Eckelmann

E°EXC 882 E°CUT ECO – Embedded Cutting Controller

Special Functional and Performance Features

E°CUT – Complete Solution
Embedded CNC controller with integrated I/O functions for a complete cutting solution

Technology Packages For
- Plasma
- Oxyfuel
- Laser
- Water jet
- Marking

Head Configurations
- 1 to 2 × plasma with height control (internal or external)
- 1 to 4 × oxyfuel with proportional valves
- 1 × laser with analog power control
- 2 × plasma plus up to 2 x oxyfuel with proportional valves
- 1 x plasma plus up to 3 × oxyfuel
- IPG YLS laser
- RAYCUS/MAXphotonics(X) laser
- Water jet cutting

Height Controls
- Internal precise E°IHC height control
- Support of external height control systems with digital I/O interface (IHT, Kjellberg KHC)
- External height control with capacitive distance measurement function

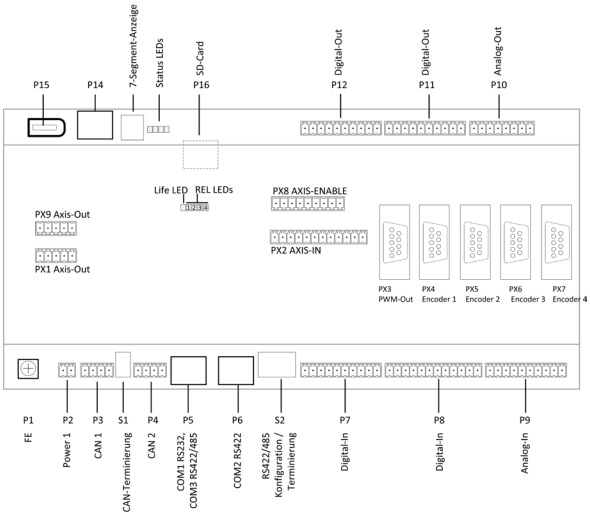
Supported Components
- Plasma power sources, serial (Kjellberg SmartFocus, HiFocus, Hypertherm HPR, PMX, MaxPro200, Thermal Dynamics UCUT)
- Laser (IPG YLS with Lasermech HSU, RAYCUS RFL-C4400/RFL-C2000X and MAXphotonics MFSC 1000X-4000X with Raytools BM114 + Lasermech HSU or Raytools QC-300, SPI/GSI JK with Lasermech HSU)
- Koike powder marker

Drives
- 4 Axes (1 gantry axis)
- CANopen®

Software
- E°CUT HMI for all cutting technologies
- E°CAM (CAD/CAM software)

Special Functions
- Remote control unit connection
- Shuttle table control for laser cutting
- Fume extraction with flap control

Connections on E°EXC 882 E°CUT ECO



Optional: 2 x CAN interface
3 Serial interfaces
Programming interface Ethernet, RS232
Digital inputs/outputs
Analog inputs/outputs
Analog axis interface for 4 axes
PWM interface for laser control

Technical Data

Electrical connection	
▪ Operating voltage	24 V DC nominal, 19.2 V ... 30 V permitted
Interfaces	
▪ CAN1, CAN2	Optional: 2x CANopen® port each port configurable as I/O or drive bus
▪ Ethernet	1x 100Base-TX, 100 Mbit/s
▪ Serial interfaces	1 x RS-232, 2 x RS-485 / RS422 switchable
▪ Digital inputs and outputs	20 x Digital In, 24 V, status indication via LED, reverse polarity protected 16 x Digital Out, 24 V, 500 mA, status indication via LED, short-circuit proof
▪ Analog inputs and outputs	4 x Analog In, -10 V ... 10 V, differential 4 x Analog Out, -10 V ... 10 V, single-ended
▪ Analog axis interface	4 Axes
▪ PWM interface	Output, differential (RS-422 level)
▪ Encoder inputs	4
▪ Programming interface	Ethernet, RS-232 interface with control LEDs
Data memory	256 MByte RAM, 1 MByte CMOS RAM, battery buffered
Program memory	1 GByte FLASH
Memory extension	Optional: internal slot for Micro SDHC card (up to 32 GB memory)
Real-time clock	Power reserve battery buffered
Monitoring function	Outputs are turned off by a watchdog in case of an error
General data	
▪ Dimensions (W x H x D)	258 mm x 42 x 128 mm
▪ Temperature range Transport/storage: Operation:	-40 °C to +70 °C +5 °C to +50 °C
▪ Relative humidity	10 % to 95 %, non-condensing
▪ Protection	IP20
Standards and regulations	EC Declaration of Conformity according to ▪ 2014/30/EU (EMC 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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Technical changes and errors excepted