

For up to 2 axes



## Product Features:

- Suitable for various applications of drive technology, e.g.: Synchronization Control, Index and Print Mark Evaluation Control, Rotating Cross Cutter Control, Flying Saw Control, Eccentric Shear Control, Label Printing Machine Control, etc.
- IO modules (optional), CANopen, CC-Link, DeviceNet, EtherCAT, Modbus TCP, PROFIBUS, PROFINET, SERCOS-III, etc.
- Free assignment of the control axis and index or print mark inputs
- New included control loop enables to run torque loop applications
- Tandem Drive Control

## Technical Specification:

<b>Power supply:</b>	Input voltage:	18 ... 35 VDC
	Protective circuit:	reverse voltage protection
	Consumption:	approx. 150 mA (unloaded)
	Connections:	screw terminal, 1,5 mm <sup>2</sup>
<b>Encoder supply:</b>	Output voltage:	5.2 VDC and 16 ... 33 VDC (input voltage minus ca. 2 V)
	Output current:	5.2 VDC: max. total 300 mA and 16... 33 VDC: max. total 240 mA
	Protective circuit:	reverse voltage protection
<b>SinCos inputs:</b>	Number of inputs:	2
	Amplitude:	0.8 ... 1.2 V <sub>pp</sub>
	DC offset:	1.8 ... 3.1 VDC
	Frequency:	max. 400 kHz
	Connections:	SUB-D (male) connectors, 9-pin
<b>Incremental inputs:</b>	Number of inputs:	2
	Format:	RS422 (differential signal A, /A, B, /B, Z, /Z)
	Frequency:	max. 2 MHz
	Differential voltage:	> 1 VDC
	Connections:	screw terminals, 1,5 mm <sup>2</sup>
<b>Control inputs:</b>	Number of inputs:	4
	Application:	fast interrupt-inputs (light barriers, photocells, ...)
	Signal level:	HTL PNP/NPN: LOW 0 ... 2,5 V, HIGH 10 ... 30 V
	Pulse width:	min. 4 µs
	Input resistance:	R <sub>i</sub> ≈ 3 kOhm
	Connections:	screw terminal, 1,5 mm <sup>2</sup>
	Number of inputs:	4
	Application:	control inputs
	Signal level:	HTL PNP: LOW 0 ... 2,5 V, HIGH 10 ... 30 V
	Pulse width:	min. 1 ms
	Input resistance:	R <sub>i</sub> ≈ 10 kOhm
	Connections:	screw terminal, 1,5 mm <sup>2</sup>

## Technical Specification:

<b>SSI inputs:</b>	Number of inputs: 2 SSI-Mode: Master and Slave Frequency: 100 Hz ... 1 MHz Resolution: 13 ... 32 Bit Format: RS422, also selectable as pulse input 2 x A, /A, B, /B Connections: screw terminals, 1,5 mm <sup>2</sup>
<b>Analog inputs:</b>	Number of inputs: 2 Current input: 0 ... 20 mA / 4 ... 20 mA (load max. 150 Ohm) or Voltage input: -10 ... +10V / 0 ... 10 V (R <sub>i</sub> ≈ 100 kOhm) Reference voltage: 4.096 VDC (to connect linear potentiometers) Resolution: 14 Bit (±13 Bit) Accuracy: 0.1 % Delay period: < 1 ms Connections: screw terminal, 1,5 mm <sup>2</sup>
<b>Incremental outputs:</b>	Channels: A, /A, B, /B, Z, /Z (differential signal) Frequency: max. 500 kHz Differential voltage: 3.5 ... 30 VDC (depends „Com+“ input level) Output current: 30 mA each channel Connections: screw terminal, 1,5 mm <sup>2</sup>
<b>Control outputs:</b>	Number of outputs: 4 Output voltage: 5 ... 30 VDC (depends „Com+“ input level) Output current: max. total 350 mA Output Driver: push-pull Protective circuit: short-circuit-proof Delay period: < 1 ms Connections: screw terminal, 1,5 mm <sup>2</sup>
<b>Analogue outputs:</b>	Number of outputs: 2 Voltage output: -10 ... +10V / 0 ... 10 V (load max. 2 mA) or Current output: 0 ... 20 mA / 4 ... 20 mA (load max. 270 Ohm) Resolution: 14 Bit (±13 Bit) Accuracy: 0.1% Delay period: < 1 ms Protective circuit: short-circuit-proof Connections: screw terminal, 1,5 mm <sup>2</sup>
<b>RS232-interface:</b>	Data transmission: asynchronous Baud rate: 2400 ... 38400 Protocol: Lecom protocol „standard“ Connections: SUB-D (female), 9-pin
<b>USB-interface:</b>	Version: USB 2.0 Connections: USB-B (female)
<b>Ethernet / TCP / IP:</b>	Standard: IEEE 802.3 Transmission rate: 10 ... 100 Mbps Parameterization: Half / Full Duplex Connections: RJ45 (female)
<b>Fieldbus module: (optional)</b>	Ethernet Interface: EtherCAT, Ethernet / IP, Modbus TCP, Powerlink, PROFINET, SERCOS-III Fieldbus Interface (Slave): CC-Link, CANopen, DeviceNet, Modbus, PROFIBUS
<b>Display:</b>	Number of LED's: 3 Green LED: Ready for operation „ON“ Yellow LED: Status 1 Yellow LED: Status 2
<b>Switches:</b>	DIL-switch: 3-pin
<b>Conformity and standards:</b>	EMC 2004/108/EC: EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 Guideline 2011/65/EU: RoHS conform
<b>Enclosure:</b>	Material: plastic Mounting: mounting rail (DIN, 35 mm C-Profile) Dimensions: 50 x 160 x 160 mm (w x h x d) Weight: ca. 450 gram Protection class: IP20
<b>Ambient temperature:</b>	Operating: 0 °C ... +60 °C / +32 °F ... +140 °F (not condensing) Storage: -25 °C ... +70 °C / -13 °F ... +158 °F (not condensing)