



**Equipment**

- RS232 interface
- RS485 interface
- CANopen, or
- Profibus DP
- 10 digital inputs (8 programmable)
- 3 digital outputs (2 programmable)
- Clock/direction interface
- 2 Encoder inputs (incremental)



→ **DC Supply**

Power supply	V <sub>DC</sub>	24 ... 70
Recommended fuse for power supply	A	10 (slow)
Logic supply	V <sub>DC</sub>	24 (18-30)
Recommended fuse for logic supply	A	3 (slow)

→ **Data of Power Output Stage**

Maximum effective current per phase	A <sub>RMS</sub>	5.6
Maximum phase current	A <sub>DC</sub>	8
Rated output current	A <sub>RMS</sub>	4.2
Maximum output voltage	V <sub>DC</sub>	70
Rated output voltage	V <sub>DC</sub>	60
Minimum inductivity of motor winding	mH	0.5
Maximum length of motor cable	m	10
Frequency of output current ripple	kHz	16.4

→ **Data of Brake Control**

Output voltage (depending on logic supply)	V <sub>DC</sub>	24
Output voltage reduced	V <sub>DC</sub>	12
Output current 100 ms/permanent	A	0.8 / 0.5

**Functions**

- Operation of 2-phase brushless synchronous motors
- Operation of 2-phase synchronous linear motors
- Operation of brushed DC servo motors
- Operation of stepper motors
- Torque, force, speed, and positioning control
- Interpolation via CANopen

→ **Control Signals**

Digital inputs	V	24
	mA	2
Digital outputs	V	24
	A	0,5
Analogue input	-10 V ... +10 V	
	10 bit resolution	
Analogue monitor outputs	0 ... 5 V	
	8 bit resolution	

→ **Dimensions and Weights**

Dimensions W x H x D	mm	87 x 200 x 50 (without mating connector)
Weight	kg	0.5
Housing	Aluminium passivated, RoHS conform	
Cable clamping and strain relief	metal clamps, max. cable diameter 15 mm	

→ **Ambient Conditions**

Class	3K3 acc. to EN 50178	
Ambient temperature during operation with rated load	5 ... 40 °C	
Storage temperature	- 10 ... 70 °C	
Degree of humidity (non-condensing)	max. 95% of rel. humidity	
Cooling	mounting on supporting plate	
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 speed and position control with position, speed, and torque limiting
- Digital filter functions effective on resonant loads
- Parameterisable velocity profiles with jerk limiting
- Short-circuit, voltage, temperature, encoder, tracking error and I<sup>2</sup>t monitoring
- Parameterisation via RS232, RS485, CANopen, or Profibus DP
- Scalable analogue input for any setpoint
- Scalable analogue monitors for any actual value
- Intelligent control of a holding brake with automatic voltage reduction
- Limit switch and reference sensor evaluation, various reference point approach modes
- Enabling of output stage and reset of fault conditions via digital inputs
- Readiness for operation message via digital output
- Setting of field bus node address via DIP switch
- Status indication via 4 LEDs

## Positioning Control on Field Bus

- Setpoint setting via RS232, RS485, CANopen, or Profibus DP
- Point-to-point control
- Path interpolation via CANopen

## Master / Slave Positioning

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

## Positioning with Clock / Direction Setpoint

- Scalable setpoint setting via RS422 for clock / direction signals

## Positioning with Digital I/O Interface

- 256 motion profiles storable
- 8 digital inputs
- 2 digital outputs
- Event-based control concept

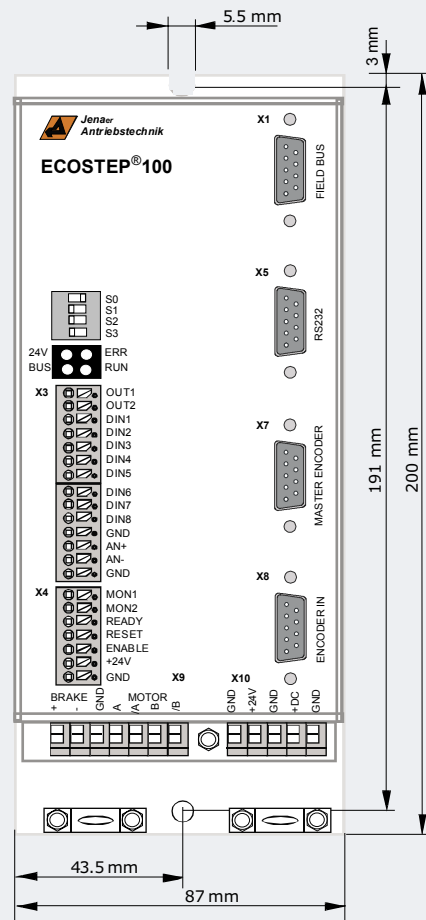
## Joystick Operation

- Parameterisable joystick table for speed or position with 256 entries
- Joystick connection to +/-10 V analogue input

## Speed Setting with Analogue Setpoint

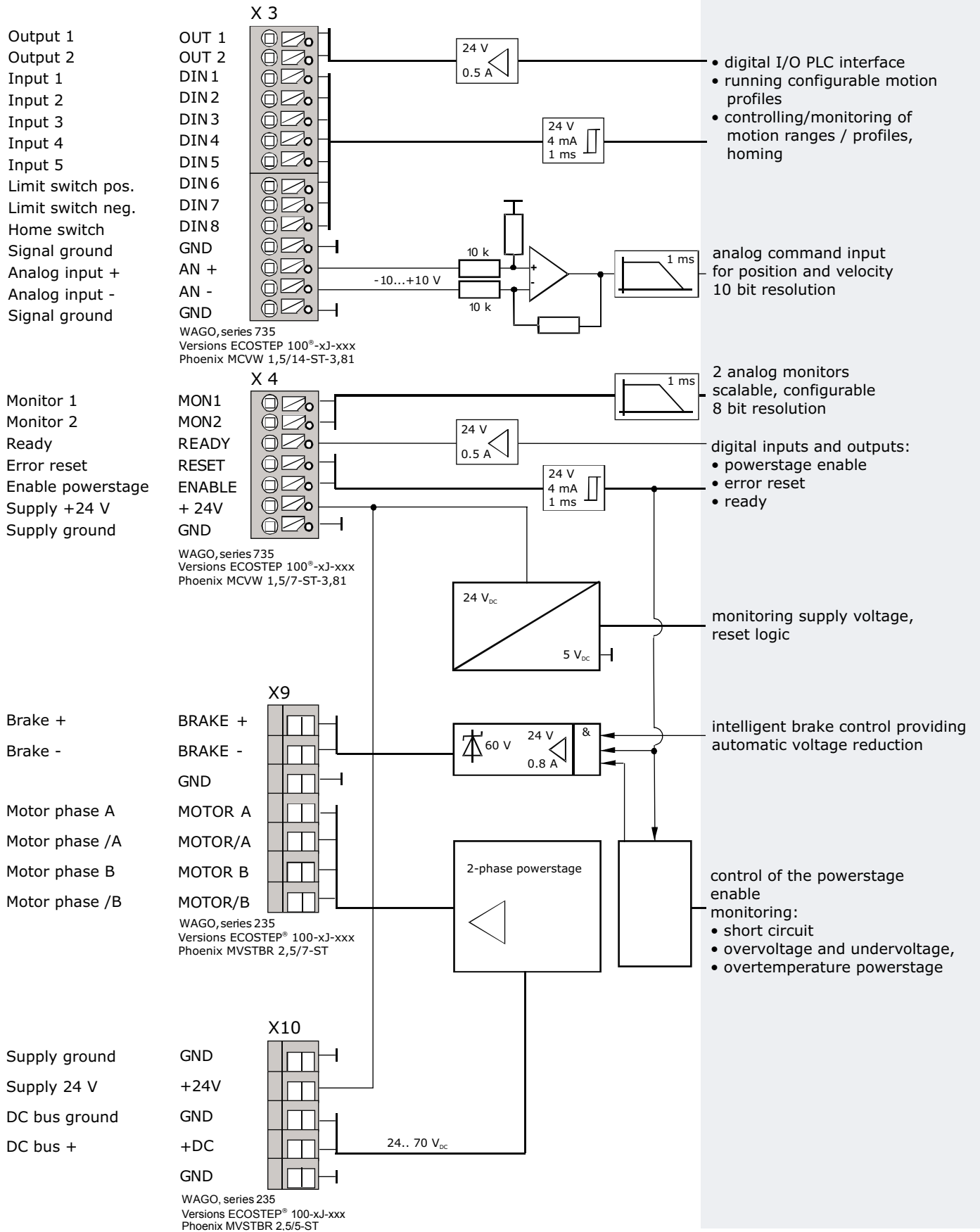
- Scalable speed setpoint via +/-10 V analogue input
- 10 bit resolution

## Mechanical Outlines



depth approx. 50 mm (without mating connectors)

Connections



Interfaces

