

CANopen

USB

RS232

GUI

**EPOS2 24/5**

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

**EPOS2 70/10**

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

Controller versions		
	Slave version	Slave version
Electrical Data		
Operating voltage V_{CC}	11 - 24 VDC	11 - 70 VDC
Logic supply voltage V_C (optional)	11 - 24 VDC	11 - 70 VDC
Max. output voltage	$0.9 \times V_{CC}$	$0.9 \times V_{CC}$
Max. output current I_{max} (<1 s)	10 A	25 A
Continuous output current I_{cont}	5 A	10 A
Switching frequency of power stage	50 kHz	50 kHz
Sample rate of PI - current controller	10 kHz	10 kHz
Sample rate of PI - speed controller	1 kHz	1 kHz
Sample rate of PID - positioning control	1 kHz	1 kHz
Max. speed (1 pole pair)	25 000 rpm (sinusoidal); 100 000 rpm (block)	25 000 rpm (sinusoidal); 100 000 rpm (block)
Built-in motor choke per phase	15 μ H / 5 A	25 μ H / 10 A
Input		
Hall sensor signals	H1, H2, H3	H1, H2, H3
Encoder signals	A, A \bar , B, B \bar , I, I \bar (max. 5 MHz)	A, A \bar , B, B \bar , I, I \bar (max. 5 MHz)
Digital inputs	6 (TTL and PLC level)	10 (7 optically isolated, 3 differential)
Analog inputs	2 12-bit resolution, 0...+5 V	2 (differential) 12-bit resolution, 0...+5 V
CAN-ID (CAN node identification)	configurable with DIP switch 1...7	configurable with DIP switch 1...7
Output		
Digital outputs	4	5 (4 optically isolated, 1 differential)
Analog outputs		
Encoder voltage output	+5 VDC, max. 100 mA	+5 VDC, max. 100 mA
Hall sensor voltage output	+5 VDC, max. 30 mA	+5 VDC, max. 30 mA
Auxiliary voltage output	V_{CC} , max. 1300 mA	+5 VDC, max. 150 mA; +5 VDC ($R_i = 1 \text{ k}\Omega$)
Interface		
RS232	RxD; TxD (max. 115 200 bit/s)	RxD; TxD (max. 115 200 bit/s)
CAN	high; low (max. 1 Mbit/s)	high; low (max. 1 Mbit/s)
USB 2.0	Data+; Data- (max. 12 Mbit/s)	Data+; Data- (max. 12 Mbit/s)
Indicator		
LED green = READY, red = ERROR	green LED, red LED	green LED, red LED
Ambient temperature and humidity range		
Operation	-10...+45°C	-10...+45°C
Storage	-40...+85°C	-40...+85°C
No condensation	20...80%	20...80%
Mechanical data		
Weight	Approx. 170 g	Approx. 330 g
Dimensions (L x W x H)	105 x 83 x 24 mm	150 x 93 x 27 mm
Mounting threads	Flange for M3-screws	Flange for M3-screws
Article numbers	367676 EPOS2 24/5	375711 EPOS2 70/10

Accessories	309687 DSR 50/5 Shunt regulator	235811 DSR 70/30 Shunt regulator
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