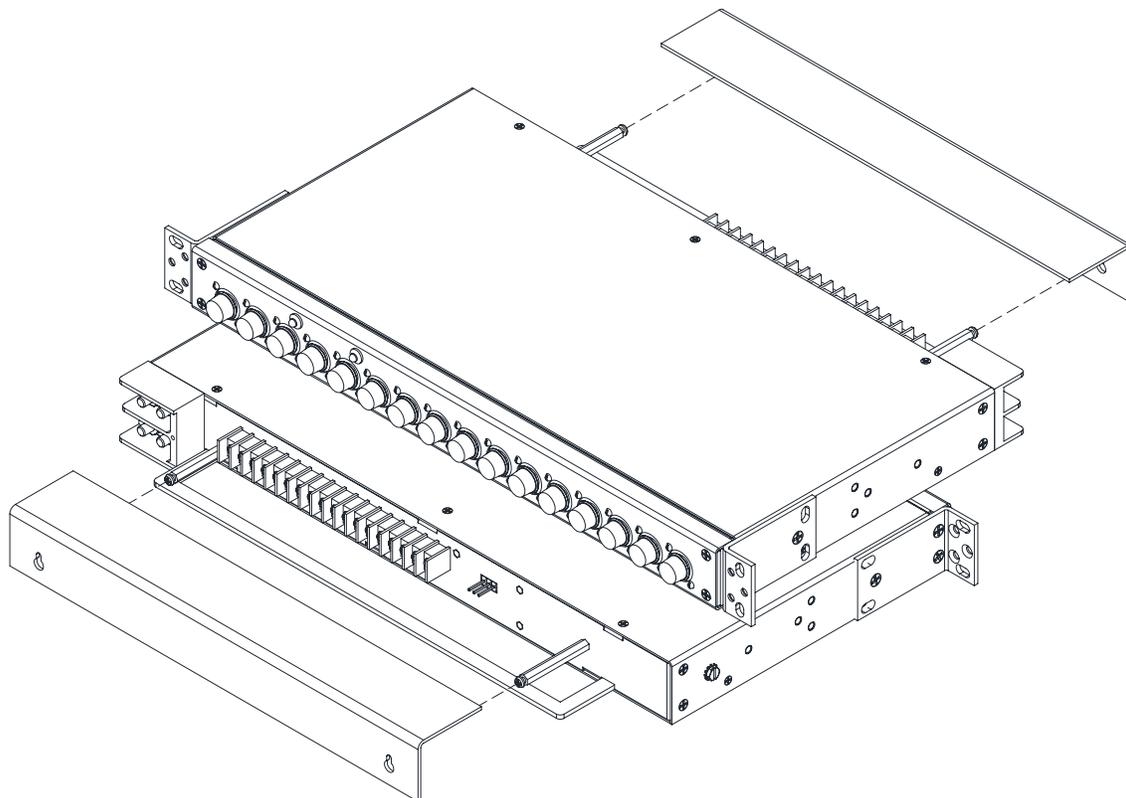


Westell

FUSE PANEL

Technical Practice

180108-N-0808
8 Position Type 70 – 130 VDC Floating



FEATURES

- Single floating input distributing power via Type-70 fuses each (10Amps/Type-70 max)
- Nominal 130 VDC operation
- This panel can distribute up to 80 Amps
- Barrier terminal strip for fused outputs (positive and negative)
- One set of Form C relay contacts is provided to extend alarm (fuse alarm or input power failure)
- Cable management bar (aka towel bar) on rear of panel included (flush style)
- 1.75" (1 RU) mounting height (single panel space).
- Two sets of mounting brackets are supplied (1" & 1-3/4" spacing), both sets of brackets are universal for 19" and 23" racks, with flush and offset mounting options.

1. GENERAL DESCRIPTION

1.1. The 180108-N-0808 Fuse Panel provides up to 8 circuits for the distribution of 130 V DC power to equipment. Each of the 8 circuits is individually protected by 2 - Type-70 style telecommunication fuses located on the panel's faceplate. Each output, positive and negative, is protected with a separate fuse. Alarm circuits are provided to indicate and extend alarm conditions when faults occur. A Normal Operation LED indicates the status of the panel.

1.2. Input wiring is connected to an easy access stud input block located at the rear of the panel.

1.3. The power is distributed to the load side equipment through Type-70 style fuses. There are 16 fuses (8 positive, 8 negative) per panel. Each fuse position is available for installer connection at the rear of the panel. A designation card is provided for keeping records of which position is connected to which equipment and what amperage is to be used.

1.4. Alarm circuits are provided to alert service personnel of fault conditions. An alarm is signaled when any of the distribution fuses opens. A red fuse alarm LED on the faceplate will illuminate and the Normal Operation LED will extinguish to signal a fuse alarm and the MAJOR relay contacts will change states. These fuse panels have common (C), normally open (NO) and normally closed (NC) terminals. A major alarm condition includes a blown fuse or power failure.

The "Normal" condition of the relay exists when the panel is powered up without any blown fuses.

1.5. The 180108-N-0808 Fuse Panels are made from 0.050" steel and painted off white. Single rack height panels are shipped with universal brackets (1" & 1-3/4" spacing) that will fit both 19" and 23" wide racks and use only one 1.75" panel space. The panel has a clear L shaped lexan to protect the wiring connections on the back of the panel.

2. APPLICATION

2.1. The 180108-N-0808 Fuse Panels are designed to be used in the distribution of 130 V DC power. They are rack mount panels that can provide fused DC power to up to 8 individual circuits (Type-70), or 8 pieces of equipment.

3. CIRCUIT DESCRIPTION

3.1. Power is connected to the fuse panel via ¼" studs on 5/8" centers located at the rear of the panel (Torque 5.5 ft-lbs). These inputs are high current stud blocks that supply current to the fuse panel. Connect the positive cable to the stud input that is labeled "POS +" and the negative cable is connected to the terminal labeled "NEG -".

3.2. Distribution of current is provided by Type-70 style fuses. Each polarity has 8 fuse holders for distribution, the fuses are labeled F1 to F8 on each bus. Each fuse position is made available at the rear of the fuse panel. Maximum output current of each fused position is rated at 10 Amps, provided the maximum panel current is not exceeded (80 Amps max).

3.3. Fuse alarm circuitry provides 1 set of form "C" contacts (C, NO and NC) In the event of a fuse failure or loss of input power, the relay will change states, providing a connection between the Normally Open "NO" and Common "C" terminals. The normally closed "NC" terminal will open to high impedance.

4. INSTALLATION

Please read completely before beginning.

WARNING: Installation should only be performed by an experienced Installer familiar with DC power distribution systems. Voltages of 130 V DC (typical) are present at the back panel of this fuse panel.

4.1. Unpack and inspect the Fuse Panel for possible damage incurred during shipping. If damage is found, file a claim immediately with the carrier, and notify the customer service department.

4.2. Once the panel is unpacked, verify that there are three mounting brackets. The bracket

with the vertical slot is used on both 1" and 1-3/4" spacing. All three brackets are universal for 19" and 23" rack mount spacing and can be mounted so the panel can be installed for a flush mounting or 5" offset. Adjust the position and orientation of the correct mounting brackets on the fuse panel, such that it will fit the rack you wish to mount the panel in. Please see drawing 0808-16B on page 5 for mounting bracket configuration.

4.3. Mount the fuse panel on the rack using the thread forming #12-24 rack mounting screws and tooth lock washers provided.

WARNING: For safety reasons all wiring should be done with the power source removed (when possible).

4.4. Remove the distribution fuse feeding the input cables that are to be connected to the new panel. Using input cables specified by the Job Engineer, hook up the input cables to the input terminal block on the fuse panel ("POS +" and "NEG -"). Each high current input terminal uses a two hole compression lug (1/4" on 5/8", torque to 5.5 ft-lbs).

4.5. The power outputs are available at the terminal blocks (#6 screw) at the rear of the panel. Each fuse position is numbered and that fused circuit is available at the terminal block position with the same number.

4.6. All inputs and outputs, positive and negative, are isolated from the chassis.

4.7. This panel has one set of alarm contacts. Common (C), normally open (NO) and normally closed (NC) Major alarm contacts are presented on the back panel. These

contacts will signal a fuse alarm (blown fuse) and/or input power loss condition.

It's recommended that you limit the alarm contact current to 1A or less to protect the alarm wiring and circuitry.

4.8. CHASSIS GROUND: For safety reasons, and as recommended by NEBS, this chassis should be electrically connected to the rack ground. From step 4.3. the panel should already be grounded to the rack via the #12-24 thread forming rack screws and outside tooth lock washers. In addition to grounding via the mounting brackets, it is recommended you ground the chassis using a ground cable and the #10 bolt and locks on the side of the chassis (#10 screw torque: 2 ft-lbs or 2 Nm).

4.9. Power up the panel by installing the distribution fuse(s) or turning on the breaker(s) supplying the panel. The panel should power up with the Normal Operation LED illuminated and without the red Fuse Alarm LED illuminated, and the relay should be in the "Normal" state ("C" connected to "NC").

4.10. If you wish to verify the fuse alarm circuit, you can insert a blown fuse into one of the empty fuse holders. The red Fuse Alarm LED should light and the Normal Operation LED should extinguish and the alarm extension relay should activate (close) to extend the alarm.

4.11. Install panel output distribution fuses as required. Use the provided designation card to keep a record of circuits and amperages.

5. SPECIFICATIONS

5.1. Voltage	130 VDC Typical 119 – 150 VDC	5.10. Alarm Block	0.045" sq wire wrap pins
5.2. Current/Fuse	10 Amps Maximum	5.11. Relay output	2 Amps/58Vdc max
5.3. Current/Polarity	80 Amps Max.	5.12. Dimensions	1¾ H, 17 W, 10½ D (excluding brackets)
5.4. Current/Panel	80 Amps Max	5.13. Rack Mounting	19" and 23" Racks for 1" or 1-3/4" Panel Spaces
5.5. Output Fuse	Type-70	5.14. Weight	Approx 8 Lbs
5.6. Output/Bus	8 Fuses	5.15. Operating Temp.	-20° to +60°C (-5° to +140°F)
5.7. Output/Panel	1 Floating Bus per Panel	5.16. Color	Off White
5.8. Input Block	Two ¼" Stud on 5/8 center		
5.9. Output Block	#22 AWG to 12 AWG wire or fork/ring for #6 screw, 10 AWG forks/rings will work		

Compatible lugs for input block

2 hole compression lugs for 1/4" studs on 5/8" centers.

Panduit# LCD2-14A 2 AWG wire
LCD4-14A 4 AWG wire
LCD6-14A 6 AWG wire
LCD8-14A 8 AWG wire

Output lugs (locking fork recommended):

Ring or fork for #6 screw (up to 10 AWG)

6. TECHNICAL SERVICES

6.1 If technical or customer assistance is required, contact Westell by calling or using one of the following options:

Voice: (800) 377-8766
email: global_support@westell.com

For additional information about Westell, visit the Westell World Wide Web site at <http://www.Westell.com>.

7. WARRANTY & REPAIRS

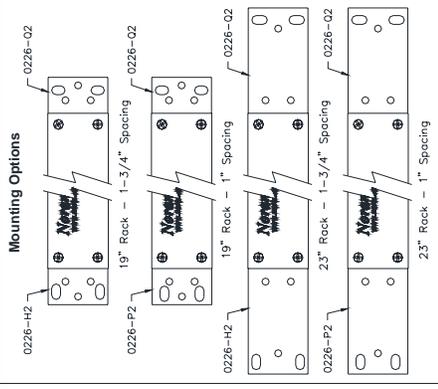
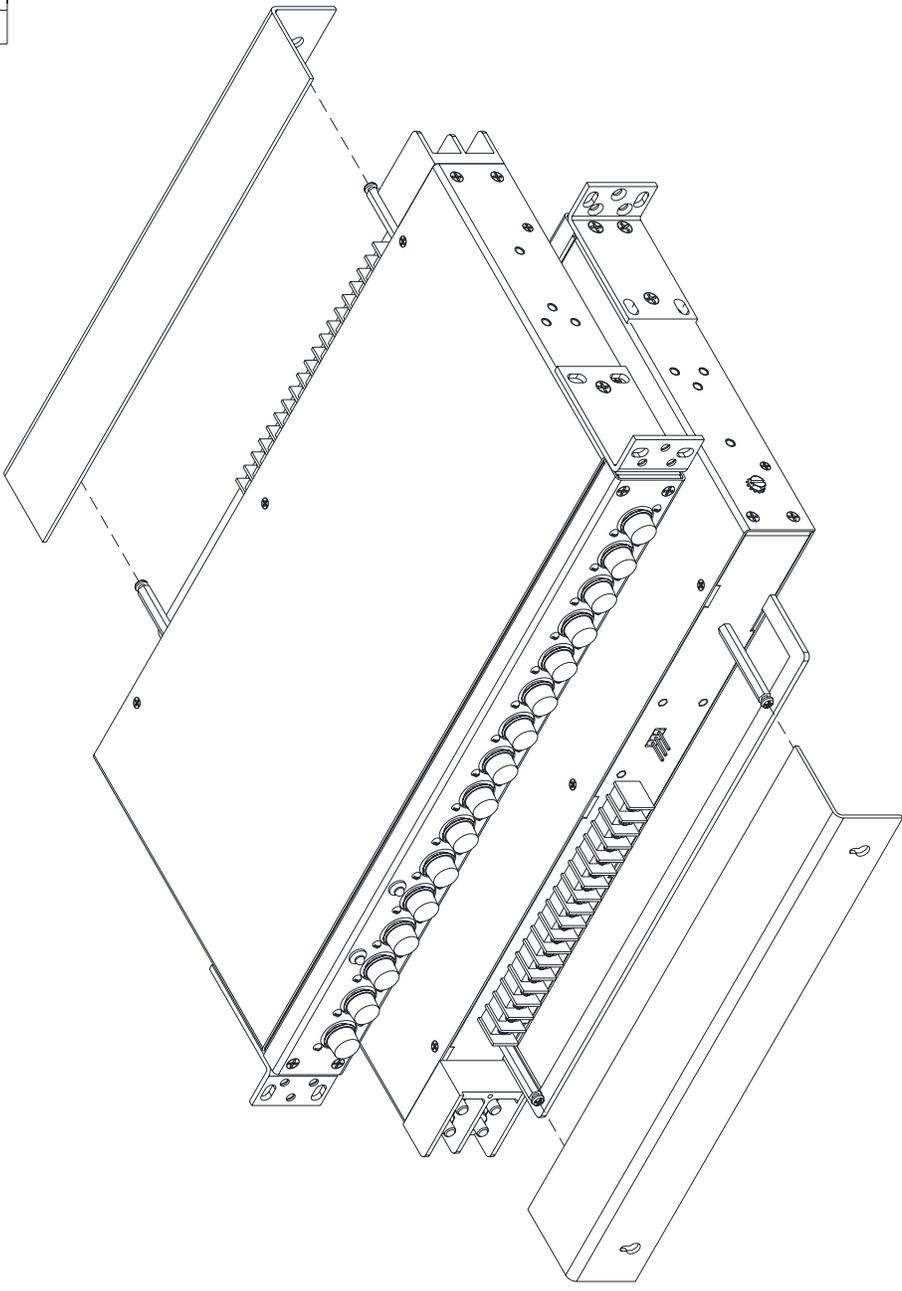
7.1 Westell warrants this product to be free of defects at the time of shipment. Westell also warrants this product to be fully functional for the time period specified by the terms and conditions governing the sale of the product. Any attempt to repair or modify the equipment by anyone other than an authorized Westell representative will void the warranty.

7.2 Westell will repair or replace any defective Westell equipment without cost during the warranty period if the unit is defective for any reason other than abuse, improper use, or improper installation. To return defective equipment, first request a Return Material Authorization (RMA) number from Westell by calling or emailing (Customer Service) at the address below. Once an RMA number is obtained, return the defective unit (freight prepaid), along with a brief problem description, to the address we will provide to you when you contact us.

email: rgmdept@westell.com
Voice: (800) 377-8766

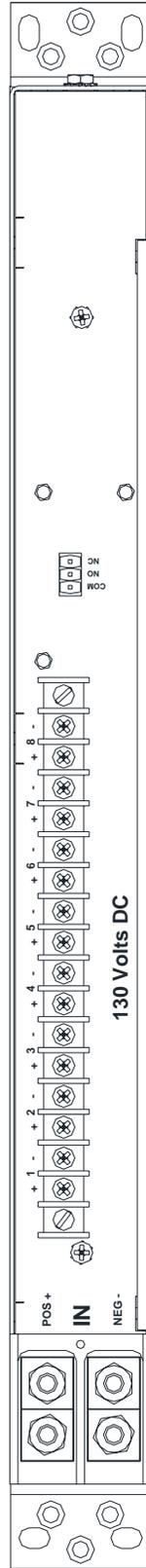
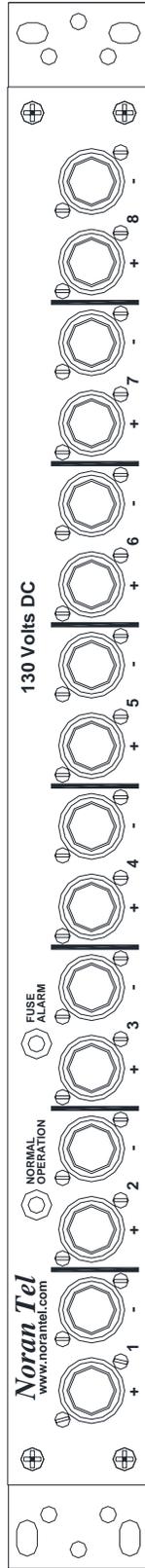
Replacements will be shipped in the fastest manner consistent with the urgency of the situation. Westell will continue to repair or replace faulty equipment beyond the warranty period for a nominal charge. Contact Westell for details.

REV	Qty	Description or Release Note	ECN	CKD	APD	DATE
A		Original	676			
B		Changed to Q bracket	775			03 Sept. 10

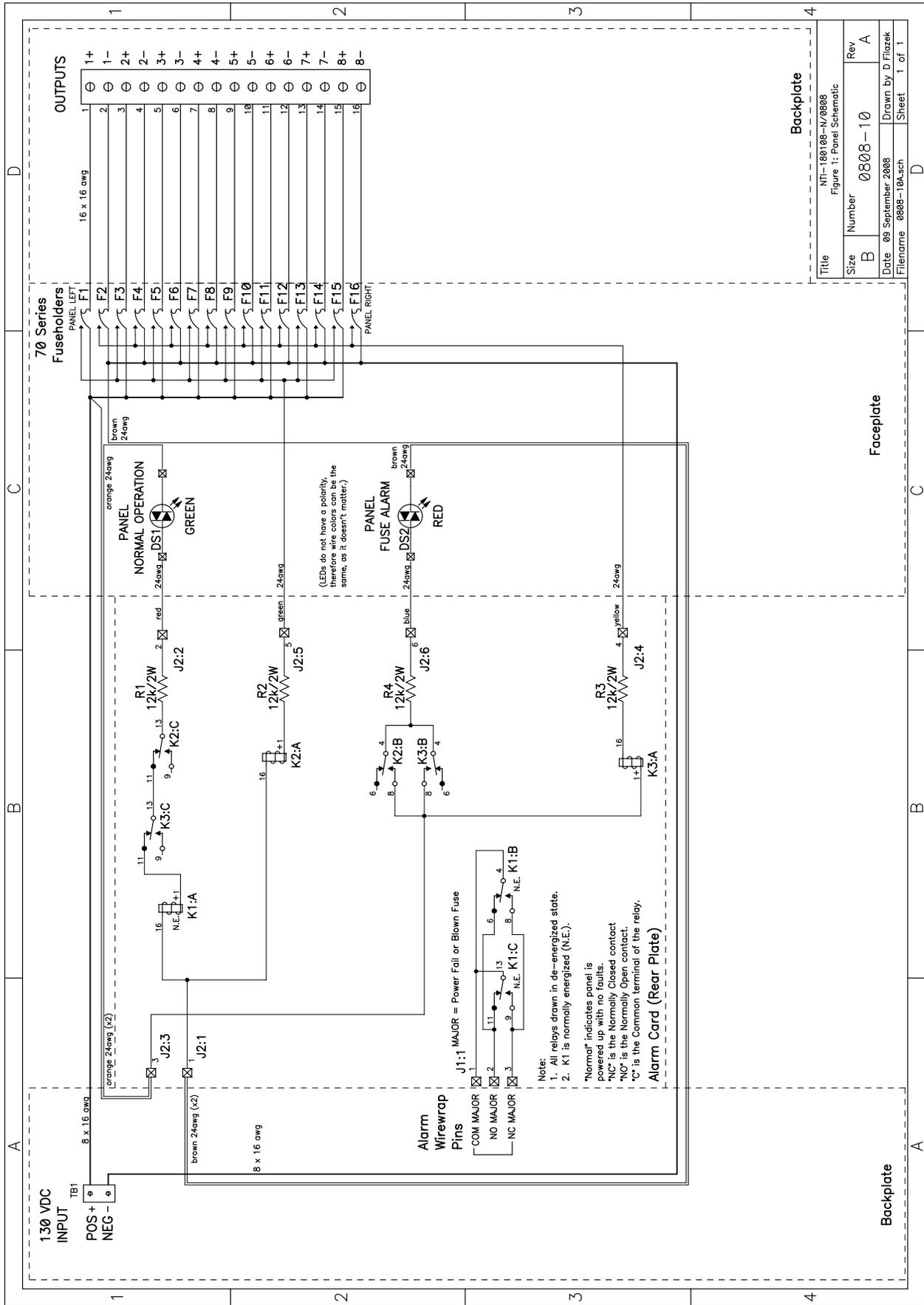


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Rev:	B
Drawn With:	Autocad
Computer File:	Noran Tel use only 0808-16B
Date:	03 September 10
Plotted Scale:	NTS
Drawn by:	S. Dolinsky
Sheet:	1 of 1

REV	Qty	Description or Release Note	ECN	CKD	AFD	DATE
A		Original	676			
B		Changed to Q bracket	775			03 Sept 10



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180108-N/0808	
Front/Rear Views	
Illustration Drawing	
Drawing Number:	Rev:
0808-17	B
Computer File: Noran Tel use only	
0808-17B	
Date: 02 September 10	Plotted Scale: NTS
Drawn by: S. Dolinsky Sheet: 1 of 1	



Title	NIJ-180188-N/0808 Figure 1: Panel Schematic		
Size	B	Number	0808-10
Rev	A		
Date	09 September 2008		
Filename	0808-10A.sch		
Sheet	1 of 1		