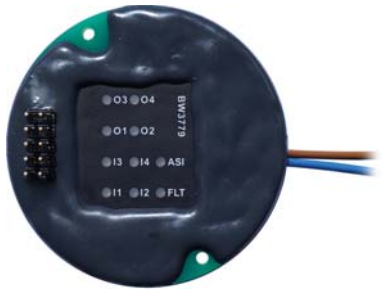
Light switch module AS-i, 4I/4O

AS-i PCB module, 4I/4O



(Figure similar)

Diameter 50 mm,
for use in round flush-mounted boxes

Thick coated

Print connector and connecting wires

For example for light switches

AB slave (up to 62 slaves)

Figure	oem dimensions	Inputs digital	Outputs digital	Connection	Coated	LED Status display (1)	Input voltage (sensor supply) (2)	Output voltage (actuator supply) (3)	AS-i address (4)	Article No.
	50 mm	4	4 x electronic	print connector + connecting wires, 250 mm	yes	yes	via AS-i	via AS-i	1 AB slave	**BW3779**

(1) **LED status display**: status of in- and outputs is indicated by LEDs. In addition to that, both AS-i LEDs (PWR green and FAULT red) show as usual regarding the AS-i Slaves- the status of the AS-i Slaves. Uaux is indicated by a green LED.

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

(3) **Output voltage (actuator supply)**: Electronic outputs are supplied by AS-i or by AUX (auxiliary 24 V power). If supplied by AS-i, outputs shall not be connected to earth or to external potential. For relay outputs the relay contacts are initiated from AS-i. The load circuit is powered externally as specified in the data sheet.

(4) **AS-i address**: AB Slave (max. 62 AB Slaves/AS-i network), 2 AB Slaves (max. 31 modules with 2 AB Slaves), Single Slaves (max. 31 Single Slaves/AS-i 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 AS-i Slave profiles.

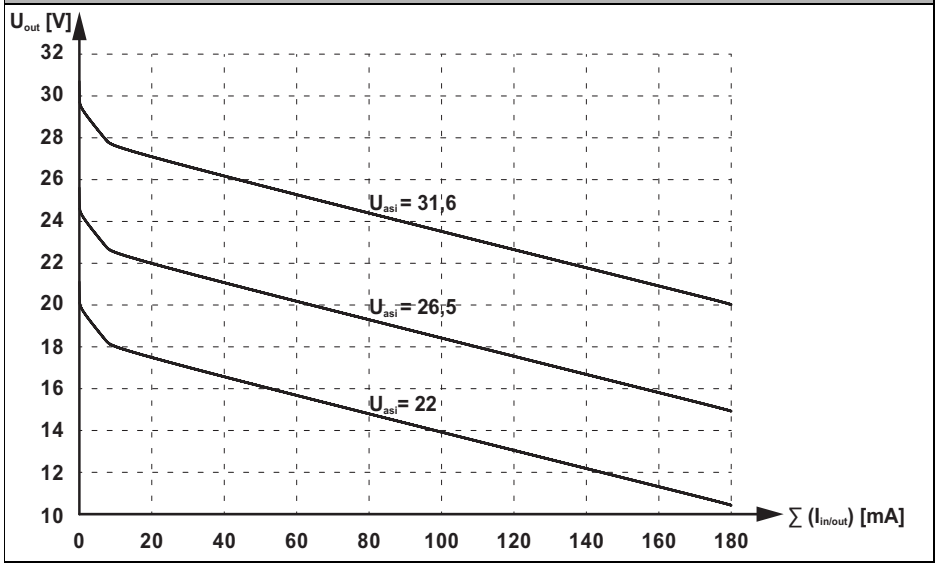
Light switch module AS-i, 4I/4O

Article no.		BW3779
Connections		
AS-i / Periphery connection		Print connectors+ connecting wires, 250 mm
Length of connector cable		I/O: max. 1,5 m (1)
AS-i		
Profile		S -7.A.7, ID1=7 (fixed)
Address		1 AB slave
Required Master profile		≥M4
Since AS-i specification		3.0
Operating voltage		22 ... 31,6 V (2)
Max. current consumption		230 mA
Input		
Number		4
Power supply		out of AS-i
Sensor supply		short-circuit and overload protected according to EN 61131-2
Power supply of attached sensors	up to 40 °C	max. 180 mA, ∑ (In/Out) ≤180 mA (3) (4)
	at 70 °C	max. 125 mA, ∑ (In/Out) ≤125 mA (3) (4)
Switching threshold		U_{in} <2 V low, U_{in} bei 0 mA >12,6 V high, U_{in} bei 180 mA >9,2 V high
Output		
Number		4
Power supply		out of AS-i
Actuator supply		short-circuit and overload protected according to EN 61131-2
Max. output current	up to 40 °C	100 mA per output, ∑ (In/Out) ≤180 mA (3) (4)
	at 70 °C	100 mA per output, ∑ (In/Out) ≤125 mA (3) (4)
Display		
LED ASI (green)		on: AS-i voltage on flashing: AS-i voltage on, or address 0 off: no AS-i voltage
LED FLT/FAULT (red)		on: slave address 0 or slave offline off: slave online
LEDs I1 ... In (yellow)		State of inputs I1 ... I4
LEDs O1 ... On (yellow)		State of outputs O1 ... O4
Environment		
Applied standards		EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Operating altitude		max. 2000
Operating temperature		-25°C … +70°C (3)
Storage temperature		-25°C … +85°C
Pollution degree		2
Protection category		IP00 (thick coated)
Tolerable loading referring to humidity		acc. EN 61131-2
Coated		yes
Tolerable loading referring to humidity		≤15*g*, T≤11 ms, 10 ... 55 Hz, 0,5 mm amplitude
Weight		27 g
Dimensions (W / H / D in mm)		50 / 20

(1) Loop resistance: ≤150 Ω

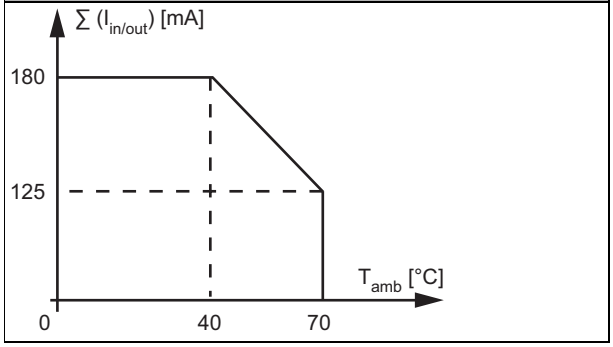
(2)

BW3779
Voltage drop on outputs at Uasi = 31,6 V / 26,5 V / 22 V



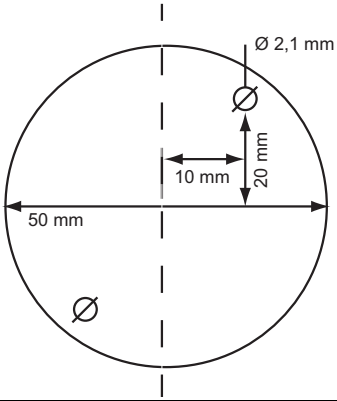
(3)

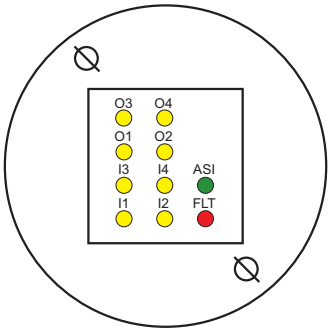
BW3779
Derating total current of inputs and outputs



(4) The current available for powering external sensors/actuators is reduced by approx. 2...3 mA per activated input/output LED.

Dimensional drawing	LED assignment
BW3779	**BW3779**





Programming	Bit setting digital I/O			
	D0	D1	D2	D3
	input			
BW3779	I1	I2	I3	I4
	output			
BW3779	O1	O2	O3	O4

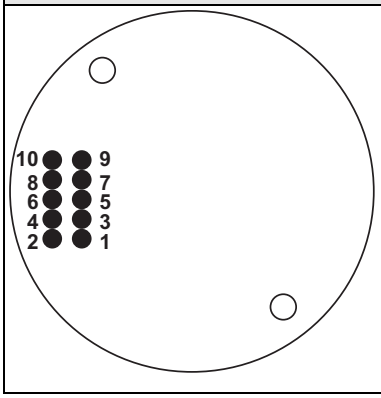
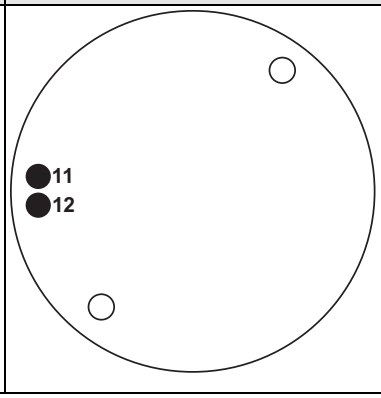
Programming	Parameter bit			
	P0	P1	P2	P3
BW3779	0= off / 1= on (Watchdog)	0= on / 1= off (Data input filter 128 µs)	0= on / 1= off (synchronous I/O mode)	not used

programming note	
BW3779	preset: address 0 changeable via bus master programming device

Pin assignment

Signal name	Explanation
Ix	digital input x
Ox	digital output x
$I+_x$	power supply
$O-_x$	GND for outputs (PNP)
AS-i+, AS-i-	Connection to AS-i bus

Pin assignment

Front view	Back view	Connection	Name	Feller (1)	Connecting wires color
		1	O-	5 (ComL)	
		2	I4	6 (T4)	
		3	I2	4 (T2)	
		4	I3	7 (T3)	
		5	O3	3 (LED3)	
		6	O2	8 (LED2)	
		7	O1	2 (LED1)	
		8	O4	9 (LED4)	
		9	I1	1 (T1)	
		10	I+	10 (ComT)	
		11	AS-i +		BN
		12	AS-i -		BU

(1) Numbering/Name of the connections to a Feller/Schneider Electric button with print connectors.

Accessories:

- **10 poles ribbon cable for connecting BW3779 to appropriate Feller/Schneider Electric switches (Art. No. BW3902)**