

ASi-3 PROFIBUS Gateway with integrated Safety Monitor

2 ASi-3 Master, PROFIBUS Slave

Redundant power supply out of ASi: all fundamental functions of the device remain available even in case of power failure in one of the two ASi networks

Full functional range of Bihl+Wiedemann PROFIBUS Gateway BWU1568!

Enhanced functional range of Bihl+Wiedemann Safety Monitor BWU2000!

Compatible with the wide range of Bihl+Wiedemann power supplies

1 ASi Safety Monitor in Stainless Steel for 2 ASi networks

- Operation using a single Monitor configuration!
Monitor processes safety slaves on two ASi networks
Coupling between the two networks superfluous

Up to 16 release circuits

- 4 CAT4, SIL 3 safe output circuits on the Monitor
- two sets of safe relays
- two sets of fast electronic safe outputs

Safe ASi outputs are supported

- up to 16 independent ASi outputs
Multiple safe ASi outputs possible via a single ASi address

Monitor configuration can be „arbitrarily“ large

- 256 configuration blocks (previously 48)
Identical reaction time due to artificial limitation to 256 configuration blocks

Chip card for storage of configuration data



(Figure similar)



Article no.	BWU2227
Interface	
PROFIBUS interface	according to DIN 19 245, part 3
Baud rates	9,6 Kbaud up to 12 000 Kbaud, automatic recognition
DP functions	imaging of the ASi slaves as I/O data of the PROFIBUS complete diagnosis and configuration via the PROFIBUS DP
Serial interface	RS 232
ASi	
ASi cycle time	150 µs * (number of slaves + 2)
Operating voltage	ASi voltage 30 V _{DC}
Operating current	master power supply, max. 300 mA out of AS-i circuit 1 (approx. 70 mA ... 300 mA), max. 300 mA out of AS-i circuit 2 (approx. 70 mA ... 300 mA); in sum max. 370 mA

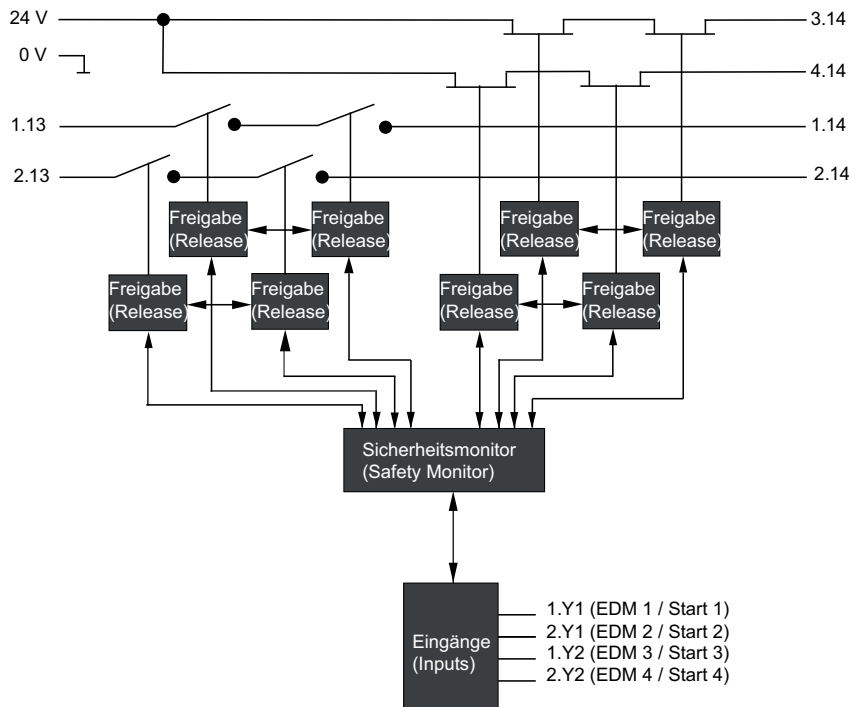
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Article no.	BWU2227
Display	
LCD	menu, indication of slave addresses and error messages in plain text
LED power	power ON
LED PROFIBUS	PROFIBUS communication active
LED config error	configuration error
LED U ASi	ASi voltage o.k.
LED ASi active	ASi normal operation active
LED prg enable	automatic addresses programming enabled
LED prj mode	configuration mode active
LED AUX	auxiliary power
LEDs 1.Y1, 1.Y2, 2.Y1, 2.Y2 (EDM/Start)	state of inputs: off: open on: closed
LEDs K1 ... K4	state of outputs: off: open on: closed
UL-specifications (UL508)	
External protection	an isolated source with a secondary open circuit voltage of $\leq 30 V_{DC}$ with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.
In general	UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.
Environment	
Applied standards	EN 61000-6-2 EN 61000-6-4 EN 62061:2005, SIL 3 EN 61508:2010/A1:2013, SIL 3 EN ISO 13849-1:2008/AC:2009, performance-level e
Operating altitude	max. 2000 m
Ambient temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Housing	stainless steel, for DIN rail mounting
Protection category (EN 60529)	IP20
Maximum tolerable shock and vibration stress	according EN 61131-2
Voltage of insulation	$\geq 500 V$
Weight	800 g
Dimensions (W / H / D in mm)	100 / 120 / 96

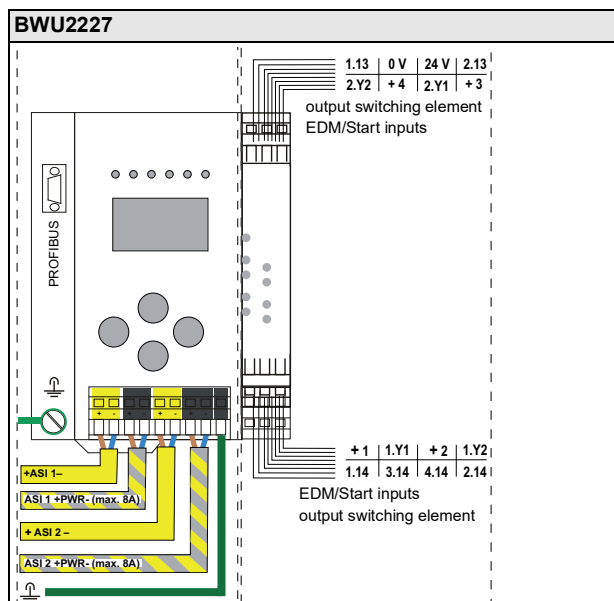
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Safety monitor	
Release circuits	4
Start delay	< 10 ms
Max. turn-off time	< 40 ms
Card slot	Chip card for storage of configuration data
Input	
4 x EDM/Start	EDM: inputs to monitor external devices Start: Start inputs switching current statical 4 mA at 24 V, dynamic 30 mA at 24 V (T=100 μ s)
Output	
4 x output switching elements	relay outputs (output circuits 1 and 2) max. contact load: 3 A AC-15 at 30 V, 3 A DC-13 at 30 V
Outputs	relay outputs (output circuits 1 and 2) max. contact load ¹ : 3 A _{AC-15} at 30 V, 3 A _{DC-13} at 30 V semiconductor outputs (output circuits 3 and 4) max. contact load: 0,5 A DC-13 at 30 V

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Safety outputs block diagram BWU2227



Connections:



Accessories:

- ASIMON 3 G2 and Asi Control Tools with serial cable for Asi Masters/Monitors in stainless steel (art. no. BW2071)
- Serial PROFIBUS-Master (art. no. BW1258)
- Asi Power Supply 4 A (art. no. BW1649) / Asi Power Supply 8 A (art. no. BW1997)
- PROFIBUS DP Master Simulator (art. no. BW1257)