

AS-i 3.0 PROFINET Gateway with integrated Safety Monitor

2 AS-i 3.0 Master, PROFINET-Slave

- Redundant power supply out of AS-i:
all fundamental functions of the device remain available even in case of power failure in one of the two AS-i networks
- Full functional range
of Bihl+Wiedemann PROFINET Gateway BWU2239!
- Enhanced functional range
of Bihl+Wiedemann Safety Monitor BWU2000!
- Compatible with the wide range of
Bihl+Wiedemann power supplies

1 AS-i Safety Monitor in Stainless Steel for 2 AS-i networks

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

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 AS-i outputs are supported on both AS-i networks

- 16 independent AS-i outputs
Multiple safe AS-i outputs possible via a single AS-i 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

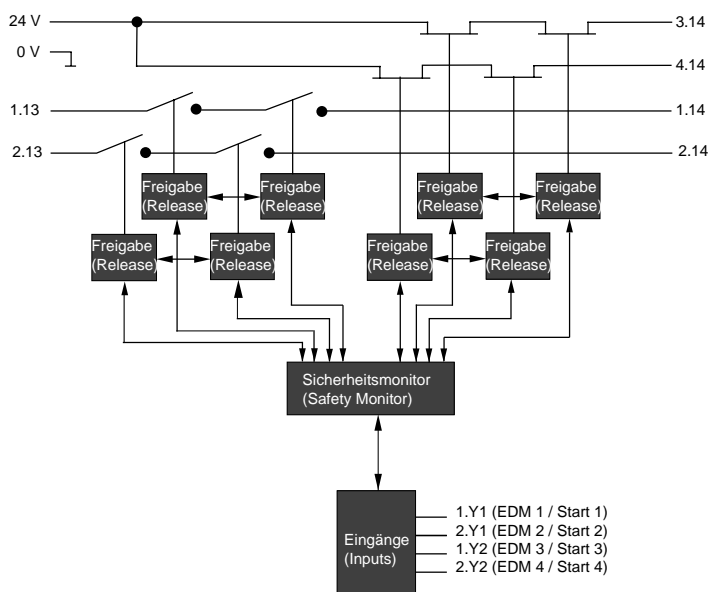


Article no.	BWU2534
PROFINET interface	RJ-45
Conformance class	B
Baud rates	10/100 MBaud
Serial interface	RS 232
AS-i cycle time	150 µs · (number of slaves + 2)
Safety monitor	
Release circuits	4
Start delay	< 10 s
Respond delay	< 40 ms
Inputs: 4 x EDM/Start	EDM: inputs to monitor external devices Start: Start inputs switching current statical 4 mA at 24 V, dynamic 30 mA at 24 V (T=100 µs)
Outputs: 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 semiconductor outputs (output circuits 3 and 4) max. contact load: 0,5 A DC-13 at 30 V
Card slot	chip card for storage of configuration data
Displays	
LCD	indication of slave addresses and error messages
LED <i>power</i>	power on
LED <i>PROFINET</i>	PROFINET master recognized
LED <i>config error</i>	configuration error
LED <i>U AS-i</i>	AS-i voltage OK
LED <i>AS-i active</i>	AS-i normal operation active
LED <i>prg enable</i>	automatic addresses programming enabled
LED <i>prj mode</i>	configuration mode active
LED <i>AUX</i>	auxiliary power

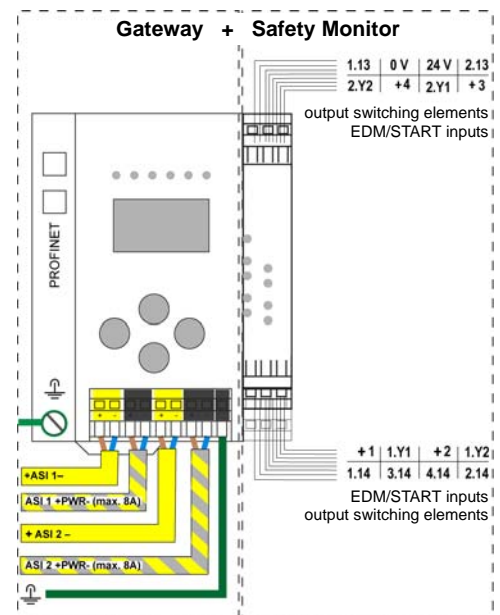
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4 x LED EDM/Start	state of inputs: <i>LED off: open</i> <i>LED on: closed</i>
4 x LED output circuit	state of output circuits: <i>LED off: open</i> <i>LED on: closed</i>
Operating current	master power supply, max. 300 mA out of AS-i circuit 1 (approx. 70 mA ... 300 mA), max. 300 mA out of AS-i circuit 2 (approx. 70 mA ... 300 mA); in sum max. 370 mA
Operating voltage	30 V, 9 W
Voltage of insulation	≥ 500 V
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.
cTÜVus	The devices BWU2534 from Bihl + Wiedemann GmbH were safety certified by TÜV Rheinland of North America, Inc. according to UL-standards and meet the safety requirements for the North American market.
Standards	EN 61 000-6-2 EN 61 000-6-4 EN 62 061:2005, SILCL 3 EN 61 508:2001, SIL 3 EN ISO 13 849-1:2008, performance level e
Housing	AS-i master housing in stainless steel
Ambient operating temperature	0°C ... +55°C
Storage temperature	-25°C ... +85°C
Dimensions (L / W / H in mm)	120 / 100 / 96
Protection category IEC 60 529	IP20
Tolerable loading referring to impacts and vibrations	according to EN 61 131-2
Weight	800 g

Safety Monitor block diagram:



Connections:



Accessories:

- Serial cable and adapter for AS-i Gateways in Stainless Steel (Art. no. BW2513)
- ASIMON and AS-i-Control-Tools for AS-i-Master/Monitors in Stainless Steel (Art. no. BW2501)