

ASi-3 Motor Module for SEW frequency inverter, IP67, M12, 1M/2I

ASi-3 Motor Module for SEW frequency inverter


Easy triggering of fixed frequencies

M12 connectors

High protection class IP67



(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	out of ASi	ASi profile cable	1 single address	BWU3135

- (1) **Drive:**
"SEW MOVIMOT®": Motor module to control geared motors with frequency inverters.
- (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:** 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) ASi-5 address (max. 62 ASi-5 addresses/ASi network), mixed use allowed (upon request, ASi nodes are available with specific ASi address profiles).
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.

ASi-3 Motor Module for SEW frequency inverter, IP67, M12, 1M/2I

Article no.	BWU3135
Interface	
Interface	RS 485
Baud rates	9600 Bit/s
Connection	
ASi / AUX connection	profile cable and piercing technology
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	400 mA
Max. current consumption without sensor/ actuator supply	50 mA
AUX	
Voltage	–
Max. current consumption	–
Input	
Number	2
Power supply	out of ASi
Sensor supply	short-circuit and overload protected according to EN 61131-2
Power supply of attached sensors	Σ (In/Motor) max. 350 mA
Switching threshold	< 5 V (low), > 15 V (high)
Drive	
Number	1
Interface	RS 485
Power supply	out of ASi
Max. output current	Σ (In/Motor) max. 350 mA
Visualization	
LED ASi (green)	on: ASi voltage flashing: ASi voltage on, but peripheral fault ⁽¹⁾ or address 0 off: no ASi voltage
LED FLT (red)	on: ASi node offline flashing: peripheral fault ⁽¹⁾ off: ASi node online
LED AUX (green)	–
LEDs I1 ... I2 (yellow)	state of inputs I1, I2
LED M1 (yellow)	RS 485 communication active

ASi-3 Motor Module for SEW frequency inverter, IP67, M12, 1M/2I

Article no.	BWU3135
Environment	
Applied standards	EN 61000-6-2 EN 61000-6-4 EN 60529
It can be used with a switched AUX cable, which is passively safe up to SIL3/PLe	yes ⁽²⁾
Operating altitude	max. 2000 m
Ambient operating temperature	-30 °C ... +55 °C (up to max. +70 °C) ⁽³⁾
Storage temperature	-40 °C ... +85 °C
Housing	plastic, for DIN rail mounting
Protection category	IP67 ⁽⁴⁾
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"

(2) The module is suitable for use in passively safe paths as it has no connection to an AUX potential.

(3) Maximum ambient operating temperature +55 °C according UL certificate for the use in the USA and Canada

(4) Protection category IP67 can only be achieved if all open connections are sealed with suitable end caps fulfilling the same protection category.

UL-specifications (UL508)	
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		
	Overload sensor supply	Error in the inverter	Communication error to the inverter
BWU3135	•	•	•

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)
FE (functional earth)	Functional earth
n.c.	not connected

ASi-3 Motor Module for SEW frequency inverter, IP67, M12, 1M/2I

Connections							
Article no.	M12 Connection	Marking	Pin1	Pin2	Pin3	Pin4	Pin5
BWU3135	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 1)	24 V _{out of ASi}	RS 485 TX -	0 V _{out of ASi}	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 SEW MOVIMOT. For further detailed information, please refer to the SEW MOVIMOT documentation.

Accessories:

- ASi substructure module for 4-channel module in 45 mm-housing (art. no. BW2349)
- ASi substructure module (CNOMO) 4-channel module in 45 mm-housing (art. no. BW2350)
- Universal protection cap ASi-5/ASi-3 for M12 sockets, IP67 (art. no. BW4056)
- Passive Distributor ASi/AUX to 2 x M12 socket, internal protection via changeable 4 A slow-blow fuses (article no. BWU3087)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4925)
- It is recommended to use pre-assembled cables to connect the power source with the module e.g.:
 - Connection cable for SEW MOVIMOT AVT1, M12 cable plug, straight, 4 poles, A coded to M12 cable socket, straight, B coded, cable length 2 m (art. no. BW4215)
 - Connection cable for SEW frequency inverters (art. no. BW2799)