FBX - Secondary Distribution Switchgear
Cables test device

AMTNoT232-02_REV00
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

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.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️ ⚡ DANGER</td>
<td>Indicates a hazardous situation which, if not avoided, will result in death or serious injury.</td>
<td></td>
</tr>
<tr>
<td>⚠️ WARNING</td>
<td>Indicates a hazardous situation which, if not avoided, could result in death or serious injury.</td>
<td></td>
</tr>
<tr>
<td>⚠️ CAUTION</td>
<td>Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.</td>
<td></td>
</tr>
<tr>
<td>⚠️ NOTICE</td>
<td>is used to address practices not related to physical injury.</td>
<td></td>
</tr>
</tbody>
</table>
Safety rules

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

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Busbar</th>
<th>Câbles</th>
<th>Interrupteur</th>
<th>Sectionneur de terre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normale</td>
<td>De-energized</td>
<td>De-energized</td>
<td>Open</td>
<td>Closed</td>
</tr>
<tr>
<td>Possible</td>
<td>Energized</td>
<td>De-energized</td>
<td>Open</td>
<td>Closed</td>
</tr>
</tbody>
</table>

Locking out of the Functional Unit
Any locking-out operation must be carried out in accordance with the special rules for the network concerned.
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.
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
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).

7. Mettre en place le pince de terre puis le dispositif d'excitation.
8. Installer les supports de liaison à la terre à l'aide du marteau plat.
9. Ouvrir le dispositif de liaison à la terre à l'aide du marteau plat.
6-7 8 9

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

8 N.m

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

**CAUTION**

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.
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.

Repeat the operation for the other two phases.
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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As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

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