13.02.2019

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# Datasheet - EX-T4V7H 355-20ZH-2138-3G/D

Position switches with safety function / EX-355 Metal enclosure with Actuator / EX-355 Roller lever 7H-2138





Metal enclosure

- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 66,7 mm x 76 mm x 38 mm
- Actuator heads can be repositioned by 4 x 90°
- · Including Ex-certified screwed cable gland and screw plug
- Mounting details to EN 50041
- 3 cable entries M 20 x 1.5
- Ex certified

(Minor differences between the printed image and the original product may exist!)

### **Ordering details**

Product type description Article number EAN Code eCl@ss EX-T4V7H 355-20ZH-2138-3G/D EX-T4V7H 355-20ZH-2138-3G/D

27-27-26-01

#### Approval

Approval

(Ex)

### Classification

Standards
Mission time
notice

EN ISO 13849-1

20 Years  

$$MTTF_{d} = \frac{B_{100}}{0.1 \times D_{ex}}$$

 $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oyole}}$ 

### **Global Properties**

Permanent light Standards Compliance with the Directives (Y/N) CE EX-T 355 Rollenschwenkhebel 7H 2138 IEC 60947-5-1, EN 60079-0, EN 60079-15, EN 60079-31, BG-GS-ET-15

Suitable for safety functions (Y/N)	No
Materials	
- Material of the housings	light alloy die-casting
- Lever material	Metal film
- Material of the contacts	Silver
- Roller material	Plastic
Housing coating	painted
Housing construction form	Norm construction design
Weight	

# Mechanical data

Design of electrical connection	Screw connection
Cable cross-section of the cable glands	
- Min. Cable cross-section of the cable glands	7
- Max. Cable cross-section of the cable glands	12
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
AWG-Number	13
Mechanical life	30.000.000 operations
Switching frequency	5000
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller lever
actuating torque	31
Bounce duration	< 2
Switchover time	in accordance with actuating speed
Impact energy	1
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	
- Max. Actuating speed	2.5

# **Ambient conditions**

Ambient temperature	
- Min. environmental temperature	-20
- Max. environmental temperature	+60
Protection class	IP67

# **Electrical data**

Design of control element	Normally open contact (NO)
Switching principle	Slow action with staggered contacts
Number of auxiliary contacts	2
Number of safety contacts	0
Rated impulse withstand voltage	6
Rated insulation voltage	500
Thermal test current	10 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 1 A
Max. fuse rating	6 A gG D-fuse

# ATEX

EX-marking	EX II 3G Ex nC IIC T5 Gc X, EX II 3D Ex tc IIIC T90°C Dc X
Explosion protection categories for gases	ATEX gas ex-protection, Cat. 3
Explosion protection Zones for gases	2
Explosion protected category for dusts	ATEX dust ex-protection, Cat. 3
Explosion protection Zones for dusts	22

# Dimensions

Dimensions of the sensor	
- Width of sensor	40.5
- Height of sensor	173.5
- Length of sensor	57.25

#### notice

Switch with 2 NO contacts are not for security tasks

# Keywords

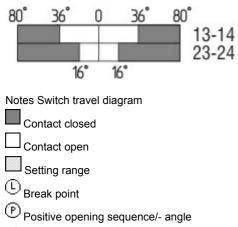
Keywords

Ex, EEx, ATEX, Ex 235, Ex 235, 235 Ex, 235ex, 235ex, ATEX 235

# Diagram

23 -Note Diagram  $\ominus$  positive break NC contact  $\textcircled{1}_{\text{active}}$ no active °----- Normally-open contact o-it----o Normally-closed contact

# Switch travel diagram



VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

# Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

#### Order example: EX-T4V7H 355-20ZH-2138-3G/D-1297

1297	Enclosure with transverse slotted holes
1637	0,3 µm gold-plated contacts

#### **Documents**

**Operating instructions and Declaration of conformity** (es) 373 kB, 24.01.2018 Code: mrl\_ex-zt355\_es

**Operating instructions and Declaration of conformity** (jp) 572 kB, 05.07.2011 Code: mrl\_ex-zt355\_jp

**Operating instructions and Declaration of conformity** (fr) 376 kB, 01.02.2018 Code: mrl\_ex-zt355\_fr

**Operating instructions and Declaration of conformity** (en) 380 kB, 11.01.2019 Code: mrl\_ex-zt355\_en

**Operating instructions and Declaration of conformity** (it) 371 kB, 16.02.2018 Code: mrl\_ex-zt355\_it

**Operating instructions and Declaration of conformity** (pl) 392 kB, 16.02.2018 Code: mrl\_ex-zt355\_pl

**Operating instructions and Declaration of conformity** (de) 337 kB, 11.01.2019 Code: mrl\_ex-zt355\_de

**Operating instructions and Declaration of conformity** (pt) 378 kB, 23.01.2018 Code: mrl\_ex-zt355\_pt

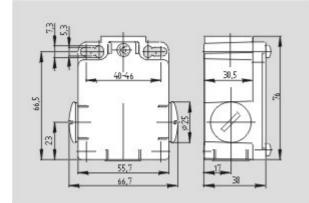
**Operating instructions and Declaration of conformity** (nl) 375 kB, 31.01.2018 Code: mrl\_ex-zt355\_nl

Brochure (de) 7 MB, 19.10.2016 Code: b\_atep01\_de

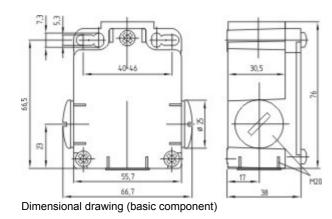
**Brochure** (en) 7 MB, 19.10.2016 Code: b\_atep01\_en

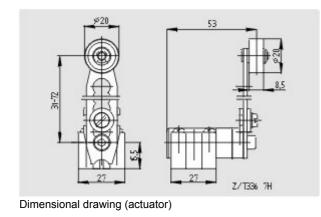
Brochure (it) 3 MB, 20.07.2007 Code: b\_atep05

#### Images



Dimensional drawing (basic component)





K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:10:23h Kasbase 3.3.0.F.64l