



# RSS260-12-D-ST

- Repeated individual coding with RFID technology
- Coding level "High" according to ISO 14119
- 1 x connector plug M8
- Frontal and lateral actuation enabled
- Thermoplastic enclosure
- Simple mounting without additional angle
- RFID-technology for needs-based protection against tampering

### **Data**

### **Ordering data**

EAN (European Article

4030661436432

Number)

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 Individual coding, multiple teaching

Coding level according to ISO

14119

High

**RFID** Active principle

Housing construction form Block

Installation conditions

(mechanical)

not flush

Sensor for series wiring Sensor topology

**Enclosure** material Plastic, thermoplastic, self-extinguishing

Active area Glass-fibre, thermoplastic

Gross weight 61 g

Time to readiness, maximum 2,000 ms

Reaction time, maximum 100 ms

Duration of risk, maximum 200 ms

#### **General data - Features**

Diagnostic output Yes

Short circuit detection Yes

Short-circuit recognition Yes

Safety functions Yes

Cascadable Yes

Integral System Diagnostics,

status

Yes

Number of LEDs 3

Number of semi-conductor

outputs with signaling function

Number of fail-safe digital

outputs

2

1

### Safety appraisal

Standards EN ISO 13849-1

IEC 60947-5-3 EN 62061 IEC 61508

Performance level, up to e

Control category to EN13849

PFH-value  $6.80 \times 10^{-10} / h$ 

Safety Integrity Level (SIL), suitable for applications in

3

Mission Time 20 Year(s)

#### **Mechanical data**

Actuating panels lateral

front side

Active area lateral

front

Hysteresis (Switch distance),

maximum

2 mm

Repeat accuracy R R 0.5 mm

Note (Repeat accuracy <sub>R</sub>) Axial offset: The long side allows for a maximum height misalignment (x) of sensor

and actuator of 8 mm (e.g. mounting tolerance or due to guard door sagging). The axial misalignment (y) is max.  $\pm$  18 mm (see figure: Operating principle). Minimum

clearance between two sensor systems 100 mm

Mounting A 20 mm screw length usually suffices to mount the sensor. When the mounting

plates are used, we recommend 25 mm long screws.

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

Switch distance  $S_n$  front 12 mm

lateral 9 mm

Ensured switching distance

"ON", front

10 mm

Ensured switching distance

"OFF", front

18 mm

Ensured switching distance

"ON", side

6 mm

## **Mechanical data - Connection technique**

Terminal Connector Connector M8

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 29.5 mm

Width of sensor 39.2 mm

Height of sensor 18 mm

#### **Ambient conditions**

Degree of protection IP65 to EN 60529

IP67 to EN 60529

Ambient temperature,

minimum

-25 °C

Ambient temperature,

maximum

+65 °C

Storage and transport

temperature, minimum

-25 °C

Storage and transport

temperature, maximum

+85 °C

Resistance to vibrations to EN

60068-2-6

10 ... 55 Hz, amplitude 1 mm

Restistance to shock 30 g / 11 ms

#### Ambient conditions - Insulation value

Rated insulation voltage U<sub>i</sub> 32 VDC

Rated impulse withstand

 ${\rm voltage}~{\rm U_{imp}}$ 

0.8 kV

Overvoltage category

Ш

Degree of pollution to VDE

0100

3

#### **Electrical data**

Voltage type DC (direct current)

No-load supply current In 100 mA

24 VDC -15% / +10% Rated operating voltage

Rated operating voltage,

minimum

20.4 VDC

Rated operating voltage,

maximum

26.4 VDC

Operating current 600 mA

Required rated short-circuit

current to EN 60947-5-1

100 A

Switching frequency, approx. 1 Hz

### **Electrical data - Fail-safe digital outputs**

Versions p-type

Voltage drop  $U_d$ , maximum 1 V

Current leakage I<sub>r</sub> 0.5 mA

Voltage, Utilisation category

DC12

24 VDC

Current, Utilisation category

DC12

0.25 A

Voltage, Utilisation category

DC13

**24 VDC** 

0.25 A

Current, Utilisation category

DC13

### **Electrical data - Diagnostic output**

Operating current 50 mA

Versions p-type

Voltage drop U<sub>d</sub>, maximum 2 V

Voltage, Utilisation category

24 VDC

DC12

Current, Utilisation category

0.05 A

DC12

Voltage, Utilisation category

24 VDC

DC13

Current, Utilisation category

0.05 A

DC13

# Electrical data - Electromagnetic compatibility (EMC)

Interfering radiation IEC 61000-6-4

EMC rating IEC 60947-3

#### Status indication

Note (LED switching LED yellow: Operating condition conditions display)

LED green: Supply voltage

LED red: Fault

# Pin assignment

PIN 1 A1  $\rm U_e$ : White

PIN 2 X1 safety input 1: Brown

PIN 3 A2 GND: Green

PIN 4 Y1 safety output 1: Yellow

PIN 5 OUT Diagnostic output OUT Grey

PIN 6 X2 safety input 2: Pink

PIN 7 Y2 safety output 2: Blue

#### **Accessory**

Recommendation (actuator) RST16-1

RST-U-2 RST260-1

Recommended safety PROTECT PSC1

switchgear 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.

Generated on: 11/9/2021, 10:40 AM