



In the Ex i or Ex e version, the MODEX 8 x 4 to 20 mA module can control various actuators depending on the model using 8 analogue short-circuit proof outputs. The controlled actuators can be switched off by an emergency stop via a second power supply connection on the module on terminals U- and U+. The module is connected to the process control system via the PROFIBUS-DP. Coding rotary switches are available for addressing the module. Diagnostics data indicating the status of the outputs with respect to a disconnection or short-circuit can also be transmitted in addition to the user data. This is also displayed on the module itself using LEDs.

**Explosion protection Ex i**

Marking ATEX	II 2(1)G Ex db e [ia Ga] IIC Gb I M2 Ex db e [ia Ma] I Mb
Certification	PTB 97 ATEX 1066 U TÜV 99 ATEX 1426
Marking IECEx	Ex db e [ia Ga] IIC Gb Ex db e [ia Ma] I Mb
Certification	IECEx PTB 11.0082U IECEx TUN 11.0033X
Marking CSA	Class I, Zone 1, IIC A/Ex d e [ia] IIC Gb
Certification	CSA 2011-2484303U
Installation	Type 17-6583-3600 II (1)G / II (1)D [Ex ia Ga] IIC [Ex ia Da] IIIC For further data see test certificates.
Safety data	$U_0 = 21.4 \text{ V}$ $I_0 = 93.9 \text{ mA}$ $P_0 = 503 \text{ mW}$ $C_0 = 176 \text{ nF (IIC)}/1.2 \text{ }\mu\text{F (IIB)}$ $L_0 = 3.4 \text{ mH (IIC)}/13.9 \text{ mH (IIB)}$ $U_m = 253 \text{ V}$

**Explosion protection Ex e**

Marking ATEX	II 2G Ex db e IIC Gb I M2 Ex db e I Mb
Certification	PTB 97 ATEX 1066 U
Marking IECEx	Ex db e IIC Gb Ex db e I Mb
Certification	IECEx PTB 11.0082U
Marking CSA	Class I, Zone 1, IIC A/Ex d e IIC Gb
Certification	CSA 2011-2484303U
Other approvals and certificates, see <a href="http://www.bartec.de">www.bartec.de</a>	

**Technical data**

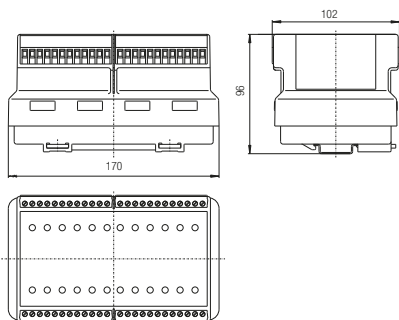
Construction	Flameproof, clip-on enclosure for TH 35 rail	
Enclosure material	High-quality thermoplastics	
Protection class	Electronic assembly	IP 66 EN/IEC 60529
	Terminals	IP 20 EN/IEC 60529
	Terminals with covers	IP 30 EN/IEC 60529
Terminals	2.5 mm <sup>2</sup> , fine stranded	
Device designation	Front plate for labelling	
Displays	LEDs on front panel	
Storage temperature	-40 °C to +60 °C	
Ambient temperature	-25 °C to +60 °C at T4	
Weight	2.1 kg	

**Electrical data**

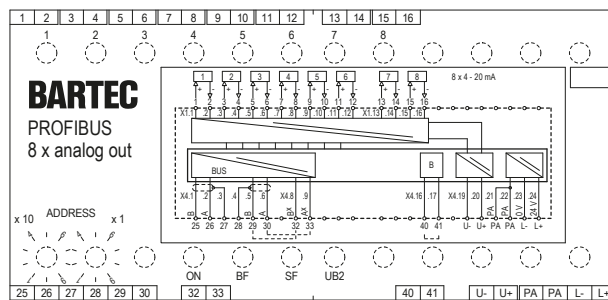
Supply voltage electronics (L +, L-)	DC 24 V (20 to 30 V)	
Power consumption (L +, L-)	1.8 W	
Supply voltage	DC 24 V (20 to 30 V)	
Outputs (U +, U-) suitable for emergency stop		
Power consumption	max. 5.7 W	
Reverse polarity protection (L +, L-, U+, U-)	Yes	
Power dissipation	max. 7.5 W (Module)	
Galvanic isolation	Power supply//bus//circuitry//outputs//	
Bus interface	RS485 with screw terminals	
Displays	Status	ON, BF, SF, UB2
	Outputs	8 x LEDs LED yellow, output ok LED red, short circuit

Outputs	
Signal range	4 to 20 mA 4 mA = 0 dec. 20 mA = 4096 dec.
Resolution	12 bit
Quantising	3.91 $\mu\text{A/LSB}$
Load	0 to 500 $\Omega$
Basic error	at $T_U = 25 \text{ }^\circ\text{C} \pm 0.2 \%$
Linearity	$\pm 0.2 \%$
Line monitoring	Group error message via bus

**Dimensions/mounting positions**



**Wiring diagram/terminal assignment**



**Note**

To disable open/short circuit monitoring, bridge terminals 40 and 41.

Last bus module            Bridge A-A<sup>X</sup> (terminals 30, 33)  
 in system                    Bridge B-B<sup>X</sup> (terminals 29, 32)

GSD file                      BARX2306.gsd  
 Download                    <http://automation.bartec.de>

**Ordering information**

PROFIBUS Interface 8 x 4 to 20 mA out Ex i                    **07-7331-2306/0000**  
 PROFIBUS Interface 8 x 4 to 20 mA out Ex e                    **07-7331-2306/1000**

Technical data subject to change without notice.

