



Your future's safe!



INTERFACES

safety interfaces and relays

product catalogue



AD SR1

Type 4 interface for OSSD output devices
See page 3



AD SRM

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

AD SRT

PL e safety Interface for two-hand control
See page 5

AD SRE4 - AD SRE4C

PL e safety interfaces for emergency stop buttons and safety switches
See page 6

AD SRE3 - AD SRE3C

PL d safety interfaces for emergency stop buttons and safety switches
See page 7



SV MR0 - SV MR0 U

PL e / SIL 3 safety speed monitoring interface
See page 9

AU SX

Type 2 control unit for Reer Ilion and Ulisse photocells
See page 8

AU SXM

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



AD SR0 - AD SR0A

Safety relay
See page 10



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

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

TYPE 4 INTERFACE FOR OSSD OUTPUT DEVICES

TECHNICAL FEATURES

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

PART NUMBERS

AD SR1: 1330900





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.

- 2 sensor logic integrated Muting
- 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

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

TYPE 4 SAFETY INTERFACE WITH INTEGRATED MUTING

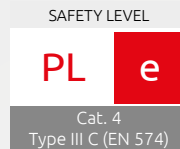
TECHNICAL FEATURES

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
Safety relay outputs	2 NO - 2A 250 VAC
Status output	PNP – 100 mA at 24 VDC
Muting lamp output	24 VDC; 0,5 ... 5 W
Response time (ms)	≤ 20
Start/Restart command according to IEC 61496-1	Manual or automatic Start/Restart selectable on terminal block
Status display	LED indications of input/output status, Muting sensor inputs, diagnosis
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
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 35 x 114

PART NUMBERS

AD SRM: 1330904





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

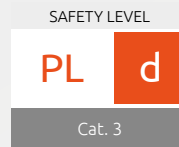
TECHNICAL FEATURES

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





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



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





REEER *Customer Service*

We put our Customers always first

ReeR after sales service is committed to support all customers that need technical guidance regarding functionality, handling and installation of our products.

Customer Service Hotline

+39 011 24 82 215

Monday to Friday 8.30 - 12.30 and 13.30-18.00 (CET)

or contact

aftersales@reer.it

For product returns please visit www.reersafety.com for further information.



Your future's safe!

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.



ReeR SpA
Via Carcano, 32
10153 Torino, Italy

T +39 011 248 2215
F +39 011 859 867

www.reersafety.com | info@reer.it



Issue 2 - Rev 1.3
September 2020
8946227
INTERFACES - English

Printed in Italy

