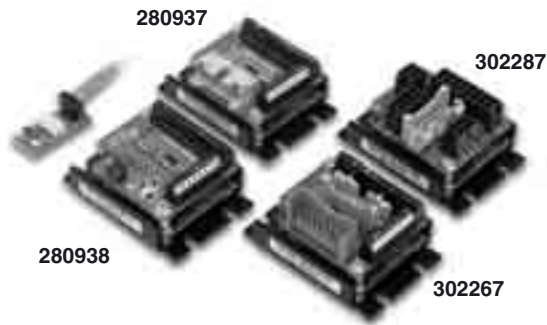


EPOS 24/1

Matched with DC brush motors with encoder or brushless EC motor with Hall sensors and encoder up to 20 Watt.



EPOS 24/5

Matched with DC brush motors with encoder or brushless EC motors with Hall sensors and encoder, from 5 to 120 Watt.



EPOS 70/10

Matched with DC brush motors with encoder or brushless EC motors with Hall sensors and encoder, from 80 to 700 Watt.



Order numbers

- 280937** EPOS 24/1 for DC motors
- 280938** EPOS 24/1 for EC 6 motor
- 302267** EPOS 24/1 for EC 16 / EC 22 motors
- 302287** EPOS 24/1 for DC / EC motors
- 275512** EPOS 24/5
- 300583** EPOS 70/10

Accessories

- 309687** Shunt regulator (EPOS 24/1 and 24/5)
- 235811** Shunt regulator (EPOS 70/10)

Mechanical data

- Weight
 - EPOS 24/1 approx. 45 g
 - EPOS 24/5 approx. 170 g
 - EPOS 70/10 approx. 330 g
- Dimensions (L x W x H)
 - EPOS 24/1 55 x 40 x 25 mm
 - EPOS 24/5 105 x 83 x 24 mm
 - EPOS 70/10 150 x 93 x 27 mm
- Mounting plate
 - Flange for M3-screws

DIGITAL

CANopen

RS232

GUI

Electrical Data

- Supply voltage V_{CC} (Ripple < 10%)
 - EPOS 24/1 9 - 24 VDC
 - EPOS 24/5 11 - 24 VDC
 - EPOS 70/10 11 - 70 VDC
- Max. output voltage
 - EPOS 24/1 $0.98 \times V_{CC}$
 - EPOS 24/5 $0.9 \times V_{CC}$
 - EPOS 70/10 $0.9 \times V_{CC}$
- Max. output current I_{max} (<1 s)
 - EPOS 24/1 2 A
 - EPOS 24/5 10 A
 - EPOS 70/10 25 A
- Continuous output current I_{cont}
 - EPOS 24/1 1 A
 - EPOS 24/5 5 A
 - EPOS 70/10 10 A
- Sample rate of PI - current controller 10 kHz
- Sample rate of PI - speed controller 1 kHz
- Sample rate of PID - positioning control 1 kHz
- Max. speed (motor with 2 poles) 25 000 rpm
- Built-in motor choke per phase
 - EPOS 24/1 150 μ H / 1 A (DC / EC motors)
 - 300 μ H / 0.7 A (EC 6 motor)
 - EPOS 24/5 15 μ H / 5 A
 - EPOS 70/10 25 μ H / 10 A

Inputs

- Hall sensor signals H1, H2, H3
- Encoder signals A, A', B, B', I, I' (max. 1 MHz)
- Digital inputs
 - EPOS 24/1 6 digital inputs
 - EPOS 24/5 6 digital inputs
 - EPOS 70/10 8 digital inputs
- 2 analogue inputs
 - 10-bit resolution, 0 ... +5 V
- CAN-ID (CAN node identification)
 - EPOS 24/1 configurable with DIP Switch 1 ... 4
 - EPOS 24/5 configurable with DIP Switch 1 ... 7
 - EPOS 70/10 configurable with DIP Switch 1 ... 7

Outputs

- Digital outputs
 - EPOS 24/1 2 digital outputs
 - EPOS 24/5 4 digital outputs
 - EPOS 70/10 4 digital outputs

Voltage outputs

- Encoder supply voltage +5 VDC, max 100 mA
- Hall sensor supply voltage
 - +5 VDC, max. 30 mA
- Auxiliary supply voltage
 - EPOS 24/1 +5 VDC, max. 10 mA
 - EPOS 24/5 V_{CC} , max. 1300 mA
 - EPOS 70/10 +5 VDC ($R_i = 1 \text{ k}\Omega$)

Interface

- RS232 RxD; TxD (max. 115 200 bit/s)
- CAN high; low (max. 1 Mbit/s)

LED indicator

- LED
 - EPOS 24/1 red LED, green LED
 - EPOS 24/5 Bi-colour LED
 - EPOS 70/10 Bi-colour LED
 - green = READY, red = ERROR

Ambient temperature / humidity range

- Operation -10 ... +45°C
- Storage -40 ... +85°C
- No condensation 20 ... 80 %