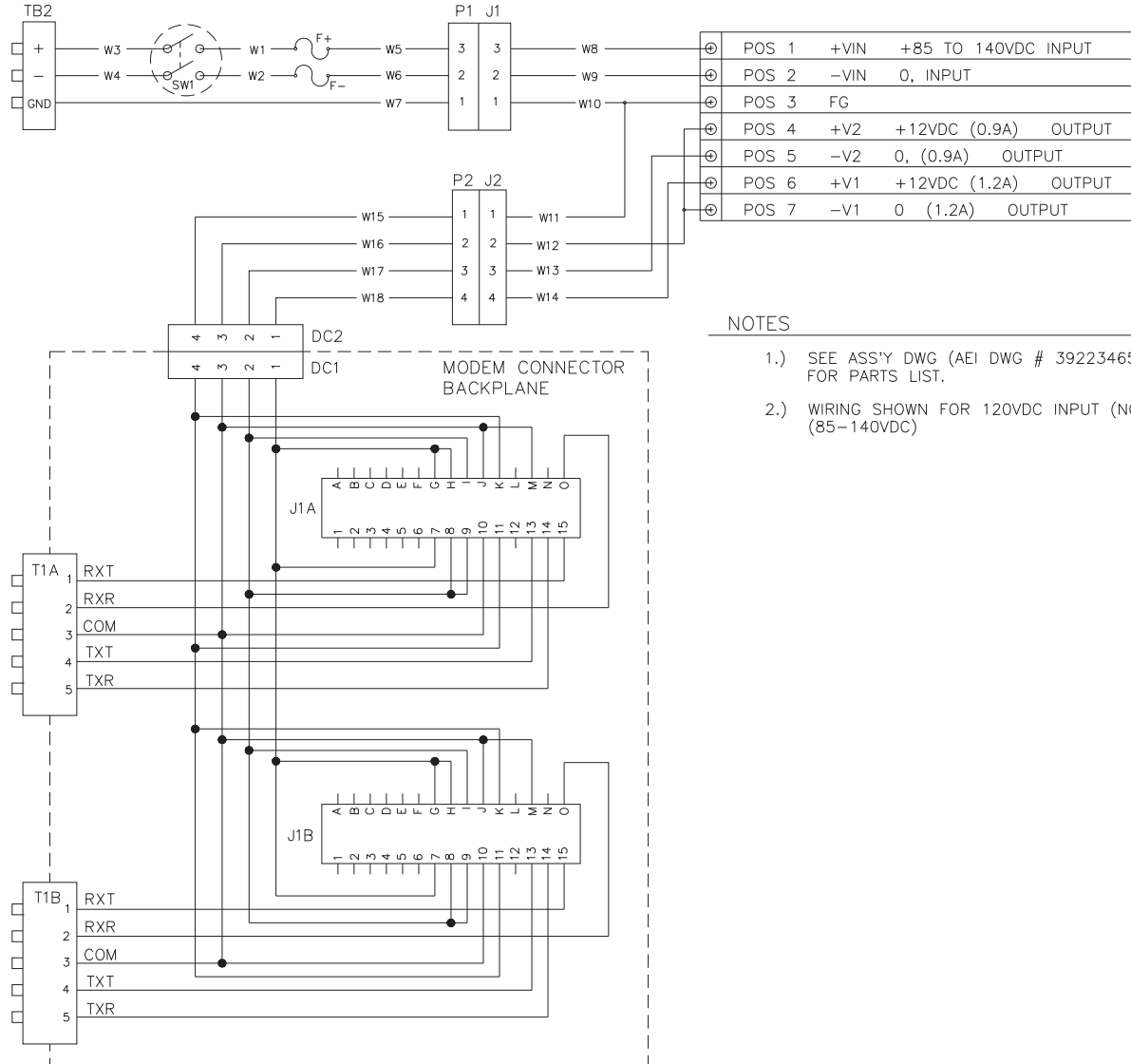
6. MAINTENANCE

6.01 No preventive maintenance is required. General care is recommended.

7. WARRANTY

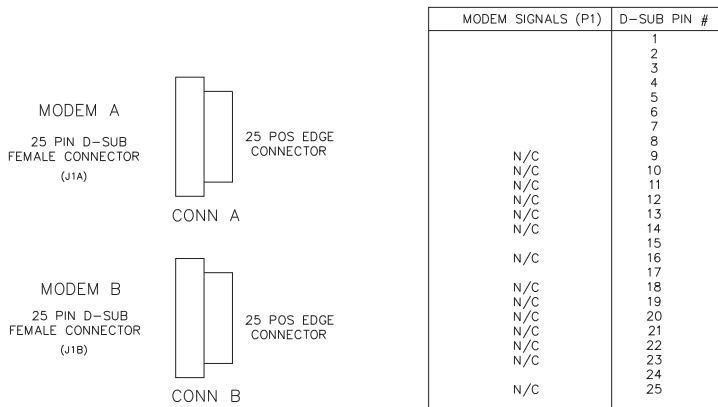
7.01 See WARRANTY in front of catalog.

FIGURE 1. CIRCUIT DESCRIPTION



NOTES

- 1.) SEE ASS'Y DWG (AEI DWG # 39223465) FOR PARTS LIST.
- 2.) WIRING SHOWN FOR 120VDC INPUT (NOMINAL) (85-140VDC)



SIGNALS AND PIN-OUT SAME FOR MODEMS A AND B

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FIGURE 2. MECHANICAL OUTLINE

