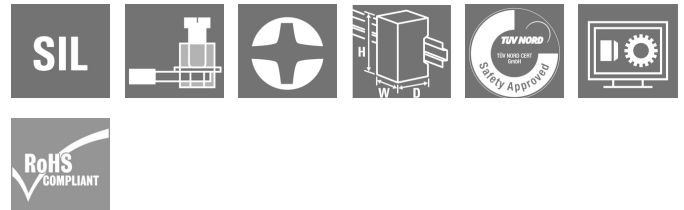


**SCS 24VDC P1SIL3DS****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

This safety relay is used in areas of process automation that require a functionally safe switch-off. The module meets the requirements for SIL3 according to EN 61508.

- Variant without monitoring circuit
- TUV certified and with "Approved Safety Function"
- cULus certified
- Optional compatible with Triconex<sup>®</sup> output modules Tricon<sup>™</sup>, Trident<sup>™</sup>, and Tri-GP<sup>™</sup>
- Multi-voltage input (24 - 230 V UC) in the monitoring circuit
- Externally accessible fuse

**General ordering data**

|            |   |
|------------|---|
| Version    | SAFESERIES, Safety relay, 24 V DC $\pm$ 20%, 35 mA, Max. switching current, internal fuse : 5 A (refer to derating curve), SIL 3, EN 61508:2010 |
| Order No.  | <a href="#">1303890000</a>  |
| Type       | SCS 24VDC P1SIL3DS  |
| GTIN (EAN) | 4050118102697   |
| Qty.       | 1 pc(s).  |

## SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH &amp; Co. KG

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## Technical data

## Dimensions and weights

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 114.1 mm | Depth (inches)  | 4.492 inch |
| Height     | 117.3 mm | Height (inches) | 4.618 inch |
| Width      | 22.5 mm  | Width (inches)  | 0.886 inch |
| Net weight | 177 g    |                 |            |

## Temperatures

|                     |  |                       |                |
|---------------------|--|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C                                 | Operating temperature | -25 °C...50 °C |
| Humidity            | 40 °C / 93 % rel. humidity,<br>no condensation |                       |                |

## Input (safety circuit)

|   |   |   |                   |
|---|---|---|-------------------|
| Connection designation (safety circuit) | A1, A2  | Rated control voltage                         | 24 V DC $\pm$ 20% |
| Current consumption                     | 42 mA   | Guaranteed current consumption of 24 VDC -10% | 35 mA             |
| Inrush current                          | $\leq$ 170 mA                                       | Status indicator                              | LED yellow        |
| Protective circuit                      | Reverse polarity protection,<br>Free-wheeling diode |   |                   |

## Output (safety circuit)

|  |                               |                                       |                                       |
|--|-------------------------------|---------------------------------------|---------------------------------------|
| Connection designation (safety output) | 13, 14, 15                    | Contact design                        | 1 x de-energised to safe (NO contact) |
| Contact base material                  | AgNi 0.15 gold flashed        | Max. permitted switching voltage      | 250 V AC / 30 V DC                    |
| Max. permitted switching current       | 5 A                           | Max. switching current, internal fuse | 5 A (refer to derating curve)         |
| Max. switching current, external fuse  | 5 A (refer to derating curve) | Max. switching capacity               | 1250 VA                               |
| Internal fuse                          | 5 A time-lag                  | External back-up fuse                 | 5 A time-lag                          |
| Short circuit resistance               | No                            | Switch-on time                        | typ. 7 ms                             |
| Switch-off time                        | typ. 14 ms                    | Min. switching capacity               | 10 mA @ 12 V                          |

## Safety-related basic specifications

|                                |               |                    |       |
|--------------------------------|---------------|--------------------|-------|
| Device type                    | A             | T <sub>proof</sub> | 12 a  |
| Hardware fault tolerance (HFT) | 2             | Safety category    | SIL 3 |
| Safety standard                | EN 61508:2010 |                    |       |

## General data

|                    |                                |   |                                 |
|--------------------|--------------------------------|---|---------------------------------|
| Operating altitude | $\leq$ 2000 m, above sea level | Rail                                    | TS 35                           |
| Colour             | black, yellow                  | Noxious gas resistance to EN 60068-2-60 | Yes (art. No.: 1304040000 only) |

## Insulation coordination

|  |                             |   |                              |
|--|-----------------------------|---|------------------------------|
| Rated voltage                                    | 300 V                       | Pollution severity  | 2                            |
| Surge voltage category                           | III                         | Clearance and creepage distances for control side - load side | $\geq$ 5.5 mm                |
| Dielectric strength for control side - load side | 4 kV <sub>eff</sub> / 1 min | Dielectric strength to mounting rail                          | 4 kV <sub>eff</sub> / 1 Min. |
| Impulse withstand voltage                        | 6 kV (1.2/50 $\mu$ s)       | Protection degree   | IP20                         |

## SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Further details of approvals / standards

|           |                        |                         |         |
|-----------|------------------------|-------------------------|---------|
| Standards | EN 61000, EN 61326-3-2 | Certificate no. (cULus) | E223474 |
|-----------|------------------------|-------------------------|---------|

## Connection data

|   |                     |   |                      |
|---|---------------------|---|----------------------|
| Wire connection method  | Screw connection    | Stripping length, rated connection  | 8 mm                 |
| Tightening torque, min.   | 0.4 Nm              | Tightening torque, max.   | 0.6 Nm               |
| Clamping range, rated connection  | 1.5 mm <sup>2</sup> | Clamping range, min.  | 0.13 mm <sup>2</sup> |
| Clamping range, max.  | 2.5 mm <sup>2</sup> | Wire connection cross section AWG, min.   | AWG 26               |
| Wire connection cross section AWG, max.   | AWG 12              | Wire cross-section, solid, min.   | 0.2 mm <sup>2</sup>  |
| Wire cross-section, solid, max.   | 2.5 mm <sup>2</sup> | Wire connection cross section, finely stranded, min.                                    | 0.2 mm <sup>2</sup>  |
| Wire connection cross section, finely stranded, max.                                    | 2.5 mm <sup>2</sup> | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.2 mm <sup>2</sup>  |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm <sup>2</sup> | Conductor cross-section, flexible, AEH (DIN 46228-1), min.                              | 0.2 mm <sup>2</sup>  |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max.                              | 2.5 mm <sup>2</sup> | Blade size  | size PHO             |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001449    | ETIM 7.0    | EC001449    |
| ETIM 8.0    | EC001449    | ETIM 9.0    | EC001449    |
| ECLASS 9.0  | 27-37-18-19 | ECLASS 9.1  | 27-37-18-19 |
| ECLASS 10.0 | 27-37-18-19 | ECLASS 11.0 | 27-37-18-19 |
| ECLASS 12.0 | 27-37-18-19 | ECLASS 13.0 | 27-37-18-19 |

## Environmental Product Compliance

|            |                                      |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1                       |
| SCIP       | 807f1906-ce90-4f93-8801-4b128b343e6b |

## Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E223474    |

## Downloads

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">TÜV Safety Approved certificate</a><br><a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>                                |
| Engineering Data                            | <a href="#">CAD data – STEP</a>   |
| User Documentation                          | <a href="#">Beipackzettel / Package Insert - multilingual</a><br><a href="#">Safety manual - English</a><br><a href="#">Sicherheitshandbuch - Deutsch</a> |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |
| Brochures                                   |   |

Creation date April 29, 2024 8:16:21 PM CEST

Catalogue status 20.04.2024 / We reserve the right to make technical changes.

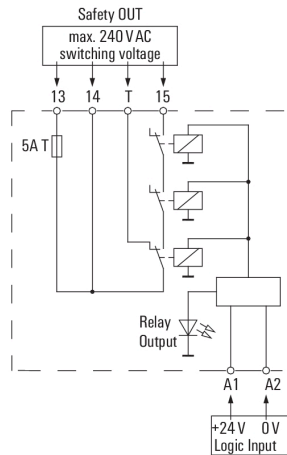
## SCS 24VDC P1SIL3DS

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

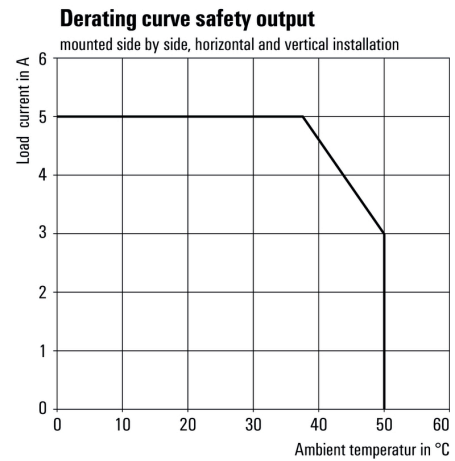
[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

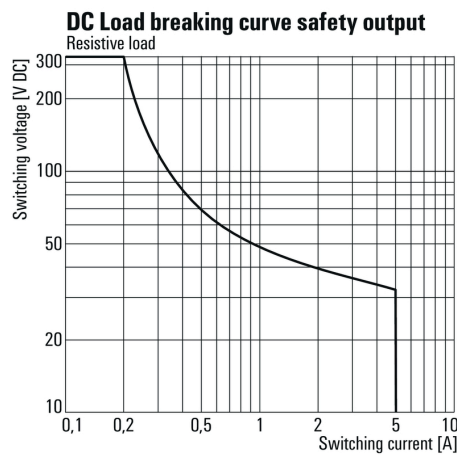
## Wiring diagram



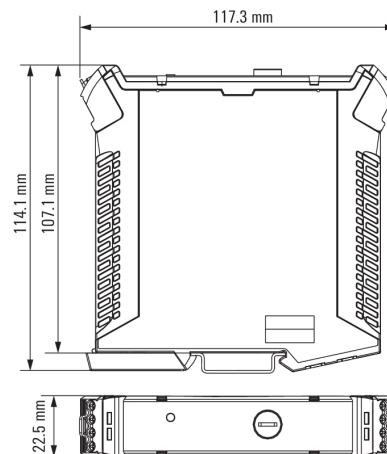
## Derating curve



## DC load limit curve



## Dimensioned drawing



## SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH &amp; Co. KG

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D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

## SM 18/9.5

**Prevention of incorrect operation: SM**

MultiMark device markers can be used with marking materials from different manufacturers. Wherever they are used, they ensure that all components, such as control and signalling devices from different vendors, are clearly assigned.

**Your benefits with MultiMark**

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | SM 18/9.5 MM GR            | Version                                       |
| Order No.  | <a href="#">2006260000</a> | SwitchMark, Device markers, 9 x 18 mm, grey   |
| GTIN (EAN) | 4050118390964              |   |
| Qty.       | 1,000 pc(s).               |   |
| Type       | SM 18/9.5 MM GE            | Version                                       |
| Order No.  | <a href="#">2006240000</a> | SwitchMark, Device markers, 9 x 18 mm, yellow |
| GTIN (EAN) | 4050118390698              |   |
| Qty.       | 1,000 pc(s).               |   |
| Type       | SM 18/9.5 MM WS            | Version                                       |
| Order No.  | <a href="#">2006220000</a> | SwitchMark, Device markers, 9 x 18 mm, white  |
| GTIN (EAN) | 4050118391435              |   |
| Qty.       | 1,000 pc(s).               |   |

## ESG 6/15

**Guaranteed long service life: ESG**

The multi-colour and multi-format labels have a strong adhesive layer to ensure the best possible adhesion to the underlying surface. Double laminated polyester makes the basic material very thin and yet extremely tear-resistant.

**Your benefits with MultiMark**

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

**General ordering data**

|            |                            |                                       |
|------------|----------------------------|---------------------------------------|
| Type       | ESG 6/15 MM WS             | Version                               |
| Order No.  | <a href="#">2619940000</a> | ESG, Device markers, 6 x 15 mm, white |
| GTIN (EAN) | 4050118626148              |                                       |
| Qty.       | 3,000 pc(s).               |                                       |

## SCS 24VDC P1SIL3DS

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## Accessories

## Blank, adhesive backing



SM is a MultiCard marker for labelling control and signalling devices. The tags are clipped into the carriers or attached by means of the adhesive film already fitted to them. Customised tags can be created with the PrintJet CONNECT or Plotter marking systems.

- Users can quickly produce tags to suit their needs
- No need to stock expensive standard tags
- Highly resistant printing quality when using the PrintJet as a substitute for engraving
- For extreme demands, we recommend the ETO SM protective film
- Holders can be used for the 22-mm or 30-mm-diameter push-buttons from Siemens, ABB, Moeller and Télémécanique

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | SM 18/9.5 K MC NE GR       | Version   |
| Order No.  | <a href="#">1248610000</a> | SwitchMark, Device markers, 9.5 x 18 mm, grey                 |
| GTIN (EAN) | 4050118038675              |   |
| Qty.       | 200 pc(s).                 |   |
| Type       | SM 18/9.5 K MC NE WS       | Version   |
| Order No.  | <a href="#">1248580000</a> | SwitchMark, Device markers, 9.5 x 18 mm, white                |
| GTIN (EAN) | 4050118038965              |   |
| Qty.       | 200 pc(s).                 |   |
| Type       | SM 18/9.5 K MC NE GE       | Version   |
| Order No.  | <a href="#">1248590000</a> | SwitchMark, Device markers, 9.5 x 18 mm, Siemens 3 SB, yellow |
| GTIN (EAN) | 4050118038958              |   |
| Qty.       | 200 pc(s).                 |   |

## SCS 24VDC P1SIL3DS

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## Accessories

## Yellow



THM GEW woven-fabric labels are made from a very flexible cotton fabric. Delivery on reels for use with thermal transfer printers enables an adhesive layer which is thicker than that of A4 sheets for office laser printers. Together, this flexibility and the thick adhesive layer ensure higher adhesive strength and enable use on angular or round objects such as e.g. cables or hoses.

## General ordering data

| Type       | THM GEW 15/6 GE            | Version                                | Packaging |
|------------|----------------------------|--|-----------|
| Order No.  | <a href="#">1059790000</a> | THM, Device markers, 6 x 15 mm, yellow | Reel      |
| GTIN (EAN) | 4032248808182              |  |           |
| Qty.       | 1 pc(s).                   |  |           |

## Blank



ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

| Type       | ESG 6/15 K MC NE GE        | Version   |
|------------|----------------------------|---|
| Order No.  | <a href="#">1880130000</a> | ESG, Device markers x 15 mm, PA 66, Colour: yellow, Self-adhesive |
| GTIN (EAN) | 4032248478910              |   |
| Qty.       | 200 pc(s).                 |   |
| Type       | ESG 6/15 K MC NE WS        | Version   |
| Order No.  | <a href="#">1880100000</a> | ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive  |
| GTIN (EAN) | 4032248478781              |   |
| Qty.       | 200 pc(s).                 |   |

## SCS 24VDC P1SIL3DS

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## Accessories

## Blank



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## General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | ESG 9/11 K MC NE WS        | Version  |
| Order No.  | <a href="#">1857440000</a> | ESG, Device markers x 11 mm, PA 66, Colour: white, Self-adhesive |
| GTIN (EAN) | 4032248402731              |  |
| Qty.       | 200 pc(s).                 |  |

## ESG 6/17

**Guaranteed long service life: ESG**

The multi-colour and multi-format labels have a strong adhesive layer to ensure the best possible adhesion to the underlying surface. Double laminated polyester makes the basic material very thin and yet extremely tear-resistant.

**Your benefits with MultiMark**

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

## General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | ESG 6/17 MM GE             | Version                                |
| Order No.  | <a href="#">2005110000</a> | ESG, Device markers, 6 x 17 mm, yellow |
| GTIN (EAN) | 4050118390827              |  |
| Qty.       | 3,000 pc(s).               |  |
| Type       | ESG 6/17 MM WS             | Version                                |
| Order No.  | <a href="#">2005100000</a> | ESG, Device markers, 6 x 17 mm, white  |
| GTIN (EAN) | 4050118390728              |  |
| Qty.       | 3,000 pc(s).               |  |



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****White**

THM GEW woven-fabric labels are made from a very flexible cotton fabric. Delivery on reels for use with thermal transfer printers enables an adhesive layer which is thicker than that of A4 sheets for office laser printers. Together, this flexibility and the thick adhesive layer ensure higher adhesive strength and enable use on angular or round objects such as e.g. cables or hoses.

**General ordering data**

|            |                            |                                       |
|------------|----------------------------|---------------------------------------|
| Type       | THM GEW 15/6 WS            | Version                               |
| Order No.  | <a href="#">1059780000</a> | THM, Device markers, 6 x 15 mm, white |
| GTIN (EAN) | 4032248808175              |                                       |
| Qty.       | 1 pc(s).                   |                                       |

**Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | SDK PH0 X 60               | Version   |
| Order No.  | <a href="#">2749400000</a> | Screwdriver, Blade width (B): 60 mm, Blade thickness (A): |
| GTIN (EAN) | 4050118895629              |   |
| Qty.       | 1 pc(s).                   |   |

## SCS 24VDC P1SIL3DS

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## Accessories

## Crosshead screwdriver Phillips



VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | SDIK PHO X 60              | Version   |
| Order No.  | <a href="#">2749880000</a> | Screwdriver, Blade width (B): 0 mm, 60 mm, Blade thickness (A): 0 |
| GTIN (EAN) | 4050118897081              |   |
| Qty.       | 1 pc(s).                   |   |

## Blank



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Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

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- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | ESG 6.6/20 BHZ 5.00/04     | Version   |
| Order No.  | <a href="#">1082540000</a> | ESG, Device markers x 20 mm, PA 66, Colour: white |
| GTIN (EAN) | 4032248845439              |   |
| Qty.       | 200 pc(s).                 |   |

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

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**General ordering data**

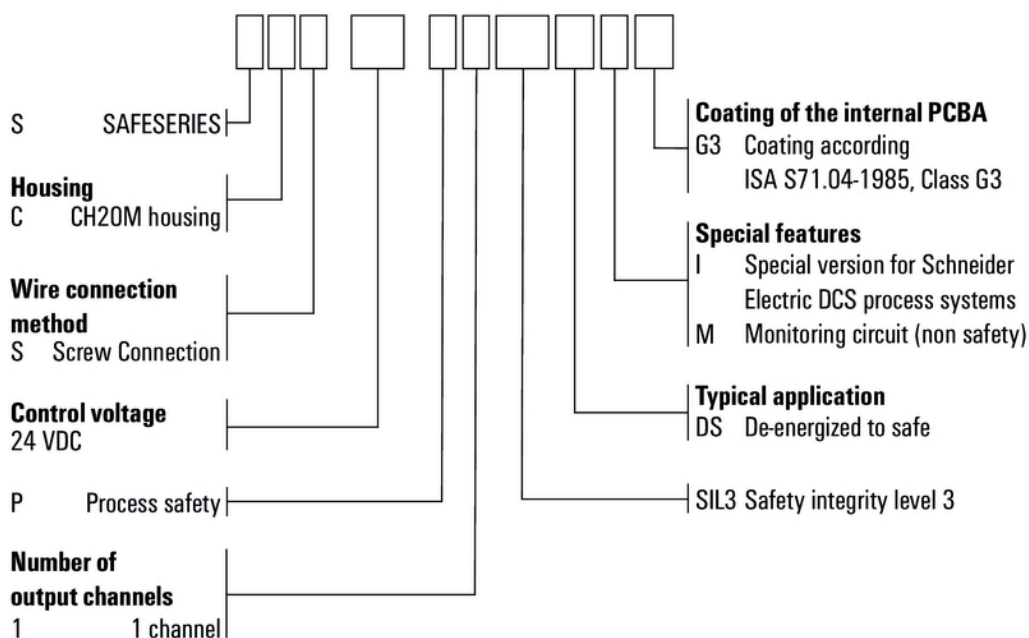
|            |                            |   |
|------------|----------------------------|---|
| Type       | ESG 6/17 K MC NE GE        | Version   |
| Order No.  | <a href="#">1880110000</a> | ESG, Device markers x 17 mm, PA 66, Colour: yellow, Self-adhesive |
| GTIN (EAN) | 4032248478798              |   |
| Qty.       | 200 pc(s).                 |   |
| Type       | ESG 6/17 K MC NE WS        | Version   |
| Order No.  | <a href="#">1880120000</a> | ESG, Device markers x 17 mm, PA 66, Colour: white, Self-adhesive  |
| GTIN (EAN) | 4032248478804              |   |
| Qty.       | 200 pc(s).                 |   |

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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Miscellaneous**

Type codes