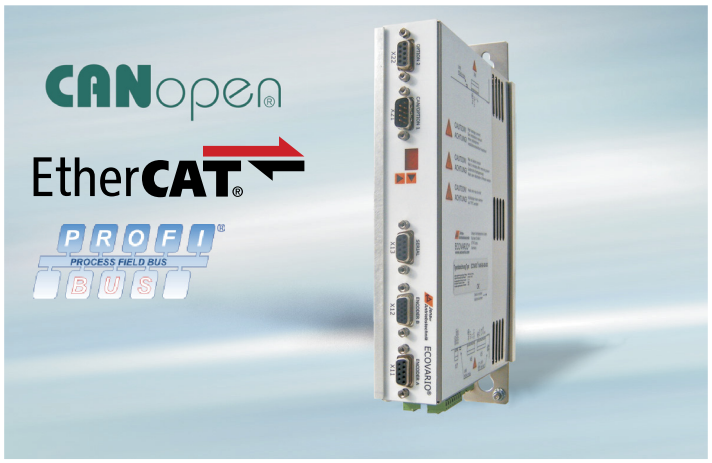


Equipment

- EtherCAT/Ethernet interface
- CANopen
- Profibus DP
- RS232 interface for parameterization via PC
- RS485 interface
- 2 encoder interfaces
- Encoder output for master-slave operation
- Safety function „STO" acc. to EN 61800-5-2

Functions

- Operation of 2- and 3- phase brushless synchronous motors
- Operation of 2-and 3-phase synchronous linear motors
- Operation of brushed DC servo motors
- Torque / force, speed, and positioning control
- Position feedback via incremental encoder: RS422, SINCOS
- Position feedback via absolute value encoder: BISS® or HIPERFACE® interface
- Simultaneous use of several feedback systems possible
- Interpolation via EtherCAT or CANopen

Electrical Connection Data		2-phase Motors	3-phase Motors
1-phase AC Supply			
Rated supply voltage	V_{AC}	48	48
Line frequency	Hz	50 .. 60	50 .. 60
Rated installed load	VA	480	480
Rated power loss	W	40	40
Rated output voltage (AC)	V_{AC}	42	42
Rated output current	A_{RMS}	5.3	7.1
DC Supply			
Rated supply voltage	V_{DC}	70	70
Rated installed load	W	700	700
Rated power loss	W	50	50
Data of Power Output Stage			
Peak output current	A_{RMS}	14	14
Max. phase current	A_{DC}	20	20
Rated output current	A_{RMS}	5.3	7.1
Rated DC link voltage	V_{DC}	60	60
Max. DC link voltage	V_{DC}	70	70
Overvoltage switch-off	V_{DC}	90	90
DC link capacity	µF	1760	1760
Returnable energy	Ws	2.8	2.8

Control Signals		
24-V supply (current consumption without output)	V	24 ±10%
	A	0.8
8 digital control signal inputs	V	LOW 0-7, HIGH 12-36
	mA	10 (at 24 V)
3 digital control signal outputs	V	24
	A	0.5
1 analogue input	V	0 to +10
Dimensions and Weights		
Dimensions W x H x D	mm	42 x 279 x 167
Weight	kg	1.35
External Fuses		
AC supply		10 A (slow-acting)
24-V supply		max. 10 A (fast-acting)
external ballast resistor (not required if resistors for specific use DPRxx-xxx are used)		6 A (fast acting)

Ambient Conditions	
Class	3K3 acc. to EN 50178
Ambient temperature during operation with rated load	5 °C .. 40 °C (storage temperature: - 10 ... 70°C)
Degree of humidity (non-condensing)	max. 95% rel. humidity
Cooling	In a closed cabinet, sufficient circulating air movement must be provided
Installation altitude	max. 1500 m above mean sea level without power reduction
Mounting position	The technical data refer to a vertical mounting position
Protection class	IP20, pollution degree 2
Applied standards for CE	EMC acc. to EN61800-3, safety acc. to EN61800-5-1
Applied standards for UL	UL508C

Basic Functions

- Digital current, speed, and position control with position, speed and torque limiting
- Digital filter functions effective on resonant loads
- Parameterisable jerk filters optimize the motion profiles and thus contribute to the longevitiy of the whole machine
- Short-circuit, voltage, temperature, encoder, tracking error, and I^2xt monitoring
- Parameterisation via EtherCAT, Ethernet, CANopen, RS232, RS485, or Profibus DP
- Scalable analogue input for any setpoint
- Intelligent control of a holding brake with automatic voltage reduction
- Limit switch and reference sensor evaluation, various homing modes
- Enabling of output stage and reset of fault conditions via digital input
- Readiness for operation message via digital output
- Status indication and setting of field bus node address and baud rate on the front via seven-segment display and 2 keys
- Internal ballast resistor (continuous power: 10 W), external ballast resistor can be connected

Positioning control on field bus

- Setpoint setting via Ethernet, EtherCAT, CANopen, Profibus DP, RS232, or RS485
- Point-to-point control
- Motion Control / Path interpolation via CANopen or EtherCAT

Master/slave positioning

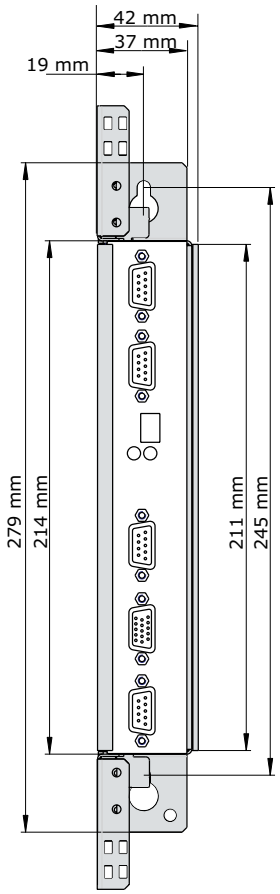
- Parameterisable electric gearbox
- Master position via encoder signals or CANopen

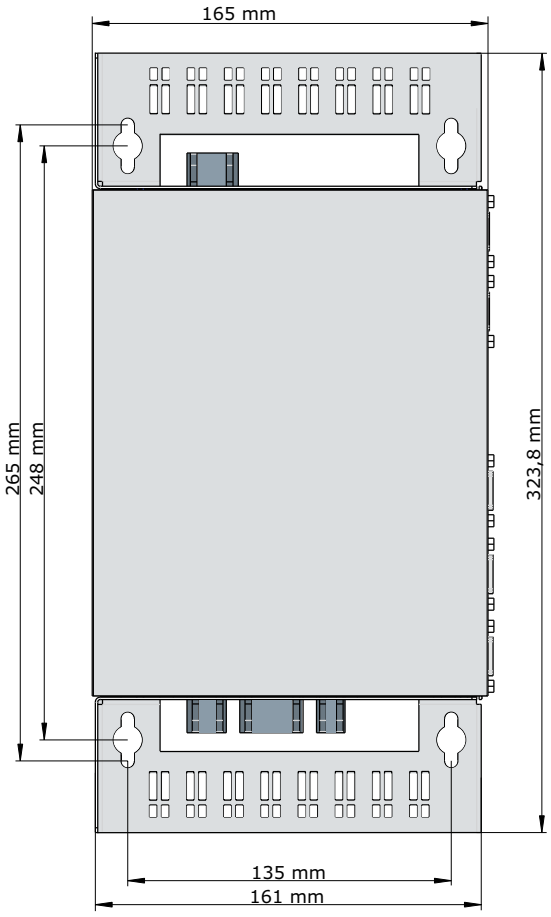
Sequence programming

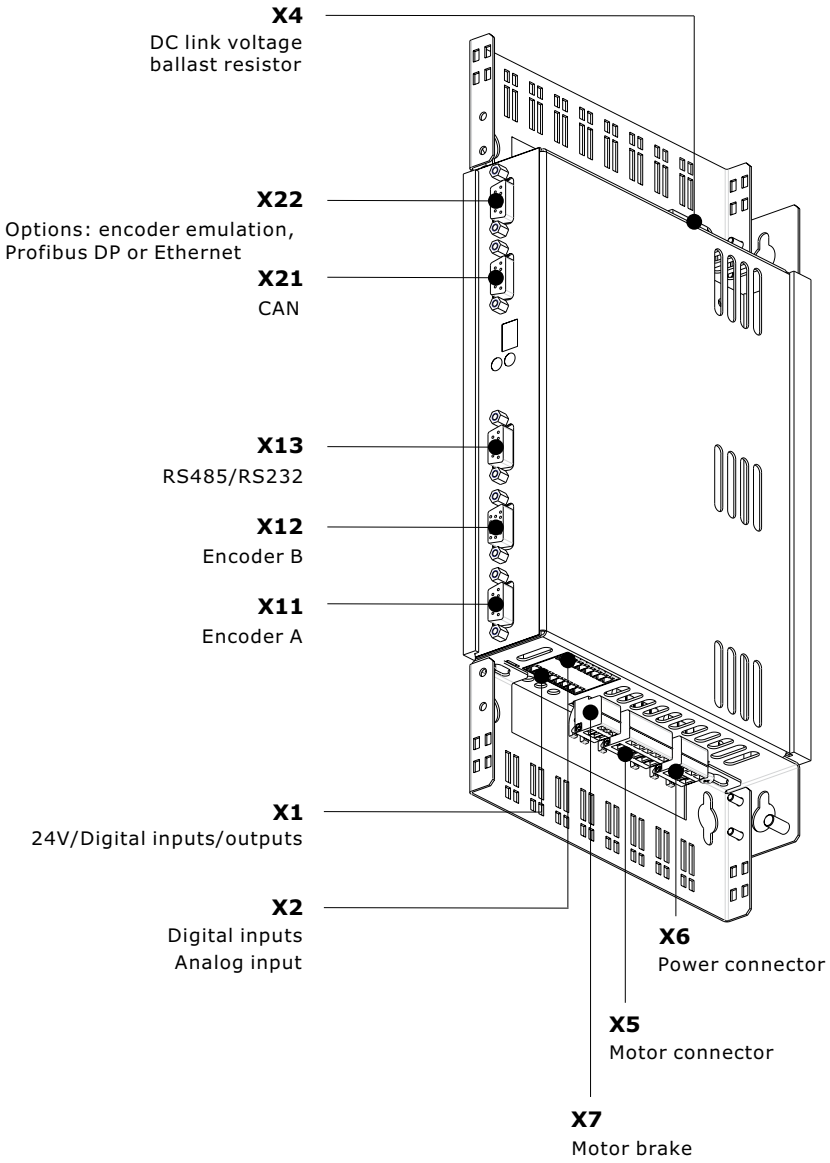
- free programmable sequences for realisation of individual control and operation concepts
- 8 digital inputs
- 3 digital outputs

Speed setting with analogue setpoint

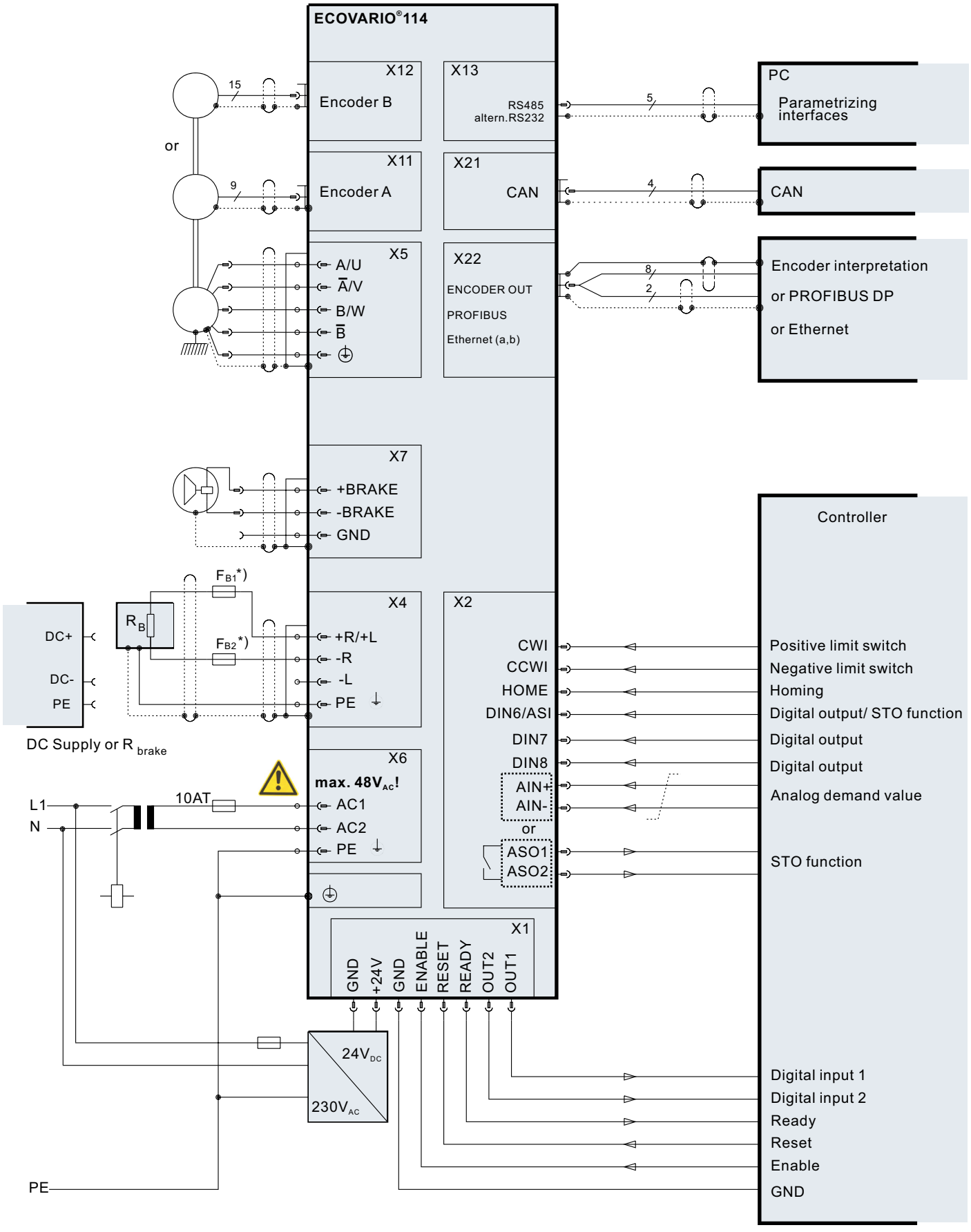
- Scalable speed setpoint via 0 ... 10 V analogue input
- 10 bit resolution







Accessories	
Complementary parts	
DLZ11	Shield set ECOVARIO 114 with 1 side part, 2 cable clamps and mounting elements
DLK10	Connector set ECOVARIO® 114
Ballast resistors	
DPR10-100	Ballast resistor 10 Ω/100 W (250 W cooled)
DPR10-200	Ballast resistor 10 Ω/200 W (500 W cooled)
Power Supplies	
SV24	Single-phase power supply unit 24 V_{DC} / 5 A
SV24/60	Single-phase power supply unit 24 V_{DC} / 2 A, 60 V_{DC} / 5 A
SV60	Single-phase power supply unit 60 V_{DC} / 5 A
TE 500-42	Single-phase transformer 42 V_{AC} / 500 VA
For details concerning the power supplies please refer to data sheet **11-2**.	



*) not necessary if ballast resistor DPRxx is used