

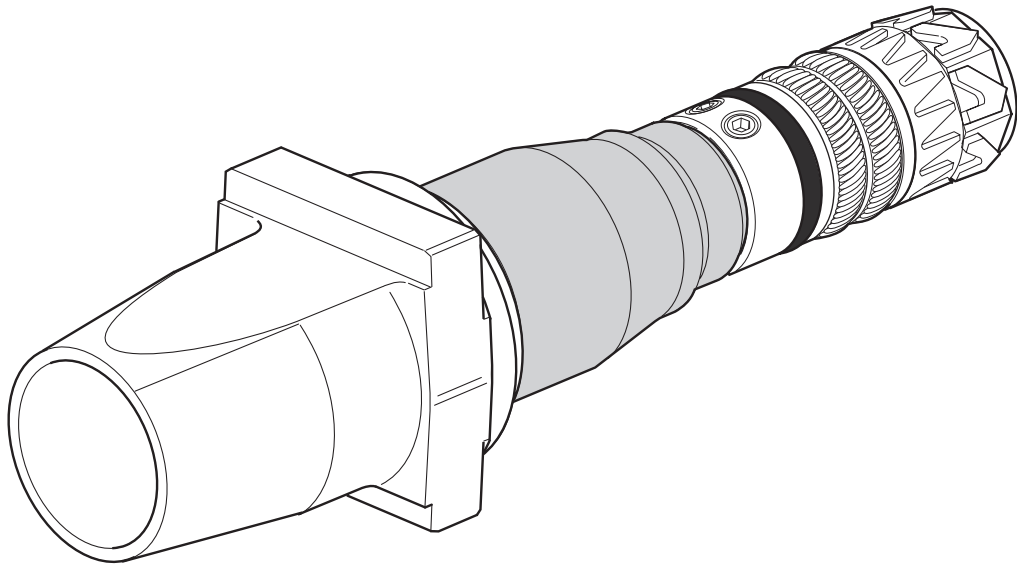
# SWA

**Plug-in Termination SWA  
for XLPE-insulated cables 12 - 24 kV  
Prep. XLPE-diameter 30 - 66 mm.  
For ABB AX 1 Switchgear.**

**ABB**

ABB Kabeldon

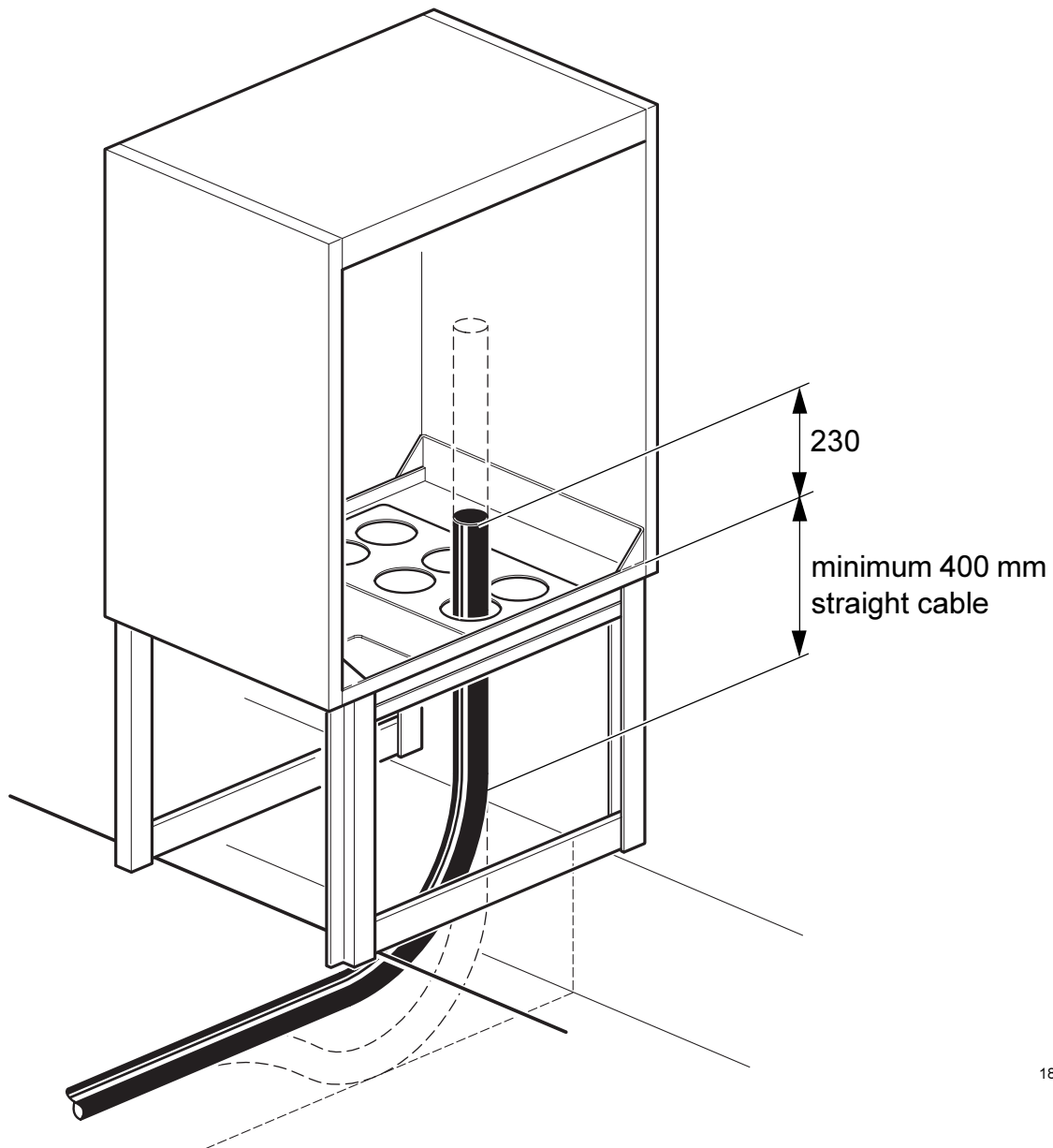
4290.4391-01  
(Engelsk)



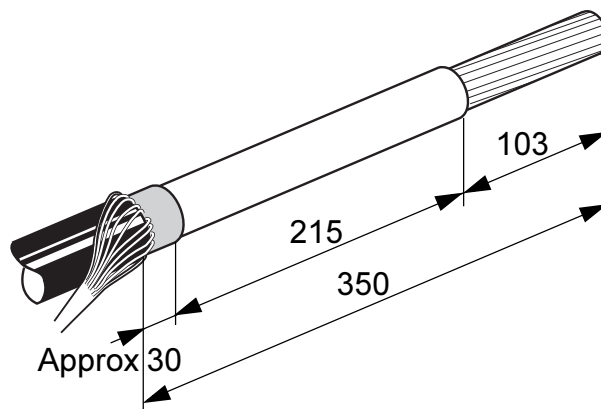
1848

January 2001

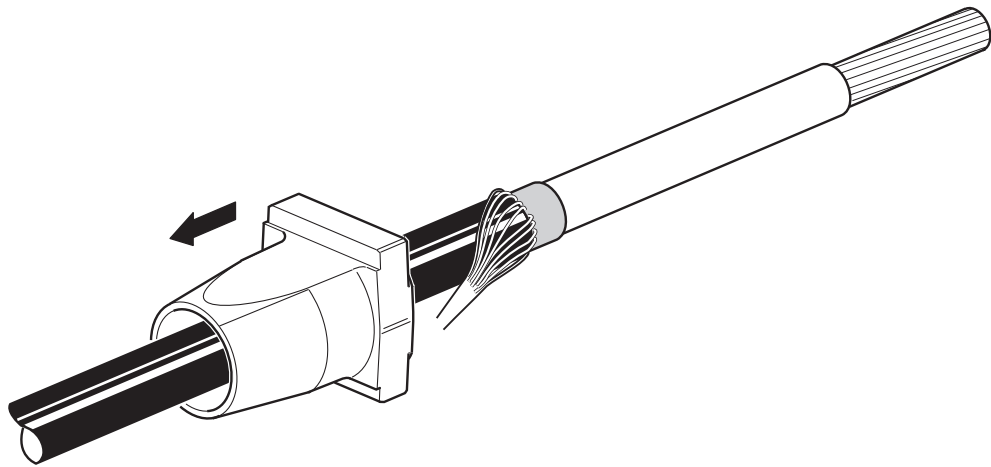
1. Train cable into position and cut the length 230 mm above the bottom frame work. Allow sufficient length of screen wire for earth connection.



2. Strip the cable according to the dimensions below.

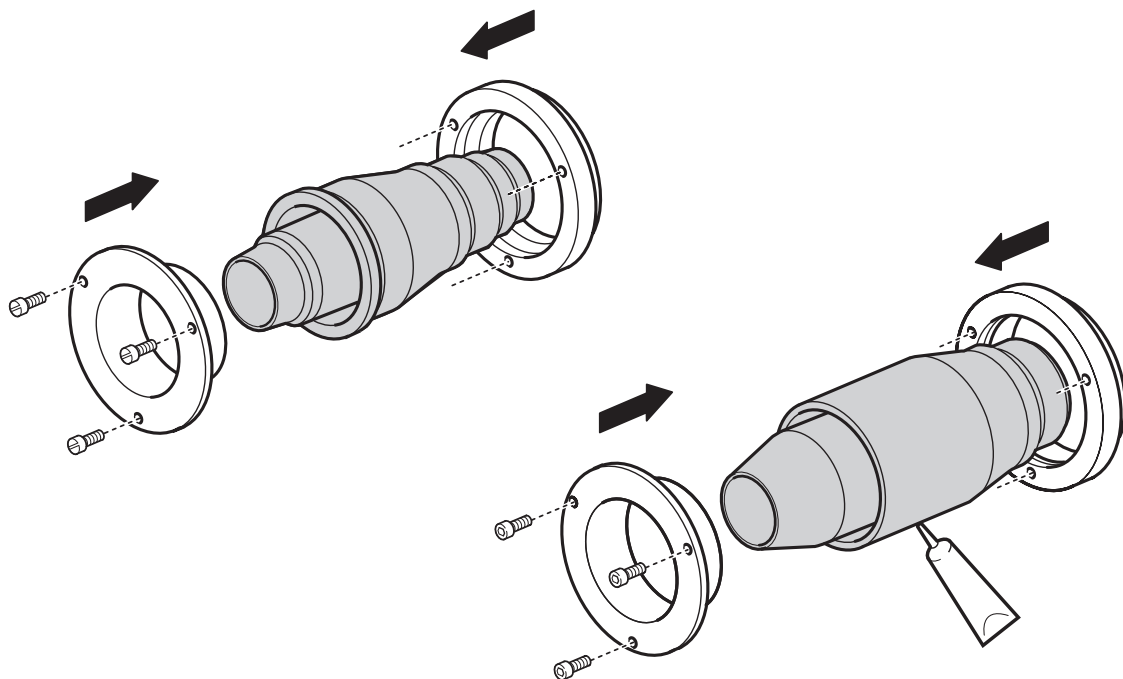


3. Position the bodybox onto the cable.



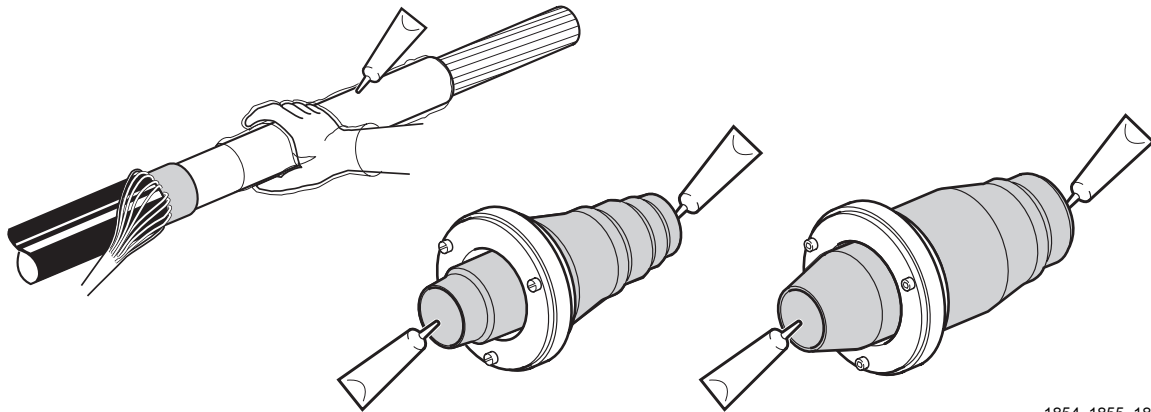
1851

4. Assemble the flanges on the stresscone using 3 pcs. of screws. If necessary, apply a liberal amount of grease on the outside of the edge on the stresscone.



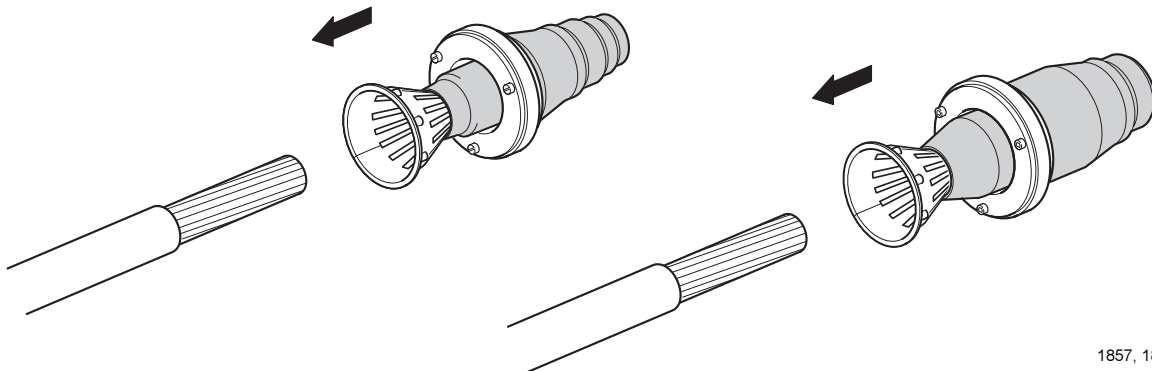
1852, 1853

5. Clean the insulation. Apply grease on the cable insulation with the grease supplied to 50 mm from the insulation screen using the plastic glove included. Empty the remaining amount of grease into the stresscone.



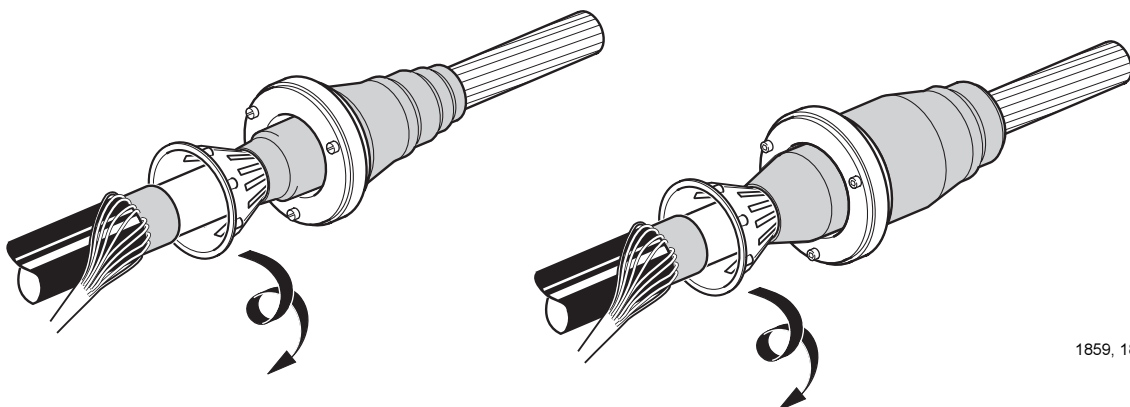
1854, 1855, 1856

6. Adjust the sliding cone to fit the cable diameter. The sliding cone shall be inserted halfway into the stresscone before entering the cable.



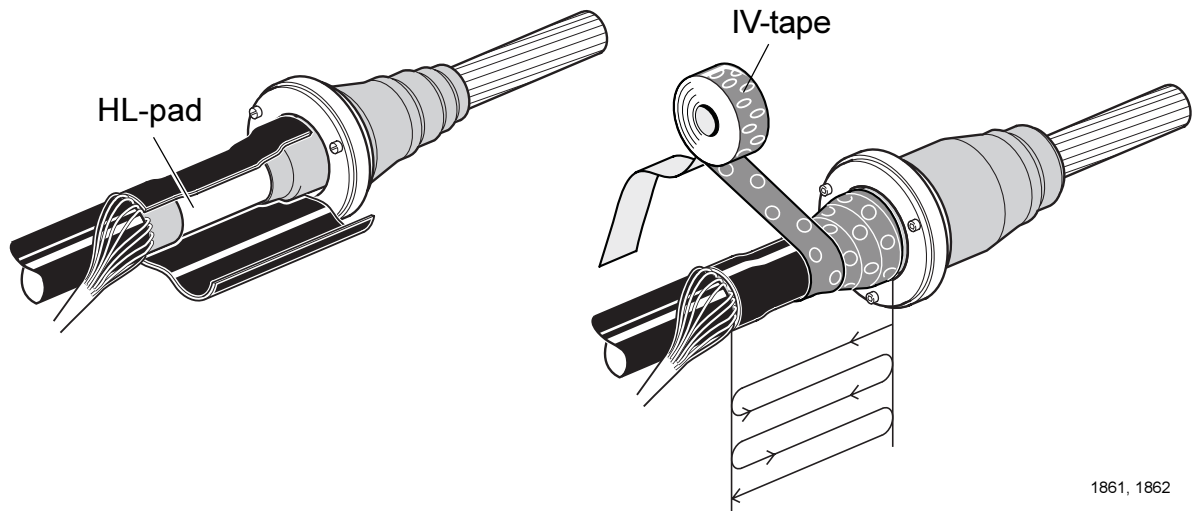
1857, 1858

7. Push the stresscone onto the cable until the upper part of the stresscone is inline with the edge of the cable insulation. Remove the sliding cone.



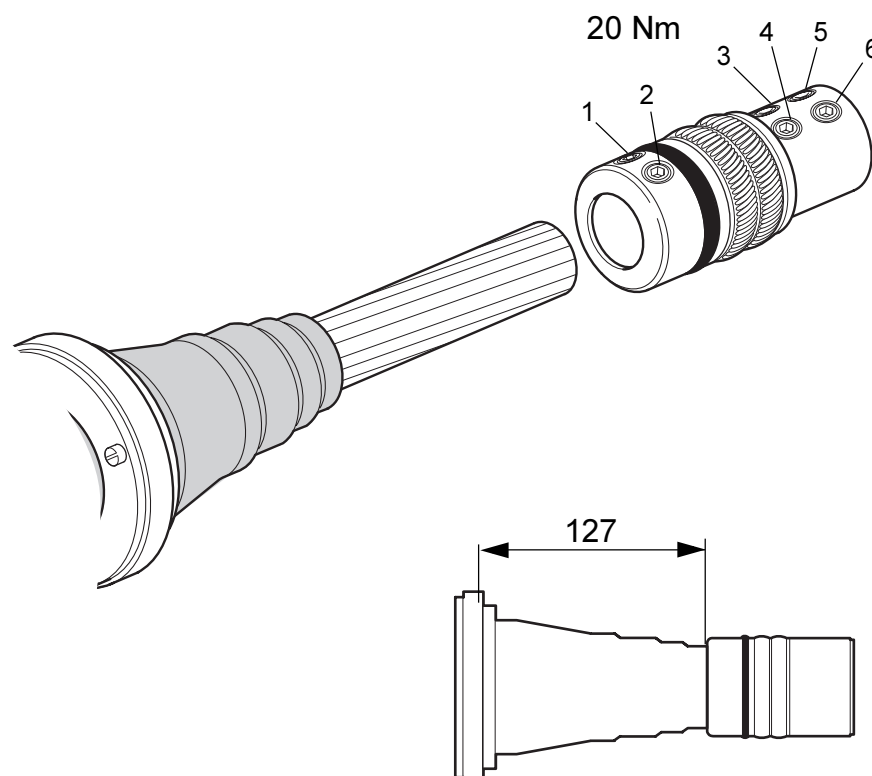
1859, 1860

8. Wipe away all grease. Wrap the HL-pad overlapping the stresscone and the insulation screen on the cable. Stretch the HL-pad slightly to avoid folds and hollow to be created. Wrap the IV-tape 5 times with half overlap over the HL-pad. Fasten the IV-tape with one turn of ET-tape.



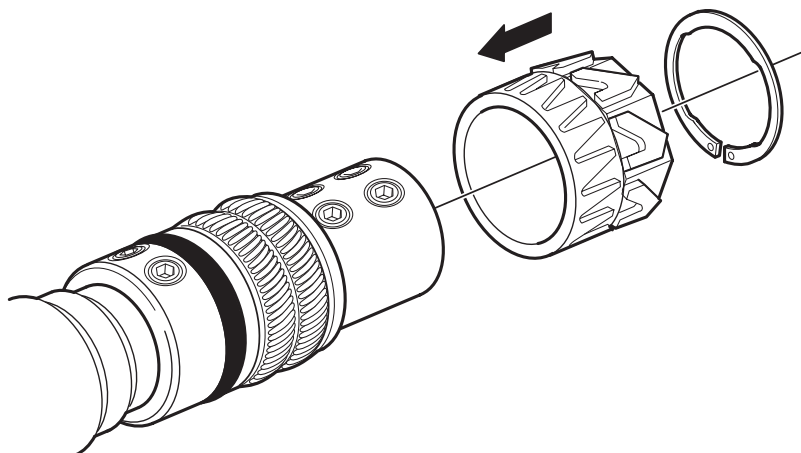
1861, 1862

9. Push the connector onto the conductor. If there is difficulties to enter the connector chamfer the edge of the conductor with a file about 1 mm. Remove any file dust. Fasten the screw slightly and check the measurement 127 mm according to the figure below. Tighten the screws with 20 Nm using a torque wrench in a correct sequence according to figure below.



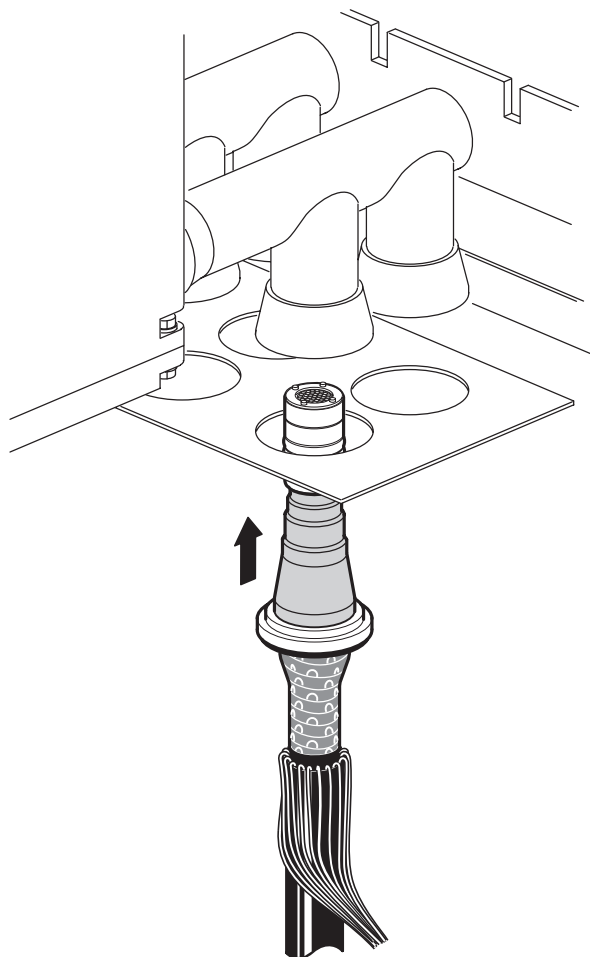
1863, 1864

10. Fit the lock socket on the connector and secure it with the track ring. Check that the lock socket rotate smoothly. Wipe of the stresscone.



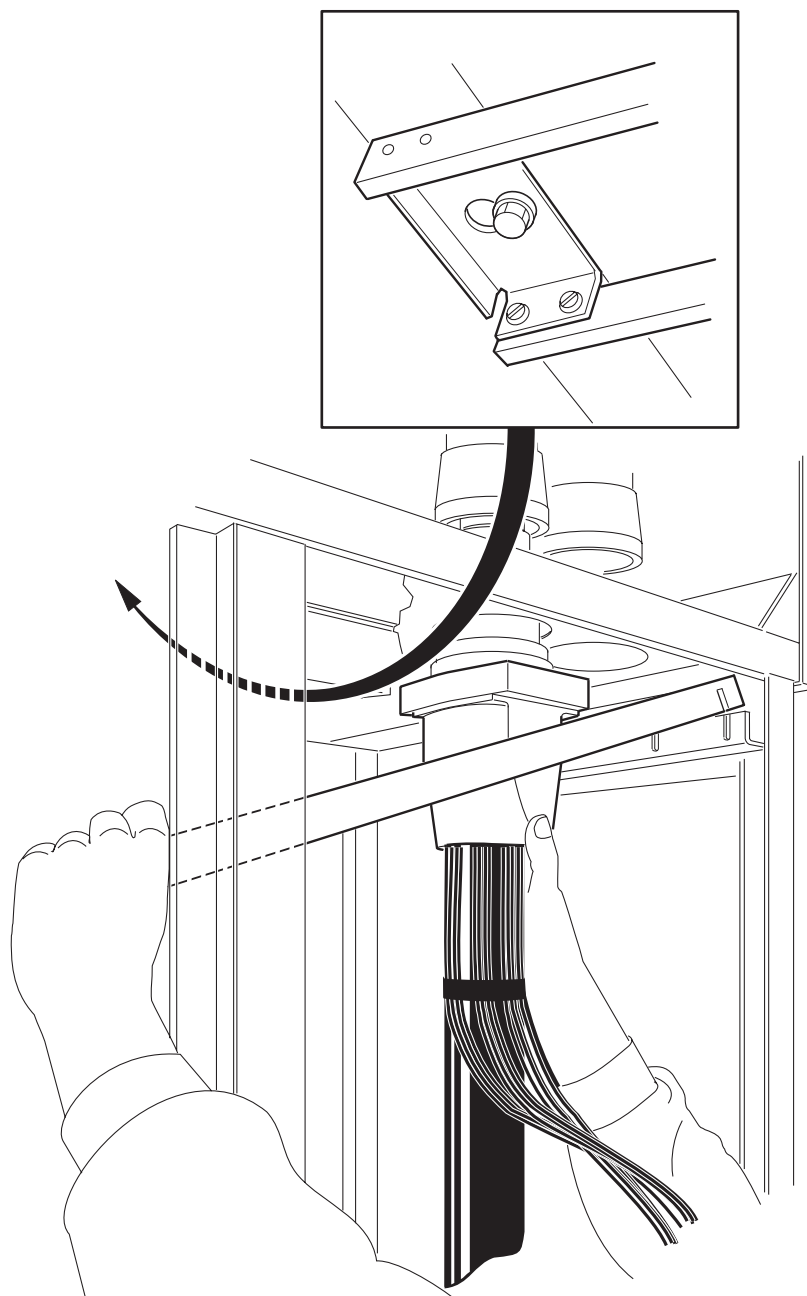
1865

11. Insert the termination into the busbar. Push until it stops and then pull it down to lock position. Install all termination up to this point.



1866

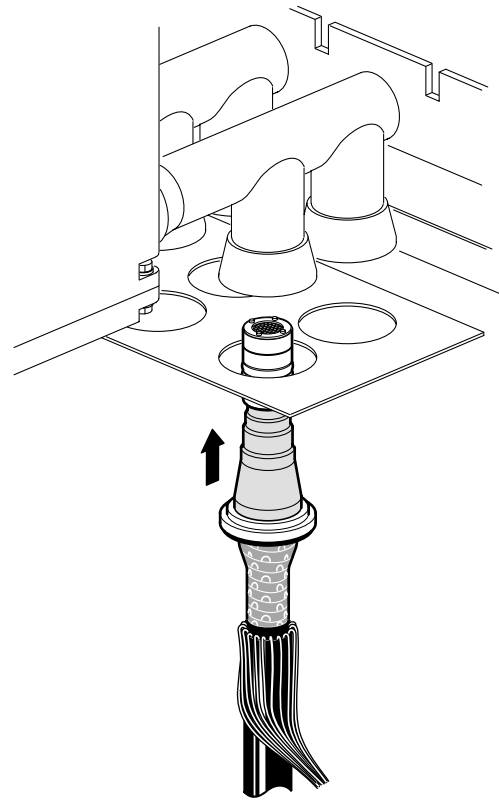
12. Fasten the bottom sheet according to the switchgear manual.
13. Lift the box bodies towards the bottom sheet by means of the support rails and tighten the screws.



1867

14. Connect the screen wires to the earth rail.

# New SWA plug-in cable connector suitable for ABB switchgear AX1, 12-24 kV



Designation	Cross-section mm <sup>2</sup>	Voltage kV	XLPE diameter mm	Conductor diameter mm	Sheath diameter mm	Conductor material
SWA/Al	500-1200	<24	30-66	26-43.5	80	Al
SWA/Cu	500-1200	<24	30-66	26-43.5	80	Cu

## Description:

ABB's AXI switchgear has connection points for use with plug-in connectors on thick cables. The connectors can be used with cables with aluminium or copper conductors, with cross-sections of 500 - 1200 mm<sup>2</sup>, and voltages of 12 and 24 kV.

Stress grading is via a stress cone. Power transmission to switchgear is via a contact device with contact springs of proven ABB standard. The contact device is to be screwed to the conductor. Once the termination has been prepared, it is easily pressed into position. An ingenious locking device ensures that it stays in place. An aluminium sleeve housing ensures complete personal safety against accidental contact. The compact design of the SWA enables four parallel cables to be connected.

## Selected features:

- Stress grading of proven standard
- Automatic locking device keeps connector in place
- Conventional cable preparation
- Simple installation
- No need for special tools

SWA meets the requirements of:

- CENELEC:
- HD628.1 S1
  - HD629.1 S1