

RML104 & RML105

Power Supply Cards

Description

The RML104 System Power Supply and the RML105 Redundant Power Supply cards contain a switching power supply that has universal AC power input. This means the RML100 may be powered from any AC voltage from 100 to 250V and from any frequency from 47 to 63 Hz. The RML100 power entry panel contains a standard instrument style AC power connector. Universal AC input means there is no selection switch to set and connection to any outlet can be made with the selection of the correct power cable.

The RML104/105 front panel contains a power switch and indicating LEDs for +12V and -12V power. The front panel also contains a lamp test pushbutton. While this button is held in, all the LEDs on all the installed card front panels are

kept lit. This enables some limited troubleshooting of the installed cards and the signal cables. It separates a bad LED from an inactive LED.

WARNING! Lamp test should only be used when all lines are idle! RML070 LEDs should be tested with loopback pushbuttons in!

The RML104 contains circuitry that automatically provides backup power from an installed RML105 redundant power supply card.

Dataforth does not authorize or warrant its products for use in life support/critical applications.

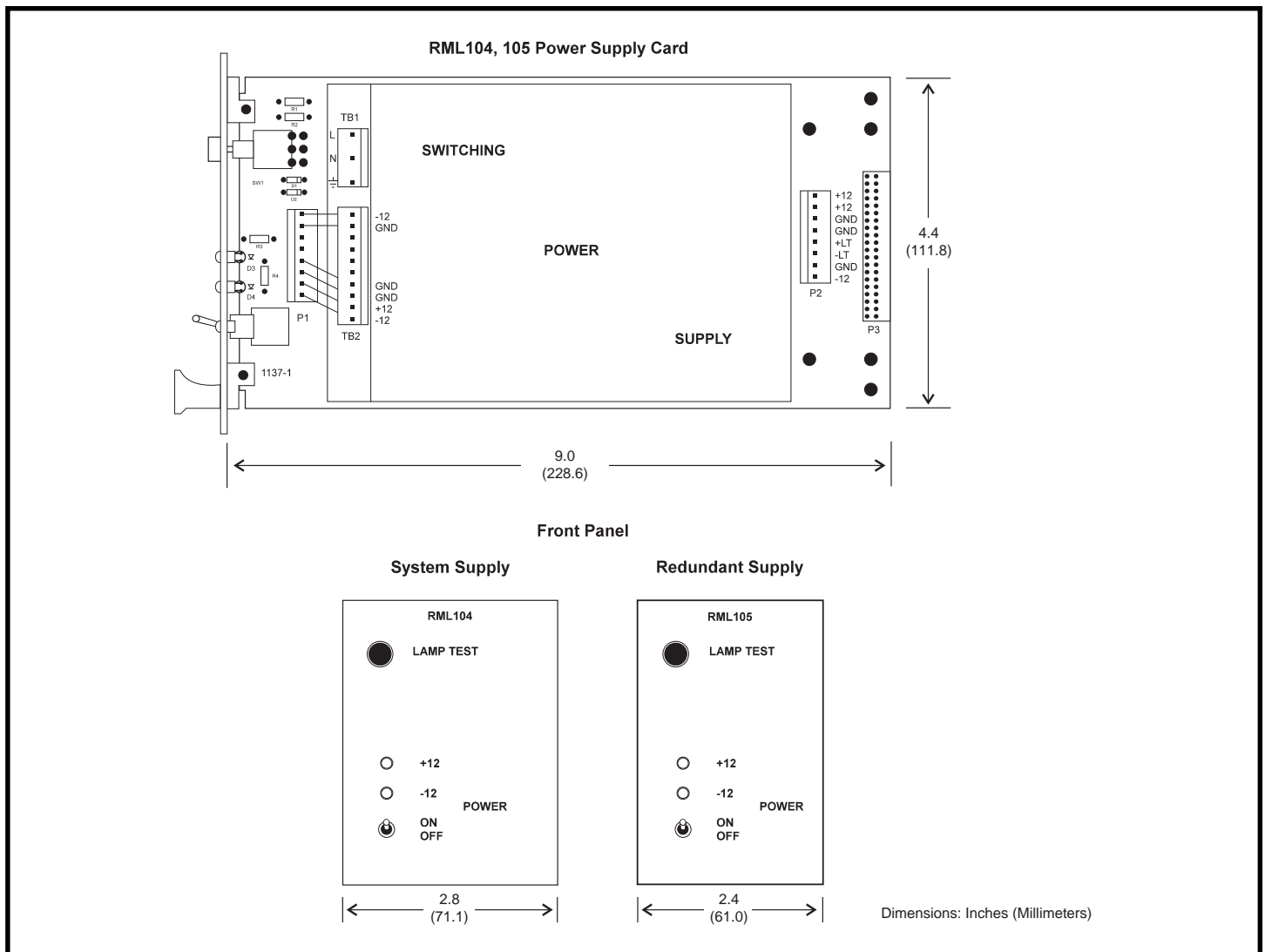


Figure 1: RML104/105 Mechanical Drawing

RML104

Installation and Removal

Installation

Turn off the RML104 power switch.

Using right-most harness with the 8 position single row connector, connect it to the matching 8 position single row header toward the rear of the RML 104 card. Then insert the cable bundle into the latching cable clamp and snap it closed. If the cable clamp is closed, use a small screwdriver to snap it open.

Now insert the RML104 card in between the card guides and slide in about $\frac{3}{4}$ of the way. Then using the harness with the 4 position square connector, connect it to the matching 4 position square connector toward the front of the RML 104 card.

Then push the RML 104 into the card cage until it seats, taking care to keep the slack of the second harness in the space between the front panel and the power supply case. Make sure the RML104 front panel is flush with the front edge of the card cage. Then tighten the four screws in the RML104 front panel.

Removal

Turn off the RML104 power switch.

Loosen the four front panel screws. Pull on the handle on the front panel to unseat the RML104. Then carefully pull the RML104 about $\frac{1}{4}$ of the way out and disconnect the 4 position square connectors from each other.

Now pull the RML104 out far enough to expose the latching cable clamp. Use a small screwdriver to snap it open. Remove the cable bundle from the cable clamp. Then pull the RML 104 out completely and disconnect the 8 position single row connector from the 8 position single row header toward the back of the RML104 card.

RML105

Installation and Removal

Installation

Turn off the RML105 power switch.

Using left-most harness with the 8 position single row connector, connect it to the matching 8 position single row header toward the rear of the RML 105 card. Then insert the cable bundle into the latching cable clamp and snap it closed. If the cable clamp is closed, use a small screwdriver to snap it open.

Now insert the RML105 card in between the card guides and slide in about $\frac{3}{4}$ of the way. Then using the harness with the 4 position square connector, connect it to the matching 4 position square connector toward the front of the RML 105 card.

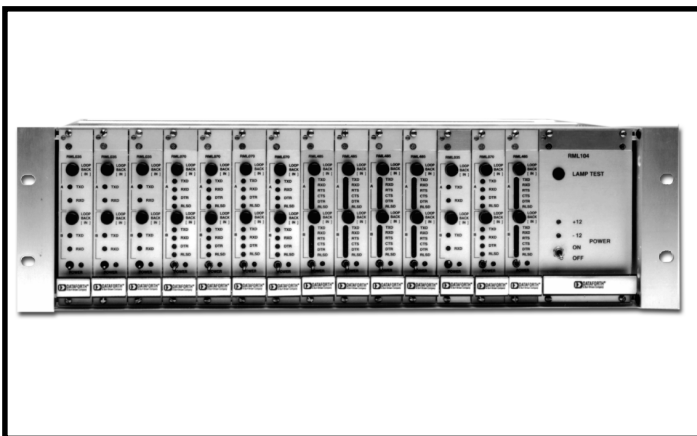
Then push the RML105 into the card cage until it seats, taking care to keep the slack of the second harness in the space between the front panel and the power supply case. Make sure the RML105 front panel is flush with the front edge of the card cage. Then tighten the four screws in the RML105 front panel. Install the narrow filler panel to the right of the RML105.

Removal

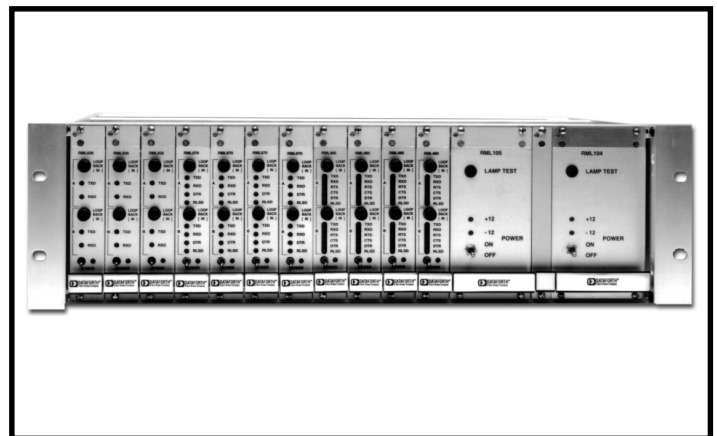
Turn off the RML105 power switch. Remove the narrow filler panel to the right of the RML105.

Loosen the four front panel screws. Pull on the handle on the front panel to unseat the RML105. Then carefully pull the RML105 about $\frac{1}{4}$ of the way out and disconnect the 4 position square connectors from each other.

Now pull the RML105 out far enough to expose the latching cable clamp. Use a small screwdriver to snap it open. Remove the cable bundle from the cable clamp. Then pull the RML105 out completely and disconnect the 8 position single row connector from the 8 position single row header toward the back of the RML105 card.



RML100, 101 Card Cage with Single Power Supply (RML104)



RML100, 101 Card Cage with Redundant Power Supplies (Left RML105, Right RML104)