

Switching Amplifiers

Evaluation Amplifiers for Optoelectronic Transducers

Model LSO.25

WIKA Data Sheet LM 31.20

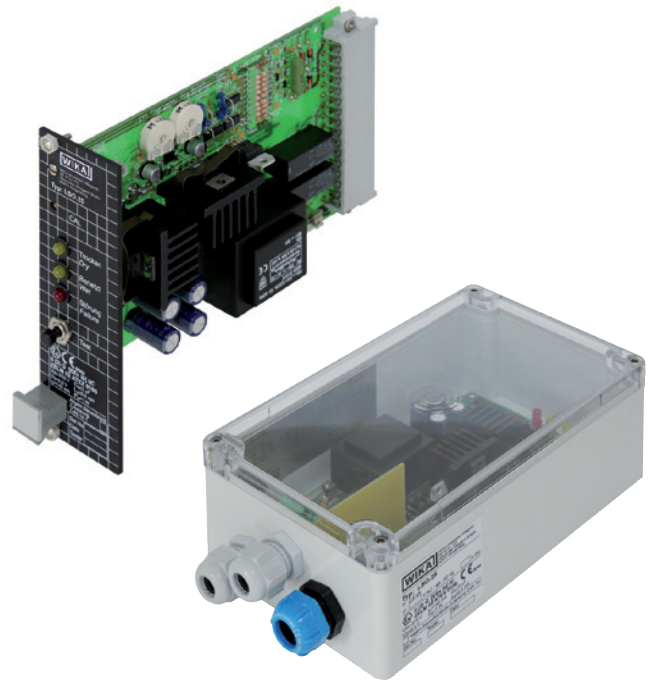


Applications

- For amplifying signal processing of the optoelectronic instrument transducer model LSO.06

Special Features

- Separate relays and displays for dry/wet
- Permanent self-test of instrument transducer, wiring and electronic system
- Test of electronic system and following instruments by pressing the Test button
- Selectable versions
 - 19" plug-in card
 - in mounted case



Switching amplifier Model LSO.25

Fig. top: 19" plug-in card

Fig. bottom: in mounted case

Description

The switching amplifier is mounted in safe areas and operated together with a transducer model LSO.06. The signal circuit is intrinsically safe.

The switching amplifier model LSO.25 may be used together with the instrument transformer model LSO.06 as overflow control.

For the 19" plug-in card version, all operating elements, except for the switch for changing the alarm direction and the potentiometers for the time delay, can be accessed from the front.

If incorporated in a mounted case, a transparent lid allows seeing the switching statuses.

General Data

Functions

- Selectable alarm direction
- On-delay and drop-out delay for signal relay, each adjustable up to approx. 8 s

Monitoring

- Wire break signal circuit
- Short-circuit signal circuit
- Internal supply voltage, fail-safe

Weight

- 19" plug-in card 0.31 (0.36) kg
- mounted case 0.6 (0.73) kg

Design Data

Ambient temperature

- 19" plug-in card -25 ... +60 °C
- mounted case -40 ... +40 °C

Signal circuit II (2) G [EEx ib] IIC

Maximum external inductance L_{max} 0.5 mH

Maximum external capacitance C_{max} 3 μ F

U_0 \leq 9.6 V

I_0 \leq 149 mA

P_0 \leq 1.0 W

Electrical Data

Supply voltage 230/115/120/ AC 24 V / DC 24 V

Power consumption 2.8 VA/3 W

Outputs

- Signal relay, SPDT, 250 V/ 3 A/100 VA
- Failure relay, SPDT, 250 V/ 3 A/100 VA

Cable glands M16 x 1.5 / M20 x 1.5 Ex: blue

Max. connection cross section 2.5 mm²

Cable length 175 ... 600 m (0.5 ... 1.5 mm²)

Ingress protection

- 19" plug-in card IP 20 per EN 60 529
- mounted case IP 65 per EN 60 529

Options

Approvals

EC-type examination certificate ZELM 02 ATEX 0106 (includes ASEV)

Allgemeine Bauaufsichtliche Zulassung (only for Germany) Z-65.14-1

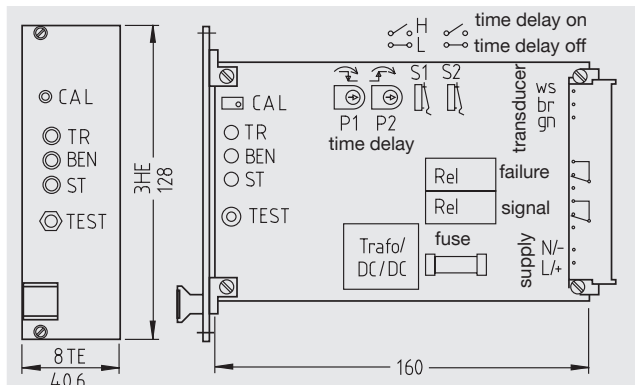
SIL level per IEC 61 508 SIL1, in connection with transducer Model LSO.06

Ordering information

Model / Version / Supply voltage / Options

Modifications may take place and materials specified may be replaced by others without prior notice. Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

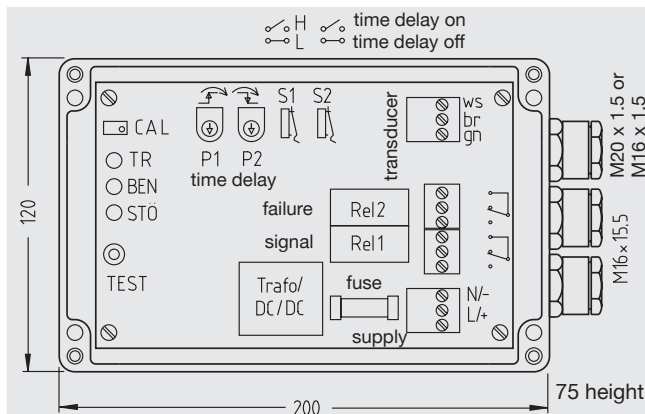
19" plug-in card version



Application details

- 32-pin connector per DIN 41 612 Form F
 - Operating elements can be accessed from the front
- Exceptions:
- Switches for changing the alarm direction
 - Potentiometers for time delay

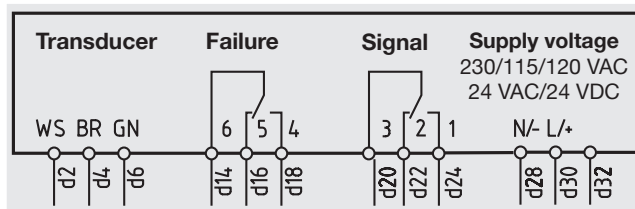
Mounted case version



Application details

- Transparent lid, LED display for dry/wet/failure is easy to read
- Ingress protection IP 65, field use possible

Electrical connection diagram



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