

# ASi-3 Gateway, PROFIsafe via PROFINET, with integrated safety monitor

## ASi-3 PROFIBUS-DP Gateway/Link with integrated Safety Monitor

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

### Gateway + Safety Monitor in one housing:


- Full functional range of Bihl+Wiedemann PROFIBUS Gateway BWU1567
- Enhanced functional range of Bihl+Wiedemann Safety Monitor BWU2044



### 1 ASi-3 Master PROFIBUS Device

### Chip card for storage of configuration data



Figure	Fieldbus 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 <sup>(1)</sup>	Integrated decoupling, ASi current measurement in the gateway <sup>(2)</sup>	Diagnostic and configuration interface	Article No.
	PROFIBUS	—	—	2 FGK; 2 x 2 Relais	—	—	2 ASi networks, 1 ASi-3 Master	no, max. 8 A/ASi network, redundant supply	—	<b>BWU2027</b>

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

(2) **Integrated decoupling, ASi current measurement in the gateway**  
"no, max. 8 A/ASi network, redundant supply ": 1 ASi power supply per ASi network. Gateway is powered in normal operation from one of the two ASi power supplies. Should one ASi power supply fail, switching to the other ASi power supply allows all the diagnostics functions to be maintained and the unaffected ASi network continues to operate.

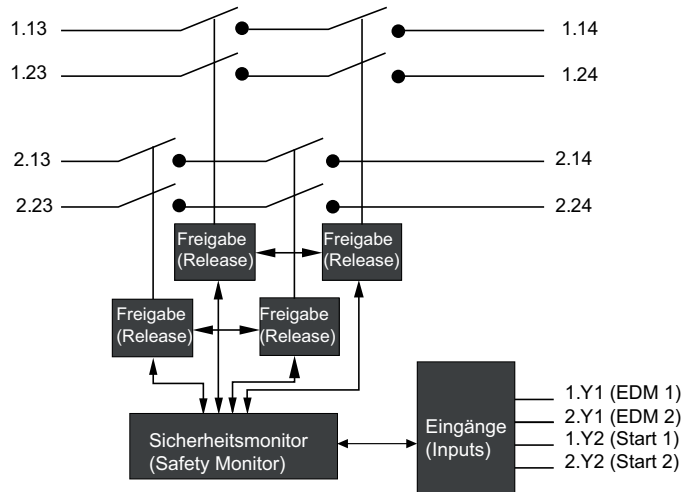
BWU2027	safe ASi outputs are not supported
<b>Fieldbus Interface</b>	
Type	PROFIBUS according to DIN 19 245, part 3
Baud rates	9,6 kBaud up to 12 000 kBaud, automatic recognition
DP functions	imaging of the ASi nodes as I/O data of the PROFIBUS complete diagnosis and configuration via the PROFIBUS DP
Serial interface	RS 232
Card slot	Chip card for storage of configuration and additional data
<b>ASi</b>	
ASi cycle time	150 µs*(number of nodes + 2)
Operating current	master power supply, max. 300 mA out of ASi circuit 1 (approx. 70 mA ... 300 mA) max. 200 mA out of ASi circuit 2 (approx. 70 mA ... 300 mA); in sum max. 370 mA
Operating voltage	30 V, 9 W

# ASi-3 Gateway, PROFIsafe via PROFINET, with integrated safety monitor

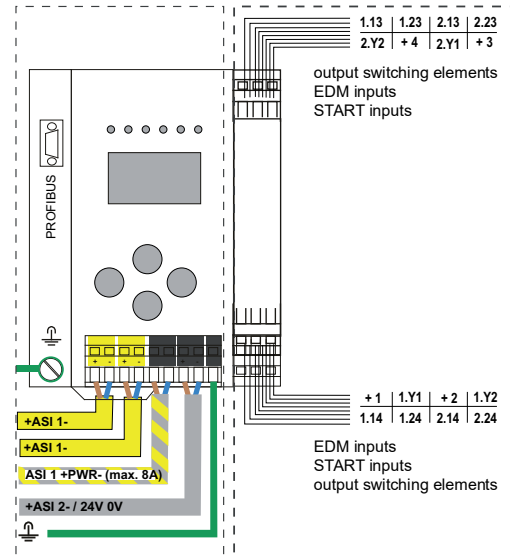
<b>BWU2027</b>	<b>safe ASi outputs are not supported</b>
<b>Display</b>	
LCD	indication of ASi addresses and error messages
LED <i>power</i>	power on
LED <i>PROFIBUS</i>	PROFIBUS master recognized
LED <i>config error</i>	configuration error
LED <i>U ASi</i>	ASi voltage OK
LED <i>ASi active</i>	ASi normal operation active
LED <i>prg enable</i>	automatic address programming enabled
LED <i>prj mode</i>	configuration mode active
<b>UL-specifications (UL508)</b>	
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.
<b>Environment</b>	
Standards	EN 61 000-6-2 EN 61 000-6-4 EN 62 061:2005, SILCL 3 EN 61 508:2001, SIL3 EN 954-1, categorie 4 EN ISO 13 849-1:2008, performance level e
Ambient operating temperature	0°C ... +55°C
Storage temperature	-25°C ... +85°C
Housing	ASi master housing in stainless steel
Protection category IEC 60 529	IP20
Tolerable loading referring to impacts and vibrations	according to EN 61 131-2
Voltage of insulation	$\geq 500 V$
Weight	800 g
Dimensions (L / W / H in mm)	120 / 100 / 96
<b>Safety Monitor</b>	
Release circuits	2-channel
Start delay	< 10 s
Respond delay	< 40 ms
Inputs	2 x EDM / inputs of external device monitoring circuits 1 and 2 2 x Start / start inputs, output circuits 1 and 2 switching current statical 4 mA at 24 V, dynamic 30 mA at 24 V (T=100 $\mu$ s)
Outputs	4 x output switching elements, output circuits 1 and 2 max. contact load: 3 AAC-15 at 30 V, 3 A DC-13 at 30 V

# ASi-3 Gateway, PROFIsafe via PROFINET, with integrated safety monitor

## Safety Monitor block diagram:



## Connections:



## Accessories:

- Software ASIMON 3 G2 and „ASi Control Tools" with serial cable for ASi Master/monitors in stainless steel (art. no. BW2071)
- Serial PROFIBUS Master (art. no. BW1258)
- PROFIBUS DP Master Simulator (art. no. BW1257)