EM213
Industrie Ethernet Master

The module EM213 extends the control system with an additional Ethernet adapter with 3 ports for 10/100 MBit. Thus Ethernet ports for connection of a service laptop or for other Ethernet-based networking are also available on FASTBUS substations.

- Cable length to 100 m per line
- Status display via LED
- 3xRJ45 connections
- Integrated switch

<table>
<thead>
<tr>
<th>Item</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM213</td>
<td>00017321-00</td>
</tr>
<tr>
<td>EM213 CC</td>
<td>00017470-00</td>
</tr>
</tbody>
</table>
Interface Modules

**EM213**

Ethernet master

<table>
<thead>
<tr>
<th>Number of transceivers</th>
<th>3x 10/100BaseT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>3x RJ45/crossed and uncrossed cables can be used (autocross detection)</td>
</tr>
<tr>
<td>Line length</td>
<td>Max. 100 m/line</td>
</tr>
<tr>
<td>Transfer rate to M1 CPU</td>
<td>Max. 2.4 Mbit/s user data</td>
</tr>
<tr>
<td>Transfer rate as switch</td>
<td>Max. 100 Mbit/s</td>
</tr>
<tr>
<td>Line impedance</td>
<td>100 Ω</td>
</tr>
<tr>
<td>Status display</td>
<td>LEDs for power, collision + 4x LinkPuls, 3x speed (10/100 Mbit/s)</td>
</tr>
</tbody>
</table>

**Approvals / Certificates**

<table>
<thead>
<tr>
<th>General</th>
<th>CE, UL/cUL, CCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine</td>
<td>GL/DNV, LR, ABS, BV</td>
</tr>
</tbody>
</table>

**Ambient conditions**

<table>
<thead>
<tr>
<th>Standard</th>
<th>ColdClimate (♀)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-30 to +60°C</td>
</tr>
<tr>
<td>Rel. humidity operation</td>
<td>5 to 95% without condensation</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40 to +85°C</td>
</tr>
<tr>
<td>Rel. humidity storage</td>
<td>5 to 95% without condensation</td>
</tr>
<tr>
<td>Pollution degree</td>
<td>2 (without condensation; according to IEC 60664-1)</td>
</tr>
</tbody>
</table>

**Order Codes EM213**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM213</td>
<td>00017321-00</td>
<td>Ethernet interface module; RJ45; 3 Ports; Eth100</td>
</tr>
<tr>
<td>EM213 CC</td>
<td>00017470-00</td>
<td>Like EM213; ColdClimate (♀)</td>
</tr>
</tbody>
</table>