## Product description

## Security System for fiber laser SPISCU11 / SPIHPS11

Drawings: Pulsed laser construction guide SPISCU11 / SPIHPS11 connections

SPISCU11 / SPIHPS11 allows easy construction of laser systems under consideration of necessary security aspects for emergency off ( F-Stop ) and interlock (s).

Its two channel system with high security level is certified by DEKRA EXAM. Power switches interupt the  $24\mathrm{V}/30\mathrm{A}$  laser DC power through F-Stop, interlock (open doors) fault conditions and by means of a PLC controlled signal line. An additional circuit verifies functionality of the  $24\mathrm{V}/30\mathrm{A}$  switch. In case of switch malfunction and F-STOP the AC input of the main laser supply is interrupted.

## SPISCU11 / SPIHPS11: DIN rail module: EN 50022 100 \* 110 \* 45mm

- A: Monitoring of F-STOP and interlocks circuits for contact faults and shorts.
- B: Dual interlock circuit galvanically separated by optocouplers.
- C: Dual emergency off circuit (F-Stop) galvanically separated by optocouplers.
- D: F-STOP rearm key.
- E. Monitoring output of FAULT condition: 24V = no fault; 0V = fault.
- F: Interlock status: door closed = 24V; door open = 0V.
- G: General enable input: OV = disable unit and laser and laser; NC or 24V = enable all.
- H: Status indications by LED's.
- I: Cabling by cage clamp connectors ( max.2.5mm2, max. AWG13 ).
- K: External supply required: 24V / 1A minimum.
- L: All interface to SPS/PLC 24V is shortproof.

Operation: If faults are detected or F-Stop is activated the system rearm button must be operated to return to normal operation. A permanent fault is not resettable.

Important note: minus of aux. 24V power supply and minus of main laser power supply must be interconnected!

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