



In the Ex i version, the MODEX digital out Ex i module can control various actuators using 16 digital outputs. During operation, a channel can be short-circuited on the short-circuit proof outputs (short-circuit proof to a limited extent). For example, intrinsically safe solenoid valves and intrinsically safe signal transmitters can be controlled as actuators. 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

Marking ATEX	Ⓔ II 2(1)G Ex db e [ib] IIC/IIB Gb Ⓔ I M2 Ex db e [ib] I Mb
Certification	PTB 97 ATEX 1066 U TÜV 00 ATEX 1649
Marking IECEx	Ex db e [ib] IIC/IIB Gb Ex db e [ib] I Mb
Certification	IECEx PTB 11.0082U IECEx TUN 11.0035X
Marking CSA	Class I, Zone 1, IIC A/Ex d e [ib] IIC Gb
Certification	CSA 2011-2484303U
Other approvals and certificates, see www.bartec.de	

Installation	Type 17-6583-.10./.... Type 17-6583-.11./.... Ⓔ II (2) G / II (2) D [Ex ib Gb] IIC/IIB [Ex ib Db] IIC/IIB For further data see verification certificates.
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Safety data	Type 17-6583-.10./.... $U_0 = 21\text{ V}$ $I_0 = 111.6\text{ mA}$ $P_0 = 586\text{ mW}$ Characteristic: linear
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Ex ib IIC	L_0	2.1 mH	1 mH	0.5 mH	0.2 mH	0.1 mH	0.05 mH
	C_0	93 nF	96 nF	110 nF	150 nF	180 nF	188 nF
Ex ib IIB/IIB/IIC	L_0	12 mH	10 mH	5 mH	0.5 mH	0.2 mH	0.1 mH
	C_0	540 nF	620 nF	710 nF	750 nF	910 nF	1.1 nF

Type 17-6583-.11./....
 $U_0 = 21\text{ V}$
 $I_0 = 139.2\text{ mA}$
 $P_0 = 731\text{ mW}$
 Characteristic: linear

Ex ib IIC	L_0	1.2 mH	1 mH	0.5 mH	0.2 mH	0.1 mH	0.05 mH
	C_0	83 nF	86 nF	100 nF	140 nF	170 nF	188 nF
Ex ib IIB/IIB/IIC	L_0	7.4 mH	5 mH	0.5 mH	0.2 mH	0.1 mH	0.05 mH
	C_0	630 nF	680 nF	730 nF	900 nF	1.1 nF	1.27 nF

Technical data

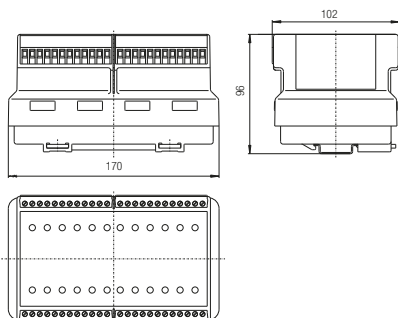
Construction	Flameproof, clip-on enclosure for TH 35 rail	
Enclosure material	High-quality thermoplastics	
Protection class	Electronic assembly	IP 66 EN/IEC 60529
	Terminals	IP 20 EN/IEC 60529
	Terminals with cover	IP 30 EN/IEC 60529
Terminals	2.5 mm ² , fine stranded	
Device designation	Front plate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

Electrical data

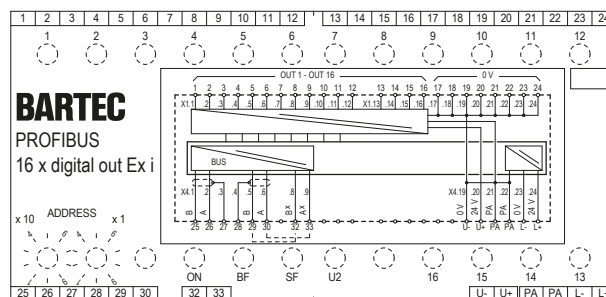
Supply voltage electronics (L +, L-)	DC 24 V (20 to 30 V)
Power consumption (L +, L-)	2.5 W
Supply voltage Outputs (U +, U-) suitable for emergency stop	DC 24 V (20 to 30 V)
Power output (U+, U-)	15 W (max.)
Reverse polarity protection (L +, L-, U +, U-)	Yes
Power dissipation	max. 8 W (Module)
Galvanic isolation	Power supply//bus//electronic//outputs
Bus interface	RS485 with screw terminals
Displays	Status ON, BF, SF, U2 Outputs LED yellow, active LED red, short-circuit

Outputs	
Output voltage	DC 18.1 V (at U+ ≥ 22 V)
Output data	$I_N = 30\text{ mA}$ $R_i = 220\ \Omega$ $I_N = 35\text{ mA}$ $R_i = 180\ \Omega$
Short-circuit protection	conditionally short-circuit-proof
Reverse polarity protection	Yes
Circuit monitoring	Combined fault via bus

Dimensions/mounting positions



Wiring diagram/terminal assignment



Note

Last bus module in system	Bridge A-A ^x (terminals 30, 33) Bridge B-B ^x (terminals 29, 32)
GSD file	BARX2301.gsd
Download	http://automation.bartec.de

Ordering information

PROFIBUS Interface 16 x digital out Ex i	Safety data Type 17-6583-.10./.... U ₀ = 21 V I ₀ = 111.6 mA P ₀ = 586 mW U _m = 253 V L ₀ = 3.2 mH (IIC)/12 mH (IIB) C ₀ = 188 nF (IIC)/1.27 μF (IIB)	07-7331-2301/1000
PROFIBUS Interface 16 x digital out Ex i	Safety data Type 17-6583-.11./.... U ₀ = 21 V I ₀ = 139.2 mA P ₀ = 731 mW U _m = 253 V L ₀ = 1.8 mH (IIC)/8 mH (IIB) C ₀ = 188 nF (IIC)/1.27 μF (IIB)	07-7331-2301/1100

Further data see certificate: TÜV 00 ATEX 1649. Technical data subject to change without notice.

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