Eckelmann

Embedded Controller – E°EXC 89e

Special Functional and Performance Features

The compact E°EXC 89e controller has the following features:

- CNC functionality with a maximum of 32 axes
- Limitations for a controller with 8 or 32 axes:
  A maximum of 4 simultaneously interpolating axes and additionally up to 28 auxiliary or gantry axes
- CODESYS® V3 run time system
- CNC core with large instruction set
- Direct connection of fast I/O modules from the E°UBM family
- EtherCAT® Master
- OPC UA Server and OPC UA Client for Industry 4.0 connection
- Versatile technology specific functions (from circular/eccentricity grinding to flame cutting)
- Simple configuration through automatic detection of supported drives and powerful engineering tool
- Customizing possibility

Technical Data

Electrical connection

▪ Power supply	24 V DC +20 % / -15 %
▪ Power consumption	Max. I_{IN} 10 A incl. controller Max. I_{OUT} 10 A

Interfaces

▪ CAN bus	2 x CANopen® port for drives or I/O-modules according to DS 401
▪ Standard Ethernet	1 x as an interface to a superimposed network, 100 Mbit
▪ Real-time Ethernet	1 x EtherCAT® for drives and I/O-modules
▪ USB	Device
▪ Card slot	Slot for SD or SDHC card
▪ Programming interface	Ethernet
▪ Monitoring function	Software watchdog

Central processing unit

▪ CPU	RISC processor
▪ FLASH	Up to 1 GB NAND FLASH
▪ RAM	256 MB DDR2-RAM 1 MByte CMOS-RAM, battery buffered
▪ Memory extension	Slot for SD card

General data

▪ Color		Black
▪ Dimensions (w x h x d)		100 mm x 120 mm x 76 mm
▪ Weight		370 g
▪ Temperature range	Transport/storage:	-40 °C to +70 °C
	Operation:	+5 °C to +55 °C
▪ Relative humidity max.		10 % to 90 %, non condensing
▪ Cooling		Air circulation, no fan
▪ Protection class		IP20

Standards and regulations

EC Declaration of Conformity according to
- 2014/30/EU (EMV Directive)
- 2011/65/EU (RoHS Directive)

UK Declaration of Conformity according to
- SI 2016/1091 The Electromagnetic Compatibility Regulations 2016
- SI 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

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E°EXC 89e
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Technical changes and errors excepted