

Kuhnke FIO

Kuhnke FIO MIX 111, EtherCAT® multifunction terminals

The Kuhnke FIO MIX 111 combines digital and analog inputs and outputs as well as integrated counter, encoder, PWM and PTO functions in a compact EtherCAT I/O module. In addition to twelve digital inputs, eight digital outputs, two analog inputs and two analog outputs, selected channels can alternatively be used for special functions such as event counters, A/B referencers, pulse train outputs (PTO) or PWM outputs. Configuration is carried out via the EtherCAT Modular Device Profile (MDP) using pluggable software modules in CODESYS V3. By combining different signal types and functions, control, measurement, positioning and motion tasks can be carried out with a single module.

Features

- 12 digital inputs and 8 digital outputs
- 2 analog inputs and 2 analog outputs, configurable
- Parameterization via EtherCAT Modular Device Profile (MDP)
- Functions selectable via libraries in CODESYS V3
- Signal preprocessing directly in the module



Technical Data	
Type	Kuhnke FIO Mix 111
Order no.	694 444 66
Integrated I/Os	10 x DI 24 V 0,3 ms (konfigurable filters) 2 x DI / AI 24 V 0,3 ms (konfigurable filters) / 0...10 V, 12 Bit 8 x DO 4 x 24 V 0,5 A / 4 x 24 V 0,25 A 2 x AI 0...10 V, 0/4 ...20 mA, 12 Bit 2 x AO 0...10 V, 0/4 ...20 mA, 12 Bit Integrated functions (reducing the number of available I/Os): 4 x event counter (2 x 32bit, 2 x 16bit, 200kHz), 2 x Encoder A-B-Z (200 kHz), 4 x Timestamp (1µs resolution, 32Bit counting depth) 2 x encoder supply or 2 x frequency generator (100 kHz) or 4 x PWM (50 kHz) or 2 x PTO axis (100 kHz, Step/Dir + opt. PTO enable)
Specialties	EtherCAT operation in Free RUN or DC-synchronous mode, analogue values provided in physical units
Power supply	24 VDC (-20% / +25%)
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 acc. EN 61131-2
Housing (W x H x D)	Aluminium, plastic, 25 x 120 x 90 mm
Certifications	CE (industry), cULus



We reserve the rights of modification, omission, error with respect to the products. Illustrations similar. All rights reserved by the individual copyright holders. EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany. Safety over EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany. Microsoft®, Windows® and the Windows® Logo are registered trademarks of Microsoft Corporation in the USA and other countries. At www.plcopen.org you will find more information about PLCopen Organisation. CODESYS is a product of 3S-Smart Software Solutions GmbH. CiA® and CANopen® are registered community trademarks of CAN in Automation e.V.. PROFINET® is a registered trademark of PROFIBUS and PROFINET International (PI).