Grid feeding monitoring relay CM-UFD.M31M with Modbus RTU and ABB Ability™ EDCS connectivity

Increase network stability with high-performance grid and system protection, tested for VDE-AR-N 4105 and 4110

Application
ABB’s CM-UFD.M31M with Modbus RTU is a multifunctional grid feeding monitoring relay that sits between the renewable energy system and the public grid. The innovative relay guarantees grid stability and prevents blackouts. If the public grid’s voltage or frequency moves out of the permitted ranges, the device uses a decoupling unit (e.g. contactor or breaker Tmax XT) to separate the renewable energy system from the public grid.

Advantages
• Highly accurate measurement and setting
• Modbus RTU communication interface
• Functional safety - single fault tolerance
• Clear multiline, backlit LCD display
• Intuitive and user-friendly menu

Functionality
ABB’s CM-UFD.M31M relay provides a range of monitoring functions in accordance with VDE-AR-N 4105 and 4110. The unit detects over- and undervoltage (10-minutes average value, voltage increase and decrease protection) as well as any changes in grid frequency (frequency increase and decrease protection). The rate of change of frequency (ROCOF) as well as vector shift monitoring can be easily configured.

• Event storage built in
• Pre-setting meets VDE-AR-N 4105 and 4110
• Type tested for VDE-AR-N 4105 and 4110
• Integrate the CM.UFD.M*M range into ABB Ability™ EDCS

Integration into ABB Ability™ Electrical Distribution Control System

Remote PLC for processing & visualization of measurement values

Grid feeding monitoring relay CM-UFD.M*M with Modbus RTU
Cut installation time by up to 60%
There’s no need to learn every possible adjustment and its effects on your system – ABB’s trained staff supports your business and answers your technical questions promptly.

Commission & configure up to 60% faster
Simple instructions, presets for local grid feeding standards, and ABB’s intuitive menu structure make installation quicker. Commissioning and troubleshooting errors are prevented.

Reduce downtime by up to 70%
Operate the device via LCD display or remotely with the Modbus RTU. Users are informed immediately in case of an event in the public grid. Redundant microcontrollers ensure reliable measuring values and tripping.

Ordering details

<table>
<thead>
<tr>
<th>Type</th>
<th>Rated control supply voltage</th>
<th>Measuring range</th>
<th>Order code</th>
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</thead>
<tbody>
<tr>
<td>CM-UFD.M31M</td>
<td>24-240 V AC/DC</td>
<td>L-L: 0-540 V AC / L-N: 0-312 V AC</td>
<td>1SVR560731R3701</td>
</tr>
</tbody>
</table>

The CM-UFD.M31M’s display, communication interface, pre-setting and Modbus RTU ensure that installation and configuration times are reduced by up to 60%.

Communication interface
The Modbus RTU enables control commands like remote tripping and convenient remote data processing. It also provides status information and actual process values.

Pre-set acc. to VDE-AR-N 4105 and 4110
In conformity with VDE-AR-N 4105 and 4110, the CM-UFD.M31M relay can be used in all low voltage plants and in medium voltage plants.

Type-tested
To ensure reliability and compliance to the local standard the CM-UFD.M31M is type tested by the third party authority TÜV Süd.

Services and training

Easy-to-install

Optimum interface

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