

Active Distributor ASi-5 Motor Module for Danfoss VLT, IP67, 1M



Active Distributor ASi-5 Motor Module for Danfoss VLT frequency inverter

Cyclic writing of speed and ramps possible

Periphery connection via 1 x round cable/connecting wires

High protection class IP67



(figure similar)



Figure	Type	Drive ⁽¹⁾	Number of Drives	Input voltage (sensor supply) ⁽²⁾	Output voltage (actuator supply) ⁽³⁾	ASi connection ⁽⁴⁾	Connection	ASi address ⁽⁵⁾	Art. no.
	IP67, depth 35 mm	Danfoss VLT	1	out of ASi	—	ASi profile cable	1 x round cable/connecting wires	1 ASi-5 address	BWU4980

- (1) **Drive:**
"Danfoss VLT": 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:** 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 modules are available with specific ASi node profiles.

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Article no.	BWU4980
Connection	
ASi / AUX connection	profile cable and piercing technology
Periphery connection	1 x round cable/connecting wires
Length of connector cable	1 m
	max. allowed tensile strain 10 N
ASi	
Address	1 ASi-5 address
Required ASi specification	ASi-5
ASi process data width	6 byte
Operating voltage	30 V (18 ... 31,6 V)
Max. current consumption	70 mA
Max. current consumption without sensor/ actuator supply	70 mA
RS 485 interface	
Number	1
Interface	RS 485
Baud rates	9600 Bit/s
Power supply	out of ASi
Visualization	
LED ASi/FLT (red/green)	green: ASi voltage on, ASi node online red: ASi voltage on, but ASi node offline yellow/red flashing: address 0 red/green flashing: peripheral fault ⁽¹⁾ off: no ASi voltage
LED M1 (yellow)	RS 485 communication active
Environment	
Applied standards	EN 62026-2 EN 61000-6-2 EN 61000-6-3 EN 61131-2 EN 60529
Can be used in passively safe paths up to SIL3/PLe	yes ⁽²⁾
Operating altitude	max. 2000 m
Ambient temperature	-30 °C ... +60 °C ⁽³⁾
Storage temperature	-25 °C ... +85 °C
Housing	plastic, screw mounting, suitable for cable ducts (installation depth ≥35mm)
Pollution Degree	2
Protection category	IP67 ⁽⁴⁾
Tolerable loading referring to humidity	according to EN 61131-2
Maximum tolerable shock and vibration stress	≤15g, T≤11 ms 10 ... 55 Hz, 0,5 mm amplitude
Insulation voltage	≥500 V
Weight	100 g
Dimensions (W / H / D) in mm	60 / 45 / 35

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

⁽⁴⁾ Protection category IP67 can only be achieved, if also the cable connector fulfills IP67

Article no.	Peripheral fault indication				
	Overload sensor supply	Output short circuited	AUX voltage missing	Communication error	Motor error
BWU4980	–	–	–	•	•

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Programming (Bit-setting of ASi process data image)

Article no.	Byte	Bit							
		D7	D6	D5	D4	D3	D2	D1	D0
BWU4980	Digital input data								
	0	reserved							
	1	motor ready	motor running	at reference	direction	motor error	reserved		
	2	actual speed, high byte (0 ... 100%), UINT16							
	3	actual speed, low byte (0 ... 100%), UINT16							
	4	actual current (mA), high byte, UINT16							
	5	actual current (mA), low byte, UINT16							

Article no.	Byte	Bit							
		D7	D6	D5	D4	D3	D2	D1	D0
BWU4980	Digital output data								
	0	reserved							
	1	enable	start/stop	cw/ccw	brake ⁽¹⁾	reset	free wheel	reserved	
	2	speed setpoint, high byte (0 ... 100%), UINT16							
	3	speed setpoint, low byte (0 ... 100%), UINT16							
	4	ramp (ms), high byte, UINT16							
	5	ramp (ms), low byte, UINT16							

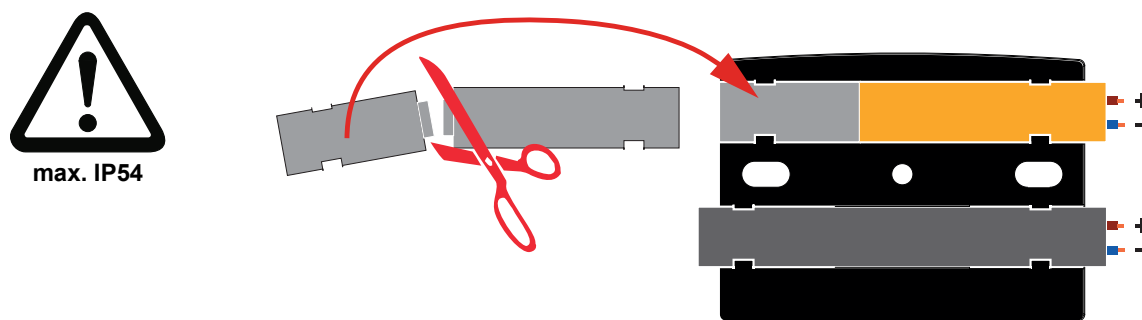
(1) Availability depends on the hardware of the drive.

Signal assignment

Signal name	Explanation
RS 485 TX +	Communication with motor, positive pole (labeling on motor RX +)
RS 485 TX -	Communication with motor, negative pole (labeling on motor RX -)

Connections: round cable/connecting wires				
Article no.	connec.	BN	BU	
BWU4980	X1	RS 485 TX +	RS 485 TX -	

Line termination with sealing profile



Accessories:

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