

RLS50 Self-Strip Block

Description and Installation Manual (641-202-002), Revision E

Specification Number: P73015



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ADMONISHMENTS USED IN THIS DOCUMENT



DANGER! Warns of a hazard the reader *will* be exposed to that will *likely* result in death or serious injury if not avoided. (ANSI, OSHA)



WARNING! Warns of a potential hazard the reader *may* be exposed to that *could* result in death or serious injury if not avoided. This admonition is not used for situations that pose a risk only to equipment, software, data, or service. (ANSI)



CAUTION! Warns of a potential hazard the reader *may* be exposed to that *could* result in minor or moderate injury if not avoided. (ANSI, OSHA) This admonition is not used for situations that pose a risk only to equipment, data, or service, even if such use appears to be permitted in some of the applicable standards. (OSHA)



ALERT! Alerts the reader to an action that *must be avoided* in order to protect equipment, software, data, or service. (ISO)



ALERT! Alerts the reader to an action that *must be performed* in order to prevent equipment damage, software corruption, data loss, or service interruption. (ISO)



FIRE SAFETY! Informs the reader of fire safety information, reminders, precautions, or policies, or of the locations of fire-fighting and fire-safety equipment. (ISO)



SAFETY! Informs the reader of general safety information, reminders, precautions, or policies not related to a particular source of hazard or to fire safety. (ISO, ANSI, OSHA)



IMPORTANT SAFETY INSTRUCTIONS

General Safety



DANGER! Installation of this kit should only be performed by a qualified technician following approved safety procedures. If a qualified technician is not available, arrangements can be made with a Vertiv service facility to have the kit installed.



DANGER! YOU MUST FOLLOW APPROVED SAFETY PROCEDURES.

Performing the following procedures may expose you to hazards. These procedures should be performed by qualified technicians familiar with the hazards associated with this type of equipment. These hazards may include shock, energy, and/or burns. To avoid these hazards:

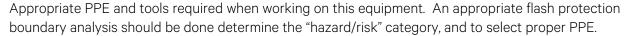
- a) The tasks should be performed in the order indicated.
- b) Remove watches, rings, and other metal objects.
- c) Prior to contacting any uninsulated surface or termination, use a voltmeter to verify that no voltage or the expected voltage is present. Check for voltage with both AC and DC voltmeters prior to making contact.
- d) Wear eye protection.
- e) Use certified and well maintained insulated tools. Use double insulated tools appropriately rated for the work to be performed.



Personal Protective Equipment (PPE)



DANGER! ARC FLASH AND SHOCK HAZARD.





Only authorized and properly trained personnel should be allowed to install, inspect, operate, or maintain the equipment.

Do not work on LIVE parts. If required to work or operate live parts, obtain appropriate Energized Work Permits as required by the local authority, per NFPA 70E "Standard for Electrical Safety in the Workplace".

Handling Equipment Containing Static Sensitive Components



ALERT! Installation or removal of equipment containing static sensitive components requires careful handling. Before handling any equipment containing static sensitive components, read and follow the instructions contained on the Static Warning Page.

STATIC WARNING



This equipment contains static sensitive components. The warnings listed below must be observed to prevent damage to these components. Disregarding any of these warnings may result in personal injury or damage to the equipment.

- 1. Strictly adhere to the procedures provided in this document.
- 2. Before touching any equipment containing static sensitive components, discharge all static electricity from yourself by wearing a wrist strap grounded through a one megohm resistor. Some wrist straps have a built-in one megohm resistor; no external resistor is necessary. Read and follow wrist strap manufacturer's instructions outlining use of a specific wrist strap.
- 3. Do not touch traces or components on equipment containing static sensitive components. Handle equipment containing static sensitive components only by the edges that do not have connector pads.
- 4. After removing equipment containing static sensitive components, place the equipment only on conductive or anti-static material such as conductive foam, conductive plastic, or aluminum foil. Do not use ordinary Styrofoam™ or ordinary plastic.
- 5. Store and ship equipment containing static sensitive components only in static shielding containers.
- 6. If necessary to repair equipment containing static sensitive components, wear an appropriately grounded wrist strap, work on a conductive surface, use a grounded soldering iron, and use grounded test equipment.

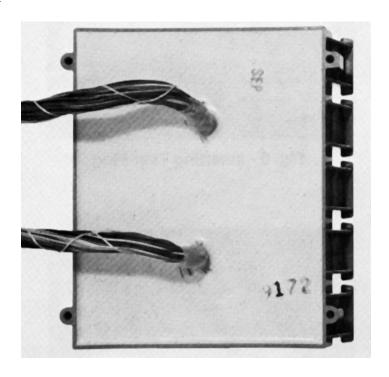


ABOUT THIS DOCUMENT

The RLS50 Terminal Block is equipped with two 25-pair 24 AWG six-foot wire bundles for pairs numbered 1- 25 and 26-50 (**Figure 1**).

This practice has been reissued to update the corporate identity.

Figure 1: Back of Block





INSTALLATION

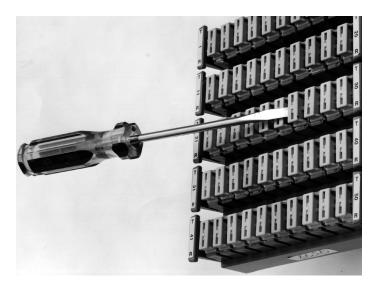
When field mounting the RLS50 block, use the appropriate frame module. Check the frame length and mounting hole spacing (**Figure 2**). Fasten the RLS50 block to the frame with #6 self-tapping screws.

Terminate terminal block stubs to the appropriate feeder or distribution cable pairs, according to local practices.

Make cross-connections on the front of the block as follows:

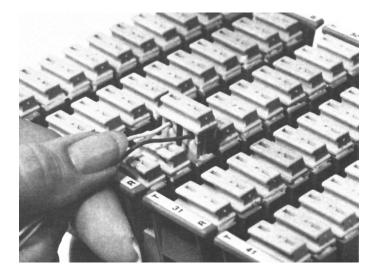
1. Lift activator as shown in **Figure 2**.

Figure 2: Lifting Activator



- 2. Trim the ends of the cross-connect wire pair (24/22 AWG) evenly. DO NOT STRIP WIRE!
- 3. Untwist the insulated wire pair as needed, and insert both wires into the ports on the left side of the activator tip conductor on top, ring conductor on bottom (**Figure 3**).

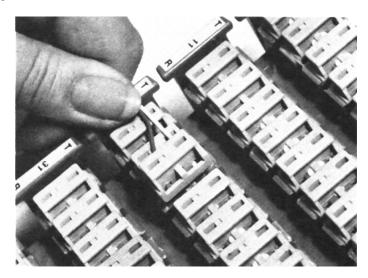
Figure 3: Terminating Jumper Wire





4. Visually check to make sure that the wires pass through the activator and touch the plastic stop (**Figure 4**).

Figure 4: Wires Touching Plastic



- 5. Press the activator until it bottoms (you feel a "click"). The activator is now fully inserted. Recheck to ensure the insulated wires are protruding beyond the activator and touch the plastic stop.
- **NOTE!** To reterminate or replace a cross-connection, lift the activator and pull the cross-connect wires to the left of the module and remove the conductors from the activator. To reterminate, trim the wires evenly, approximately one inch from the end of the conductors.
 - 6. Route the cross-connect wires through the appropriate channels on the block and framework in the most direct path distribution termination. Provide appropriate slack (at least 3 inches), and repeat the termination procedure on the distribution activator.
 - 7. Test each termination by inserting the one-pair tester, oriented as shown in **Figure 4**, into the activator and perform normal tests for continuity.



MAINTENANCE

To remove or replace a cross connection, lift the activator and remove the conductors. Terminate new wires as previously described.

DUAL WIRE TERMINATION

Remove the activator completely from the block with pliers and replace the activator with a half-tap activator (**Figure 6**). Terminate the permanent pair of the left side of the half-tap activator in the same manner as standard jumpers, and put the temporary additional jumpers on screw posts on top.

Figure 5: Inserting Test Plug

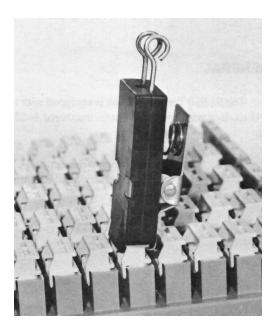
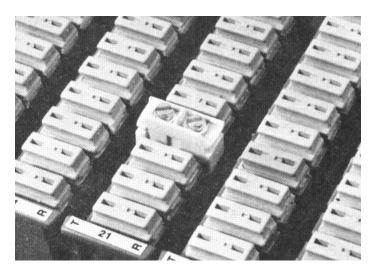


Figure 6: Half-Tap Activator





DC POWER, OUTDOOR ENCLOSURE & SERVICE **CONTACTS**

| CUSTOMER SERVICE (PRE-SHIPMENT) | | | |
|---|--|--|--|
| Email | CustomerService.ESNA@VertivCo.com | Pricing and availability [1, 2], purchase orders, expediting requests and order tracking | |
| Phone | 1.800.800.1280 option 1 | Ask for your company's dedicated Customer Service Associate. | |
| CUSTOMER SUPPORT CENTER (POST-SHIPMENT) | | | |
| Email | ESNACustomerSupportCenter@VertivCo.com | After an order has shipped, contact our Customer Support Center with related questions, concerns or claims. | |
| Phone | 1.956.661.6867 | | |
| PRODUCTS | | | |
| Email | AccountManagement.ESNA@VertivCo.com | Provides quotes and bid responses for custom configured [2] DC power systems and outdoor enclosures for customers and channel partners (Reps, VARs & Distributors). | |
| Phone | 1.800.800.1280 option 2 | | |
| SPARE PARTS | | | |
| Email | DCpower.Spares@VertivCo.com OSP.Spares@VertivCo.com | Pricing and purchase orders for spare parts, including but not limited to breakers, cables, fuses, rectifier fans, misc. breaker and fuse panels, enclosure fans, doors and | |
| Phone | 1.800.800.1280 option 5 | switches, etc. | |
| DC POWER DEPOT REPAIR | | | |
| Email | DCpower.Repair@VertivCo.com | Creates and processes RMAs for depot repair and refurbishment. | |
| Phone | 1.800.800.1280 option 6 | Determines repair and refurbishment lead times and pricing based on warranties/contractual agreements. Provides repair shipping information and status. | |
| INSTALLATION & AFTER MARKET SERVICES | | | |
| Email | ESNA.FieldService@VertivCo.com | Provides quotes for engineering, furnishing and installation of DC power systems, telecom & IT equipment, cabling infrastructure, and field services of existing DC equipment. | |
| TECHNICAL SUPPORT | | | |
| Email | DCpower.TAC@VertivCo.com OSP.TAC@VertivCo.com | Answers technical product and system questions; determines status of warranties and | |
| Phone | 1.800.800.5260 | contractual agreements for repair. | |

^[1] Contact Account Management for custom configurations. [2] Contact Spare Parts for parts and accessories.

