

## Data sheet

Commercial Art.No.: R1.188.2250.0

Device for monitoring of safety-related circuits SNV4076SL-A 30s AC115-230V

Base unit, single-channel or two-channel control, automatic-/manual reset with reset switch monitoring, 3 immediately switching current paths, 3 enabling current path off-delayed not retriggerable, 0 - 30s, AC 115-230 V, screw-terminals pluggable



|                    |               |
|--------------------|---------------|
| Commercial Art.No. | R1.188.2250.0 |
| EAN                | 4046521300539 |
| Order Unit         | 1             |

Certificates / Approvals



## Technical data

### General

|  |   |
|--|---|
| Function display   | 5 LED, grün/rot   |
| Creepage distances and clearances between the circuits   | EN 60664-1  |
| Protection degree according to DIN EN 60529 (housing)    | IP40  |
| Protection degree according to DIN EN 60529 (terminals)  | IP20  |
| Ambient temperature min.                                 | -25 °C  |
| Ambient temperature max.                                 | 55 °C   |
| Wire ranges screw terminals, fine-stranded / solid       | 1 x 0,2 mm <sup>2</sup> - 2,5 mm <sup>2</sup> / 2 x 0,2 mm <sup>2</sup> - 1,0 mm <sup>2</sup>   |
| Wire ranges screw terminals, fine-stranded with ferrules | 1 x 0,25 mm <sup>2</sup> - 2,5 mm <sup>2</sup> / 2 x 0,25 mm <sup>2</sup> - 1,0 mm <sup>2</sup> |
| Permissible torque min.                                  | 0.5 Nm  |
| Permissible torque max.                                  | 0.6 Nm  |
| Tightening moment  | 0.6 Nm  |
| Weight   | 0.35 kg   |
| Standards  | EN ISO 13849-1 EN 62061   |
| Suited for safety functions                              | yes   |
| With muting function                                     | No  |
| Feedback circuit   | yes   |
| Start contact  | yes   |
| Stop category acc. to IEC 60204                          | 1   |
| Rail mounting possible                                   | yes   |

### Connection Data

|                             |                  |
|-----------------------------|------------------|
| Detachable clamps           | yes              |
| Type of electric connection | screw connection |

### Application

|  |              |
|--|--------------|
| Model  | Basic device |
| Suitable for monitoring of magnetic switches                   | yes          |
| Suitable for monitoring of proximity switches                  | yes          |
| Suitable for monitoring of emergency-stop circuits             | yes          |
| Suitable for monitoring of optoelectronic protection equipment | yes          |
| Suitable for monitoring of position switches                   | yes          |

### Output circuit

|   |   |
|---|---|
| Enabling paths  | Normally open contact                                   |
| Enabling paths, time delayed                          | Normally open contact, off delay                        |
| Signaling paths                                       | Opener  |
| Contact material                                      | Ag-alloy, gold-plated                                   |
| Rated switching voltage, enabling paths AC            | 230 V   |
| Rated switching voltage, enabling paths DC            | 24 V  |
| Rated switching voltage, signaling paths AC           | 230 V   |
| Rated switching voltage, signaling paths DC           | 24 V  |
| Max. thermal current $I_{th}$ , enabling paths        | 6 A   |
| Max. thermal current $I_{th}$ , signaling paths       | 2 A   |
| Max. total current $I^2$ of all current path          | 25 A <sup>2</sup>                                       |
| Application category AC-15 (NO)                       | Ue 230V, Ie 3A  |
| Application category DC-13 (NO)                       | Ue 24V, Ie 3A   |
| Short-circuit protection (NO), max. fuse insert       | 6 A class gG fuse, fuse integral < 100 A <sup>2</sup> s |
| Mechanical life                                       | 10 <sup>7</sup> switching cycles                        |
| Outputs, signalling function, undelayed, with contact | 1   |
| Outputs, signalling function, delayed, with contact   | 0   |
| Outputs, safe, undelayed, with contact                | 3   |
| Outputs, safe, delayed, with contact                  | 3   |

### Control circuit

|   |                              |
|---|------------------------------|
| Response time tA1                             | 200 ms                       |
| Response time tA2                             | 200 ms                       |
| Min. switch-on time                           | 100 ms                       |
| Recovery time tW                              | > 50 ms                      |
| Release time tR                               | < 20 ms                      |
| Release time tR, delayed contacts (tolerance) | 0 - 30 s (+- 0,1 %, +- 15ms) |
| Type of switch function of the inputs         | Normally open contact        |
| Evaluation inputs                             | 2-channel                    |

### Supply circuit

|   |              |
|---|--------------|
| Nominal voltage $U_N$                                 | AC 115-230 V |
| Rated consumption AC                                  | 6.3 VA       |
| Electrical isolation supply circuit - control circuit | yes          |
| Min. rated control supply voltage at AC 50 Hz         | 98 V         |
| Max. rated AC voltage for controls, 50 Hz             | 253 V        |
| Rated control supply voltage at AC 60HZ               | 98 V         |
| Rated control supply voltage at AC 50HZ               | 253 V        |

### Dimensions

|       |        |
|-------|--------|
| Depth | 114 mm |
|-------|--------|

|        |         |
|--------|---------|
| Width  | 45 mm   |
| Height | 96.5 mm |

**Classification**

|            |          |
|------------|----------|
| ECLASS 11  |          |
| ECLASS 8.1 | 27371819 |
| ETIM 7.0   | EC001449 |
| ETIM 6.0   | EC001449 |
| ETIM 5.0   | EC001449 |
| ETIM 4.0   | EC001449 |
| ETIM 3.0   | EC001449 |

**Safety parameters**

|   |            |
|---|------------|
| Category (ISO 13849-1)                  | 4          |
| PL (ISO 13849-1)                        | Level e    |
| SIL <sub>CL</sub> (IEC 62061)           | 3          |
| PFD <sub>d</sub> (Low demand mode)      | 8.7 E-6    |
| PFH <sub>d</sub> (High demand mode)     | 2 E-9 1/h  |
| HFT                                     | 1          |
| SSF                                     | 99.7 %     |
| DC                                      | 99 %       |
| MTTF <sub>d</sub>                       | 85 a       |
| λS                                      | 4586 FIT   |
| λD                                      | 1346 FIT   |
| λDU                                     | 18.9 FIT   |
| λDD                                     | 1327.1 FIT |
| T <sub>M</sub>                          | 20 a       |
| Proof test intervall (High demand mode) | 20 a       |

**Product compliance**

|                              |                    |
|------------------------------|--------------------|
| ROHS conformity status       | Compliant/Exempted |
| ROHS exceptions              | III-6(c)           |
| REACH-SVHC conformity status | Duty-To-Declare    |
| REACH-SVHC substances        | Lead               |
| REACH-SVHC CAS numbers       | 7439-92-1          |