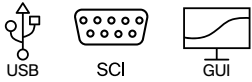


ESCON2 Data

CANopen I/O ↔



NEW

NEW



motor control

ESCON2 Nano 24/2

ESCON2 Micro 60/5

Controller version	Commands via I/O or CANopen Slave	Commands via I/O or CANopen Slave
Electrical data		
Operating voltage V_{CC}	5 - 24 VDC	10 - 60 VDC
Logic supply voltage V_C (optional)	-	10 - 60 VDC
Max. output voltage	$0.9 \times V_{CC}$	$0.95 \times V_{CC}$
Max. output current I_{max}	6 A (<6.5 s)	15 A (<4 s)
Continuous output current I_{cont}	2 A	5 A
Switching frequency of power stage	50 kHz	50 kHz
Sampling rate of PI current controller	50 kHz (20 μ s)	50 kHz (20 μ s)
Sampling rate of PI speed controller	10 kHz (100 μ s)	10 kHz (100 μ s)
Max. speed (1 pole pair)	120 000 rpm (sinusoidal)	120 000 rpm (sinusoidal)
Built-in motor choke per phase	-	-
Inputs		
Hall sensor signals	H1, H2, H3	H1, H2, H3
Encoder signals	A, B (max. 6.25 MHz)	A, A', B, B' (max. 6.67 MHz)
Sensor signals	Clock ¹ , Data ¹	Clock ¹ , Data ¹
Digital inputs	4	4
Digital inputs "High-speed"	4	4
Analog inputs	2 (12-bit resolution, 0...+5 V)	2 (12-bit resolution, -10...+10 V)
CAN ID	configurable with external wiring	configurable with external wiring
Outputs		
Digital outputs	2	2
Digital outputs "High-speed"	1	1
Analog outputs	2 (12-bit resolution, 0...+3.3 V, max. 1 mA)	2 (12-bit resolution, -4...+4 V, max. 1 mA)
Encoder voltage output	5 VDC, max. 145 mA	5 VDC, max. 145 mA
Hall sensor voltage output		
Auxiliary voltage output	3.3 VDC, max. 20 mA	3.3 VDC, max. 20 mA
Communication interfaces		
CAN	yes (ext. transceiver)	yes
SCI (RS232 ext. transceiver)	yes	yes
USB	yes	yes
Indicator		
LED green = READY, red = ERROR	External LEDs required	External LEDs required
Environmental conditions		
Temperature - Operation	-30...+45 °C	-30...+50 °C
Temperature - Extended Range	45...70 °C; Derating: -0.077 A/°C	50...70 °C; Derating: -0.227 A/°C
Temperature - Storage	-40...+85 °C	-40...+85 °C
Humidity (condensation not permitted)	5...90%	5...90%
Mechanical data		
Weight	approx. 2.5 g	approx. 6 g
Dimensions (L x W x H)	23.0 x 16.0 x 4.5 mm	36.8 x 23.8 x 6.5 mm
Mounting	Pluggable and M2 screws	Pluggable and M2 screws
Part numbers		
	809635 ESCON2 Nano 24/2	809631 ESCON2 Micro 60/5
Accessories		
	309687 DSR 50/5 Shunt regulator	235811 DSR 70/30 Shunt regulator
	Order accessories separately, see page 555	Order accessories separately, see page 555

¹in preparation