Blackburn®



AUTOSET

Type ATS Wide Range Automatic Tension Splice For ACSR, AAAC and AAC Conductors

NOTE: These instructions are written for personnel familiar with the installation, operation and safety practices of this type of equipment. Instructions are written as a guide and are not intended to be a substitute for adequate training and experience.

STEP 1

- **A.** Select the proper automatic ATS wide range splice for the job. Wire size and type are clearly marked on the splice. The ATS splice is recommended for use on the ACSR, AAAC and AAC conductors and is color-coded for the range of conductor size it accommodates.
- B. Straighten conductor to remove any curvature.
- C. Old Conductors should be cut back sufficiently to remove stretches, burned or annealed strands.
- D. Cut conductor square so that all strands are even, in lay and free of burrs.
- **E.** Measure the conductor for full insertion and mark with tape or other device which clearly indicates insertion distance (one half the length of the splice). See figure 1.
- F. Wire brush the end section thoroughly with a bristle wire brush (Reference T&B Cat. No. WWB1). See Figure 1
- G. ACSR conductor only:

The portion of the ACSR stranding to be inserted into the automatic connector should be thoroughly cleaned with a good quality aluminum conductor cleaner. (See caution 4, back page).

- H. Apply a coat of non-gritted compound such as Blackburn® CTB oxide-inhibitor, and wipe off excess.
- I. Wire brush the inhibitor coated conductor once again to assure all the oxides have been removed and inhibitor reaches between the strands.



FIGURE 1



STEP 2

- **A.** Do not remove the plastic strand guide or internal pilot cup. These components confine and guide the conductor strands for easy insertion. See figure 2.
- B. Insert conductor into splice with a smooth straight thrust through the jaws until conductor hits center stop.
 DO NOT TWIST. Do not push conductor partially in, pause and then continue. Insertion must be accomplished with one continuous thrust. Check markers for full insertion. If insertion is not complete, conductor will not be gripped and will pull out easily. See figure 3.
- **C.** Before releasing blocks, apply a momentary "hand set" tension to assure proper jaw gripping. See figure 4. As tension is applied, the conductor will move 1/4 inch to 1/2 inch from the end of the splice due to the sliding action of the gripping jaws. This is normal. **DO NOT TAP THE SPLICE TO SET JAWS**.



A CAUTION

- 1. The ATS Automatic Splices are for full tension application only and are **not to be used in slack spans**. To ensure a permanent low resistance electrical connection, a tension representing a minimum of 15% of the rated strength of the conductor is recommended. For slack spans use compression sleeves or bolted clamps.
- 2. The ATS Automatic Splices are not to be reused.
- **3.** The ATS Automatic Splices are manufactured to strict standards for critical application. Give splices the attention they deserve.
- 4. Conductor manufacturers use lubricants on steel core wire of ACSR conductor to aid in the manufacture of the conductor. To ensure the full tension holding capabilities for all automatic connectors used on new ACSR, it is recommended that the conductor core be cleaned by deeply cleaning though the O.D. of the aluminum conductors with a good quality conductor cleaner.

<u>WARRANTY</u>: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects in materials or workmanship for a period of two (2) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of Thomas & Betts Products immediately voids all warranties.

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