

- 2-Channel
- TÜV-Approval per VDE 0660 Section 209
- TÜV DIN v 19 250 Requirements class AK 1 ... 5
- Can be combined with EKSH-03-T; ED2-SH-Ex2.T; The combination meets VDE 0660 Section 209

Note:
This device was tested and meets the requirements of VDE 0660 Section 209

This Model replaces Model 2RSH

Applications

- **Contact duplication:**
Multiple relay cards can be connected to the intrinsic safety transformer isolated amplifier with transistor output from Pepperl+Fuchs (see application on page 95). With this, interconnected safety circuits (i.e. emergency stop of expanded systems) can be realized.
- **Valve cut-off**
Valves may be safely cut-off conjunction with safety controls or Emergency-Stop buttons in the input circuit.

Output I and II

The relay outputs are intrinsically safe per VDE 0660 Section 209", separate external connections for i.e. re-switched protective interlocking circuits.
Since VDE 0660 Section 209 covers the use of two interlocking relays, it is necessary with direct deactivation to switch connections d30 and z30 or d26 and z26. Connection d32 or d24 remains unswitched.

Output III

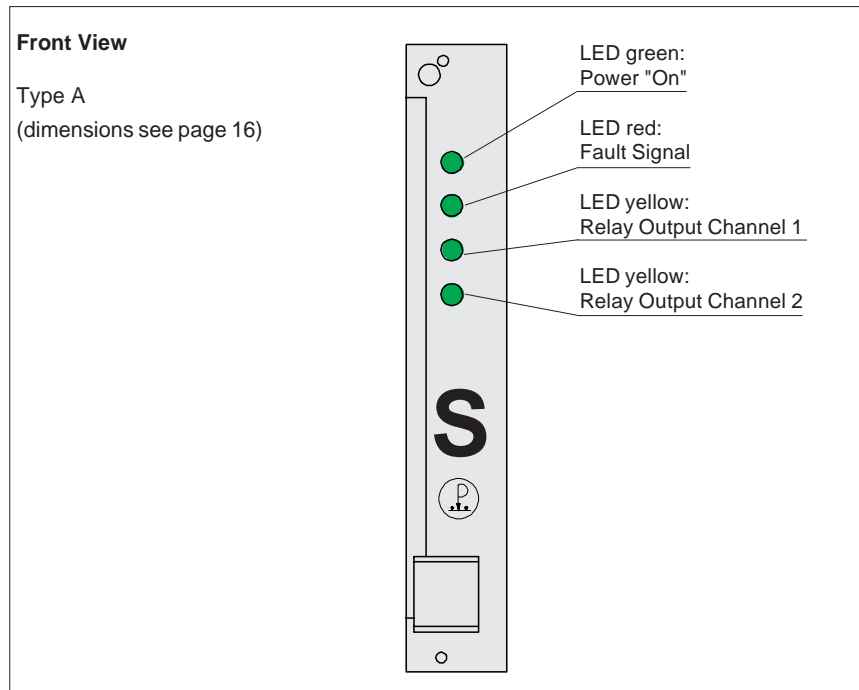
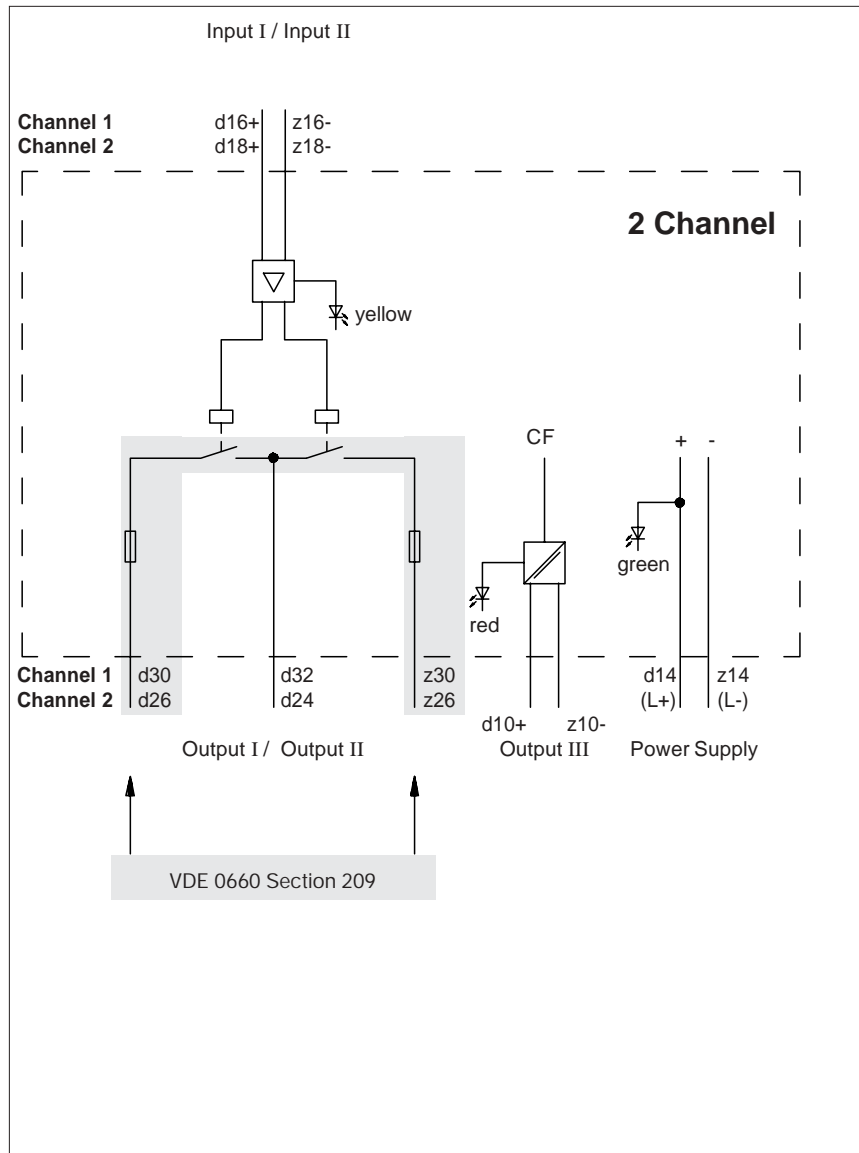
Potential free fault signal output (not intrinsically safe)
Indication of:
- Contact fusing of the intrinsically safe outputs (CF) (Signal occurs only in a non switched state)

Note

Data relevant to hazardous areas may be found in the transformer isolated amplifier data sheets.

Observation

The fuses in the relay circuit prevent contact fusing and may be replaced **only** by the manufacturer.



Technical data Power supply Nominal voltage Ripple Nominal current	Connections d14 (L+), z14 (L-) DC 20 V ... 35 V $\leq 10\%$ within the supply voltage range max. 120 mA (bei 25 °C)
Inputs Input I : Input II : Signal level Logic-1 Signal level Logic-0 Energize- / De-energized delay Input current	Connections d16+, z16- Connections d18+, z18- DC 15 V ... 35 V DC 0 V ... 4 V $\leq 10\text{ ms} / \leq 10\text{ ms}$ about 0.3 mA A max. of 10 relay cards can be connected to safety amplifier ED2-SH-Ex2.T or EKSH-03-T
Safety rating	Particularly in conjunction with the safety amplifiers, VDE 0660 Section 209 is achieved.
Outputs Output I : Output II : Contact load Mechanical life Energized- / De-energized delay Fuses Output III : Voltage Nominal current Voltage drop Leakage current	Connections d30, z30 (2 A-contact in series, center tap for protection on d32) Connections d26, z26 (2 A-contact in series, center tap for protection on d24) AC: 50 V / 500 W / 2 A / $\cos \varphi = 1$; DC 30 V / 1 A 2×10^6 switchings $\leq 8\text{ ms} / \leq 20\text{ ms}$ 4 A load, each (replaceable only by manufacturer) Transistor output Connections d10+, z10- 10 V ... 30 V 7 mA current limited about 2.5 V $\leq 10\ \mu\text{A}$
Transfer characteristics Switch frequency	10 Hz
Galvanic isolation Output I...II from power supply Output I...II from power supply Output I...II/power supply from output III	Basic insulation per DIN EN 50 178, design isolation voltage 253 V _{eff} Safe isolation per DIN VDE 0106, design isolation voltage 50 V _{eff} Safe isolation per DIN VDE 0106, design isolation voltage 253 V _{eff}
Conformity to standard Climatic conditions	per DIN IEC 721
Certification TÜV (BRD)	TÜV-approval per VDE 0660 Section 209 pending TÜV DIN v 19 250 Requirements class AK 1 ... 5
Intrinsic safety symbol of the relay card per DIN VDE 0660 Section 209	
Symbol for products from Pepperl+Fuchs for safety applications	S
Ambient temperature Connection method Weight	-25 °C ... +70 °C (248 K ... 343 K) 32-pin plug connector per DIN 41 612, Series 2, Type F; z and d provided about 200 g