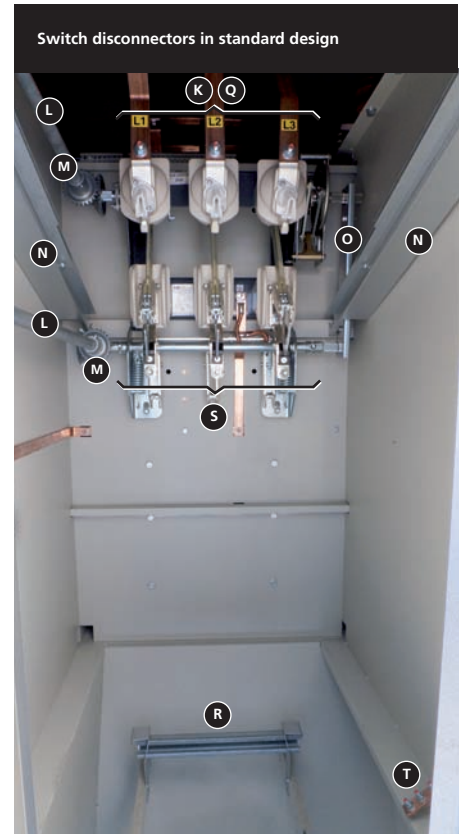
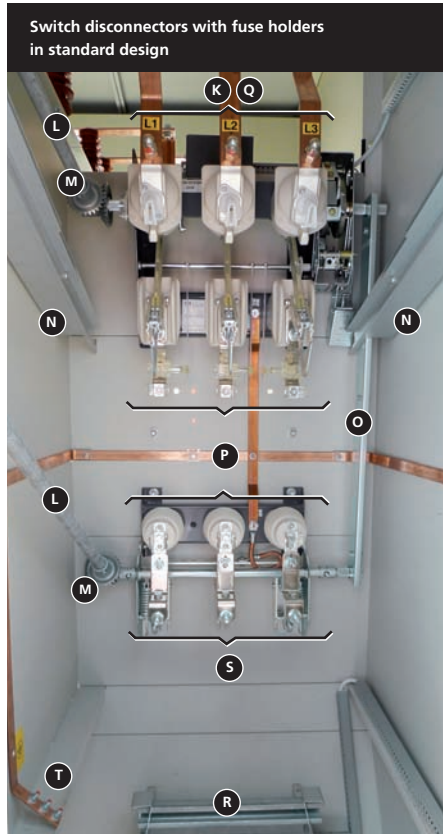


Fuse switch disconnectors – Switch disconnectors



- A** Enclosure number
- B** Inspection window
- C** Opening for shield plate
- D** Inner door
- E** Demountable baseplate
- F** Manual operating device (HE) with labelling for switch disconnectors
- F** Manual operating device (HE) with labelling for earthing switches
- H** Operating lever

- I** Shield plate
- J** Earth connection bolt for temporary earthing
- K** Earth bolt for temporary earthing
- L** Operating lever
- M** Angle gear
- N** Guides (holder for shield plate)
- O** Mechanical interlock
- P** Fuse holder
- Q** Phase labelling
- R** Strain relief bar

- S** Connection point, cable
 - T** Connection point, cable shield
- Accessories (not shown)
- Auxiliary contact, switch disconnector
 - Auxiliary contact, earthing switch
 - Shunt trip solenoid (fuse switch disconnectors only)
 - Ball head bolts instead of earthing switch
 - Motorized operating device
 - Locking sleeve for manual operating device at motor

MANUAL OPERATION

Follow the instructions on the labelling above the manual operating device.

OPERATION WITH MOTORIZED OPERATING DEVICE

If motorized switch disconnectors are fitted it is usually possible to choose between three operating modes. **MAN – O – AUTO**. The switch is located on the switching cabinet in the station.

MAN = Motor is in manual mode; operation via buttons on the switching cabinet.

O = Motor switched off; operation is manual.

AUTO = Motor in automatic mode; operation by remote control.

When operating manually using the lever do so slowly. Rapid operation may damage the motor's windings.

INTERLOCKING

Mechanical interlocking

When switch disconnectors are fitted with earthing switches, mechanical interlocks are installed. Mechanical interlocks prevent simultaneous closure of switch disconnectors and earthing switches.

Electric interlocking (motorized operating devices only)

If a switch disconnector is fitted with an earthing switch, an electric interlock is connected between the switch's auxiliary contact to prevent operation by motor if the earthing switch is closed.

In the case of switch disconnectors without earthing switches, a plate is installed over the switch disconnector manual operating device to prevent operation by motor if the lever or locking sleeve is inserted in the manual operating device.

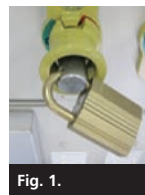
LOCKING MANUAL OPERATING DEVICES

Lock manual operating devices for switch disconnectors and earthing switches **WITHOUT** motorized operation with a padlock. Hang the padlock through the hole in the manual operation shaft; see fig. 1.

The padlock renders operation by means of the manual lever impossible.

Use the locking sleeve supplied when locking manual operating devices for switch disconnectors **WITH** motorized operation. See fig. 2.

1. Fit the sleeve over the shaft and insert the lock pin through the sleeve and the shaft.
2. Insert the lock plate through the lock pin and lock it by hanging a padlock through the lock plate hole. The locking sleeve renders operation by means of the manual lever impossible.



TEMPORARY EARTHING

Switch disconnectors are fitted with earthing switches as standard for the temporary earthing of 'incoming – outgoing' cables.

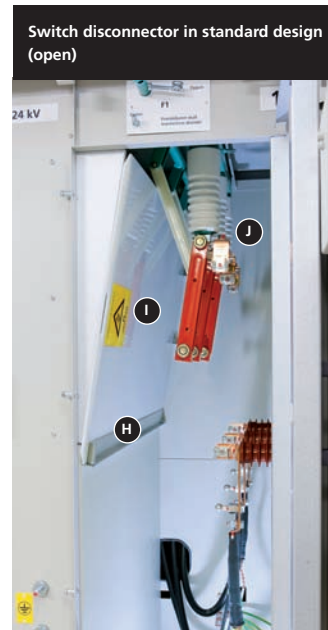
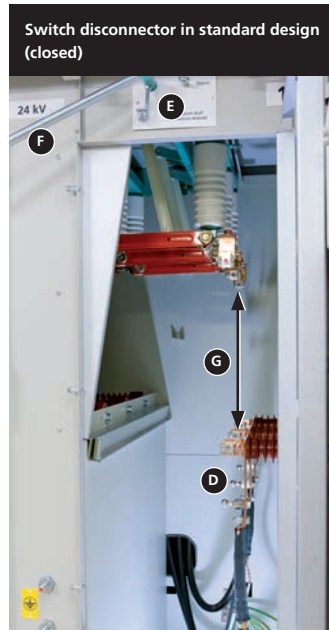
If earthing switches were not specified earthing bolts are installed instead that make temporary earthing possible using an earthing terminal.

An earthing bolt connected to the busbar is always fitted as standard in one of the compartments for the temporary earthing of the station's busbar.

There is an opening at the bottom of the inner door directly below the handle that allows the door to be closed even when temporary earthing is connected.

Always operate the fuse switch disconnectors and switch disconnectors before start-up. Contact Holtab if adjustments are necessary.

Switch disconnector



- A** Enclosure number
- B** Inner door
- C** Earth connection bolt for temporary earthing
- D** Earth bolt for temporary earthing
- E** Manual operating device with labelling for switch disconnector
- F** Operating lever
- G** Fuse holders
- H** Guides (holder for shield plate)
- I** Shield plate
- J** Phase labelling

MANUAL OPERATION
Follow the instructions on the labelling by the manual operating device. Insert the operating lever in the operating shaft; see fig. 3.

the operating shaft and the eye that shows switch disconnector position; see fig. 4.

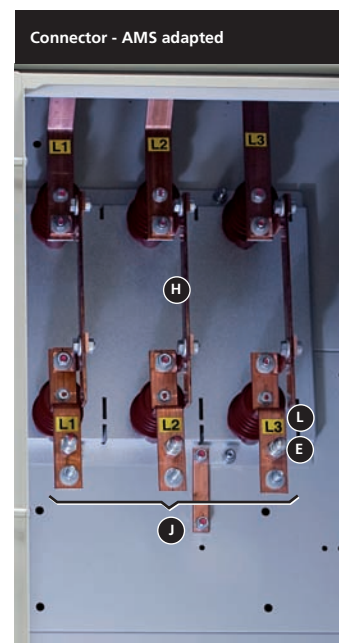
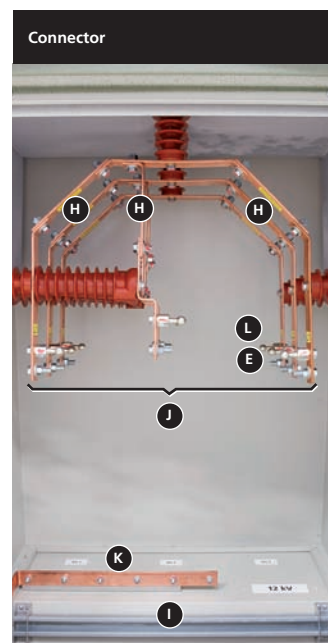
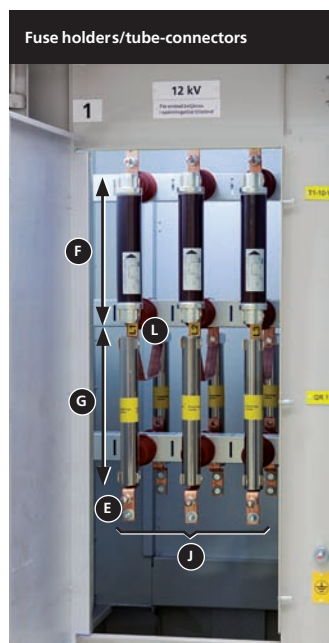
There is an opening at the bottom of the inner door directly below the handle that allows the door to be closed even when temporary earthing is connected.

LOCKING MANUAL OPERATING DEVICES
Lock the manual operating device with a padlock. Hang the padlock by passing its shank through the eye on

TEMPORARY EARTHING
Temporary earthing on any of the switch disconnector's sides usually takes place by connecting an earthing device between the earth connection bolt and the earth bolts.



Fuse holders – Tube connectors – Connectors



- A** Enclosure number
- B** Inside door
- C** Demountable baseplate

- D** Earth connection bolt for temporary earthing
- E** Earth bolt for temporary earthing
- F** Fuse in fuse holder

- G** Tube connector in fuse holder
- H** Connector
- I** Strain relief bar

- J** Connection point, cable
- K** Connection point, cable shield
- L** Phase labelling

MANUAL OPERATION
All operations must take place with power off using approved tools and in accordance with best electrical safety practice.

TEMPORARY EARTHING
The enclosures are usually equipped with earthing bolts that allow temporary earthing using an earthing device.

There is an opening at the bottom of the inner door directly below the handle that allows the door to be closed even when temporary earthing is connected.