

## ASi Safety Input Module, IP20

- for antivalent switches



(Figure similar)

Figure	Inputs Safety, SIL 3, Kat. 4	Safety signal Inputs	Outputs digital	Input voltage (sensor supply.) <sup>(1)</sup>	Output voltage (actuator supply.) <sup>(2)</sup>	ASi address <sup>(3)</sup>	Article no.
	1 x 2-channels	antivalent switches	2 x electronic	out of ASi	out of ASi	1 Single address	<b>BWU3882</b>

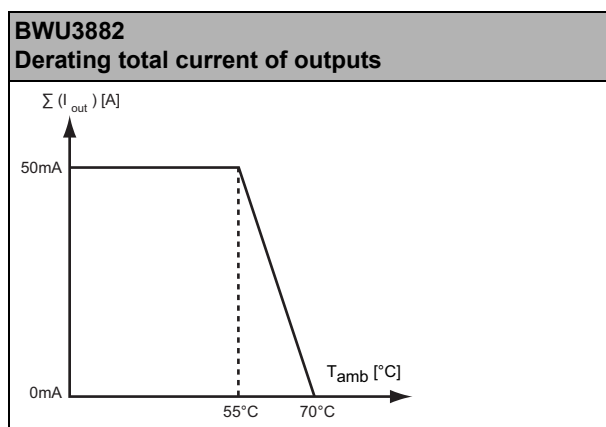
- (1) **Input voltage (sensor supply):** inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.
- (2) **Output voltage (actuator supply):** outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, outputs shall not be connected to earth or to external potential
- (3) **ASi address:** 1 AB address (max. 62 AB addresses/ASi network), 2 AB addresses (max. 31 modules with 2 AB addresses), Single addresses (max. 31 Single addresses/ASi network), mixed use allowed.

<b>Article no.</b>	<b>BWU3882</b>	
<b>Connection</b>		
ASi/AUX connection	Push-in terminals <sup>(1)</sup>	
Periphery connection	Push-in terminals <sup>(1)</sup>	
Length of connector cable	E/A: max. 15 m	
<b>ASi</b>		
Profile	S-7.B.0, ID1=F	
Address	1 Single address	
Operating voltage	30 V <sub>DC</sub> (22 ... 31,6 V)	
Required Master profile	≥M3	
As of ASi specification	2.1	
Max. current consumption	100 mA	
<b>AUX</b>		
Voltage	-	
Max. current consumption	-	
<b>Input</b>		
Number	1 x 2-channels safe input for floating contacts	
Safety signal Input	antivalent switches	
Switching current	static 4 mA at 24 V, dynamic 15 mA at 24 V (T = 100 μs)	
Power supply	out of ASi	
Switching threshold	10 mA, R < 150 Ω	
<b>Output</b>		
Number	2, electronic, short-circuit protected	
Power supply	out of ASi	
Max. current consumption	up to 40 °C	Σ(Out) 50 mA <sup>(2)</sup>
	at 45 °C	
	at 55 °C	
	at 70 °C	Σ(Out) 0 mA <sup>(2)</sup>

<b>Article no.</b>	<b>BWU3882</b>
<b>Display</b>	
LED ASI (green)	on: ASi voltage on flashing: ASi voltage on, but peripheral fault <sup>(3)</sup> or address 0 off: no ASi voltage
LED FLT/FAULT (red)	on: no exchange of data or address 0 flashing: peripheral fault <sup>(3)</sup>
LED ASI/FLT (red/green)	–
LED ASI/FLT2 (red/green)	–
LED AUX (green)	–
LED CC (red)	Cross-connection <sup>(3)</sup>
LEDs O1 ... On (yellow)	state of outputs O1, O2
LED S1 ... Sn (yellow)	state of inputs S1, S2
<b>Environment</b>	
Applied standards	EN 60529 EN ISO 13849-2 EN 61000-6-2 EN 61000-6-4 EN 61131-2 EN 62026-2  EN 62061 SIL3 EN ISO 13849-1 PLe Kat 4
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +55 °C (up to max. +70 °C) <sup>(2)</sup> <sup>(4)</sup> no condensation permitted
Storage temperature	-25 °C ... +85 °C
Housing	plastic, for DIN rail mounting
Pollution degree	2
Protection category	IP20
Tolerable loading referring to humidity	according to EN61131-2
Maximum tolerable shock and vibration stress	≤ 15 g, T ≤ 11 ms 10 ... 55 Hz, 0,5 mm amplitude
Weight	60 g
Dimensions (W / H / D in mm)	22,5 / 99,6 / 50,5

(1) See table "Wiring rules"

(2)



(3) See table „Peripheral fault indication“

(4) Maximum ambient operating temperature +55 °C according to UL certificate for use in the USA and Canada

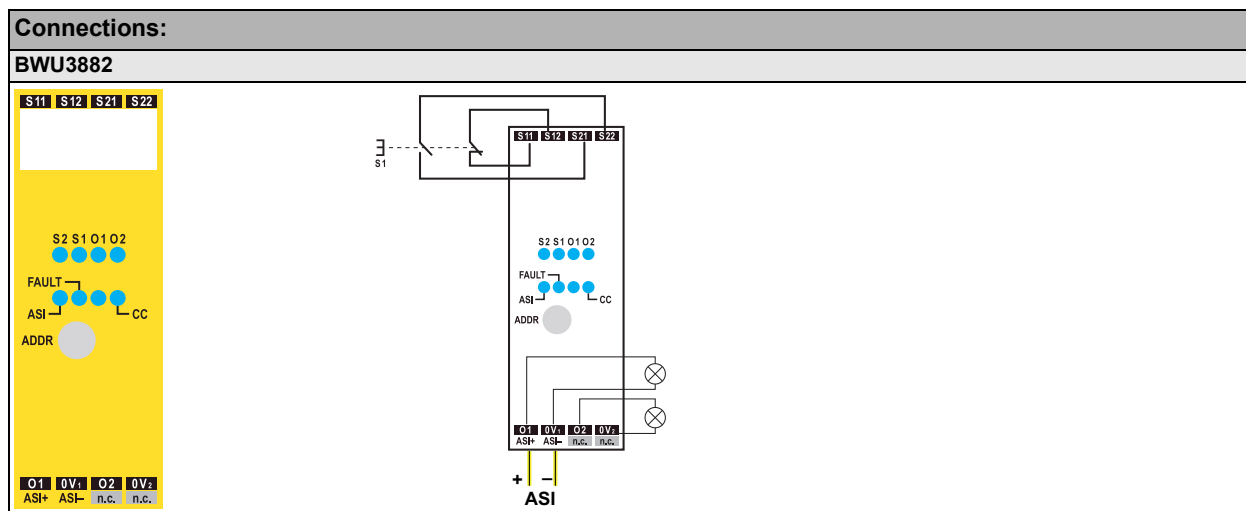
## Wiring rules

Push-in terminals, 2 /3 /4 poles (pitch 5 mm)	
<b>General</b>	
Nominal cross section	2.5 mm <sup>2</sup>
<b>Conductor cross section</b>	
Conductor cross section solid	0.2 ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 ... 2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule	without plastic sleeve: 0.25 ... 2.5 mm <sup>2</sup>
	with plastic sleeve: 0.25 ... 2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules	without plastic sleeve: 0.5 ... 1.5 mm <sup>2</sup>
AWG	24 ... 14
Stripped insulation length	10 mm

UL-Specifications (UL508) BWU3882	
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.

Article no.	Peripheral fault indication				
	Cross-connection	Overload sensor supply	output overload	AUX voltage missing	Sensor cable break
BWU3882	•	-	•	-	-

Programming:	ASi bit assignment			
	D3	D2	D1	D0
<b>safe input</b>				
BWU3882	S21 / S22 negated		S11 / S12	
<b>standard output</b>				
BWU3882	not used	not used	O2	O1
<b>parameter bit</b>				
	P3	P2	P1	P0
BWU3882	not used	not used	not used	0: off / 1: on (Watchdog)



**Accessories:**

- ASi-5/ASi-3 Address Programming Device (art. no. BW4925)
- Bihl+Wiedemann Safety Suite License - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2916)