

Kuhnke FIO MIX 04

EtherCAT®- Multifunctional Bus Terminal

This module series combines many different I/O signals to an intelligent module, saving the limited space in the control cabinet and reducing the variety of modules required in an EtherCAT® system. Under the system name FIO MIX complements the series of highly compact and multifunctional I/O modules the Kuhnke EtherCAT I/O family.

The Kuhnke FIO MIX 04 module provides besides 4 analogue inputs and 4 analogue outputs, each configurable for current and voltage, 2 encoder interfaces for signal collection of incremental (HTL/TTL) or absolute value position encoders with SSI or EnDAT interface. As an alternative 6 event counters can be configured as well. The configuration in CODESYS is done by pluggable modules with corresponding slots. Each slot thereby represents one analogue channel or an encoder interface. This procedure bases on "EtherCAT Modular Device Profile".

Integrated functions:

- Functions selectable by using CODESYS V3 libraries
- Signal preprocessing on the module
- Customizing possible



Technical Data

Type	Kuhnke FIO Mix 04		
Order no.	694 444 64		
Counter / encoder	2 (configurable):	RS422: 5/24V SE: Six-Step enc.: SSI: EnDat 2.1:	32 Bit, 20 Mio. Inc/s (5MHz) or 32 Bit, 1,6 Mio. Inc/s (400kHz) or 32 Bit, 8 kHz or 18 ... 32 Bit, 80 ... 1000 Kbit/s or 16 ... 40 Bit, 100 kHz ... 2 MHz or
	alternative	event counter:	2 x HTL/TTL 32 Bit, 400 kHz (channel 0,3) 4 x HTL/TTL 32 Bit, 5 kHz (channel 1,2,4,5)
Analogue inputs	4x 12 Bit (configurable): 0 ... 10 V, 0/4 ... 20 mA		
Analogue outputs	4x 16 Bit (configurable): 0 ... 10 V, -10 ... +10 V, 0/4 ... 20 mA		
Specialties	EtherCAT operation in Free RUN or DC-synchronous mode, analogue values scalable in physical or user-specific 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, cULus		

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