

ASi-3 Sercos Gateways with integrated Safety Monitor

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CIP Safety and Safe Link in one device

Safely monitoring up to 32 safety drives with CIP Safety over Sercos

2 ASi master, Sercos Device

- switch integrated

Up to 64 release circuits

- up to 6 release circuits SIL 3, cat. 4 on the monitor

Safe ASi outputs are supported

- up to 64 independent ASi outputs
- Multiple safe ASi outputs possible via a single ASi address



(figure similar)

Applications up to category 4/PLe/SIL 3

Chip card for storage of configuration data



Figure	Field-bus Interface	Safety communication	Inputs Safety, SIL 3, cat. 4	Outputs Safety, SIL 3, cat. 4	Inputs Safety, expandable to	Safety outputs, independent according to SIL 3, expandable to	Number of ASi networks, number of ASi Master ⁽¹⁾	Integrated decoupling, ASi current measurement in the gateway ⁽²⁾	Diagnostic and configuration interface ⁽³⁾	Art. no.
	Safety, Sercos	CIP Safety over Sercos + Safe Link	–	–	max. 62 x 2 channels, max. 1922 in max. configuration	max. 64, max. 1984 in max. configuration	2 ASi networks, 2 ASi-3 masters	yes, max. 4 A/ASi network	Ethernet diagnostic	BWU3533

(1) **Number of ASi networks, number of ASi Master**
"Double Master": 2 ASi networks, 2 ASi-3 Masters.

(2) **Integrated decoupling, ASi current measurement in the gateway**

"yes, max. 4 A/ASi network": Data decoupling integrated in the gateway. Cost-effective power for 2 ASi networks with 1 power supply (optionally supply of multiple Single Gateways by 1 power supply). Operation with short cable lengths with standard 24 V power supply possible.

(3) **Diagnostic and configuration interface**

"Ethernet diagnostic": Access to ASi Master and Safety Monitor with Bihl+Wiedemann software by using the Ethernet diagnostic interface.

The latest version of the device description file of the gateway is available in the "Downloads" section of the respective device.

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Article no.		BWU3533
Fieldbus Interface		
Type	Sercos; 2 x RJ-45: 100MBaud, 2-Port-Switch, Sercos III	
Baud rates	100 MBaud	
Card slot	chip card for storage of configuration data	
Diagnostic Interface		
Type	Ethernet; RJ-45 acc. to IEEE 802.3	
Safety communication	CIP Safety via Sercos + Safe Link	
ASi		
ASi specification	3.0	
Cycle time	150 μ s * (number of nodes + 2)	
Operating voltage	ASi voltage 30 V _{DC}	
Operating current	300 mA	
Current per ASi circuit	up to 30 °C	4 A per ASi circuit, Σ (ASi) 8 A ⁽²⁾
	at 40 °C	4 A per ASi circuit, Σ (ASi) 7 A ⁽²⁾
	at 55 °C	4 A pro per ASi circuit, Σ (ASi) 6 A ⁽²⁾
ASi Power24V capability ⁽¹⁾	yes	
AUX		
Operating voltage	–	
Max current consumption	–	
Display		
LCD	indication of ASi addresses and error messages in plain text	
LED power (green)	power on	
LED Sercos (green)	Sercos communication active	
LED config error (red)	configuration error	
LED U ASi (green)	ASi voltage o.k.	
LED ASi active (green)	ASi normal operation active	
LED prg enable (green)	automatic addresses programming enabled	
LED prj mode (yellow)	configuration mode active	
LED AUX (green)	auxiliary power	
LEDs SI1 ... SI6 (yellow)	–	
LEDs SO1 ... SO6 (yellow)	–	
UL-specifications (UL508)		
External protection	an isolated source with a secondary open circuit voltage of ≤ 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.	

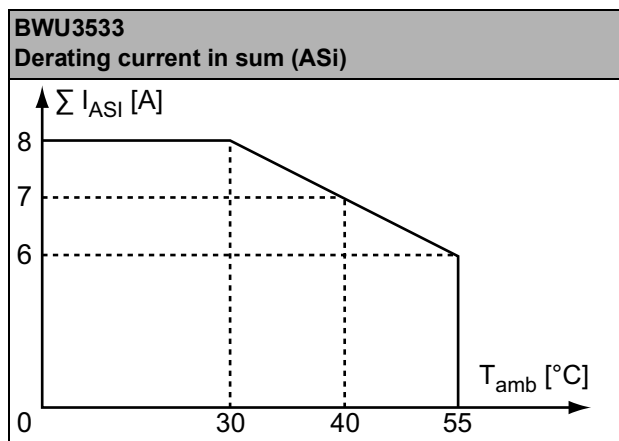
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Article no.	BWU3533
Environment	
Applied standards	EN 60529 EN 62026-2 EN 61000-6-2 EN 61000-6-4 EN 62061, SIL 3 EN 61508, SIL 3 EN ISO 13849-1, PLe
Operating altitude	2000 m
Ambient temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Housing	stainless steel, for DIN rail mounting
Protection category	IP20
Maximum tolerable shock and vibration stress	according to EN 61131-2
Voltage of insulation	≥500 V
Weight	800 g
Dimensions (W / H / D in mm)	85 / 120 / 106

(1) **ASi Power24V**

The device can be operated directly on a 24 V (PELV) power supply. The gateway has been optimized with integrated data coupling coils and adjustable self-resetting fuses for safe use of powerful 24 V power supplies.

(2)

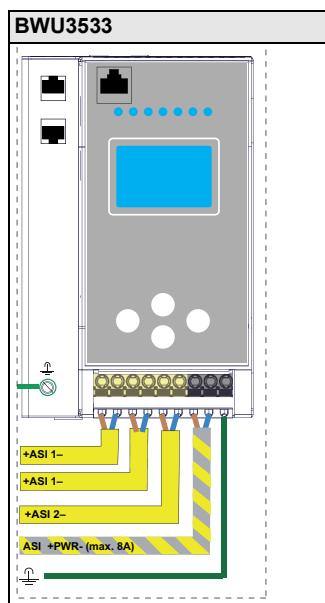


Article no.	Operating current		
	master power supply, approx 300 mA out of ASi network	master power supply, max. 300 mA out of ASi circuit 1 (approx. 70 mA ... 300 mA), max. 300 mA out of ASi circuit 2 (approx. 70 mA ... 300 mA); in sum max. 370 mA	Cost-effective power for 2 ASi networks with 1 power supply, ca. 300 mA (PELV voltage)
BWU3533	-	-	•

	BWU3533
Data decoupling integrated in the gateway	•
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	-
Current measurement of the ASi circuits	•
Self-resetting adjustable fuses	•
ASi earth fault monitor distinguishes between ASi cable and sensor cable	•
Cost-effective power for 2 ASi networks with 1 power supply	•

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Connections: Gateway



Accessories:

- Safe contact expander, 1 or 2 independent channels (art. no. BWU2548 / BWU2539)
- Bihl+Wiedemann Suite - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2916)
- Power supplies, e.g.: ASi power supply, 4 A (art. no. BW1649), ASi power supply, 8 A (art. no. BW1997)
(further power supply units can be found at www.bihl-wiedemann.de/en/products/accessories/power-supplies)