

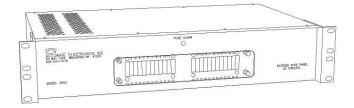
# **ACCURATE ELECTRONICS INC**

PO BOX 1654 97075-1654 8687 SW HALL BLVD 97008 BEAVERTON OR USA 503.641.0118 FAX 503.646.3903

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Practice Section 10306200 Rev A

# FILTERED FUSE PANEL MODEL 10306200



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# 1. GENERAL

**1.01** This practice provides application, specification, circuit and mechanical description, maintenance, installation, and warranty information relating to Accurate Electronics' Filtered Fuse Panel, Model 10306200.

**1.02** The power filter consists of a single L - C network designed to attenuate voice and carrier frequency signals and power supply ripple that is present on the office DC supply power leads. All input power and ground connections are made at a rear mounted terminal block TB-1. Diode combined input power is supplied at terminals A (TB1-5) and B (TB1-6). If a single input is used it may be supplied at the Single Supply Input (TB1-7). The input by-passes the two (2) combining (isolation) diodes decreasing unnecessary power dissipation and voltage drop.

**1.03** The output of the filter is supplied to all 24 fuses. Fused outputs and output returns appear at rear panel terminal blocks TB3 and TB4.

**1.04** The alarm circuit consists of a front panel LED and two (2) sets of DPDT dry contacts. The LED provides a local visual alarm and the relay provides dry contacts to activate external office audible and visual alarms.

The contacts are available at rear panel terminal block TB2. A rear panel switch (with locking tab) is used to select the power alarm operating voltage, -24VDC or -48VDC.

# 2. APPLICATION

**2.01** The Model 10306200 Filtered Fuse Panel provides filtering and fusing of twenty-four (24) external loads from a single input or two (2) diode combined inputs. Alarm circuitry is also provided. The panel operates on either -24VDC or -48VDC power.

# **3. SPECIFICATIONS**

Number of Circuits:24Input Voltage Range:- 21 VDC to - 56 VDC, switch selectableInput Current:30 A (MAX)Load Current:- 15 Amps MAX from each filter section- 15 Amps MAX from diode combined filter outputs- 3 Amp MAX from individual fuse circuitFilter DC Resistance:0.03 ohmRipple Attenuation:See FIGURE 3.		
Input Current: 30 A (MAX) Load Current: - 15 Amps MAX from each filter section - 15 Amps MAX from diode combined filter outputs - 3 Amp MAX from individual fuse circuit Filter DC Resistance: 0.03 ohm		
Load Current: - 15 Amps MAX from each filter section - 15 Amps MAX from diode combined filter outputs - 3 Amp MAX from individual fuse circuit Filter DC Resistance: 0.03 ohm		
<ul> <li>- 15 Amps MAX from each filter section</li> <li>- 15 Amps MAX from diode combined filter outputs</li> <li>- 3 Amp MAX from individual fuse circuit</li> <li>Filter DC Resistance: 0.03 ohm</li> </ul>		
<ul> <li>15 Amps MAX from diode combined filter outputs</li> <li>3 Amp MAX from individual fuse circuit</li> <li>Filter DC Resistance: 0.03 ohm</li> </ul>		
- 3 Amp MAX from individual fuse circuit Filter DC Resistance: 0.03 ohm		
Filter DC Resistance: 0.03 ohm		
Ripple Attenuation: See FIGURE 3		
See FIGURE 5.		
TB-1: copper lugs used at TB-1: 1,4,5,7		
conductor size #14 to #16 AWG		
#10/32 stud used at TB-1 2,3,6,8		
Ground Strapping Options:		
a.) no link A: frame ground isolated from supply ground		
BATT RTN).		
b.) link A (TB-1: 2,3), frame ground connected to supply		
ground (BATT RTN).		
Input Strapping Options: See Section 1.03		
TB-2: screw terminal block		
#3 / 48 captive wire clamping screws		
5 Amps, 150 V		
#18 - #22 AWG		
TB-4 AND TB-5:		
screw terminal blocks		
# 3 / 48 captive wire clamping screws		
# 18 - #22 AWG		
Individual circuits may be fused up to 3A MAX.		
Total current thru each filter section is 15A MAX.		

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#### 3.02 Environmental

Operating Temperature:	0 - 55° C	
Humidity:	up to 95% R.H. / no condensation	
3.03 Physical		
Dimensions:	17.300"W x 1.750"H x 11.250"D	
	43.942cmW x 4.459cmH x 28.589cmD	
Mounting Width:		
19" racks:	18.31"W x 1.75"H (46.507 cmW x 3.175 cmH)	
	(1.25 EIA Spacing)	
23" racks:	22.34"W x 1.75"H (56.744 cmW x 3.175 cmH)	
	(1.25 EIA Spacing)	
Mounting Depth:	flush, 1.75" and 5.25"	
	reversible/adjustable ears	
Finish:	black anodized / white lettering	
Weight:	4.0 lbs. / 1.36 kg.	
Mounting Hardware:	(4) 12/24 x <sup>3</sup> / <sub>4</sub> phillips,	
	(4) #12 hex nuts, (8) #12 flat washers	

# 4. CIRCUIT DESCRIPTION

4.01 See FIGURE 1.

# 5. MECHANICAL OUTLINE

5.01 See FIGURE 2.

### 6. INSTALLATION

**6.01** Four (4)  $12/24 \times \frac{3}{4}$  phillips screws, four (4) #12 hex nuts and four (4) #12 flat washer are furnished with each shelf to mount it firmly to the relay rack.

**6.02** Mounts on standard 19 or 23 inch equipment relay racks with three adjustable mounting depths (flush, 1.75" and 5.25").

**6.03** External wiring connects at rear of panel. Screw type terminals are provided for fuse distribution and office alarm circuits. Input terminals for office battery supply, ground return, and frame ground will accept wire sizes from 6 to 14 AWG.

**6.04** Optional strapping and alternate wiring arrangements must be completed prior to installation.

# 7. TESTING AND TROUBLESHOOTING

**7.01** The shelf should be thoroughly physically inspected before mounting, however, to ensure that there are no bent or broken connector pins or other visible defects. If trouble is encountered in an operational shelf, ensure that all modules are seated properly and operating correctly and that all wiring is correct. If a shelf is suspected of being defective, a new one should be substituted and the tested conducted again. If the substitute operates correctly, the original should be considered defective and returned to Accurate Electronics for repair or replacement as directed below. We strongly recommend that no internal (component-level) testing or repairs be attempted on Accurate Electronics' equipment. Unauthorized testing or repairs may void its warranty. Note: If equipment must be marked defective or bad, we recommend that it be done on a piece of tape or on a removable stick-on label.

#### TECHNICAL ASSISTANCE

**7.02** Contact Accurate Electronics, Inc. 503.641.0118, FAX: 503.646.3903; Mail: PO Box 1654, Beaverton OR 97075-1654.

#### **RETURN PROCEDURE (FOR REPAIR)**

**7.03** To return equipment for repair, first contact Accurate Electronics, Inc. Enclose an explanation of the malfunction, your company's name and address, the name of a person to contact for further information, and the purchase order number for the transaction. Accurate Electronics will inspect, repair, and retest the equipment so that it meets its original performance specifications and then ship the equipment back to you. If the equipment is in warranty, no invoice will be issued.

# **8. MAINTENANCE**

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

# 9. WARRANTY

 $9.01\,$  All Accurate Electronics Inc. products carry a full FIVE (5) YEAR warranty on materials and workmanship. See WARRANTY in front of catalog.

**9.02** If a situation arises that is not covered in the checklist, contact Accurate Customer Service as follows (telephone number are given below):

#### **Contact Accurate Electronic Customer Service**

**9.03** If a product is diagnosed a defective, follow the replacement procedure in paragraph 9.04 when a critical service outage exists (e.g., when a system of a critical circuit is down and no spares are available). If the situation is not critical, follow the repair and return procedure in paragraph 9.05.

#### Replacement

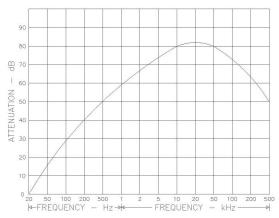
**9.04** To obtain a replacement, notify Accurate Electronics. Be sure to provide all relevant information, including the part number that indicates the issue of the product in question. Upon notification, we shall ship a replacement product to you. If the product in question is in warranty, the replacement will be shipped at no charge. Pack the defective product in the replacement, and enclose it with the defective product (this is your return authorization). Affix the preaddressed label provided with the replacement product to the carton being returned, and ship the module prepaid to Accurate Electronics.

#### **Repair and Return**

 $9.05\,$  Return the defective product, shipment prepaid, to Accurate Electronics Inc. :

ACCURATE ELECTRONICS INC. ATTN: REPAIR AND RETURN 8687 SW HALL BLVD. #100 BEAVERTON, OREGON 97008 USA

#### FIGURE 3. Attenuation Characteristics.

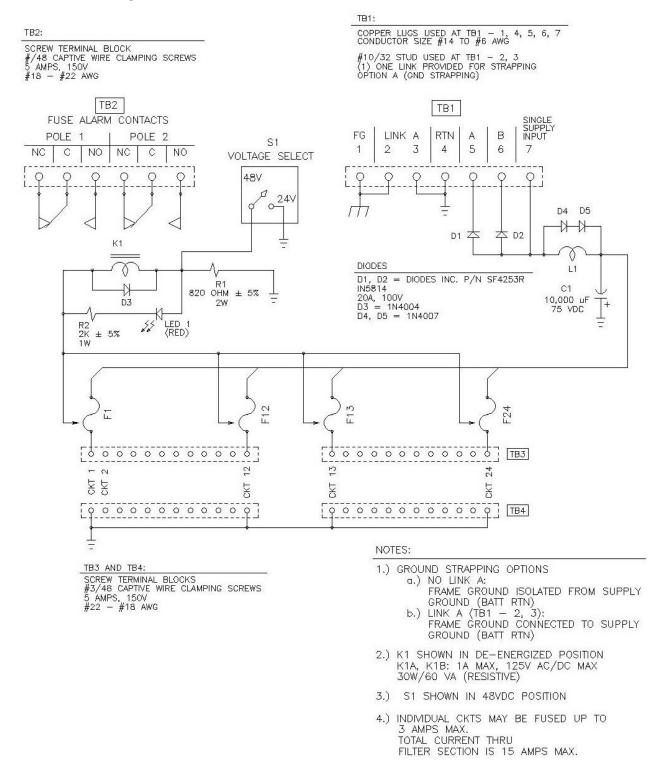


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#### FIGURE 1. Circuit Description.

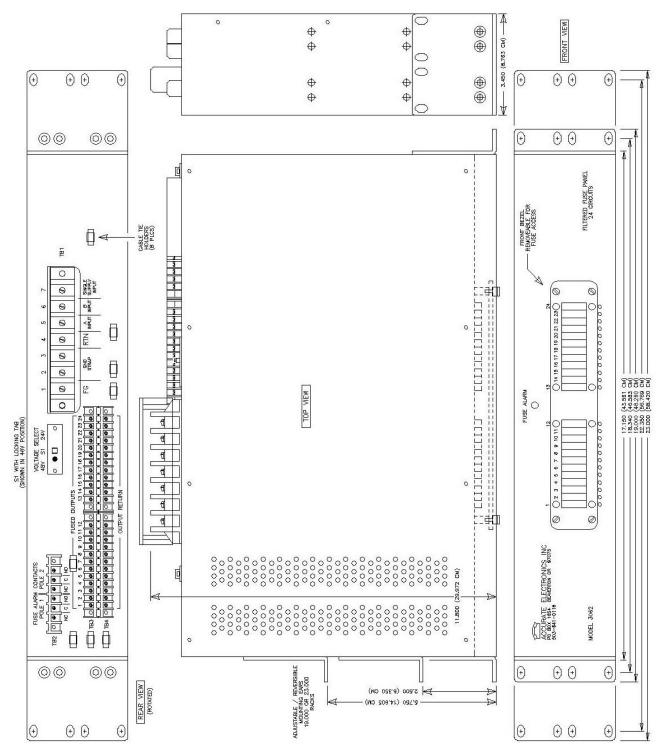


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FIGURE 2. Mechanical Outline.



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