AMP NETCONNECT* AMPTRAC 4U Rack Mount Enclosure 1435593-1

Instruction Sheet 408-8792 23 MAY 08 Rev A

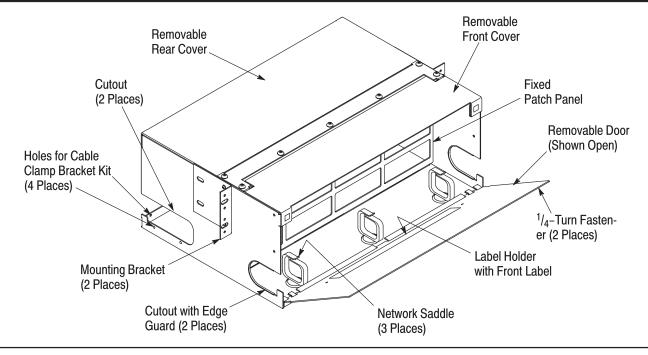


Figure 1

1. INTRODUCTION

Enclosure 1435593-1 is used for housing singlemode and multimode fiber optic connections. The enclosure fits into a standard 483-mm [19.0-in.] or 584-mm [23.0-in.] Electronic Industries Alliance (EIA) rack only. Read these instructions thoroughly before starting installation.



Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

To obtain information on AMP NETCONNECT products, call PRODUCT INFORMATION at the number at the bottom of this page, or visit the AMP NETCONNECT website at www.ampnetconnect.com.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

The enclosure consists of a removable door, front cover, and rear cover. The door has bottom hinges designed to keep the door attached when opened.

The enclosure features two universal mounting brackets, a fixed patch panel, three network saddles, and two cutouts on each side for cable entrance and exit. The patch panel holds up to 12 interface housing modules or cassettes. Inside the door is a label holder with a front label marked by alphabet (A-D) for connector identification that corresponds with the patch panel. The front cutouts feature edge guards that prevent damage to the cable. The network saddles are used for facilitating cable routing within the front of the enclosure.

Two cable clamp bracket kits (each contain a bracket, two 6-32 screws with lockwashers, and a hose clamp) are included with the enclosure. The kit is used for securing up to six pre-terminated trunk cables to the enclosure. There are four sets of screw holes for attaching the cable clamp brackets to the enclosure (two for cable entrance into the back and two for cable entrance into the side of the enclosure).

Also included are four ¹/₄-turn fastener handles, four 12-24 UNF-2A pan head screws (for mounting the enclosure in the rack), a back card label (marked D-A), and danger card label.

3. INSTALLATION

3.1. Mount the Enclosure



ALWAYS use safe lifting techniques. NEVER lift more than you can manage comfortably. Lifting guidelines are available from the Occupational Safety and Health Administration (OSHA).

1. Using the $\frac{1}{4}$ -turn fastener handles, turn the $^{1}/_{4}$ -turn fasteners for the door, and open the door. Lift the door from the hinges, and set aside. Slide the front cover off of the enclosure, and set aside.

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The front cover is attached to the enclosure by the $\frac{1}{4}$ -turn fasteners for the door.

- 2. Using the $^{1}/_{4}$ -turn fastener handles, turn the $^{1}/_{4}$ -turn fasteners for the rear cover, remove the cover from the enclosure, and set aside.
- 3. The enclosure is assembled for mounting in a 483 [19.0] rack; using the pan head screws, mount the enclosure in the rack. See Figure 2.

For a 584 [23.0] rack, remove the screws securing the brackets to the enclosure. Turn the brackets so that the long leg of the "L" is protruding, and secure the brackets to the enclosure using the screws. Using the pan head screws, mount the enclosure in the rack. See Figure 2.



The mounting holes at the front of the enclosure are for flush-mount application.

Rack 12-24 UNF-2A Pan Head Screw (4 Places) Front of Enclosure Mounting Holes for Flush-Mount Application Screws Securing

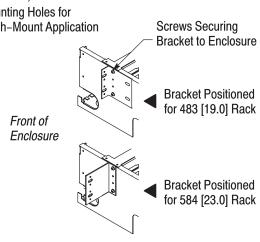


Figure 2

3.2. Install the Interface Housing Module or Cassette Onto the Patch Panel

- 1. Align the *back* of the interface housing module or cassette with an opening in the *front* of the patch panel. Slide the interface housing module or cassette through the opening until the snap—in latches "click" into place. See Figure 3.
- 2. Follow the same step for the remaining interface housing modules or cassettes.

Installing Interface Housing Module or Cassette

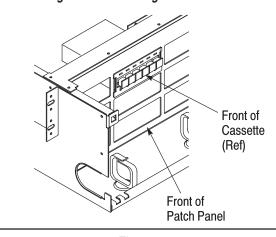
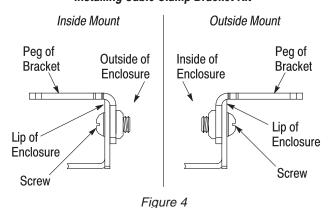


Figure 3

3.3. Install the Cable Clamp Bracket Kit

- 1. Align the holes in the cable clamp bracket with the holes in the lip of the enclosure. For an inside mount, orient the pegs of the bracket so that they face the inside of the enclosure; for an outside mount, orient the pegs of the bracket so that they face outward. For either mount, make sure that the short leg of the bracket wraps over the lip of the enclosure. Refer to Figure 4.
- 2. Thread the screws through the holes from the same side as the pegs of the bracket. Tighten the screws.

Installing Cable Clamp Bracket Kit



3.4. Route the Cable



NEVER look into the end of a terminated or unterminated fiber. Laser radiation is invisible but can damage eye tissue. NEVER eat, drink, or smoke when working with fibers. This could lead to ingestion of fiber particles.

Use the following guidelines when installing cable and routing the fiber in the enclosure. Whatever method is used, make sure that it not only meets the application needs, but also conforms to local codes and standards:

- Allow enough fiber in the enclosure for routing
- · Coil excess fiber inside the enclosure
- Keep bend radii of cable and fiber as large as possible (always follow manufacturer's minimum bend radius)



DO NOT exceed minimum bend radii for the cable or fiber. ALWAYS avoid placing fiber under tension or torsion.

The following procedure reflects a typical installation where cable or fiber is routed through only one side of the enclosure; however, cable or fiber can be routed through both sides of the enclosure. Follow the same procedure for both sides.

A. Secure the Trunk Cable

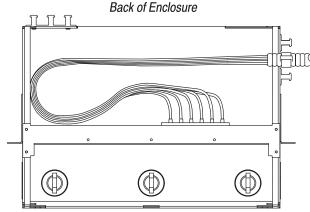
Lay the unstripped portion of the cable over one of the pegs of the cable clamp bracket. Secure armored cable to the peg using the hose clamp; secure other type of cable to the peg using cable ties. Refer to Figure 5.

B. Route the Fiber

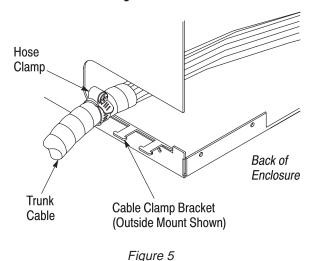
- 1. Separate the first group of fibers to be located on the first two interface housing modules or cassettes.
- 2. Join the connectors to the coupling bushings or SL housings at the back of the interface housing module or cassette. See Figure 6, Detail A.
- 3. Separate the next group of fibers to be located on the next two interface housing modules or cassettes.
- 4. Join the connectors to the coupling bushings or SL housings at the back of the interface housing module or cassette. See Figure 6, Detail B.
- 5. If applicable, continue separating groups of fibers until the interface housing modules or cassettes are completely loaded.

Routing Fiber





Securing the Trunk Cable



Detail B

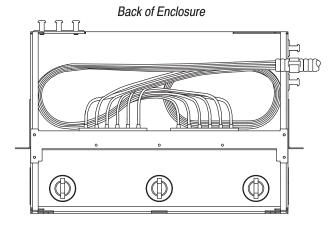


Figure 6

C. Route the Patch Cords

- 1. Route the patch cords through the cutout (either side or both sides) in the front of the enclosure.
- 2. Dress the patch cords through the network saddle rings, and join the connectors to the coupling bushings at the front of the interface housing modules or cassettes. See Figure 7.

Routing Patch Cords



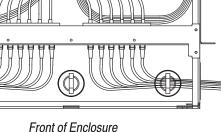


Figure 7

3.5. Inspect and Close the Enclosure

- 1. Record connector positions using the front label (A–D) (located in the label holder on the door) and back label card (D–A). Attach the back label card to the inside of the rear cover.
- 2. Attach the danger card label to the front cover.

- 3. Inspect the installation according to the following:
 - enclosure is secure to rack (pan head screws are tight)
 - cable is not nicked or broken
 - cable is secured to cable clamp bracket
 - there are no sharp bends or kinks in the fibers
 - there are no fibers under tension
 - connectors are undamaged
 - connectors are fully joined to coupling bushings
- 4. Re–assemble the front cover and rear cover onto the enclosure, then install and close the door. Inspect the closing according to the following:
 - covers and door are secure
 - no cable or fibers are pinched in the covers or the door

4. REPLACEMENT AND REPAIR

The enclosure is not repairable if damaged. Order additional enclosures through your representative, or call 1–800–526–5142, or send a facsimile of your purchase order to 1–717–986–7605, or write to:

CUSTOMER SERVICE (038–035) TYCO ELECTRONICS CORPORATION PO BOX 3608 HARRISBURG PA 17105–3608

5. REVISION SUMMARY

Revisions to this instruction sheet include:

• Updated document to corporate requirements