

# FBX - Secondary Distribution Switchgear

## Cables test device

**EN** *Operating instructions*

AMTNoT232-02\_REV00





## presentation

Each Functional Unit C is equipped with a cables test device.  
 This device allows for cable testing or searching for a fault on the cables, whilst avoiding the withdrawal of the plug-in connectors.  
 It is protected by a mobile panel (1).  
 An instruction label (2) shows the order of operations.

### Tools necessary:

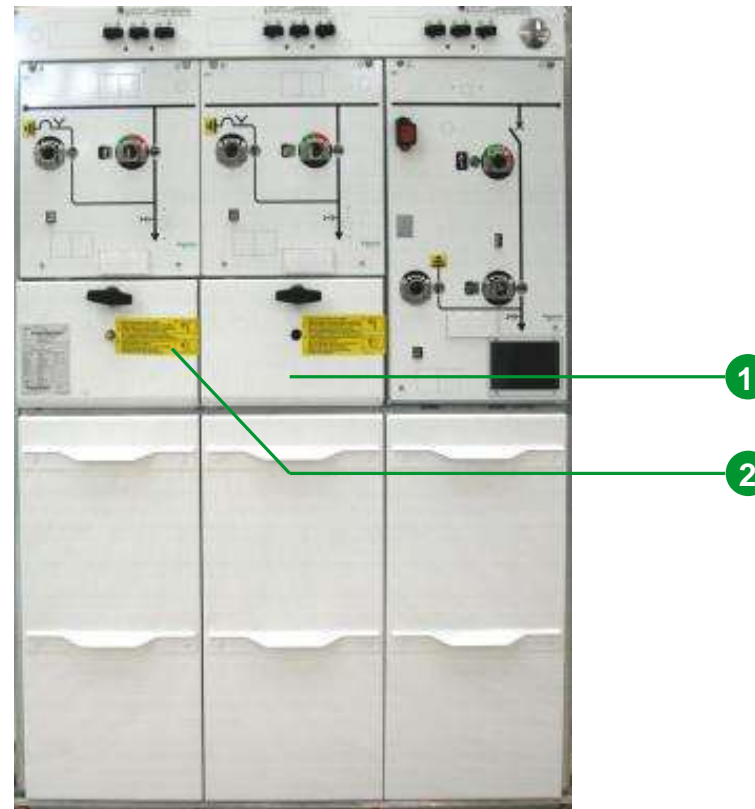
- Open-ended spanner size 10; 16
- Ratchet wrench + extension + 13 mm socket

### Accessories not supplied:

- Earthing device
- Insulating gloves

**AVIS**

Additional information to that given in instruction manuals AMTNoT131-02 and AMTNoT132-02.





## Symbols and conventions



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

**Caution:** you will find all the symbols below throughout the document, indicating the hazard levels depending on the different types of situation.



### DANGER

**DANGER** indicates a hazardous situation which, if not avoided, **will result** in death or serious injury.



### WARNING

**WARNING** indicates a hazardous situation which, if not avoided, **could result** in death or serious injury.



### CAUTION

**CAUTION** indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

### NOTICE

**NOTICE** is used to address practices not related to physical injury.



## Safety rules



### DANGER

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before turning on power to this equipment.
- Beware of potential hazards, and carefully inspect the work area for tools and objects that may have been left inside the equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## Intervention conditions for a cables test

Intervention	Busbar	Câbles	Interrupteur	Sectionneur de terre
Normale	De-energized	De-energized	Open	Closed
Possible	Energized	De-energized	Open	Closed

### Locking out of the Functional Unit

Any locking-out operation must be carried out in accordance with the special rules for the network concerned..

Preliminary  
steps

S0

Preparation  
for the cables  
test

S1

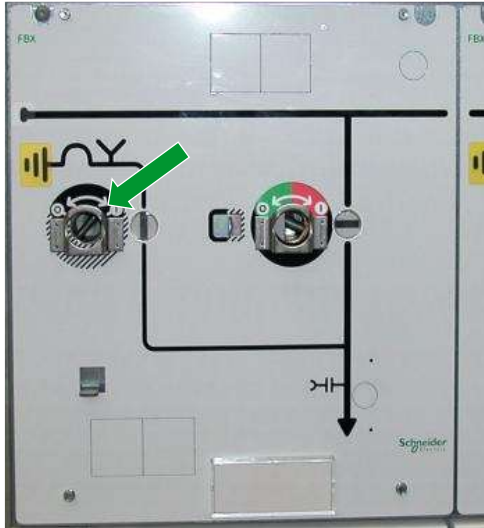
Fitting the  
earthing braids  
in place

S2

Testing

S3

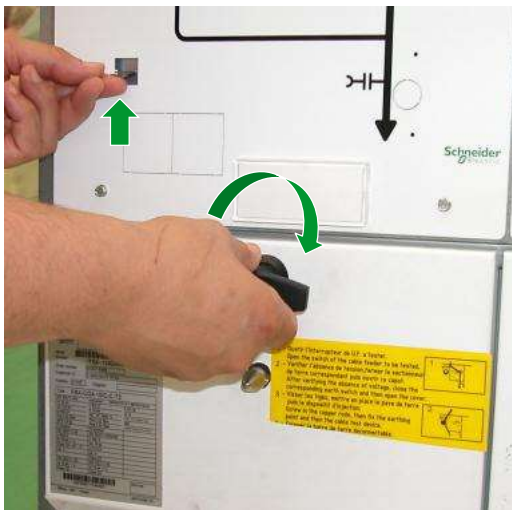
Ref : AMTNoT232-02-Rev.00



Lock-out Functional Unit C:  
switch open, earthing switch closed.



Remove the locking out  
padlocks.



Lift the pull control device to unlock  
the panel.  
Pull out the panel to the right.



Pull the panel forwards to  
remove.  
Note: A second instructions  
label (3) describes the rest of  
the operation.



Preliminary steps

S0

Preparation for the cables test

S1

Fitting the earthing braids in place

S2

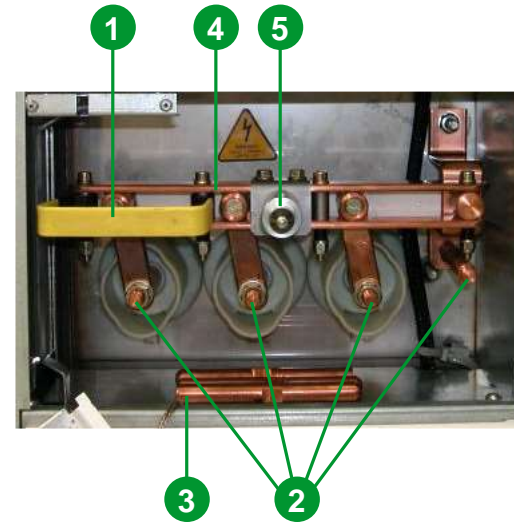
Testing

S3

Ref : AMTNoT232-02-Rev.00



Extract the panel and leave it to hang at the end of its earth connection wire.



- 1 - Handle used to disconnect the removable earthing device.
- 2 - Extender screw locations
- 3 - Emplacement for four extenders
- 4 - Removable earthing device
- 5 - Location of locking device



Preliminary steps

S0

Preparation for the cables test

S1

Fitting the earthing braids in place

S2

Testing

S3

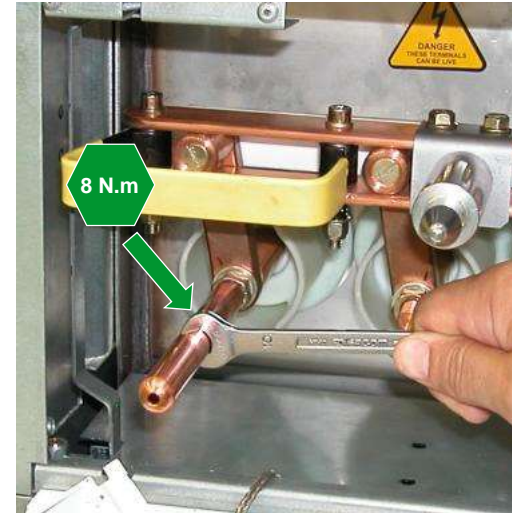
Ref : AMTNoT232-02-Rev.00

**CAUTION**

The opening of the earthing switch device must be realized only when the grounding clamps is linked and in position.



Respect the order of operations as shown on the instruction plate (3).



Screw in and tighten each extension (10 mm open-ended spanner).



The 4 extensions screwed on prevent the panel from being fitted back on.



Fit the main earthing clamp to the right hand extender, which is the earth.



Preliminary steps

S0

Preparation for the cables test

S1

Fitting the earthing braids in place

S2

Testing

S3

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Tighten the grounding clamp.



Position and tighten the grounding clamps on each phase.

**CAUTION**

Ensure that the clamps are positioned as shown in the 2 following views.



The tightening clamps must be vertical, directed towards the bottom.



Position the clamps at the end of each extension.



Preliminary  
steps

S0

Preparation  
for the cables  
test

S1

Fitting the  
earthing braids  
in place

S2

Testing

S3

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**CAUTION**

Insulating gloves must be worn for all the operations which follow.



Grab the handle on the removable earthing switch device.



Pull the assembly forwards to open the earthing switch.



The earthing switch must be completely open and in abutment on the right side of the compartment.



Connect the test equipment cable to the end of the Phase L3 extender.

Preliminary  
steps

S0

Preparation  
for the cables  
test

S1

Fitting the  
earthing braids  
in place

S2

Testing

S3

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Loosen then remove the earthing  
block clamp from Phase L3.



Proceed with the test on L3.  
On completion of the tests, refit  
The earthing clamp.  
Disconnect the test cable.

**NOTICE**

Repeat the operation for the other  
two phases.



Preliminary steps

S0

Preparation for the cables test

S1

Fitting the earthing braids in place

S2

Testing

S3

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### At the end of the tests



Use insulating gloves.  
Reclose the removable earthing device.



Disconnect end remove the earthing block.  
Loosen the four extenders and store them in their compartment.



Refit the panel.  
Note: If the removable earthing device is incorrectly closed it will not be possible to refit the panel.

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Technique T&D

**Schneider Electric Industries SAS**  
35, rue Joseph Monier  
CS 30323  
F - 92506 Rueil Malmaison Cedex (France)  
Tél. : +33 (0)1 41 29 70 00  
<http://www.schneider-electric.com>