

SIRIUS SAFETY RELAY OUTPUT EXTENSION 3RO POWER, WITH RELAY ENABLING CIRCUITS 3 NO CONTACTS + RELAY FEEDBACK CIRCUIT 1 NC CONTACT US = 230 V AC SCREW CONNECTION



Figure similar

| General technical data:                                 |                          |
|---------------------------------------------------------|--------------------------|
| product brand name                                      | SIRIUS                   |
| Product designation                                     | safety relays            |
| Design of the product                                   | Expansion unit           |
| Protection class IP of the enclosure                    | IP20                     |
| Protection against electrical shock                     | finger-safe              |
| Insulation voltage Rated value                          | 300 V                    |
| Ambient temperature                                     |                          |
| • during storage                                        | -40 ... +80 °C           |
| • during operation                                      | -25 ... +60 °C           |
| Air pressure acc. to SN 31205                           | 90 ... 106 kPa           |
| Relative humidity during operation                      | 10 ... 95 %              |
| Installation altitude at height above sea level maximum | 2 000 m                  |
| Vibration resistance acc. to IEC 60068-2-6              | 5 ... 500 Hz: 0,75 mm    |
| Shock resistance                                        | 5 g / 10 ms              |
| Surge voltage resistance Rated value                    | 4 000 V                  |
| EMC emitted interference                                | IEC 60947-5-1, IEC 61000 |

|                                                                                          |                                                                                                  |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Installation environment regarding EMC                                                   | This product is suitable for Class B environments and can also be used in domestic environments. |
| Overvoltage category                                                                     | Installation category III                                                                        |
| Degree of pollution                                                                      | 3                                                                                                |
| Equipment marking acc. to DIN EN 61346-2                                                 | F                                                                                                |
| Safety Integrity Level (SIL) acc. to IEC 61508                                           | SIL3                                                                                             |
| Performance level (PL) acc. to EN ISO 13849-1                                            | e                                                                                                |
| Category acc. to EN ISO 13849-1                                                          | 4                                                                                                |
| PFHD with high demand rate acc. to EN 62061                                              | 0.000000001 1/h                                                                                  |
| Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508 | 0.000001 1/y                                                                                     |
| T1 value for proof test interval or service life acc. to IEC 61508                       | 20 y                                                                                             |
| Hardware fault tolerance acc. to IEC 61508                                               | 1                                                                                                |
| Safety device type acc. to IEC 61508-2                                                   | Type A                                                                                           |
| Number of outputs as contact-affected switching element                                  |                                                                                                  |
| • as NC contact                                                                          |                                                                                                  |
| — for signaling function instantaneous contact                                           | 0                                                                                                |
| — for signaling function delayed switching                                               | 0                                                                                                |
| — safety-related instantaneous contact                                                   | 0                                                                                                |
| — safety-related delayed switching                                                       | 0                                                                                                |
| • as NO contact                                                                          |                                                                                                  |
| — for signaling function instantaneous contact                                           | 0                                                                                                |
| — for signaling function delayed switching                                               | 0                                                                                                |
| — safety-related instantaneous contact                                                   | 3                                                                                                |
| — safety-related delayed switching                                                       | 0                                                                                                |
| Stop category acc. to DIN EN 60204-1                                                     | 0                                                                                                |

#### General technical data:

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| Type of electrical connection Plug-in socket                       | No      |
| Operating frequency maximum                                        | 360 1/h |
| Switching capacity current of the NO contacts of the relay outputs |         |
| • at DC-13                                                         |         |
| — at 24 V                                                          | 6 A     |
| — at 115 V                                                         | 1.1 A   |
| — at 230 V                                                         | 0.55 A  |
| • at AC-15                                                         |         |
| — at 24 V                                                          | 10 A    |
| — at 115 V                                                         | 10 A    |
| — at 230 V                                                         | 10 A    |

|                                                                                                                             |                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Thermal current of the switching element with contacts maximum                                                              | 10 A                                                                 |
| Operating current at 17 V minimum                                                                                           | 5 mA                                                                 |
| Mechanical service life (switching cycles) typical                                                                          | 10 000 000                                                           |
| maximum permissible voltage for safe isolation between electronic evaluation device and enabling circuit acc. to EN 60947-1 | 300 V                                                                |
| Design of the fuse link for short-circuit protection of the NO contacts of the relay outputs required                       | gL/gG: 16 A or MCB type A: 6 A or MCB type B: 4 A or MCB type C: 4 A |
| Make time with automatic start                                                                                              |                                                                      |
| • typical                                                                                                                   | 10 ms                                                                |
| • at AC maximum                                                                                                             | 15 ms                                                                |
| Make time with automatic start after power failure                                                                          |                                                                      |
| • typical                                                                                                                   | 10 ms                                                                |
| • maximum                                                                                                                   | 15 ms                                                                |
| Backslide delay time in the event of power failure                                                                          |                                                                      |
| • typical                                                                                                                   | 15 ms                                                                |
| • maximum                                                                                                                   | 15 ms                                                                |
| Recovery time after power failure typical                                                                                   | 0 s                                                                  |

#### Control circuit/ Control:

|                                                                              |              |
|------------------------------------------------------------------------------|--------------|
| Type of voltage of the control supply voltage                                | AC           |
| Control supply voltage frequency                                             |              |
| • 1 Rated value                                                              | 50 Hz        |
| • 2 Rated value                                                              | 60 Hz        |
| Control supply voltage                                                       |              |
| • at AC                                                                      |              |
| — at 50 Hz                                                                   |              |
| — Rated value                                                                | 230 V        |
| — at 60 Hz                                                                   |              |
| — Rated value                                                                | 230 V        |
| Operating range factor control supply voltage rated value of the magnet coil |              |
| • at AC                                                                      |              |
| — at 50 Hz                                                                   | 0.85 ... 1.1 |
| — at 60 Hz                                                                   | 0.85 ... 1.1 |
| Active power loss typical                                                    | 3.5 W        |

#### Installation/ mounting/ dimensions:

|                                                         |                                      |
|---------------------------------------------------------|--------------------------------------|
| mounting position                                       | on horizontal standard mounting rail |
| Required spacing for grounded parts at the side         | 5 mm                                 |
| Required spacing with side-by-side mounting at the side | 0 mm                                 |
| Mounting type                                           | screw and snap-on mounting           |
| Width                                                   | 90 mm                                |

|        |          |
|--------|----------|
| Height | 100 mm   |
| Depth  | 121.6 mm |

#### Connections/ Terminals:

|                                                                |                                                                      |
|----------------------------------------------------------------|----------------------------------------------------------------------|
| Type of electrical connection                                  | screw-type terminals                                                 |
| Type of connectable conductor cross-section                    |                                                                      |
| • solid                                                        | 1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • finely stranded                                              |                                                                      |
| — with core end processing                                     | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) |
| Type of connectable conductor cross-section for AWG conductors |                                                                      |
| • solid                                                        | 1x (20 ... 12), 2x (20 ... 14)                                       |

#### Product Function:

|                                                  |     |
|--------------------------------------------------|-----|
| Suitability for operation Device connector 3ZY12 | No  |
| Suitability for use                              |     |
| • safety-related circuits                        | Yes |

#### Certificates/ approvals:

|                                                   |     |
|---------------------------------------------------|-----|
| Certificate of suitability                        |     |
| • TÜV (German technical inspectorate) certificate | Yes |
| • UL approval                                     | Yes |

| General Product Approval                                                                   | EMC                                                                                           | Functional Safety/Safety of Machinery  | Declaration of Conformity                                                                         |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------|
| <br>CCC | <br>C-TICK | <a href="#">Baumusterbescheinigung</a> | <br>EG-Konf. |

| Test Certificates | other |
|-------------------|-------|
|-------------------|-------|

[Typprüfbescheinigung/Werkszeugnis](#)

[Bestätigungen](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

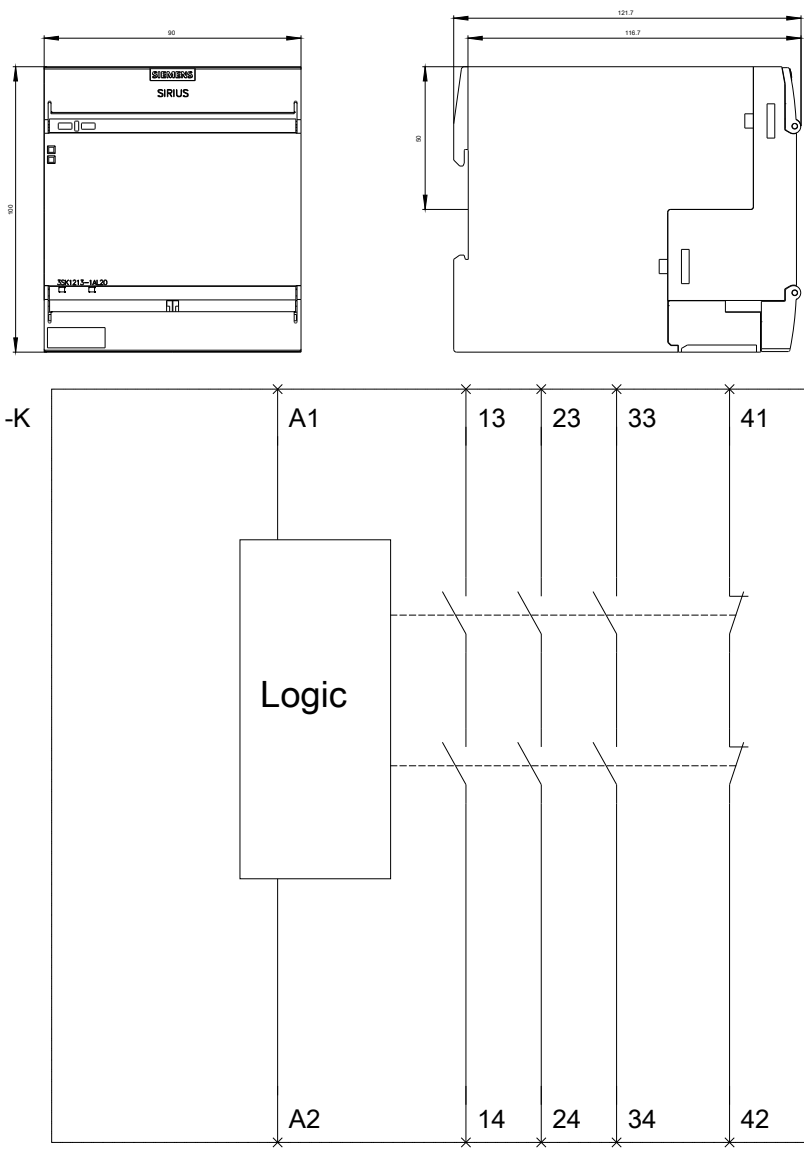
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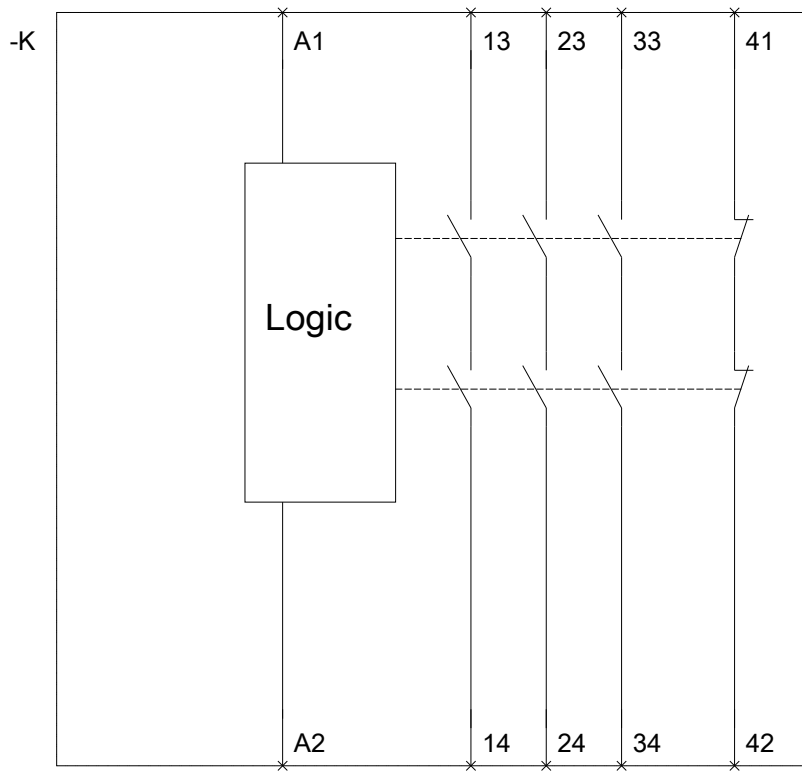
Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK12131AL20>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SK12131AL20>





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