

Voltage converter 48 V/24 V, IP67

Voltage converter AUX 48 V to AUX 24 V

Connections for profile cables 1 x AUX 48 V to 1 x AUX 24 V as profile cable branch

or

Connections for profile cables 1 x ASi + 1 x AUX 48 V to 1 x M12 cable socket, angled, 5 poles for ASi/AUX 24 V

1 A output current

LED



(figure similar)

Figure	Power supply (1)	Input voltage	Output voltage	Profile cable connection	Connection (2)	Round cable (3)	Protection category	Article no.
	Voltage converter 48 V/24 V	48 VDC (AUX)	24 VDC (AUX)	1 x AUX 24 V, 1 x AUX 48 V	profile cable branch	–	IP67	BWU4248
	Voltage converter 48 V/24 V	ASi + 48 VDC (AUX)	ASi + 24 VDC (AUX)	1 x ASi, 1 x AUX 48 V	1 x M12 cable socket, angled, 5-poles	1 m	IP67	BWU4249
	Voltage converter 48 V/24 V	48 VDC (AUX)	24 VDC (AUX)	1 x AUX 48 V	1 x M12 cable socket, angled, 5-poles	1 m	IP67	BWU4250

(1)

	Notice
	<p>48 V_{DC} must not be connected:</p> <ul style="list-style-type: none"> to devices with 24 V_{DC} operating voltage (observe instructions of the manufacturer) to the ASi connection of a module to the ASi gateway

(2)

Connection: further connection options are available on request.

M12 cable socket, angled	M12 cable socket, straight	M8 cable socket, straight	round cable / connecting wires
PUR line: oil resistant			

(3)

Cable: other cable lengths are available on request.

Under normal conditions (no bus termination or repeater), the permissible total length of the **ASi segment** is **max. 100 m**. The calculation should take into consideration that the length of the connection cable (**round cable**) for each connected **Passive Distributor** must be **doubled**. In the case of the **Active Distributors** (ASi slaves) however only the **one** ASi profile cable is counted.

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Article No.	BWU4248	BWU4250	BWU4249
Input			
Nominal voltage	–		ASi: 30,5 V _{DC} ± 1%
	AUX 48 V: 48 V _{DC}		
Voltage range	–		ASi: 29 ... 32 V _{DC}
	AUX 48 V: 48 V _{DC} + 10%/- 20%		
Output			
Nominal voltage	–		ASi: 30,5 V _{DC} ± 1%
	AUX 24 V: 24 V _{DC}		
Voltage range	–		ASi: 29 ... 32 V _{DC}
	AUX 24 V: 24 V _{DC} ± 5%		
Direct current	1 A		
24 V power supply	short-circuit, overload and open-circuit proof		
Display			
LED AUX IN (green)	on: AUX voltage 48 VDC at profile cable AUX In (gray) O.K.		
LED AUX OUT (green)	on: AUX voltage 24 VDC at profile cable AUX OUT (black) O.K.	on: AUX voltage 24 VDC at M12 connection AUX OUT O.K.	on: AUX voltage 24 VDC at M12-connection ASi/AUX OUT O.K.
LED ASi (green)	–		on: ASi voltage O.K.
Connection			
Profile cable connection	1 x AUX 24 V (black)	–	1 x ASi (yellow)
	1 x AUX 48 V (gray)		
Connection	profile cable branch	1 x M12 cable socket, angled, 5 poles	
Round cable	–	1 m	
		max. allowed tensile strain 10 N	
Environment			
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-3		
Can be used in passively safe paths up to SIL3/PLe	yes ⁽¹⁾		no ⁽³⁾
Operating altitude	max. 2000 m		
Ambient temperature	-25 °C ... +70 °C ⁽²⁾ (no condensation permitted)		
Storage temperature	-25 °C ... +85 °C		
Housing	plastic, for screw mounting, suitable for cable ducts (installation depth ≥35 mm)		
Pollution Degree	2		
Protection category	IP67		
Tolerable loading referring to humidity	acc. EN61131-2		
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude		
Insulation voltage	≥500 V		
Weight	120 g	165 g	
Dimensions (W / H / D) in mm	60 / 45 / 35		

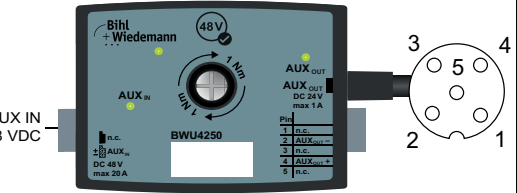
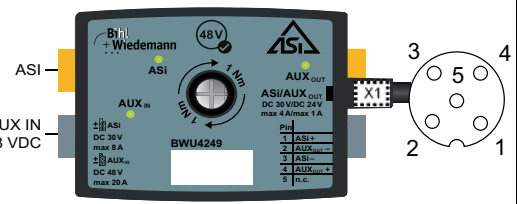
⁽¹⁾ The voltage converter is suitable for use in passively safe paths as it has no connection to any other potential (e.g. ASi).

⁽²⁾ Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.

⁽³⁾ The voltage converter is not suitable for use in passively safe paths because an exclusion of errors cannot be assumed for the connection of the two potentials, ASi and AUX.

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Connections: M12						
Article No.	M12 connection	Pin1	Pin2	Pin3	Pin4	Pin5
BWU4249	X1	ASi +	AUX OUT -	ASi -	AUX OUT +	n.c.
BWU4250	X1	n.c.	AUX OUT -	n.c.	AUX OUT +	n.c.



Connections: profile cable branch	
BWU4248	<p>Diagram of BWU4248 voltage converter showing profile cable branch connections. AUX IN 48 VDC, AUX OUT 24 VDC.</p>