



Your future's safe!



INTERFACES

safety interfaces and relays

product catalogue



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Type 4 interface for OSSD output devices. See page 3

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Type 4 interface with integrated Muting for safety light curtains. See page 4



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AU SX

Type 2 control unit for ReeR Ilion and Ulisse photocells.
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AU SXM

Type 2 control unit with integrated Muting for ReeR Ilion and Ulisse photocells. See page 8

SV MR0 - SV MR0 U
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AD SR0 - AD SR0A

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SAFETY LEVEL
TYPE 4
SILCL 3
PL e - Cat. 4

Interface module for OSSD output devices. Safety light curtains: EOS4 A, EOS2 A, Admiral AD, Admiral AX BK, Vision V. Safety switches: Magnus RFID. Safety laser scanner: UAM. Includes self-testing solid state safety outputs.

- Guided-contact safety relays
- Start/Restart interlock
- EDM Feedback input for extra external contactors monitoring



SAFETY LEVEL
TYPE 4
SILCL 3
PL e - Cat. 4

Interface module for safety light curtains EOS4, EOS2, Admiral, Vision (any resolution and heights), safety laser scanner.

- Guided contact safety relays
- Start/Restart interlock
- EDM Feedback input for extra external contactors monitoring
- Muting Time-out selectable
- Integrated Override with 2 operating modes selectable
- Muting Enable input

PART NUMBERS

AD SR1: 1330900; AD SRM: 1330904



TYPE 4 INTERFACE FOR OSSD OUTPUT DEVICES

TECHNICAL FEATURES

AD SR1

| | |
|--|--|
| Safety relay outputs | 2 NO - 2 A 250 VAC |
| Status output | PNP – 100 mA at 24 VDC |
| Response time (ms) | ≤ 20 |
| Start/Restart command according to IEC 61496-1 | Manual or automatic Start/Restart selectable on terminal block |
| Status display | LED indication of input/output status and diagnosis |
| Power supply (VDC) | 24 ± 20% |
| Electrical connections | On terminal blocks |
| Operating temperature (°C) | 0 ... +55 |
| Protection rating | IP20 for housing IP2X for terminal blocks |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 99 x 22,5 x 114 |

AD SRM

Like above plus the following characteristics:

| | |
|---------------------------|---|
| Inputs for Muting sensors | 2 inputs 0 or 24 VDC - PNP or relay - dark-on |
| Muting Enable input | 0 or 24 VDC – PNP or relay |
| Muting lamp output | 24 VDC; 0,5 ... 5 W |
| Muting time-out | 30 sec. or infinite, selectable |
| Override | 2 operating modes selectable: - manual action with hold to run - automatic with pulse command |
| Override time-out (min) | 15 |
| Dimensions h x w x d (mm) | 99 x 35 x 114 |

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- IEC 61496-1: 2013 (Type 4) "Safety of machinery - Electro sensitive protective equipment - General requirements and tests"
- EN 61496-2: 2013 (Type 4) "Safety of machinery - Electro-sensitive protective equipment - Particular requirements for equipment using active opto-electronic protective devices (AOPDs)"
- IEC 62061 (ed. 1); am1 (SILCL3) "Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems"
- ISO 13849-1: 2008/AC: 2009 (Cat. 4, PL e) "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN 50178:1997 "Electronic equipment for use in power installations"
- EN 55022:2010 "Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement"
- EN 61000-4-3 : 2006 + A1:2007 + A4:2010 "Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of immunity tests"
- UL (C+US) mark for USA and Canada
- The S-Mark carries the same weight in Korea as the CE-Mark does in Europe



LIVELLO DI SICUREZZA

SIL 3

SIL3 - SILCL 3
PL e - Cat. 4

The new SR SELECT allows four different operating modes offering the possibility to connect and control different types of safety devices, including:

- Safety Light Curtains
- Solid-State-Output Devices (i.e. RFID safety switches)
- Dual-Channel Emergency Stops
- Two-Hand Controls and Type 2 Safety Photocells.

OPERATING MODES

Selectable via the Rotary Switch.

| Rotary Switch position | Operating mode | Operating function |
|------------------------|----------------|--|
| 0 | Prog. | Programming mode start |
| 1 | 1A | OSSD double input, automatic restart mode |
| 2 | 1C | OSSD double input, monitored restart mode |
| 3 | 2A | Gate monitoring/Emergency stop function, automatic restart mode |
| 4 | 2M | Gate monitoring/Emergency stop function, manual restart mode (not monitored) |
| 5 | 2C | Gate monitoring/Emergency stop function, monitored restart mode |
| 6 | 3A | Two-hand control 2 NO contacts, automatic restart mode |
| 7 | 3C | Two-hand control changeover contact, monitored restart mode |
| 8 | 4A | Type 2 photocells control, automatic restart mode |
| 9 | 4C | Type 2 photocells control, monitored restart mode |

Programming Rotary Switch



MULTIFUNCTION SAFETY RELAY

TECHNICAL CHARACTERISTICS

| | |
|-----------------------------|---|
| Power supply (VDC) | 24 ± 20% |
| Power requirement (W) | 5 max. |
| Relay output | 2 NA - 6A; 250 Vca |
| System status output | PNP - 100 mA; 24 Vcc |
| Response time (ms) | ≤ 20 |
| Operating modes | Automatic, Monitored or Manual (selectable via rotary switch) |
| External relay control EDM | Series of contacts NC (20 mA; 24 VDC) |
| Connections | Terminal block with protection against reversal of polarity |
| LED status indicators | Input - Output - Fail |
| Length of connections (m) | 100 Max. |
| Operating temperature (°C) | -30 ... +55 |
| Protection rating | Enclosure IP 20 Terminal block IP 2X |
| Fastening | Fast attachment to rail according to EN 50022-35 |
| Dimensions (h x w x d) (mm) | 99 x 22,5 x 114,5 |
| Weight (g) | 150 |
| B10d | 800.000 |
| Device lifetime (anni) | 20 |

PART NUMBER

SR Select with screw terminal: **1330941**
SR Select C with clamp terminal: **1330813**

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2011/65/EU "RoHs Guide line"
- IEC 61496-1:2020 "Safety of machinery - Electro sensitive protective equipment - General requirements and tests"
- IEC 61508-2010 "Functional safety of electrical/electronic/programmable electronic safety-related systems"
- IEC 62061 + A2:2015 "Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control system"
- ISO 13849-1:2006 "Sicurezza del macchinario - Parti dei sistemi di comando legate alla sicurezza"
- EN 55032:2015 " Electromagnetic compatibility of multimedia equipment - Emission Requirements"
- EN IEC 63000:2018 " Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances"
- UL (C+US) mark for USA and Canada
- UKCA Declaration of conformity





Safety relay for two-hand control.

Input with 3 or 4 contacts for two-hand control unit.

Certified as Type III C according to the EN 574 standard, monitors the simultaneity between the two inputs (< 0.5 sec).

- Guided-contact safety relays
- EDM Feedback input for external contactors monitoring
- Can be used up to Cat. 4, PL e

APPROVALS

- 2006/42/CE: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- EN ISO 13849-1: 2008/AC: 2009 "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN60947-5-1: 2004 + A1:2009 "Low Voltage Switchgear and Controlgear - Part 5 - 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices"
- EN60204-1: 2006 "Safety of machinery - Electrical equipment of machines – Part 1 - General requirements"
- Type III C according to the EN 574: 1996 + A1: 2008 standard and monitors the simultaneity between the two inputs (< 0.5 sec)
- UL (C+US) mark for USA and Canada



PL E SAFETY INTERFACE FOR TWO-HAND CONTROLS

TECHNICAL FEATURES

| | |
|----------------------------|---|
| Safety relay outputs | 2 NO + 1 NC - 6 A 240 VAC / 24 VDC Each NO safety output line is interrupted twice by the two relays |
| Response time (ms) | ≤ 30 |
| Status display | LED indicators for status and supply diagnostic: power, channel 1 and channel 2 |
| Power supply (VDC) | 24 (-15 +10%) |
| Electrical connection | On terminal block |
| Operating temperature (°C) | -25 ... +55 |
| Protection rating | IP40 for housing IP20 for terminal block |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 99 x 22,5 x 114 |

PART NUMBERS

AD SRT: 1330915



Safety relay for emergency stop buttons and safety switches monitoring.

- Guided-contact safety relays
- EDM Feedback input for external contactors monitoring

Start/Restart can be:

- Automatic/Manual (AD SRE4)
- Manual Monitored (AD SRE4C)

Both models can be used up to safety Category 4, PL e according to EN ISO 13849-1.

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- EN ISO 13849-1: 2008 /AC: 2009 "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN60947-5-1: 2004 + A1:2009 "Low Voltage Switchgear and Controlgear - Part 5 - 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices"
- EN 60204-1:2006 "Safety of machinery - Electrical equipment of machines - Part 1: General requirements"
- UL (C+US) mark for USA and Canada

PL E SAFETY INTERFACES FOR EMERGENCY STOP BUTTONS AND SAFETY SWITCHES

TECHNICAL FEATURES

| | |
|----------------------------|---|
| Safety relay outputs | 3 NO + 1 NC - 5 A 240 VAC / 24 VDC Each NO safety output line is interrupted twice by the two relays |
| Response time (ms) | ≤ 50 |
| Start/Restart | AD SRE4 - Automatic/Manual AD SRE4C - Manual monitored |
| Status display | LED indicators for status and supply diagnostic: power, channel 1 and channel 2 |
| Power supply (VDC) | 24 (±10%) |
| Electrical connection | On terminal block |
| Operating temperature (°C) | -25 ... +55 |
| Protection rating | IP40 for housing IP20 for terminal block |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 99 x 22,5 x 114 |

PART NUMBERS

AD SRE 4: 1330913
AD SRE 4C: 1330914





Safety relay for emergency stop buttons and safety switches monitoring.

- Guided-contact safety relays
- EDM Feedback input for external contactors monitoring

The Start/Restart can be:

- Automatic/Manual (AD SRE3)
- Manual Monitored (AD SRE3C)

Both models can be used up to safety Category 3, PL d according to EN ISO 13849-1.

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- EN ISO 13849-1: 2008 /AC: 2009 "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN60947-5-1: 2004 + A1:2009 "Low Voltage Switchgear and Controlgear - Part 5 - 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices"
- EN 60204-1:2006 "Safety of machinery - Electrical equipment of machines - Part 1: General requirements"
- UL (C+US) mark for USA and Canada

PL D SAFETY INTERFACES FOR EMERGENCY STOP BUTTONS AND SAFETY SWITCHES

TECHNICAL FEATURES

| | |
|--|--|
| Safety relay outputs | 2 NO - 6 A 240 VAC / 24 VDC Each NO safety output line is interrupted twice by the two relays |
| Response time (ms) | ≤ 50 |
| Start/Restart command according to IEC 61496-1 | AD SRE3 - Automatic/Manual AD SRE3C - Manual monitored |
| Status display | LED indicators for status and supply diagnostic: power, channel 1 and channel 2 |
| Power supply (VDC) | 24 (-15 +10%) |
| Electrical connection | On terminal block |
| Operating temperature (°C) | -25 ... +55 |
| Protection rating | IP40 for housing IP20 for terminal block |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 99 x 22,5 x 114 |

PART NUMBERS

AD SRE 3: 1330911
AD SRE 3C: 1330912





SAFETY LEVEL
TYPE 2
SILCL 1
PL c - Cat. 2

AU SX control unit for safety photocells Ilion and Ulisse, which can be combined to form a Type 2 safety system. Up to 4 photocells may be connected.

- Guided-contact safety relays
- Start/Restart interlock
- EDM Feedback input for external contactors monitoring
- Self test every 5 seconds



SAFETY LEVEL
TYPE 2
SILCL 1
PL c - Cat. 2

AU SXM control unit with integrated Muting functions. For safety photocells Ilion and Ulisse. Can be combined to form a type 2 safety system. Up to 4 photocells may be connected.

- 2 sensor Muting logics
- Muting Time-out selectable
- Integrated Override with selectable 2 mode operation
- Muting Enable input
- Start/Restart interlock
- EDM Feedback input for extra external contactors monitoring
- Self test every 5 seconds

PART NUMBERS

AU SX: 1201710
AU SXM: 1201711

To be used in conjunction with Reer Ilion and Ulisse photocells. See catalog "SAFETY SENSORS AND DEVICES".

TYPE 2 CONTROL UNIT FOR ILION AND ULISSE PHOTOCELLS

TECHNICAL FEATURES

AU SX

| | |
|--|--|
| Number of photocells | 1 ... 4 |
| Safety relay outputs | 2 NO - 2 A 250 VAC |
| Status output | PNP - 100 mA at 24 VDC |
| Response time (ms) | ≤ 30 |
| Start/Restart command according to IEC 61496-1 | Manual or automatic Start/Restart selectable on terminal block |
| External Device Monitoring | External relay control feedback input, selectable |
| Status display | LED indication of input/output status and diagnosis |
| Power supply (VDC) | 24 ± 20% |
| Electrical connections | On terminal block |
| Operating temperature (°C) | 0 ... +55 |
| Protection rating | IP20 for housing IP2X for terminal block |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 99 x 22,5 x 114 |

AU SXM

Like above plus the following characteristics:

| | |
|---------------------------|---|
| Inputs for Muting sensors | 2 inputs 0 or 24 VDC – PNP or relay – dark-on |
| Muting Enable input | 0 or 24 VDC – PNP or relay |
| Muting lamp output | 24 VDC; 0,5 - 5 W |
| Muting time-out | 30 sec. or infinite, selectable |
| Override | 2 operating modes selectable: manual action with hold to run or automatic with pulse command |
| Override time-out (min) | 15 |
| Status display | LED indications of input/output status, Muting sensor inputs, diagnosis |
| Dimensions h x w x d (mm) | 99 x 35 x 114 |

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- EN 61496-1:2013 "Safety of machinery - Electro sensitive protective equipment - General requirements and tests"
- IEC 62061 (ed.1) (SILCL1) "Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems"
- EN ISO 13849-1: 2008 (Cat. 2, PL c) "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN 50178: 1997 "Electronic equipment for use in power installations"
- EN 55022: 2010 "Information Technology Equipment- Radio Disturbance Characteristics- Limits and Methods of Measurement"
- UL (C+US) mark for USA and Canada.





Safety speed monitoring interfaces. Safety level up to PL e - SIL 3.

- SV MR0 - Safety speed monitoring relay for overspeed and Zero speed control
- SV MR0 U - Safety speed monitoring relay for underspeed control

Both modules integrate:

- Selectable manual or Automatic restart
- EDM feedback input for external contactors monitoring
- Enable inputs used, for instance, when monitoring the same axis, in different working phases, with more modules configured with different thresholds
- Faults are signalled by LED "Fault" and a PNP system status output. PNP status output indicating overspeed or underspeed thresholds crossing
- 2 inputs for PNP proximities switches
- 3 front panel selectors allow configuration of the speed threshold

APPROVALS

- 2006/42/EC: "Machine Directive"
- 2014/30/EU: "Electromagnetic Compatibility Directive"
- 2014/35/EU: "Low Voltage Directive"
- EN ISO 13849-1:2008 "Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design"
- EN 61508-1:2010 (SIL3) "Functional safety of electrical/electronic programmable electronic safety related systems - General requirements"
- EN 61508-2:2010 (SIL3) "Functional safety of electrical/electronic/programmable electronic safety related systems - Requirements for electrical/electronic/programmable electronic safety-related systems"
- EN 61508-3:2010 (SIL3) "Functional safety of electrical/electronic programmable electronic safety related systems: Software requirements"
- EN 61508-4:2010 (SIL3) "Functional safety of electrical/electronic programmable electronic safety related systems - Definitions and abbreviations"
- EN 62061:2005 (SILCL3) "Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems"
- UL (C+US) mark for USA and Canada

PL E - SIL 3 SAFETY SPEED MONITORING INTERFACE

TECHNICAL DATA

| | |
|--------------------------------------|--|
| Overspeed Underspeed status output | PNP - 100 mA 24 VDC |
| Power supply | 24 VDC ± 20% |
| Safety relay outputs | 2 NO - 6A 250 VAC |
| Electrical connections | Removable terminal blocks, screw contacts |
| Start/Restart | Automatic/Manual |
| Maximum input Frequency (Hz) | 2000 |
| Selectable Frequency Threshold (Hz) | 0,5 ... 990 |
| Selectable Frequency Threshold (rpm) | 10 ... 49500 equivalent to 0,17 ... 825 Hz |
| Hysteresis | 5% |
| External Device Monitoring | Yes |
| Status display | LED indicators for status and diagnostic |
| Protection rating | IP20 for housing IP2X for terminal block |
| Operating temperature | -40 ... +55 °C |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 108 x 22,5 x 114,5 |

PART NUMBERS

SV MR0: 1100078
SV MR0U: 1100088





Interface relay modules for safety light curtains with feedback input for EDM, such as EOS4 X, Admiral AX, EOS2 X, Vision VX/VXL/MXL and Janus.

- Guided-contact safety relays
- Additional NC contact line for the monitoring by light curtain (EDM)

AD SR0 and AD SR0A modules can only be connected to safety sensors equipped with feedback input for monitoring external relays (EDM): EOS4 X, EOS2 X, Janus, Admiral AX (excluding AX BK models with Blanking), Pharo and Vision VX, VXL and MXL ranges.

Certified by
TÜV Rheinland
Product Safety GmbH

This product uses two guided contact safety relays manufactured by DOLD (type OA or OA 5643 5644) and certified by TUEV Rheinland.

SAFETY RELAY MODULES FOR DEVICES WITH INTEGRATED FEEDBACK INPUT FOR EDM

TECHNICAL FEATURES

| | |
|----------------------------|--|
| Safety relay outputs | AD SR0 2 NO + 1 NC - 2 A 250 VAC Each NO safety output line is interrupted twice by the two relays |
| | AD SR0A 2 NO - 2 A 250 VAC |
| Response time (ms) | ≤ 20 |
| Power supply (VDC) | 24 ± 20% |
| Electrical connections | On terminal block |
| Operating temperature (°C) | 0 ... +55 |
| Protection rating | IP20 for housing IP2X for terminal block |
| Fastening | DIN rail fastening according to EN 50022-35 standard |
| Dimensions h x w x d (mm) | 101 x 35 x 120 |

PART NUMBERS

AD SR0 and AD SR0A module includes multi-language instruction manual and CE declaration of conformity

AD SR0: 1330902
AD SR0 A: 1330903





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More than 60 years of quality and innovation

Founded in Turin (Italy) in 1959, ReeR distinguished itself for its strong commitment to innovation and technology.

A steady growth throughout the years allowed ReeR to become a point of reference in the safety automation industry at a worldwide level.

The Safety Division is in fact today a world leader in the development and manufacturing of safety optoelectronic sensors and controllers.

ReeR is ISO 9001, ISO 14001 and ISO 45001 certified.



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