

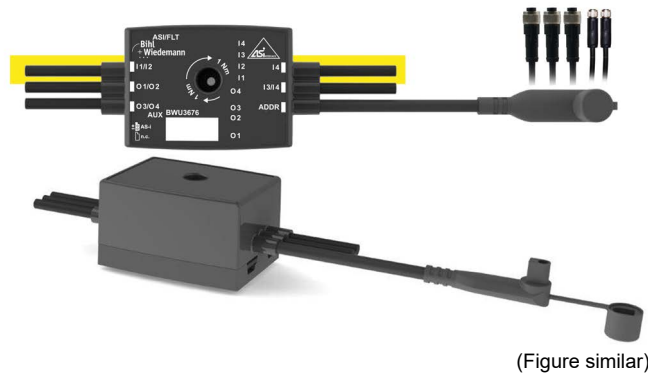
1 x connector for profile cable

Periphery connection via
3 x M12 cable sockets, straight, 5 poles +
2 x M8 snap-in cable sockets, straight, 4 poles

ASi connection via profile cable and
piercing technology

AUX connection via M12 cable socket

1 x connection for ASi addressing device



(Figure similar)



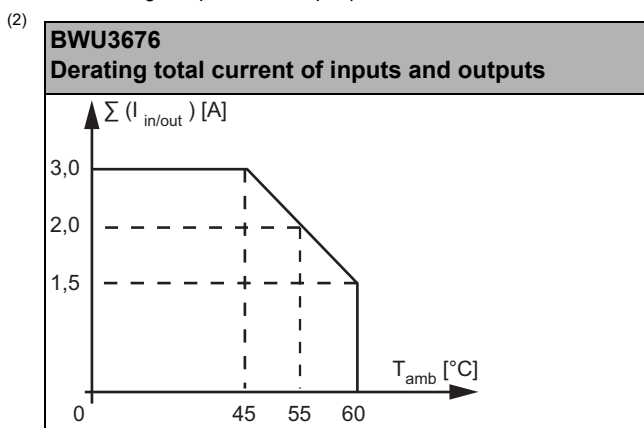
Figure	Inputs digital	Outputs digital	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	Connection ⁽³⁾	ASi address ⁽⁴⁾	Art. no.
	4	4 x electronic	out of AUX	out of AUX	3 x M12 cable sockets, straight, 5 poles + 2 x M8 snap-in cable sockets, straight, 4 poles + 1 x ASi addressing cable socket	1 AB address	BWU3676

- (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) **Connection:** further connection options are available on request.
- (4) **ASi address:** AB addresses (max. 62 AB addresses/ASi network), 2 AB addresses (max. 31 modules with 2 AB addresses), Single addresses (max. 31 Single addresses/ASi network), ASi-5 address (max. 62 ASi-5 addresses/ASi network), mixed use allowed. Upon request, ASi-3 nodes are available with specific ASi node profiles. For modules with two ASi-3 nodes the 2nd ASi-3 node is turned off as long as the 1st ASi-3 node is addressed to address "0".

Article No.		BWU3676
General data		
Device type		input/output
Connection		
ASi/AUX connection		ASi: profile cable and piercing AUX: M12 cable socket, straight, 5 poles
Periphery connection		3 x M12 cable sockets, straight, 5 poles + 2 x M8 snap-in cable sockets, straight, 4 poles + 1 x ASi addressing cable socket
M12 wiring ⁽¹⁾		–
Round cable		I1/I2: 0,1 m I3/I4: 0,3 m O1/O2: 0,2 m O3/O4: 0,3 m ASi addressing cable socket: 0,05 m
		max. allowed tensile strain 10 N
ASi		
Profile		S-7.A.7 (ID1=7 fixed)
Address		1 AB address
Required Master profile		≥M4
As of ASi specification		3.0
Operating voltage		=== 30 V _{DC} (18 ... 31.6 V)
Max. current consumption		40 mA
Max. current consumption without sensor/ actuator supply		40 mA
AUX		
Operating voltage		=== 24 V _{DC} (18 ... 30 V)
Max. current consumption		3 A
Input		
Number		4
Power supply		out of AUX
Power supply of attached sensors	up to +45 °C	1 A, $\sum (I_{n}/O_{n}) \leq 3 \text{ A}^{(2)}$
	at +55 °C	1 A, $\sum (I_{n}/O_{n}) \leq 2 \text{ A}^{(2)}$
	at +60 °C	1 A, $\sum (I_{n}/O_{n}) \leq 1,5 \text{ A}^{(2)}$
Switching threshold		U<5 V (low) U>15 V (high)
Output		
Number		4
Power supply		out of AUX
Max. output current	up to +45 °C	1 A per output, $\sum (I_{n}/O_{n}) \leq 3 \text{ A}^{(2)}$
	at +55 °C	1 A per output, $\sum (I_{n}/O_{n}) \leq 2 \text{ A}^{(2)}$
	at +60 °C	1 A per output, $\sum (I_{n}/O_{n}) \leq 1,5 \text{ A}^{(2)}$
Display		
LED ASi/FLT (red/green)		green: ASi voltage on, ASi node online green/red: ASi voltage on, but ASi node offline green flashing/red: address 0 green/red flashing: peripheral fault ⁽³⁾ off: no ASi voltage
LED AUX (green)		on: 24 V _{DC} AUX off: no 24 V _{DC} AUX
LEDs I1 ... In (yellow)		state of inputs I1 ... I4
LED O1 ... On (yellow)		state of outputs O1 ... O4

Article No.		BWU3676
Environment		
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529	
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	yes ⁽⁴⁾	
Operating altitude	max. 2000 m	
Ambient temperature	-30 °C ... +60 °C ⁽²⁾ ⁽⁵⁾	
Storage temperature	-25 °C ... +85 °C	
Intended environment	for indoor use only ⁽⁶⁾	
Housing	plastic, for screw mounting, suitable for cable ducts (≥35 mm installation depth)	
Pollution degree	2	
Protection category	IP54	
Overvoltage category	II	
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude	
Insulation voltage ASi/AUX (internal)	2 kV RMS AC for 60s (performance test)	
Insulation voltage (external)	any wire to all surfaces, except screws of M8 connectors	3 kV RMS AC for 60 s (performance test)
	any wire to screws of M8 connectors	1 kV RMS AC for 60 s (performance test)
External protection	UL - Class 2 source required	
Weight	100 g	
Dimensions (W / H / D) in mm	60 / 45 / 35	

- (1) **M12 wiring:**
Single wiring: 1 input or output per connection.
Y wiring: 2 inputs or outputs per connection.
Mixed wiring: 1 input and 1 output per connection.



- (3) **see table "Peripheral fault indication"**
- (4) The module is suitable for use in paths with a passively safe-switched AUX cable, since an exclusion of errors can be assumed for the connection of the two ASi and AUX potentials.
- (5) Down to -25 °C with flexibly mounted cable, -30 °C only with fixed mounted cable.
- (6) Intended environment according to UL certificate for the use in the USA and Canada.

UL-specifications (UL61010) BWU3676	
Model ⁽¹⁾	PCO.DBA3-3676
External protection	The supply source to these devices shall meet the requirements of Class 2 of NEC, or Limited Energy of UL/CSA 61010-1, -2-201 or Limited Power Source of UL/CSA 60950/62368-1.

(1) See reference of UL file E227214 "Programmable Controllers "Active Distributor Family""

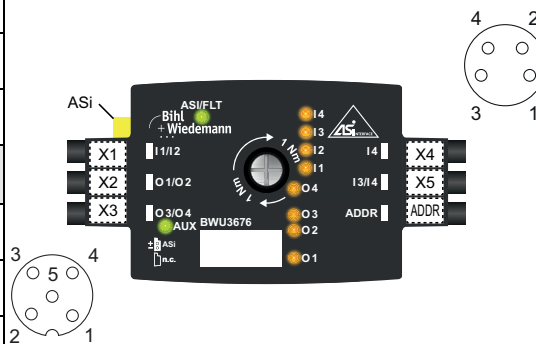
Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BWU3676	-	-	•

Programming	ASi bit assignment			
	D3	D2	D1	D0
	input			
BWU3676	I4	I3	I2	I1
	output			
BWU3676	O4	O3	O2	O1
	parameter bit			
	P3	P2	P1	P0
BWU3676	not used	0= on / 1= off (synchronous I/O mode)	0= off / 1= on (peripheral fault, if AUX missing)	0= off / 1= on (Watchdog)

Pin assignment

Signal name	Explanation
Ix	digital input x
Ox	digital output x
24V _{ext out}	power supply, out of external voltage, positive pole (AUX, actuator supply)
0V _{ext out}	power supply, out of external voltage, negative pole (AUX, actuator supply)
24V _{out of ASi}	power supply, out of ASi, positive pole (sensor supply)
0V _{out of ASi}	power supply, out of ASi, negative pole (sensor supply)
ASi +, ASi -	connection to ASi bus
n.c. (not connected)	not connected

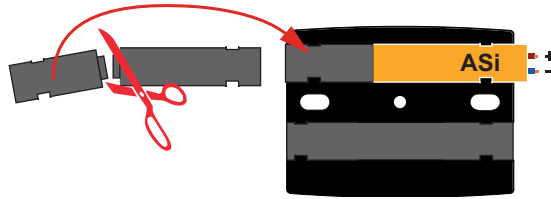
Connections:							
Article no.	M12 Connection	Cable length	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3676	X1 (I1/I2)	0,1 m	24 V ext in	I2	0 V ext in	I1	n.c.
	X2 (O1/O2)	0,2 m	n.c.	O2 (RUN2)	n.c.	O1 (RUN1)	n.c.
	X3 (O3/O4)	0,3 m	n.c.	O4 (DIR2)	n.c.	O3 (DIR1)	n.c.
	M8 Connection	Cable length	Pin1	Pin2	Pin3	Pin4	
	X4 (I4)	0,3 m	24 V ext out	n.c.	0 V ext out	I4	-
	X5 (I3/I4)	0,3 m	24 V ext out	I4	0 V ext out	I3	-
	ADDR	0,1 m	connection for ASi-3 addressing plug				



Line termination with sealing profile



max. IP54



Accessories:

- Sealing profile IP67 (IDC plug), 60 mm (art. no. BW3282)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4925)