ABB i-bus® EIB / KNX

Fault Monitoring Unit
SMB/S 1.1
Product overview

- Fault Monitoring Unit, 2-fold, MDRC (2 MW)
- Programming-button/LED
- Bus connection terminal
Device technology

- Registration and processing of 100 independent signals to DIN 19 235

- According to DIN
  - Message with steady light
  - New value message with flashing light
  - First value message with confirmation
  - Motor message

- Directly connected by the bus connection terminal with the bus
Device technology

SMB/S 1.1

Fault 1
Fault 2
Fault 3
Fault 4

Opt. Indication 1
Fault 1

Opt. Indication 2
Fault 2

Opt. Indication 3
Fault 3

Opt. Indication 4
Fault 4
Message with steady light

A fault will be indicated with steady light

<table>
<thead>
<tr>
<th>Operating state</th>
<th>Display</th>
<th>Acknowledgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central signal (e.g. audible signal)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fault signal 1
Fault signal 2
Optical individual display 1
Optical individual display 2
Central optical display
Central acoustic alarm
Acknowledgement
Case
New value message with flashing light SMB/S 1.1

Every new message will be indicated by a flashing light until it is confirmed.

<table>
<thead>
<tr>
<th>Operating state</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Visual indicator</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Central signal (e.g. audible signal)</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

- Fault signal 1
- Fault signal 2
- Optical individual display 1
- Optical individual display 2
- Central optical display
- Central acoustic alarm
- Acknowledgement Case

1 2 3 4
The first value message is a functional extension of the new value message:

Only the first message (fault) activates a flashing light, the following messages have steady light.

<table>
<thead>
<tr>
<th>Operating state 1</th>
<th>Display Visual indicator 1</th>
<th>Operating state 2</th>
<th>Display Visual indicator 2</th>
<th>Operating state 3</th>
<th>Display Visual indicator 3</th>
<th>Initial value acknowledgement</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

The reporting expiration for the going messages and for the central alarm units corresponds to fig. 2 with single signal light and with double signal light fig. 3.
First value message with confirmation SMB/S 1.1

- Fault signal 1
- Fault signal 2
- Optical individual display 1
- Optical individual display 2
- Central optical display
- Central acoustic alarm
- Acknowledgement Case

<table>
<thead>
<tr>
<th>Case</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>
**Motor message**

The motor message indicates by flashing light and acoustical alarm, if the nominal condition (e.g. control of a relay / on) is not in compliance with the current status (e.g. status feedback of load)

<table>
<thead>
<tr>
<th>Operating state</th>
<th>Setpoint state on</th>
<th>Actual state on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual indicator</td>
<td>Display 1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acknowledgement</td>
</tr>
<tr>
<td>Central signal</td>
<td>Display</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acknowledgement</td>
<td></td>
</tr>
</tbody>
</table>

1) Target of the visual indicators the condition “engine not ready” announce, flash he after acknowledgement slowly (1) and expire as soon as the disturbance repaired and thus the engine again ready is.
Motor message

Setpoint state

Actual state

Opt. indiv. display

Central opt. display

Central aco. alarm

Acknowledgement Case

1 2 3 4
Application program  

SMB/S 1.1

- Fault messages will be processed in SMB/S 1.1 and will be sent via bus to an optical indication.
- Additionally an optical and acoustical centralized fault indication is available.
- Messages can be confirmed.
- Loss of data is signaled.
- Cyclical monitoring of sensors possible.
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