Kuhnke FIO Drive Control
Compact drive controller

This extremely compact drive controller is the general-purpose solution for both, stepper motors and brushless DC motors.

Magnetic field-orientated vector control and encoder feedback plus sine wave commutation ensure highly dynamic, very efficient, smooth and balanced operation at low running noise - particularly when it comes to driving stepper motors. Step errors are corrected along the path already and the load angle error is eliminated within a single full step. Owing to continuous motor current monitoring, the control unit supplies just as much power as necessary, thus making the system very energy-efficient.

An integrated web server helps to set up the unit. Thus, no software needs to be installed to configure the module. Instead, any PC featuring and Ethernet port and a web browser will do.

Modes
- Interpolation (cyclic synchronous position mode)
- Positioning mode (absolute / relative)
- Velocity mode
- Torque control
- Referencing

Technical Data	
Type	**Kuhnke FIO Drive Control**
Motor type	2 Phase Stepper motor or Brushless DC motor
Power supply	Electronic 24 V DC, Motor 12..72 V DC (cULus 12..48 V DC)
Rated current	5 A (cULus: max 55°C, 5A @ 12..24 V DC / 4A @ 48 V DC)
Peak current	Stepper motor: 10 A / Brushless DC motor: 15A
Incremental encoder	5 V / 24 V (A, /A, B, /B, Z, /Z)
Hall sensor	24 V (H1, H2, H3) or 3 additional zero-switching digital inputs
Digital Inputs	5 x 1 ms (configurable, for example, reference, limit or release switch)
Digital Outputs	1 x 0.5A (brake output or standard output)
Fieldbus	EtherCAT$^®$ 100 Mbit/s LVDS: E-Bus
Mounting	35 mm DIN-Rail
Indication	LED, assigned to the clamping point locally
Shield connection	Directly at module
I/O connection	Spring-loaded plug with mechanical ejection
Ambience conditions	0 °C…+55 °C, IP 20, Interference immunity Zone B per EN61131-2
Housing (W x H x D)	Aluminium, plastic, 25 x 120 x 90 mm
Certifications	CE, cULus

14.11.17

INDUSTRIAL CONTROL SYSTEMS   KUHNKE