

ASi Safety Input Module, IP20

- for antivalent switches



(Figure similar)

Figure	Type	Housing	Inputs Safety, SIL 3, Kat. 4	Outputs digital	Safety signal Inputs	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	ASi address ⁽³⁾	Article no.
	IP20, 22,5 mm x 50 mm, 3 x COMBICON, Safety	3 x COMBICON	1 x 2-channels	2 x electronic	antivalent switches	out of ASi	out of ASi	1 Single address	BWU3882

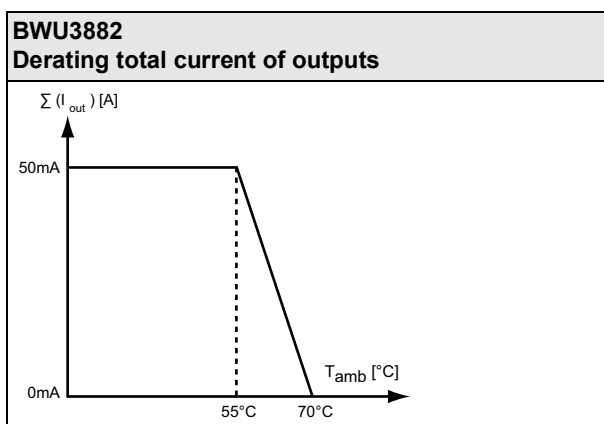
- (1) **Input voltage (sensor supply):** inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.
- (2) **Output voltage (actuator supply):** outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied 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.

Article no.	BWU3882	
Connection		
ASi/AUX connection	COMBICON cable socket, Push-in terminals ⁽¹⁾	
Periphery connection	COMBICON cable socket, Push-in terminals ⁽¹⁾	
Length of connector cable	E/A: max. 15 m	
ASi		
Profile	S-7.B.0, ID1=F	
Address	1 Single address	
Operating voltage	30 V _{DC} (22 ... 31,6 V)	
Required Master profile	≥M3	
As of ASi specification	2.1	
Max. current consumption	100 mA	
AUX		
Voltage	–	
Max. current consumption	–	
Input		
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	
Output		
Number	2, electronic, short-circuit protected	
Power supply	out of ASi	
Max. current consumption	up to 40 °C	Σ(Out) 50 mA ⁽²⁾
	at 45 °C	
	at 55 °C	
	at 70 °C	Σ(Out) 0 mA ⁽²⁾

Article no.	BWU3882
Display	
LED ASI (green)	on: ASi voltage on flashing: ASi voltage on, but peripheral fault ⁽³⁾ or address 0 off: no ASi voltage
LED FLT/FAULT (red)	on: no exchange of data or address 0 flashing: peripheral fault ⁽³⁾
LED ASI/FLT (red/green)	–
LED ASI/FLT2 (red/green)	–
LED AUX (green)	–
LED CC (red)	Cross-connection ⁽³⁾
LEDs O1 ... On (yellow)	state of outputs O1, O2
LED S1 ... Sn (yellow)	state of inputs S1, S2
Environment	
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) ⁽²⁾ ⁽⁴⁾ 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

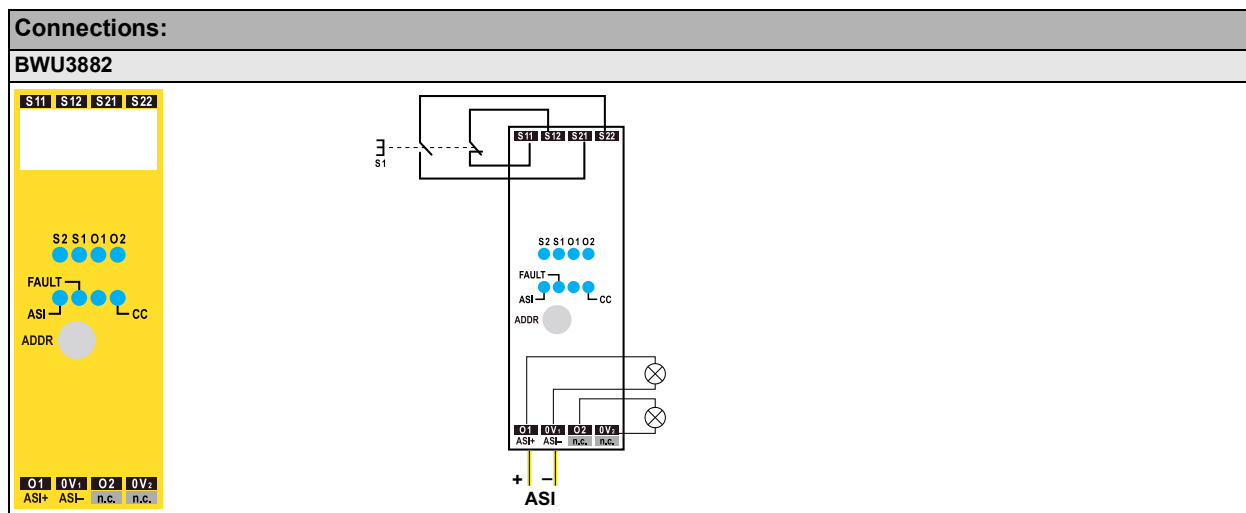
Wiring rules

Push-in terminals	
General	
Nominal cross section	2.5 mm ²
Conductor cross section	
Conductor cross section solid	0.2 ... 2.5 mm ²
Conductor cross section flexible	0.2 ... 2.5 mm ²
Conductor cross section flexible, with ferrule	without plastic sleeve: 0.2 ... 2.5 mm ²
	with plastic sleeve: 0.25 ... 2.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules	without plastic sleeve: 0.5 ... 1.5 mm ²
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
safe input				
BWU3882	S21 / S22 negated		S11 / S12	
standard output				
BWU3882	not used	not used	O2	O1
parameter bit				
	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. BW4708)