



Equipment

- RS232 interface
- CANopen interface
- 8 opto-coupled digital inputs
- 8 opto-coupled digital outputs

Functions

- 4-axes motion control for 2-phase stepper motors
- Microstep resolution 12800 steps/rev
- separate logic and power supply
- control of a holding brake for each axis
- Compact controller in metal housing

→ **Electrical Connection Data**

Power supply	V _{DC}	20 ... 45
Recommended fuse for power supply	A	10 A T
Logic supply	V _{DC}	24 (18-30)
Recommended fuse for logic supply	A	3 A T

→ **Data of Power Output Stage**

Maximum phase current	A _{DC}	2,5
Maximum output voltage	V _{DC}	U _{DC-BUS}
Maximum output power	W	4 x 100
Minimum inductivity of motor winding	mH	1
Maximum length of motor cable	m	10
Frequency of output current ripple dependant on current and inductivity		

→ **Control Signals**

Digital inputs	V _{DC}	24
	mA	2.4 / 3.4
Digital outputs	V _{DC}	24
	A	0.5
Analogue input	0 ... +5 V	
	10 bit resolution	
Analogue output	- 10 V ... + 10 V	
	10 bit resolution	

→ **Dimensions and Weights**

Dimensions W x H x D without heat sink	mm	62 x 240 x 170 (without mating connector)
Dimensions W x H x D with heat sink	mm	102 x 240 x 170 (without mating connector)
Weight (without heat sink)	kg	1.8
Weight (with heat sink)	kg	3.4
Housing	aluminium	
Cable clamping and strain relief	metal clamps, max. cable diameter 15 mm	

→ **Ambient conditions**

Ambient temperature during operation with rated load	0 ... + 40°C	
Storage temperature	- 10 ... + 70°C	
Degree of humidity (non-condensing)	5 ... 95% of rel. humidity (RH-2 acc. to IEC 61 132-2)	
Pollution degree	2 acc. to IEC 61131-2	
Cooling	convection (heat sink required in case of restricted convection)	
Installation altitude	max. 1000 m above mean sea level without power reduction	
Mounting position	vertical	
Protection class	IP20	



Basic Functions

- Microstep control for low-resonance operation
- Convenient motion profile generator with software limit switch
- Parameterisation via RS232, or CANopen
- Limit switch and reference sensor evaluation
- Various homing modes
- Intelligent control of 4 holding brakes with automatic voltage reduction

Positioning Control on Field Bus

- Setpoint setting via RS232 or CANopen (Profile DS301/DSP402)
- Modes: Profile Position Mode, Homing Mode, Profile Velocity Mode

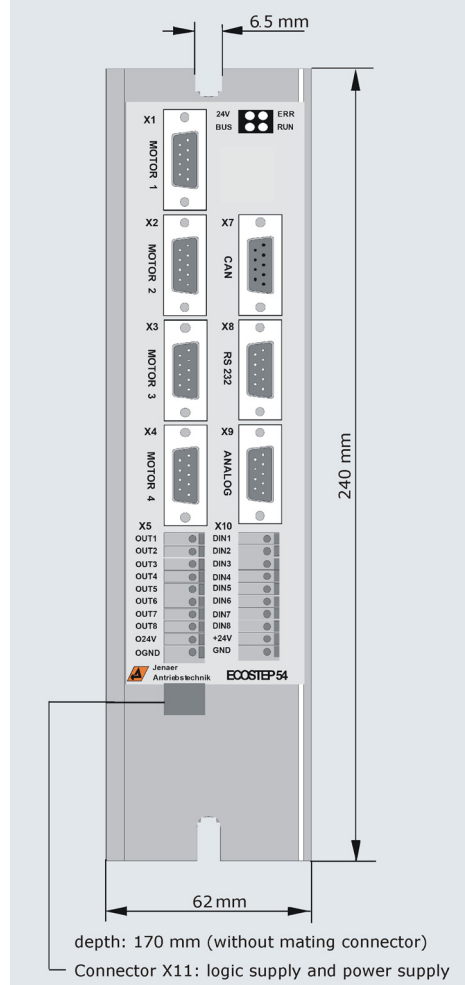
Positioning Control via SPS Interface

- up to 256 motion profiles with positions, velocities and accelerations storable
- Call-up of the profiles via digital inputs
- Configurable feedback via digital outputs

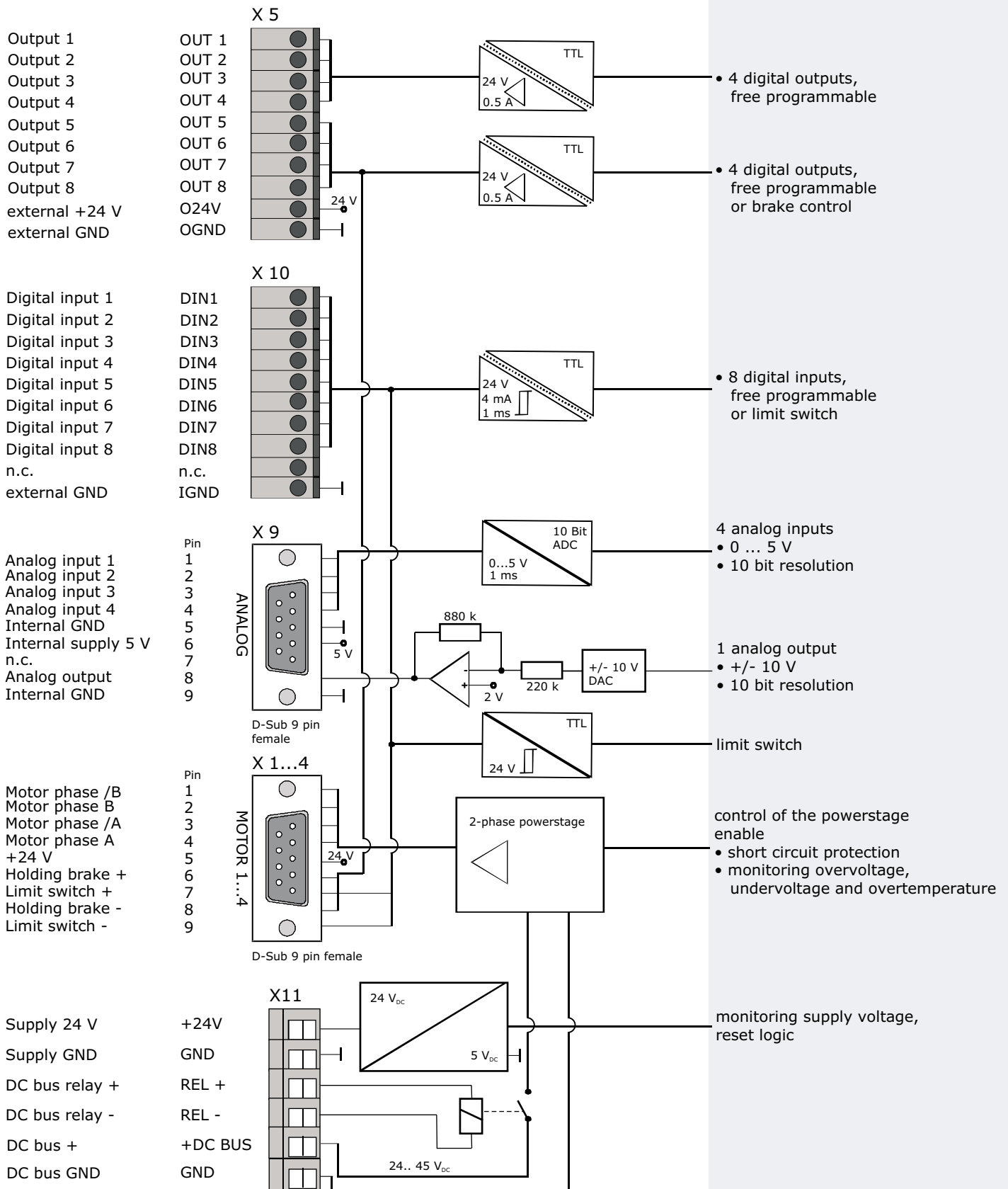
Joystick Operation

- Connection of 4 joysticks possible via analogue inputs (1 per motor)
- Parameterisable joystick table for velocity or position with 256 entries

Mechanical Outlines



Connections



Interfaces

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

Field bus interface: CANopen (DS 402)

4 LEDs for indication of device status

