

ASi module for SEW Frequency Inverter, IP67, M12

ASi module for SEW Frequency Inverter

Easy triggering of fixed frequencies


M12 connectors

High protection class IP67

Passive Safety up to PLE



(figure similar)

Figure	Type	Drive ⁽¹⁾	Number of drives	Inputs digital	Outputs digital	Input voltage (sensor supply) ⁽²⁾	Output voltage (actuator supply) ⁽³⁾	ASi connection ⁽⁴⁾	ASi address ⁽⁵⁾	Art. no.
	IP67, 4 x M12	SEW MOVIMOT	1	2	–	out of ASi	–	ASi profile cable	1 single address	BWU3840

- (1) **Drive:**
"SEW MOVI-SWITCH® 1E": Motor module to control motor starters MOVI-SWITCH® 1E.
- (2) **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.
- (3) **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.
- (4) **ASi connection:** the connection to ASi as well to AUX (auxiliary 24 V power) is made via yellow resp. black ASi profile cable with piercing technology or via M12 socket (in IP20 via clamps).
- (5) **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.
For modules with two ASi nodes the second ASi node is turned off as long as the first ASi node is addressed to address "0".
Upon request, ASi nodes are available with specific ASi address profiles.

Article no.	BWU3840
Interface	
Interface	RS 485
Baud rates	9600 Bit/s
Connection	
ASi / AUX connection	profile cable and piercing
Periphery connection	M12
ASi	
Profile	S-7.F.E (ID1=1 fixed)
Address	1 single address
Required Master profile	≥M3
Since ASi specification	2.1
Operating voltage	30 V (18 ... 31,6 V)
Max. current consumption	165 mA
AUX	
Voltage	24 V (18 ... 30 V)
Max. current consumption	1 A
Input	
Number	2
power supply	out of ASi
Sensor supply	short-circuit and overload protected according to EN 61131-2
Supply of attached sensors	120 mA
Switching threshold	< 5 V (low) > 15 V (high)

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Article no.	BWU3840
Visualization	
LED I1, I2 (yellow)	state of input I1, I2
LED M1 (yellow)	RS 485 communication active
LED ASI (green)	on: ASi voltage flashing: ASi voltage on, but peripheral fault ⁽¹⁾ or address 0 off: no ASi voltage
LED AUX (green)	on: 24 V _{DC} AUX off: no 24 V _{DC} AUX
LED FLT (red)	on: ASi node offline flashing: peripheral fault ⁽¹⁾ off: ASi node online
Environment	
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Operating altitude	max. 2000 m
Ambient operating temperature	-30 °C ... +55 °C
Storage temperature	-40 °C ... +85 °C
Housing	plastic, for DIN rail mounting
Protection category	IP67
Pollution Degree	2
Tolerable loading referring to humidity	according to EN 61131-2
Max. tolerable shock load	30g, 11 ms, acc. EN 61131-2
Max. tolerable vibration stress	5 ... 8 Hz 50 mm _{pp} /8 ... 500 Hz 6g, acc. EN 61131-2
Isolation voltage	≥500 V
Weight	100 g
Dimensions (B / H / T in mm)	45 / 80 / 42

⁽¹⁾ See table "Peripheral fault indication"

Article no.	Peripheral fault indication		
	Overload sensor supply	error in the inverter ⁽¹⁾	communication error with the inverter
BWU3840	•	•	•

⁽¹⁾ The motor status "standstill current" is not considered an error.

Article no.	Operating mode ⁽¹⁾	
	1 ramp with 14 speeds	2 ramps with 6 speeds each
BWU3840	•	•

⁽¹⁾ The ramps can be switched during operation.

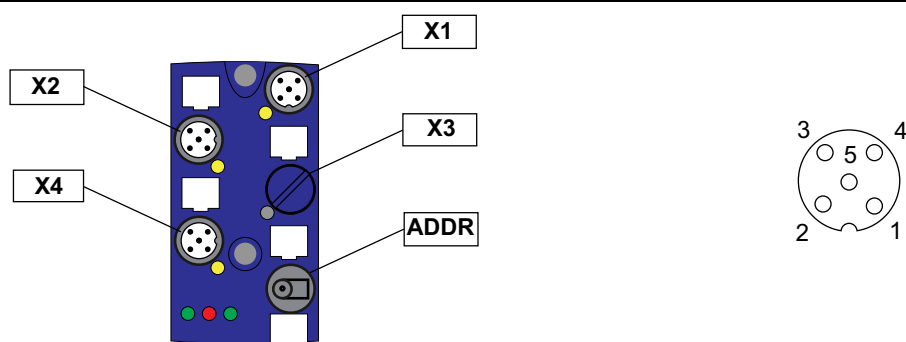
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Pin assignment

Signal name	Explanation
Ix	Digital input x
RS 485 TX +	Communication with motor, positive pole (labeling on motor RX +)
RS 485 TX -	Communication with motor, negative pole (labeling on motor RX -)
24 V _{ext out}	Power supply, out of external voltage, positive pole (AUX, actuator supply)
0 V _{ext out}	Power supply, out of external voltage, negative pole (AUX, actuator supply)
24 V _{ext in}	Input voltage, positive pole (AUX+)
0 V _{ext in}	Input voltage, negative pole (AUX-)
ASi +	ASi network, positive potential
ASi -	ASi network, negative potential
24 V _{out of ASi}	Power supply, out of ASi, positive pole (sensor supply)
0 V _{out of ASi}	Power supply, out of ASi, negative pole (sensor supply)
n.c.	not connected

Connections

Article no.	M12 Connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3840	X1	I1 (input 1)	24 V _{out of ASi}	n.c.	0 V _{out of ASi}	I1	n.c.
	X2	I2 (input 2)	24 V _{out of ASi}	n.c.	0 V _{out of ASi}	I2	n.c.
	X3	no connection (protection cap)					
	X4	M1 (motor)	24 V _{ext out}	RS 485 TX -	0 V _{ext out}	RS 485 TX +	n.c.
	ADDR (protection cap)	connection for ASi-3 addressing plug					



Notice:

- The RS 485 bus address must be set directly on MOVIMOT. For further detailed information, please refer to the MOVIMOT documentation.
- The tap of the external 24V_{ext} has to be protected via a resetting fuse.

Accessories:

- ASi substructure module for 4-channel module in 45 mm-housing (art. no. BWU2349)
- ASi substructure module (CNOMO) 4-channel module in 45 mm-housing (art. no. BWU2350)
- Passive Distributor ASi/24 V to M12, 2 m line (article no. BW1974)
- Universal protection cap ASi-5/ASi-3 for M12 sockets, IP67 (art. no. BW4056)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4708)