DATASHEET





RSS16-SD-ST8H

- Universal coding with RFID technology
- 1 x connector plug M12, 8-pole
- Series-wiring up to 31 components
- without latching
- Thermoplastic enclosure
- RFID-technology for needs-based protection against tampering
- 3 different directions of actuation
- Door stop with magnetic latching
- Connection terminal or plug connection
- Suitable for series-wiring

Data

Ordering data

EAN (European Article Number) 4030661456959

eCl@ss number, Version 9.0 27-27-24-03

eCl@ss number, Version 11.0 27-27-24-03

Approval - Standards

Certificates TÜV

cULus EAC FCC IC

General data

Standards IEC 60947-5-3

general information Universal coding

Coding level according to ISO 14119 Low

Active principle RFID

Housing construction form Block

Installation conditions (mechanical) not flush

Sensor topology Sensor for series wiring

Enclosure material Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Active area Glass-fibre, reinforced thermoplastic

Gross weight 250 g

Time to readiness, maximum 2,000 ms

Reaction time, maximum 100 ms

Duration of risk, maximum 200 ms

General data - Features

Serial diagnostics Yes

Diagnostic output Yes

Short circuit detection Yes

Short-circuit recognition Yes

Series-wiring Yes

Safety functions Yes

Cascadable Yes

Integral System Diagnostics, status Yes

Number of LEDs 2

Number of semi-conductor outputs

with signaling function

1

Number of fail-safe digital outputs 2

Number of Series-wiring of sensors 31

Safety appraisal

Standards EN ISO 13849-1

IEC 60947-5-3 EN 62061 IEC 61508

Performance level, up to e

Control category to EN13849 4

PFH-value $6.30 \times 10^{-11} / h$

Safety Integrity Level (SIL), suitable for applications in

3

Mission Time 20 Year(s)

Mechanical data

Actuating panels front side

rear

from head

Active area lateral

front side cover-side

Hysteresis (Switch distance),

maximum

2 mm

Repeat accuracy R R 0.5 mm

Mounting 2 x M5, Cylinder head screw

Tightening torque of nuts, maximum 2 Nm

Mechanical data - Switching distances according IEC 60947-5-3

Switch distance 15 mm

Ensured switch distance "ON" S_{ao} 12 mm

Ensured switch distance "OFF" S_{ar} 30 mm

Mechanical data - Connection technique

Terminal Connector Connector M12, 8-pole

Note

The cable section of the interconnecting cable must be observed for both wiring variants! Cable length and cable section alter the voltage drop depending on the output current

Mechanical data - Dimensions

Length of sensor 91 mm

Width of sensor 52 mm

Height of sensor 30 mm

Ambient conditions

Degree of protection IP65 to EN 60529

IP66 to EN 60529 IP67 to EN 60529

Ambient temperature, minimum -25 °C

Ambient temperature, maximum +70 °C

Storage and transport temperature,

minimum

-25 °C

Storage and transport temperature,

maximum

+85 °C

0.8 kV

Restistance to shock 30 g / 11 ms

Protection rating 0

Ambient conditions - Insulation value

Rated insulation voltage U_i 32 VDC

Rated impulse withstand voltage U

imp

Overvoltage category III

Degree of pollution to VDE 0100 3

Electrical data

Voltage type DC (direct current)

No-load supply current I₀ 100 mA

Rated operating voltage, minimum 20.4 VDC

Rated operating voltage, maximum 26.4 VDC

Operating current 2,100 mA

Required rated short-circuit current

to EN 60947-5-1

Switching frequency, approx. 1 Hz

Electrical data - Fail-safe digital outputs

Rated operating current (safety

outputs)

1,000 mA

100 A

Output current, (fail-safe output),

maximum

1 A

Versions p-type

Voltage drop U_d, maximum 1 V

Current leakage I_r 0.5 mA

Voltage, Utilisation category DC12 24 VDC

Current, Utilisation category DC12 1 A

Voltage, Utilisation category DC13 24 VDC

Current, Utilisation category DC13 1 A

Electrical data - Diagnostic output

Operating current 150 mA

Versions p-type

Voltage drop U_d, maximum 2 V

Electrical data - Electromagnetic compatibility (EMC)

Interfering radiation IEC 61000-6-4

EMC rating IEC 60947-3

Status indication

Note (LED switching conditions

display)

Multi-coloured LED: Green, Red LED yellow: Operating condition

LED green: Supply voltage

LED red: Fault

Scope of delivery

Included in delivery

Actuators must be ordered separately.

Accessory

Recommendation (actuator)

RST16-1 RST-U-2

Recommended safety switchgear

PROTECT PSC1 SRB-E-301ST

SRB-E-201LC

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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