

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 Slave	BWU3882

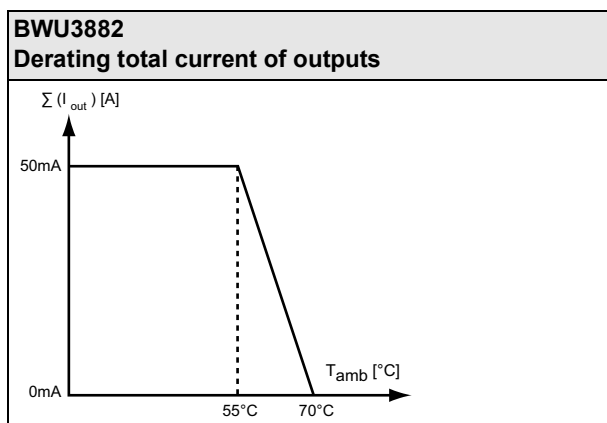
- (1) **Input voltage (sensor supply):** inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.
- (2) **Output voltage (actuator supply):** outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, outputs shall not be connected to earth or to external potential
- (3) **ASi address:** 1 AB Slave (max. 62 AB Slaves/ASi network), 2 AB Slaves (max. 31 modules with 2 AB Slaves), Single Slaves (max. 31 Single Slaves/ASi network), mixed use allowed.
 For modules with two slaves the second slave is turned off as long as the first slave is addressed to address "0".
 Upon request, slaves are available with specific ASi Slave profiles.

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 Slave	
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	Σ(Out) 0 mA ⁽²⁾
	at 70 °C	
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	

Article no.	BWU3882
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 Klemmen	
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	with 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	
parameter bit				
	P3	P2	P1	P0
BWU3882	not used	not used	not used	0: off / 1: on (Watchdog)

