# **WiAutoLink**

15kV, 27kV Instruction Book









Do not perform any of the activities described on this document with the Sectionalizer energized.

All the activities listed on this document it must be performed with the Sectionalizer completely de-energized and out of service.

ALWAYS follow your company Safety procedures before performing any work on this equipment.

This product is intended to be operated and maintained by qualified persons, thoroughly trained and knowledgeable of hazards involved. This document is written only for such qualified persons and is not intended to be a substitute for adequate training and experience in safety procedures for this device.

Detailed descriptions of procedures, safety principles and service operations are not included on this document.

These warnings do not cover all conceivable ways in which service, whether or not recommended by ABB, might be performed or the possible hazardous consequences of each conceivable way, nor could ABB investigate such ways. Anyone using service procedures or tools, whether or not recommended by ABB, must satisfy himself thoroughly that neither personal safety nor equipment safety will be jeopardized by the service method or tools selected.

## For your safety!

- Make sure that the installation area (spaces, divisions and ambient) is suitable for electrical apparatus.
- > Check that all the installation, putting into service and maintenance operations are carried out by personnel with suitable knowledge of the apparatus.
- Make sure that the standard and legal prescriptions are complied with during installation, putting into service and maintenance, so that installations according to the rules of good working practice and safety in the workplace are constructed.
- Strictly follow the information given in this document.
- Check that the rated performance of the apparatus is not exceeded during service.
- Check that the personnel operating the apparatus have this document at hand, as well as all necessary information for correct intervention.
- Pay special attention to the danger notes indicated in this document by the following symbol:



Responsible behavior safeguards your own and other's safety!

For any requests, please contact ABB.

The information and illustrations are not binding. We reserve the right to make changes during technical development of the product.

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#### 1. Introduction

This document contains the required information to install medium voltage WiAutoLink Sectionalizer and put it into service.

For a correct use of the product, please read it carefully.

Like every apparatus we manufacture, WiAutoLink is designed for specific applications.

Use only original spare parts.

For further information, please read the technical catalogue.



All installation, putting into service, commissioning and maintenance operations must be carried out by suitably qualified personnel with indepth knowledge of the apparatus.

## 2. Packing and Transportation

The WiAutoLink Sectionalizer is shipped in cardboard package, in armed position.

## 3. Checking on Reception



Before carrying out any operation, always make sure that the operating mechanism springs are charged and that the apparatus is in armed position. When performing a reception test, it is required to wait 5 minutes with the device de-energized after a tripping operation, to reset it.

On reception, check the state of the apparatus, integrity of the packing and nameplate information is the same requested on the purchase order specifications.

Make sure that all materials described in the shipping note are included in the supply.

If any damage or irregularity is seen in the supplied product after unboxing, notify ABB (directly or through the agent or distributor) as soon as possible within five days of receipt.

The apparatus is only supplied with the accessories specified at the time of ordering and validated in the order acknowledgement sent by ABB.

The documents sent in the shipping packing are:

- Test Certification.
- Packing List.

Other documents which are sent prior to shipment of the apparatus are:

- Order acknowledgement.
- Original shipping advice notes.
- Any drawings or documents referring to special configurations/conditions.

#### 4. Storage

When the apparatus is unboxed, it must be carefully unpacked and checked as described in Chapter 3 of this manual.

If immediate installation is not possible, the product should be kept in its original packing.

If immediate installation is not possible, store the equipment on its original packaging in a covered, well-ventilated, dry, dust-free, non-corrosive ambient, away from any flammable materials and at a temperature between -5°C and +45°C.

In any case, avoid any accidental impacts or positioning which stresses the apparatus.

## 5. Description

The WiAutoLink Electronic Sectionalizer is a protection device that operates at a permanent fault in the distribution line. It must be used together with an upstream recloser or circuit breaker with reclosure capability. Please take note that the WiAutoLink is not a fuse tripping device, therefore it cannot be used as a protection device by itself.



The WiAutoLink Electronic Sectionalizer is designed ONLY to protect electrical equipment and NOT for saving people from accidents or electrocution when contacting energized circuits.

#### 6. Installation

#### 6.1 General



Correct installation is very important. The manufacturer's instructions must be carefully studied and followed. It is good practice to use gloves for handling the pieces during installation.

#### 6.2 Installation and service conditions

The following standards must be taken into particular consideration during installation and service:

- IEC 60694.
- IEC 61936: Electrical Installation.
- ANSI C37 63: Automatic Sectionalizer.
- All accident prevention regulations in relative countries.

For special installation requirements or other operating conditions, please contact ABB.

#### FCC ID: 2ABDQWIAUTOLINK IC: 11571A-WIAUTOLINK

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)

This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the responsible party could void the user's authority to operate the equipment.

This device has been designed to operate with the on-board inverted F antenna. No other antennas may be used.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication. Operating the device with the supplied antenna will ensure that this requirement is met.

A separation distance of 20 cm should be observed to maintain compliance with the FCC's RF exposure guidelines set out in OET Bulletin 65.

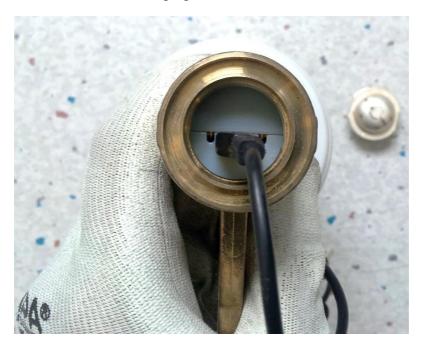
## 6.3 Initial Setting or Previous Setting Modification Instructions

Remove the top cap using a 34mm fork spanner holding the tube with the hand. Check condition of O-ring, and replace it if necessary, applying grease on it.

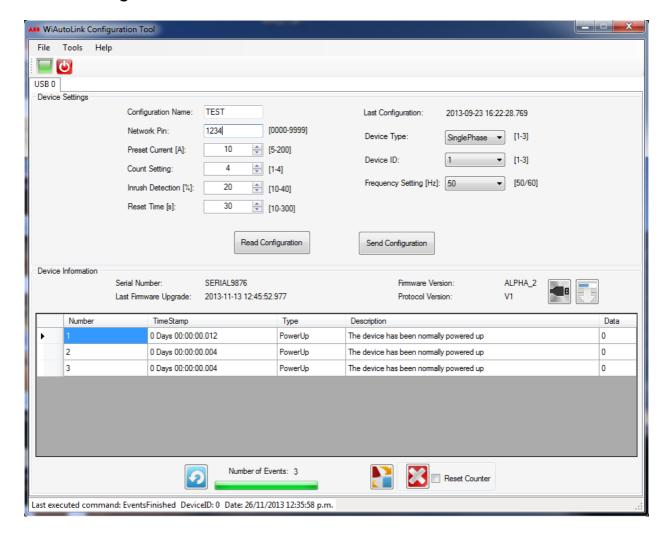


Connect the micro-USB cable to calibrate the current, set counting operations, tripping mode, network id and frequency. You may also use this connection to download the events.

Note: Handle with care without damaging the micro-USB connector.



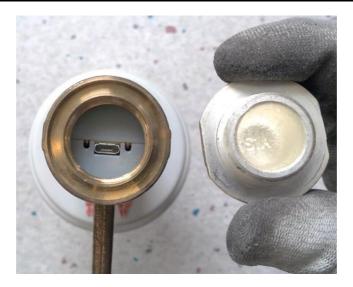
## 6.4 USB Configuration



Once it is correctly configured, cover the micro-USB connector with silicon grease, supplied with WiAutoLink.



Check the condition of the O-Ring and apply silicon grease both inside the cap and over the micro-USB connector.



Place the cap, holding the tube with the hand, and tighten it using a 34 mm fork spanner (torque between 8 and 10 Nm) without damaging the O-Ring.



## 6.5 WiAutoLink Repositioning

Push the interlocking bolt until blocked (it will rotate freely). Do not strike the bolt, nor use any type of tool to reset.



Turn the tensioning device support.

Place the tensioning device support facing the interlocking bolt.



Turn the tripping pin 90°, until the lower contact is firmly blocked.



Place the pole in the tube inferior eyelet and position in the cutout-base.



Withdraw the pole and place it in the tube's superior eyelet. Push it until it remains in closing position.



## 7. Commissioning

## 7.1 General procedures



When commissioning, all operations must be carried out by suitable qualified customer personnel with in-depth knowledge of the apparatus and the installation itself.



It is not recommended to open WiAutoLink under charge using a common hookstick, as it could cause an arc that might damage the personnel or the equipment. The WiAutoLink has horns to be used with a load break tool.

#### 8. Maintenance

Test the correct operation of electronic sectionalizer on a regular basis, preferably while maintenance on upstream recloser is made:

- Check the closing system.
- Check that the interlocking bolt turns freely. The tensioning device support should move easily and the spring should be sufficiently tightened so that the support may reset when the system opens following the operation of the sectionalizer.
- Check that the mobile lever and the lower support of the WiAutoLink move easily at the joint. Clean and lubricate the joint surfaces of both pieces.
- Keep contact zones clean and place a thin film of conductive grease on those zones.
- Keep the tripping pin clean.
- Check the upper contact cap is correctly fastened and both the o-ring and the silicon grease are present.

Test should be carried out on a laboratory with the appropriate equipment to simulate service conditions. For this operation it is recommended to contact ABB to request the testing procedure.



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