

**EPOS P 24/5**

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

**Additional information****Controller versions****Master-Version (programmable)****Electrical Data**

Operating voltage $V_{cc}$ (ripple < 10%)	11 - 24 VDC
Logic supply voltage $V_c$ (optional)	11 - 24 VDC
Max. output voltage	$0.9 \times V_{cc}$
Max. output current $I_{max}$ (<1 s)	10 A
Continuous output current $I_{cont}$	5 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 (1 pole pair)	25 000 rpm
Built-in motor choke per phase	15 $\mu$ H / 5 A

**Input**

Hall sensor signals	H1, H2, H3
Encoder signals	A, A $\bar$ , B, B $\bar$ , I, I $\bar$ (max. 1 MHz)
Digital inputs	6 digital inputs
Analogue inputs	2 analogue inputs 10-bit resolution, 0 ... +5 V
CAN-ID (CAN node identification)	Configurable with DIP switch 1 ... 7

**Output**

Digital outputs	4 digital outputs
Encoder voltage output	+5 VDC, max 100 mA
Hall sensor voltage output	+5 VDC, max. 30 mA
Auxiliary voltage output	$V_{cc}$ , max. 1300 mA

**Interface**

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

**Indicator**

LED green = READY, red = ERROR	Bi-colour LED
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**Ambient temperature / Humidity range**

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

**Mechanical data**

Weight	Approx. 180 g
Dimensions (L x W x H)	105 x 83 x 24 mm
Mounting threads	Flange for M3-screws

**Order Number**

**323232** EPOS P 24/5

**Accessories**

**309687** DSR 50/5 Shunt regulator

Order accessories separately, see page 299

**Modes of Operation**

CANopen Profile Position-, Profile Velocity- and Homing Mode

Position-, Velocity- and Current Mode

Path generating with trapezoidal or sinusoidal velocity profiles

Feed forward for velocity and acceleration

Velocity and acceleration feed forwarding

Sinusoidal or block commutation for EC motors

**Communication**

Programming interface (Windows)

serial RS232 maxon protocol

**Inputs / Outputs**

Free configurable digital inputs e.g. for limit switches and reference switches

Free configurable digital outputs e.g. for brakes

Free analogue inputs

**Available software**

EPOS Studio including programming tool according to IEC 61131-3

Motion Control Library according to PLCopen  
maxon Utility Library

Firmware

**Available documentation**

Getting Started

Cable Starting Set

Hardware Reference

Firmware Specification

Programming Reference

Application Notes

**Cable**

A comprehensive range of cables is available as an option. Details can be found on page 299.