

Technical Bulletin

TB 0281A – Screened Terminations in Safelink Switchgear

Purpose

To introduce ABB straight screened connectors (terminations) for ABB Safelink switchgear.

Background

Endeavour Energy has been using ABB Safelink in the 11kV distribution network since 2003. Un-screened (heat shrink and cold shrink) terminations have been used in this switchgear. Since the introduction of Siemens 8DJH in 2013, ABB Safelink was restricted for use in old size 5 and size 10 padmount substations.

ABB has developed and tested a pre-moulded in line screened separable cable connector now available in the market. This termination removes the risk of cable termination failure due to partial discharge of unscreened terminations, effects of condensation on charged surfaces and rodents in the cable compartment.

Implementation

All ABB 11kV Safelink switchgears (CF, CFC, CFCC, CCC, CCCC) is now approved to be used in the 11kV distribution network. These switchgears must be installed with the screened terminations.

Effective 1st April 2020, all Safelink switchgear installed by Accredited Service Providers (ASP) must be with the screened terminations. (Refer to Figures 1,2 &3)

Endeavour Energy will move to the new screened termination once all currently held stock of un-screened terminations and cable lead sets are depleted.

Stock codes

Stock Code	Manuf. Ref. No.	Item Description
1572882	5812055	35mm ² Al flexible cable lead set with screened boots. 2.3m (used in ABB Safelink CF, CFC & CFCC)
TBA	NKT-LS12032020	35mm ² Al flexible cable lead set with screened boots. 2.3m (used in ABB Safelink CF, CFC & CFCC) for legacy transformers with epoxy connection bushings
1571546	CSEN12630-240/300	12-17.5 kV 630A Straight Screened cable connector for XLPE or EPR insulation cable 240 – 300 mm ²
1572890	CSE12630-35	12-17.5 kV 630A Straight Screened cable connector for XLPE or EPR insulation cable 35 mm ²
1549666	IXSU-FP103 or H11/1X4T2+FBB1	11kV Heat shrink termination kits #
1569813	5811932	35mm ² Al flexible cable lead set with unscreened boots. 2.3m (used in ABB Safelink CF, CFC & CFCC) #
1560747	92-EP636-3-ENV	11kV Cold shrink termination kits #
1544162	IE-4	11kV Cold shrink termination kits #

- Will be obsolete stock codes once existing stock is depleted

* - To be used only for terminating in 11kV zone substation circuit breakers.

Training

1. A YouTube [QuickBytes](#) video on the installation of the product is available on the Endeavour Energy intranet and website.
2. Familiarisation and introduction training for ASPs was conducted on 30th and 31st. October 2019 for any further requests for training please contact Network Connections.
3. Endeavour Energy Technical Training Centre will provide familiarisation training for EE jointers on request. Please contact Technical Training at technical.training@endeavourenergy.com.au

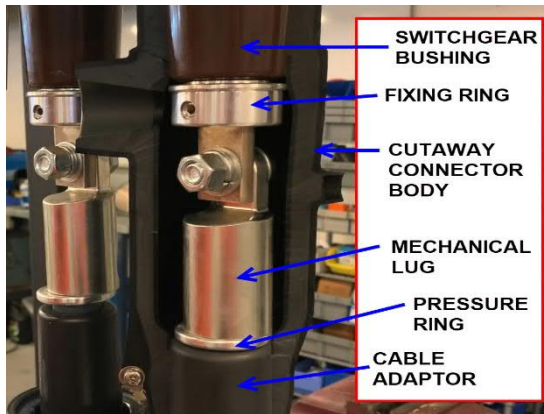


Figure 1: Positioning of connection components



Figure 2: The capacitive test plug inserted until flush with the connector body



Figure 3: The completed terminations with the front and side termination cabinets panels removed to provide clear access.

Impacted Standard

MCI 0006 – Underground distribution construction standard
SDI 211 - ABB Safelink 12kV switchgear

Contact

For further information contact:

Raymond Danam, Engineer - Distribution Substation Assets, (98534129 / 0423842533)

Adrian George, Senior Engineering Officer – Mains (98536198 / 0429000203)

Lachlan Marshall, Senior Assessor Trainer -Technical Training Centre (98537502 / 046 655 4361)