



SAFEMASTER



Extension module RK 6929 - Safe compact contact extension

If control systems with integrated switching outputs reach their limits in the application, coupling relays and contact extension modules are used. Their task is contact amplification, contact multiplication and, due to the galvanic isolation between input and output, decoupling of the control and power levels.

The centrepiece of the **extension module RK 6929** of the **SAFEMASTER** series, which is only 17.5 mm narrow, is the **safety relay OA 5642** from Dold, which also opens up fields of application in the area of functional safety up to Cat. 4 / PL e or SIL 3 due to its forcibly guided contacts in accordance with IEC 61810-3. The extension module is suitable for use in machine and plant construction as well as in applications for firing systems in accordance with EN 50156-1. For use within the scope of EN 61010-1, the clearances and creepage distances of the extension module RK 6929 between mains circuits and touchable voltages as well as between mains circuits are dimensioned according to double insulation.

If the current consumption of downstream actuators exceeds the power of the output of a safety controller or light grid, the extension module switches these actuators reliably and potential-free via its relay contacts. The input of the extension module RK 6929 corresponds to the interface type C class 1 in accordance with the ZVEI position paper CB24I and can therefore also be controlled by safety-related semiconductor outputs with testing (OSSD). Single and dual-channel versions of the extension module are available.

Advantages and customer benefits

- ▶ Suitable for safety applications up to Cat. 4 / PL e or SIL 3 in conjunction with a compatible higher-level safety switching device, UL-listed
- ▶ Space-saving in the switch cabinet due to a width of only 17,5 mm
- ▶ Can also be activated with safety-related semiconductor outputs
- ▶ Input corresponds to interface type C class 1 (CB24I)
- ▶ Suitable for firing systems according to EN 50156-1

Our experience. Your safety.

Extension module RK 6929

Technical features

- ▶ Can be used in conjunction with a suitable switchgear / control unit in safety applications as follows:
 - Up to PL e and category 4 acc. to EN ISO 13849-1
 - Up to maximum SIL 3 acc. to EN IEC 62061
 - Up to SIL 3 acc. to EN 61508 and EN 61511
- ▶ According to EN 50156-1 for firing systems
- ▶ Control from semiconductor safety outputs (light curtains, e-stop, etc.) is also possible
- ▶ With forcibly guided contacts acc. to IEC 61810-3
- ▶ Indication for operating condition
- ▶ As option with gold plated contacts to switch low loads
- ▶ Width 17,5 mm



Extension module
RK 6929



Order information

Standard type:
RK 6929.22PS/100/61 DC 24 V
Item number: 0069180

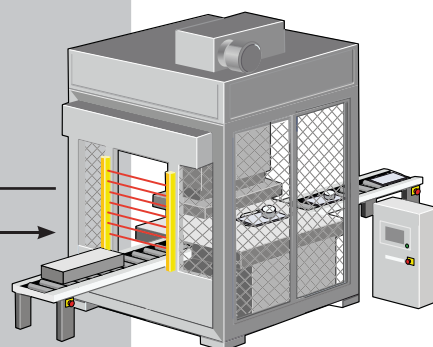
RK 6929.16PS/61 DC 24 V
Item number: 0069176

Fields of application

- ▶ Machine and plant construction
- ▶ Use in applications for firing systems
- ▶ Decoupling of control and power levels
- ▶ Potential-free switching of low loads
- ▶ Contact reinforcement
- ▶ Output extension for OSSD

Application example

Monitoring of safety zones:
In conjunction with a suitable higher-level safety switching device or control unit, which diagnoses the switching status via the forcibly guided NC contacts, the extension module RK 6929 can therefore be used in applications up to Cat. 4 / PL e or SIL 3. Removable terminals, in screw and cage clamp technology, complete the advantages of the extension module by enabling convenient installation and simple device replacement.



RK 6929.22/100 with 2-channel control via light barriers with self-test acc. to DIN EN 61496-1, suitable up to SIL 3, Performance Level e, Cat. 4

Further information

RK 6929

Start

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