Instruction manual on Q8BAT-SET Battery

This instruction manual explains specifications and handling instructions on the large capacity battery for MELSEC-Q series CPU modules, Q8BAT-SET battery.

1. Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Battery type</td>
<td>Lithium/Manganese dioxide primary battery (assembled battery)</td>
</tr>
<tr>
<td>Nominal current capacity</td>
<td>1800mAh (1800mAh x 10)</td>
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<tr>
<td>Storage life</td>
<td>5 years (at normal temperature)</td>
</tr>
<tr>
<td>Application</td>
<td>Retention of the following memory in the event of power failure: Program memory, standard RAM and latch device</td>
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<tr>
<td>Dimensions</td>
<td>Q8BAT battery: 98mm (3.86 inch) (H) x 55.2mm (2.17 inch) (W) x 87mm (3.43 inch) (D)</td>
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<tr>
<td></td>
<td>Q8BAT connection cable: 1000mm (39.4 inch)</td>
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</table>

2. Battery Replacement

When the Q8BAT comes to the end of its life, replace the battery with new one (Q8BAT).

Make sure to complete the battery replacement within 3 minutes. Failure to do so may delete the data in memory, although it includes a condenser to back up the memory for a while without battery.

When the MELSEC-Q series is used as a UL-certificated product, the Q8BAT replacement must be done by service personnel. The service personnel are defined as experienced technicians who have been sufficiently educated and trained, and are capable of perceiving and avoiding operational hazard.

3. Disposal of batteries

When disposing of batteries, separate them from other wastes according to the local regulations. (For details of the battery directive in EU member states, refer to the user’s manual for the CPU module used.)

4. Procedure for connecting Q8BAT battery to CPU module

Connect the Q8BAT to the CPU module in the following procedures.

- Open the cover of the CPU module's bottom.
- Disconnect the connector connecting the Q8BAT to the CPU module.
- Remove the Q8BAT and cover from the CPU module.
- Insert the connector of Q8BAT connection cable (included in the Q8BAT-SET) into the connector of CPU module while confirming the orientation of each connector.
- Attach the Q8BAT connection cover to the CPU module.
- Connect the Q8BAT to the control panel. (Screws or DIN rail is applicable.)

5. Precautions for connecting Q8BAT battery

**Précautions de raccordement de la batterie Q8BAT**

Indicates the control panel top, wiring duct or any part position.

- When setting the Q8BAT inside the control panel, ensure the above distance, as is the case with PLC.
- While holding the connector, carefully pull out the battery connector so that the Q8BAT connection cable will not be broken.
- When mounting the Q8BAT directly onto the control panel, make sure to use M4 x 14 screws (user-prepared) and tighten them in the torque range of 0.66 to 0.89Nm.
- Ensure the bending radius of 10mm (0.39 inch) or more for the Q8BAT connection cable.
- Fix the Q8BAT connection cable using a clamp.

Failure to do so may cause damage of the Q8BAT connection cover, connector or cable due to unintentional swinging and shifting or accidental pull of the cable.

- At the installation of the Q8BAT in the tableau de commande, respecter les distances ci-dessous comme dans le cas du PLC.
- Débrancher le connecteur de batterie en tirant avec soin sur le connecteur lui-même pour ne pas risquer d'endommager le câble de raccordement de la Q8BAT.
- Pour fixer la Q8BAT directement au tableau de commande, utiliser 14 vis M4 (fournies par l'utilisateur) et serrer ces vis avec un couple de 0,66 à 0,89Nm.
- Veiller à ce que le rayon de courbure du câble de raccordement de la Q8BAT ne soit pas inférieur à 10mm (0,39 pouces)
- Attacher le câble de raccordement de la Q8BAT avec un collier.

Faute de quoi, tout déplacement ou effort de traction sur le câble risquerait d’endommager le capot de connexion, le connecteur ou le câble de la Q8BAT.

6. Transportation precautions

As they include lithium, the Q8BAT must be treated as Class 9 dangerous goods during transportation. Prior to shipment, Mitsubishi packs products properly in order to ensure safety. However, when transporting the products, which are unpacked once or repacked after purchase, make sure to observe the dangerous goods regulations of the country as well as IATA Dangerous Goods Regulations and IMDG code. Also, consult and determine the details with the transportation company.

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