Mini CST Closure

INSTALLATION INSTRUCTION

Cold-Sealed Terminal Closure

1.0 General Product Information

The Mini CST cold-sealed terminal closure is a ready access terminal closure that accomm odates up to 15 copper conductor pairs from buried or aerial drop wire. The closure can be used in below-grade applications such as handholes or manholes, or can be mounted on a pole or wall. The closure can accept up to 8 two to six pair buried drop wires.

Note: Aerial flat drop wire can be accommodated in this closure with the use of the additional, optional Flat Drop Wire Grommet Kit.

Dat@Term terminal blocks are environmentally gel sealed terminal blocks that provide toolless connections for a wide range of applications. Connections can be made using 22 AWG to 26 AWG conductors without stripping the insulation from the conductors or requiring any special adapters. Gel sealant protects the terminal connections against corrosion.

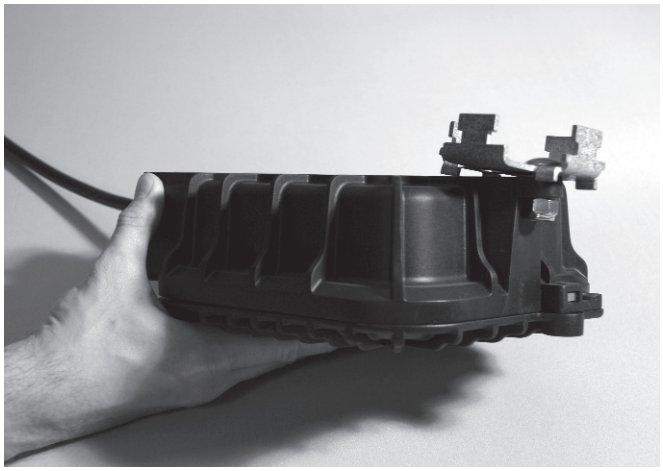


Figure 1

2.0 Cautions

Use/follow all applicable safety equipment/practices for installation and operation including company, local, and NEC requirements.

Do not use with wire physically larger than 22 AWG.

3.0 Kit Components

- Mini CST Closure with 15-pair Dat@Term terminal block

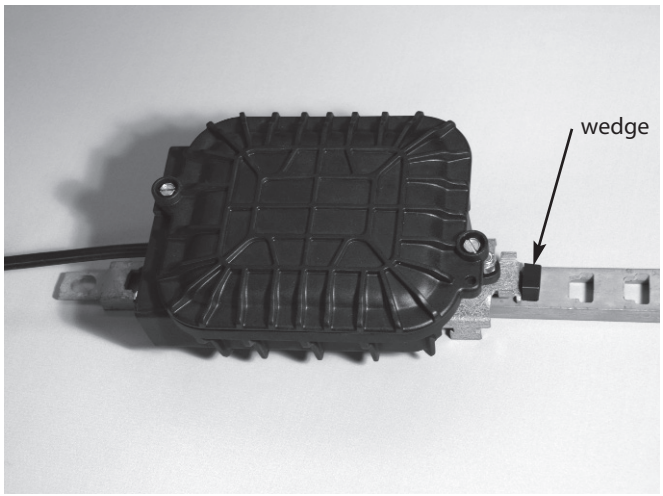


Figure 2

4.0 Mounting

Using the holes in the closure body and lag bolts or screws, attach the closure to any vertical surface that will hold bolts or screws securely. To mount the closure on a rack, use the rack mounting bracket as described below:

1. Attach the rack mounting bracket to the hole in the closure using the supplied bolt and nylock nut. (Figure 1)
2. Insert the feet of the rack mounting bracket into the slots on the rack, and insert the wedge between the top of the rack bracket and the rack to stabilize the closure. (Figure 2)
3. The closure can easily be repositioned by removing the wedge, relocating the closure, and repositioning the wedge.

4.1 Grounding the Closure with External Ground Lug

Before installing any drop wires in the closure, install a #6 copper ground wire on the external lug on the back of the closure, tightening the lug to 25-40 inch-pounds of torque. Ground the closure per local practice. (Figure 3)

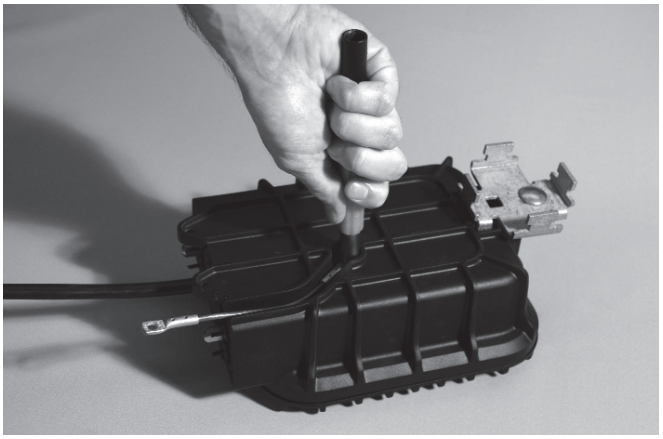


Figure 3

5.0 Splice Stub Wire

Splice the 15-pair stub to the main cable stub per locally approved practice.

6.0 Drop Wire Installation

6.1 Remove the Lid

1. Alternately unscrew each of the two lid screws by two rotations each until both screws are free and the seal has come free of the base. (Figure 4)
2. Remove the lid from the base of the closure.

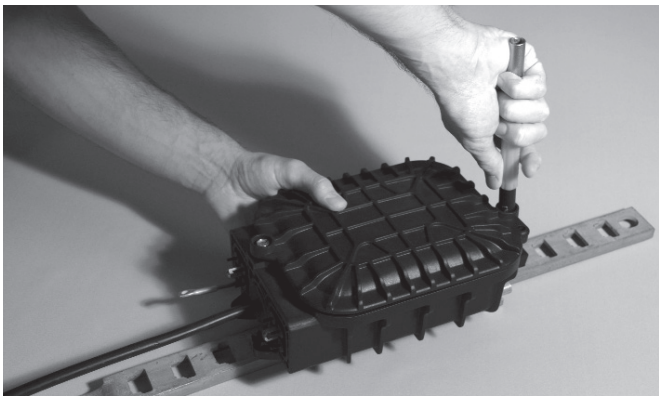
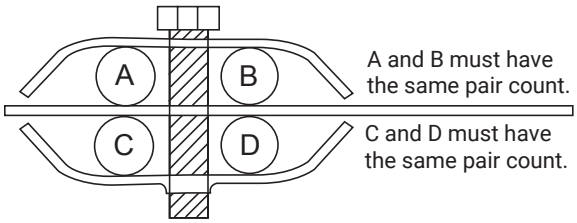


Figure 4

6.2 Install the Drop Wires

Important: Although this closure supports the use of 2-pair through 6-pair drop wires, a 2-pair drop and a 6-pair drop cannot be positioned beneath the same ground clamp because the clamp will not grip the drops correctly given the difference in diameters. Plan to keep drop cables with the same pair count on both sides of the ground clamp, so that the clamp can work correctly.



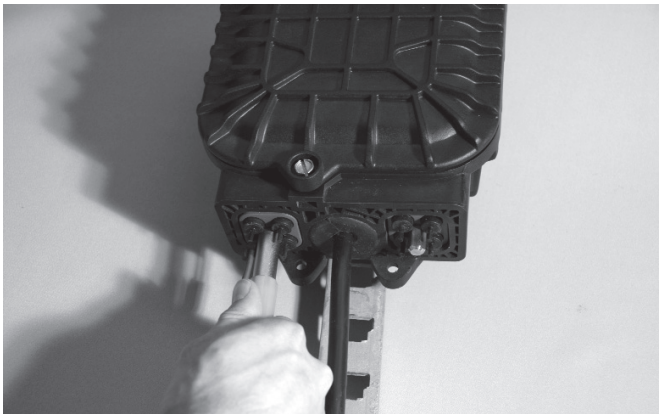


Figure 5

1. Using a 216 tool, loosen the compression bolt on the drop wire grommet until the bolt turns freely. (Figure 5)

2. Pull downward on the stem on the bottom of the black grommet cap and cut off approximately 1/8” of the cap with snips. (Figure 6)

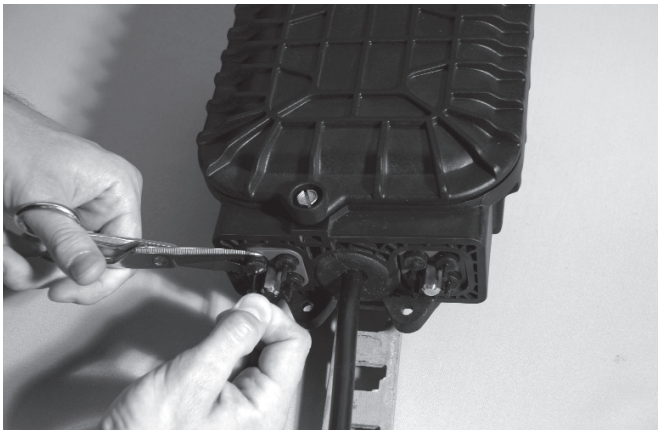


Figure 6

3. Clean at least three feet of the drop wire with a cloth to avoid getting dirt in the grommet, which might compro-mise the seal.

Important: Use pliers to reshape the cut end of the drop wire so that no sharp, exposed shield edges will cut or damage the grommet when the wire is inserted.

Note: If the cable is flattened or deformed, use pliers to restore it to a round shape where it will pass through the grommet.

Note: Verify that the drop wire insulation is clean and free of gouges, nicks, or deformities which might affect the seal.

4. Insert an appropriate length of drop wire through the grommet and route it past the ground clamp and out of the top of the base. (Figure 7)

Figure 7

5. Prepare the drop cable, exposing 1" of shield and appro-priate length of conductors. (Figure 8)

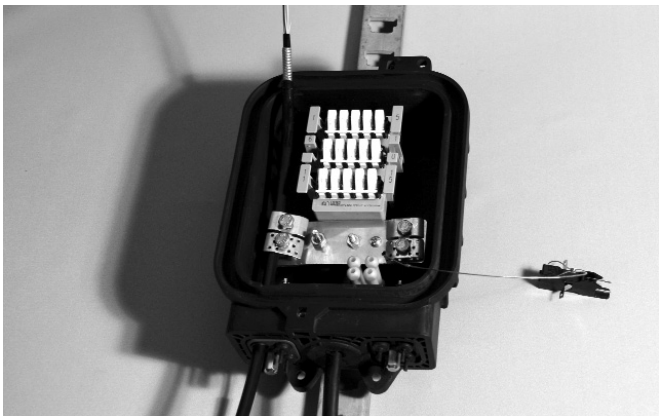


Figure 8

6. Use the 216 tool to loosen both bolts of the ground clamp so that the drop wire can be positioned underneath the ground clamp from the side. (Figure 9)

7. Position the drop cable so that the exposed shield is located under the top (solid) portion of the ground clamp, and the cable jacket is positioned under the bottom (perforated) portion of the ground clamp. (Figure 9) Add additional drops following steps 2-5 if necessary. Use a 216 tool to tighten both bolts on the ground clamp (25 in-lbs torque minimum) to secure the drop cable(s) in place.

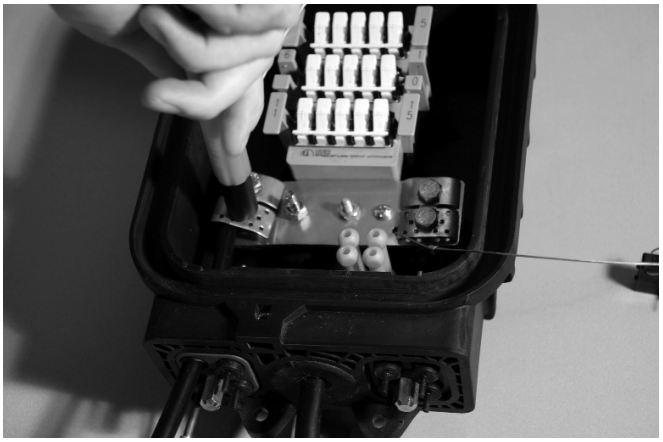


Figure 9

Note: For flat drop wire which has no shield, position the jacket cutback even with the top of the ground clamp and tighten as directed in step 7.

8. After all drops are installed in the closure, tighten the compression bolts on all grommets until the bolts can no longer be turned using the 216 tool (25 in-lbs torque minimum). (Figure 10)

Figure 10

9. Route the conductors to the side of the Dat@Term terminal block. (Figure 11)

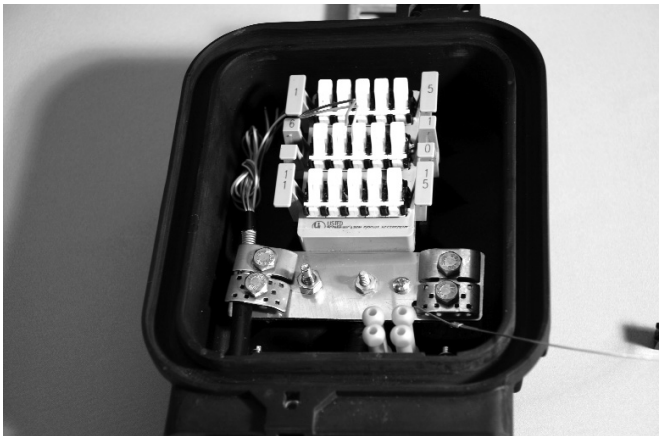


Figure 11

Note: If for any reason it is necessary to remove a drop cable from the closure, the port must be plugged with an orange, dumbbell-shaped hole plug. Orange hole plugs are stored in the base and should be saved and stored inside the closure for later use. The correct position of the orange hole plug is shown in Figure 12.

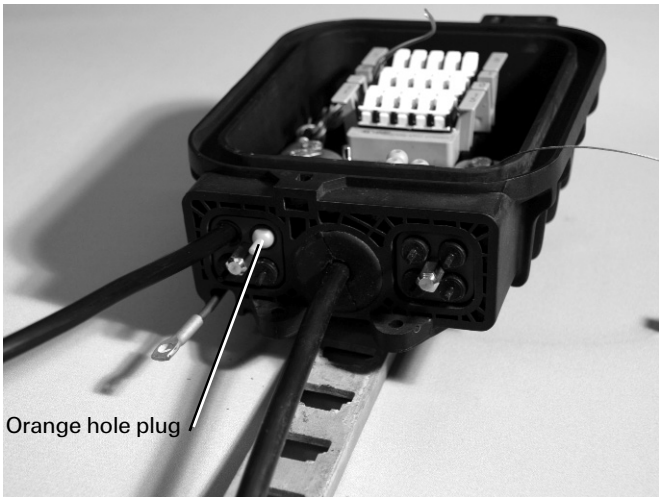


Figure 12

6.3 Terminate Conductors

1. Straighten last 1-2 inches of conductors. Trim tips of conductors evenly.
2. Pinch, then pull back the appropriate toggle (Figure 13).
3. Insert conductors into ports (Figure 14). Note ports are identified “T” (for Tip) and “R” (for Ring). Conductors should insert approximately 3/8" before bottoming out.
4. Holding conductors into toggle, push toggle until locking mechanism “locks” into place.
5. Tug gently on each individual conductor to verify connec-tion. If the connection was not made, remove conductor pair, straighten, trim evenly, and reconnect.

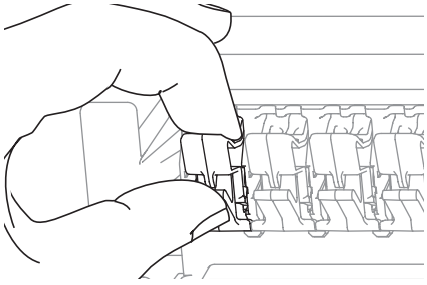


Figure 13

6.4 Disconnect Conductors (optional)

1. Pinch, then pull back the appropriate toggle (Figure 13).
2. Remove conductors from toggle.

(Note: Scored area of conductor must be trimmed away prior to being reconnected.)

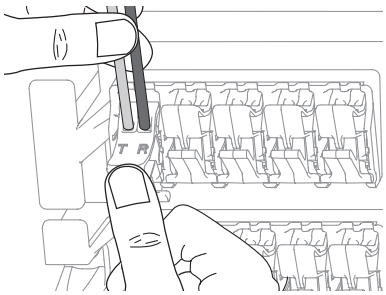


Figure 14

6.5 Testing Dat@Term Terminal Block Connections

1. The test clip is tethered to and stored on the back of the block. Place the test clip over a toggle so that the align-ment tab slides along the hinge side of the toggle. Push test clip onto the toggle until it locks into place. (Figure 15)
2. Attach test equipment leads to test clip leads and perform test.
3. When testing is completed, remove the test clip from the toggle by firmly tugging the test clip until it unsnaps from the toggle.

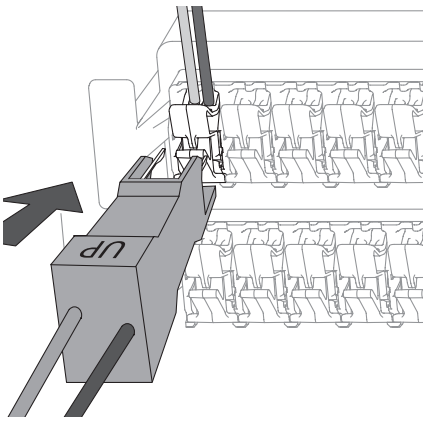


Figure 15

6.6 Replacing Dat@Term Terminal Block Toggles

In the unlikely event a toggle is damaged, toggle replacement is accomplished as follows:

1. Open damaged toggle to normal open position.

Note: Toggle replacement of inboard toggles is most easily accomplished if the corresponding toggle below the damaged one is also opened.

2. Push toggle out of its block cell by rotating it past its normal open position. This will cause it to break free of the holding mechanism in the block without damaging the block. (Figure 16)
3. Once free, remove toggle from block and discard.
4. Insert new toggle as shown. (Figure 17)
5. Rotate toggle into cell, using care to make sure the toggle axle is mated with the bearing surface in the block.
6. Rotate toggle until it closes and the toggle latch locks. Toggle is now replaced.
7. Close any corresponding opened toggles.

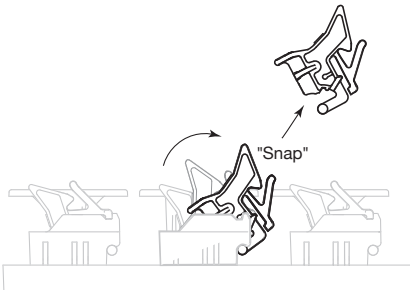


Figure 16

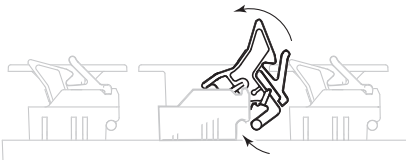


Figure 17

7.0 Reinstall the Lid

1. Orient the lid such that the screws are aligned and the padlock holes are aligned.
2. Apply light pressure to the lid and start each screw with a few turns.
3. Alternately tighten each lid screw untl the seal seats and the lid is tight on the base. (Figures 18 and 19)
4. To release air pressure trapped within the closure, use a 216 tool to loosen the compression bolt on one of the drop wire grommets until the bolt turns freely. Press on the lid at points A and B as shown in Figure 19.
5. Use the 216 tool to tighten the compression bolt and seal the closure.

Figure 18

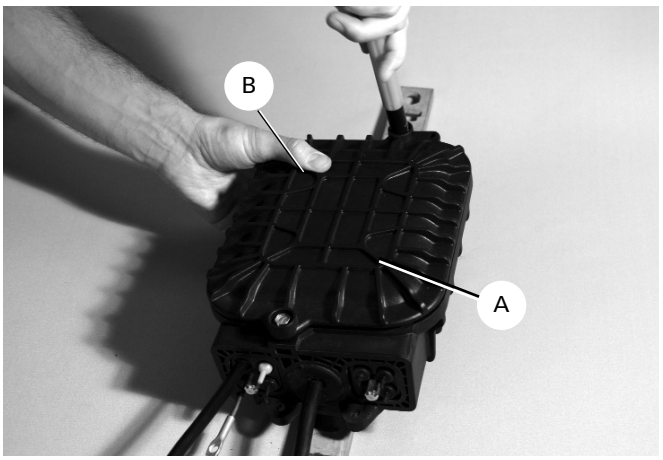


Figure 19