

The diagnosis and protection module enables quick diagnostics of the bus state and indicates telegram traffic via an LED. A bus fault ( $U < U_{\min}$ ) is indicated by normally open and normally closed contacts. The DSM incorporates a suppressor diode which suppresses transient overvoltages and interference voltage spikes on the EIB.

The DSM/S is a rail mounted modular installation device for installation in distribution boards. The connection to the ABB i-bus® is established using the bus connection terminal.

### Technical Data

<b>Power supply</b>	<ul style="list-style-type: none"> <li>– Operating voltage</li> <li>– Current consumption</li> <li>– Power consumption via EIB</li> <li>– Leakage loss</li> </ul>	21 ... 32 V DC, via the bus Max. 6 mA < 150 mW Max. 150 mW
<b>Operating and display elements</b>	<ul style="list-style-type: none"> <li>– U = ok (1)</li> <li>– <math>U &lt; U_{\min}</math> (2)</li> <li>– Telegram (3)</li> <li>– Red LED (5) and button (6)</li> </ul>	Lights up if the bus voltage is ok (approx. > 22.5 V) and the device is ready for operation, if the bus voltage is too low (approx. < 20.5 V) Flashes, if a telegram is sent via the bus, lights with multiple telegrams on the bus Without function
<b>Connections</b>	<ul style="list-style-type: none"> <li>– EIB / KNX</li> <li>– Load current circuits</li> <li>– Tightening torque</li> <li>– Signal contacts (8, 9)</li> </ul>	Bus connection terminal 0.8 mm Ø, single core Screw terminal 0.2...2.5 mm² Ø, finely stranded 0.2...4 mm² Ø, single core Max. 0.6 Nm In normal operation the contacts are in the normal positions (as indicated on the enclosure). If the bus voltage drops below $U_{\min}$ , the red LED (2) lights and the contacts are energized (N/O contact closes, N/C contact opens).
<b>Load rating of the relay contacts</b>	6 A at 230V AC (AC1/AC3) / 4 A at 24 V DC	
<b>Protective function</b>	The DSM incorporates a suppressor diode (43V / 1500W @ 10/1000 µs pulse) which suppresses transient overvoltages and interference voltage spikes on the EIB. It is recommended to apply the device as a “disconnection point”, for example between building sections, to provide optimum protection.	
<b>Enclosure</b>	– IP 20	to DIN EN 60 529
<b>Safety class</b>	– II	to DIN EN 61 140
<b>Isolation category</b>	<ul style="list-style-type: none"> <li>– Overvoltage category</li> <li>– Pollution degree</li> </ul>	III to DIN EN 60 664-1 2 to DIN EN 60 664-1
<b>EIB / KNX safety extra low voltage</b>	– SELV 24 V DC	
<b>Ambient temperature range</b>	<ul style="list-style-type: none"> <li>– Operation</li> <li>– Storage</li> <li>– Transport</li> </ul>	<ul style="list-style-type: none"> <li>– 5 °C...+ 45 °C</li> <li>– 25 °C...+ 55 °C</li> <li>– 25 °C...+ 70 °C</li> </ul>
<b>Design</b>	– Modular installation device, ProM	
<b>Housing, colour</b>	– Plastic housing, grey	
<b>Installation</b>	– On 35 mm mounting rail	to DIN EN 60 715
<b>Dimensions</b>	– 90 x 36 x 64 mm (H x W x D)	
<b>Mounting depth/width</b>	– 36 mm / 2 modules at 18 mm	
<b>Weight</b>	– 0.1 kg	
<b>Mounting position</b>	– as required	
<b>Approvals</b>	– EIB / KNX to EN 50 090-2-2	
<b>CE mark</b>	– in accordance with the EMC guideline and low voltage guideline	

Application program	Max. number of communication objects	Max. number of group addresses	Max. number of associations
Diagnosis and protection module/1	0	0	0

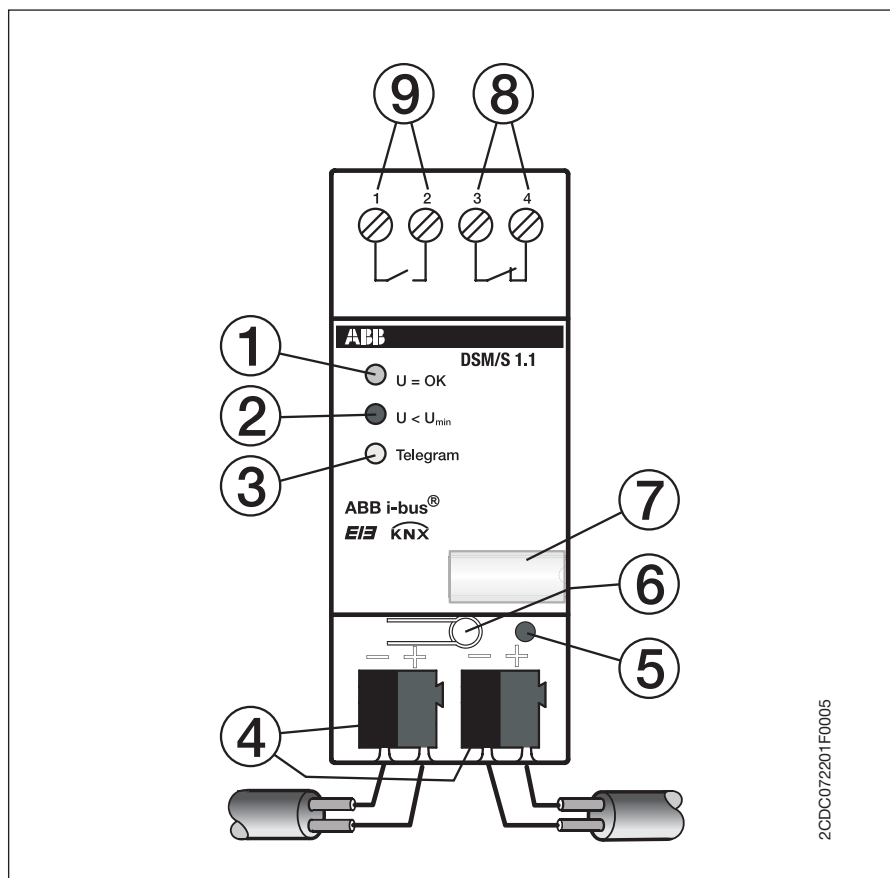
Note:

No programming of the device is required with the ETS. For documentation purposes a product database can be loaded in the ETS2 (.vd2) or ETS3 (.vd3) which only displays the device.

## Circuit diagram

3

3



- 1 Display, bus voltage ok
- 2 Display, bus voltage too low
- 3 Display, telegram traffic
- 4 EIB connection terminals
- 5 LED without function

- 6 Button without function
- 7 Label carriers
- 8 Contact for  $U < U_{min}$ , N/C
- 9 Contact for  $U < U_{min}$ , N/O

## Dimension drawing

