YVDOO_R0 03.07.2023

Active illuminated emergency-stop with status indication active (illuminated) / inactive (non-illuminated)

General Data

Type reference	YVDOO_R0
Description	Emergency-stop, active/inactive (without diagnostic device), LED without series resistor
Approvals	CE, cURus, TÜV_Süd, UKCA
Contact type	1 NC / 2 NC
Degree of protection	IP65 / IP67
Connection type	Faston terminals 2.8 mm x 0.5 mm
Contact material	AgNi
Max. storage temperature	-40°C ... 80°C
Max. operating temperature	-25°C ... 55°C
Mechanical life	30,000 switching cycles
Electrical life (rated load)	30,000 switching cycles at rated load
Contact resistance NC	< 20 mOhm
Min. current	1 mA (under laboratory conditions)
Min. voltage	5 V
Bouncing time NC	< 10ms
Positive opening contact	acc. to EN60947-5-1,appendix K

Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

	alternate current	direct current
Utilisation category	AC15	DC13
Rated insulation voltage Ui	250 V	250 V
Rated operating voltage Ue	35 V	35 V
Rated operating current Ie	5 A	2 A
Breaking capacity	10Ie	1,1Ie
Continuous thermal current	5 A	-

Technical Data - Lamp

Lamp socket	none, with integrated 3 mm LED, without series resistor, with

	potective diode in series
Definition	X1...anode, X2...cathode

Additional data

Mounting aperture	16.2 mm
Tightening torque (mounting nut)	0.8 ... 1.5 Nm
Release	twist release, left or right
Mounting position	any
Standards	ISO 13850:2015(E), EN ISO 13850:2015(D), DIN EN ISO 13850:2016-05, EN60947-5-5
Material group	I
Overvoltage category	II
Pollution degree	2
Ld	20% (NC)
B10d [cycles]	250,000

Note

- O = NC contact
- LED: 0-Ohm series resistor, with protective diode (series-connected)
- with switching position indicator
- diagnostic unit not included

- use partially insulated Faston clamps
  recommended Schlegel type "FHTI2,8x0,5_01"
0.5-1.5mm² (AWG 20-16)
-30°C - 75°C

Illuminated version, status indication active/inactive:
Mushroom "grey": "inactive",no emergency stop
Mushroom "red": "active" emergency stop

Technical data of LED:
The LED must not be operated without series resistor.
Do not connect terminals X1-X2 directly to voltage. Observe LED data!

LED type: (Data sheet_LED_YVD_161220.pdf)
Protective diode (series-connected): Taiwan Semiconductor, TS4148 RYG, forward voltage max. 1.0V
LED series resistor: 0-Ohm

Typical data at IF=20mA, Tu=25°C: (=recommended amperage)
Luminous intensity: typ. 450 mcd
Beam angle: typ. 90°
Dominant wave length: 618...627 nm, typ. 623 nm

Average life at 20mA:
Brightness loss: approx. 11% (after 10,000h at IF=20mA, 15-30°C)
LED cut-off voltage: max. 70V (with protective diode)
Max. forward current: 30mA
Forward voltage LED: typical 2.0V (1.8V...2.3V)

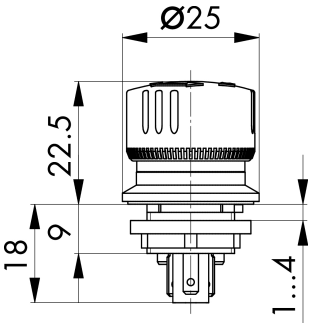
Safety Instructions:
- The emergency stop must only be used when lighting conditions ensure clear and distinct visibility of the red illuminated (active) mushroom,
  e.g. in interiors or roofed places without direct sunlight (normal industrial environment).

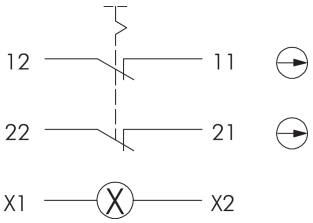
- Before using the emergency stop, a systematic safety review of the overall system is required.
- Depending on the designer's risk assessment, the illumination of the emergency stop must be monitored by means of a "diagnostic unit",
  and in case of error one has to react in accordance with the risk evaluation.
- The emergency stop lighting must be checked at regular intervals to ensure its clear and distinct visibility.
  The emergency stop must be replaced if the clear visibility is no longer guaranteed.
- Please observe the operation manual

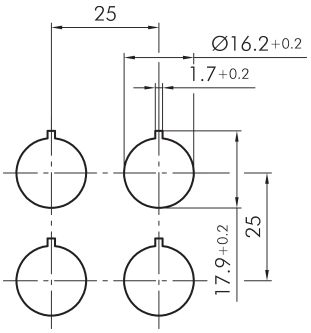
Standard compliant applications:
- pluggable operator stations
- wireless operator stations
- pluggable system components (fixed system components which are only temporarily in operation)

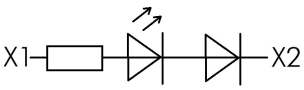
Data acc. to UL508, IEC60947-5-5

Tightening torque (mounting nut)	0.8 ... 1.5 Nm (plastic nut) 1.2 Nm (metal nut)
Rating contact block	35 V AC/DC, 2 A
Lamp rating	LED input current to be limited to 20 mA
Enclosure Type	Type 1 (front face)









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