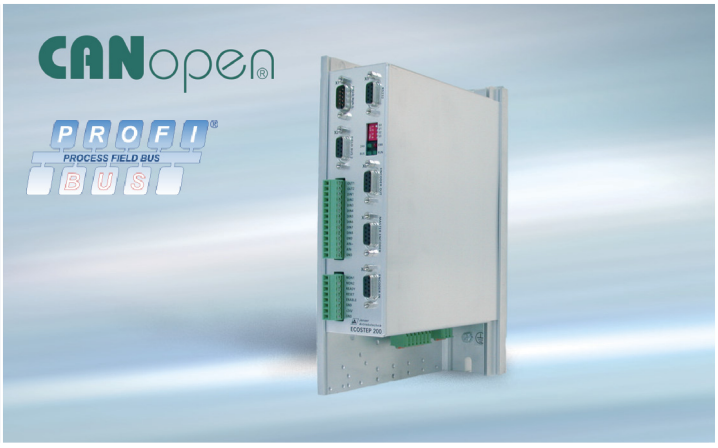

Equipment

- RS232 interface and RS485 interface
- CANopen or Profibus DP
- 10 digital inputs (8 programmable)
- 3 digital outputs (2 programmable)
- Clock/direction interface
- 2 Encoder inputs (incremental)
- Optically decoupled encoder output

CE

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DC Supply		
Power supply	V_{DC}	24 ... 170
Recommended fuse for power supply	A	10 (slow)
Logic supply	V_{DC}	24 (18-30)
Recommended fuse for logic supply	A	3 (slow)
Data of Power Output Stage		
Maximum effective current per phase	A_{RMS}	8.5
Maximum phase current	A_{DC}	12
Rated output current	A_{RMS}	7
Maximum output voltage	V_{DC}	170
Rated output voltage	V_{DC}	150
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_{DC}	24
Output voltage reduced	V_{DC}	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 (ECOLIN® 200)
- 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 to + 10 V
		10 bit resolution
Analogue monitor outputs		0 ... 5 V
		8 bit resolution

Dimensions and Weights		
Dimensions W x H x D	mm	62 x 240 x 170 (without mating connector)
Weight	kg	1.8
Housing		Aluminium, passivated, in conformance with RoHS
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^2xt 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

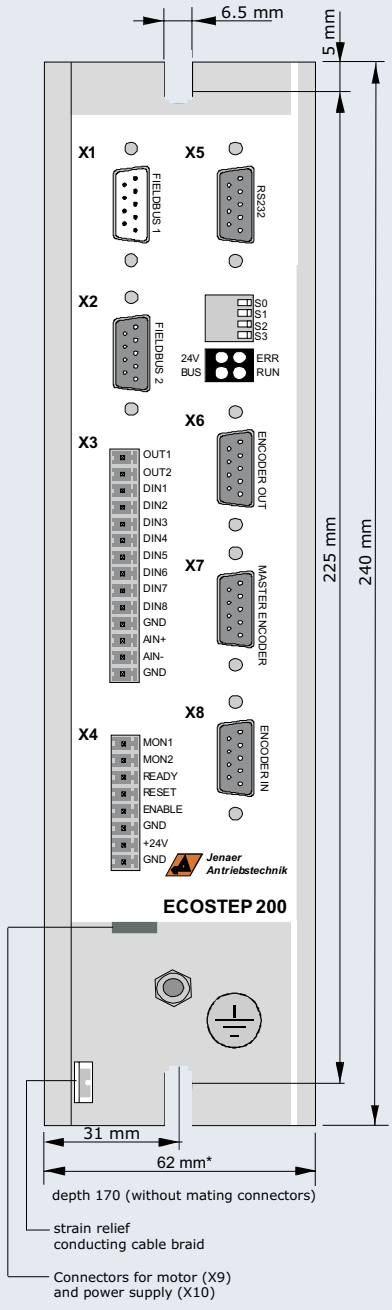
Joystick Operation

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

Speed Setting with Analogue Setpoint

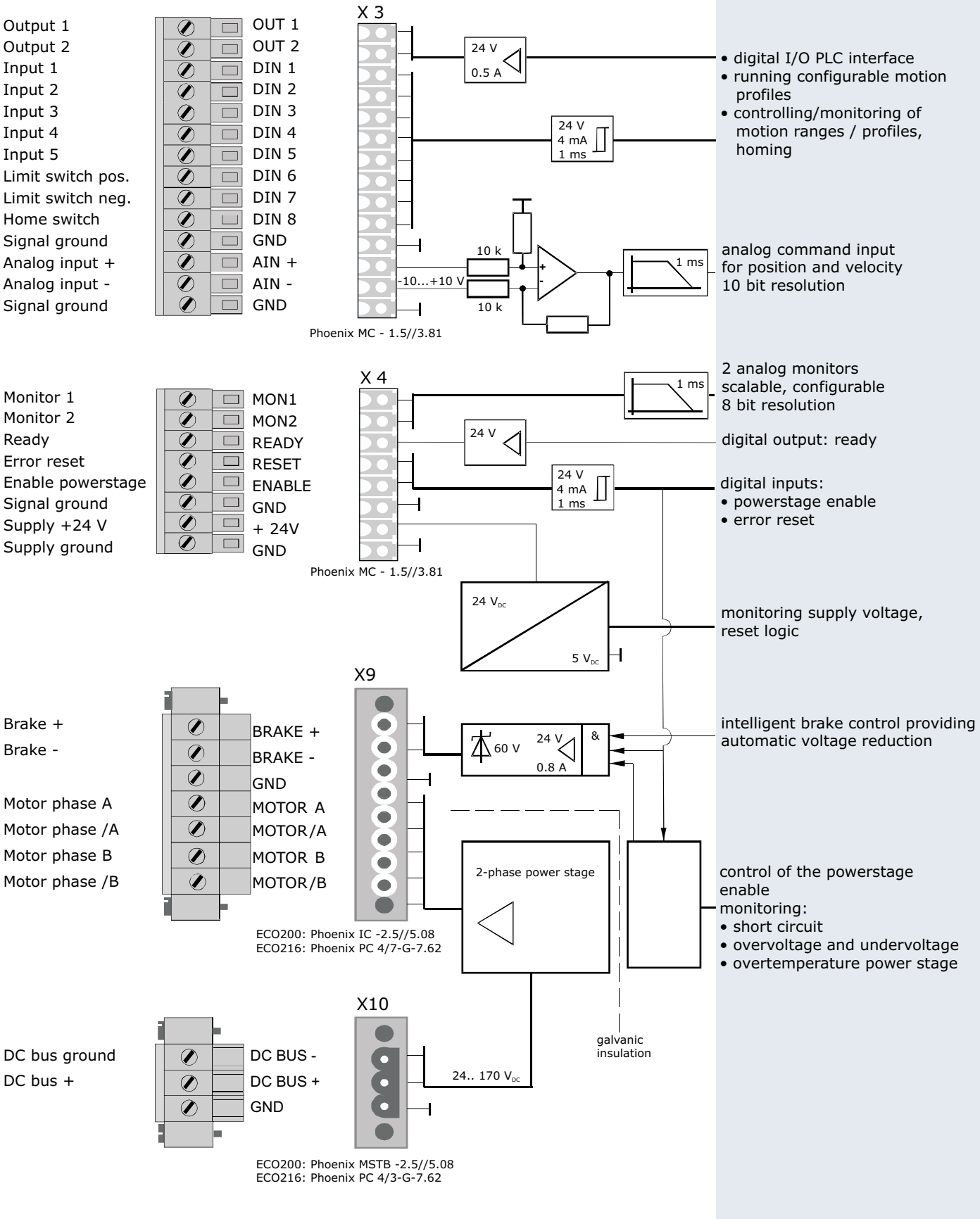
- Scalable speed setpoint via +/-10 V analogue input
- 10 bit resolution

Mechanical Outlines



*) optional with heat sink (width 102 mm)

Connections



Interfaces

RS232 serial interface for parameter setting, configuration, control, interface for setup by a PC

Field bus interface CANopen (DS 402)

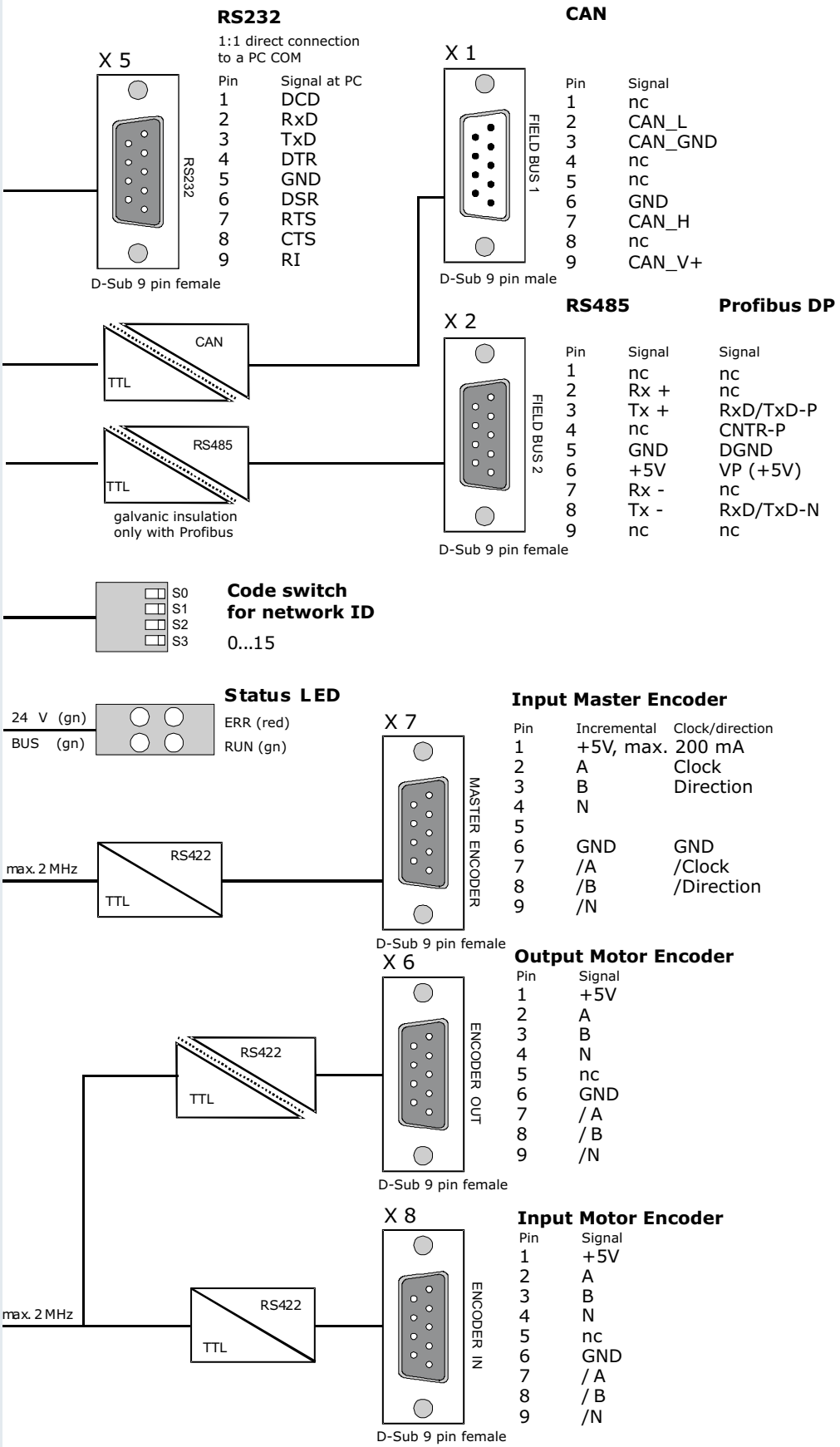
Field bus interface: RS 485 (published protocols) or Profibus DP

ID setting for serial network operation

4 LEDs for indication of device status

quadrature encoder input: configurable electronic gear box functions or clock/direction

quadrature encoder input: for commutation, current, speed and postion control



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