

FRVKDOO_AU

17.03.2022

**Active illuminated safety emergency-stop
with position indication active/inactive**



General Data

Type reference	FRVKDOO_AU
Description	Emergency-stop, active/inactive (without diagnostic device)
Approvals	CE, cURus, TÜV_Süd, UKCA
Contact type	2 NC
Degree of protection	IP65 / IP67
Connection type	Faston terminals 2.8 x 0.8 mm
Contact material	AgNi, gold-plated 5µm
Max. storage temperature	-40°C ... 80°C
Max. operating temperature	-25°C ... 70°C
Mechanical life	50,000 switching cycles
Electrical life (rated load)	50,000 switching cycles at rated load
Contact resistance NC	< 50 mOhm (new state)
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	-	-
Rated operating current Ie	-	-
Breaking capacity	-	-
Continuous thermal current	-	-

Technical Data - Lamp

Lamp socket	none, with integrated 3 mm LED
Definition	X1 ...anode, X2...cathode



Additional data

Mounting aperture	22.3 mm
Tightening torque (mounting nut)	1.3 ... 1.9 Nm
Release	twist release, left or right
Mounting position	any
Standards	EN 60947-5-1, EN 60947-5-5, EN ISO 13850
Ld	20% (NC)
B10d [cycles]	250,000
Overvoltage category	II
Pollution degree	2
Material group	I
Switching voltage	20 mV ... 35 V AC/DC
Switching current	1 mA ... 250 mA

Note

- O = NC contact; I = NO contact
- with switching position indicator
- the diagnostic unit is not scope of delivery
- Use partially or all-insulated Faston clamps for the version with Faston terminals

Illumination, status indication active/inactive: acc. to ISO 13850:2015(E), EN ISO 13850:2015(D), DIN EN ISO 13850:2016-05

Mushroom head "grey": "inactive", no emergency-stop
Mushroom head "red": "active" emergency-stop

LED data:

Type: Opto Devices
Typical data at IF=20mA:
Luminous intensity: min. 10000 mcd, typ. 13000 mcd
Beam angle: typ. 15°
Dominant wave length: 618...624 nm, typ. 621 nm

Rated voltage: 24 V DC ± 10%
Rated current: 17.8 mA (15.6...19.95mA)
Typical luminous intensity at IF=18mA: min. 9000 mcd, typ. 11700 mcd
Cut-off voltage LED: max. 70 V
Average lifetime: abt. 80.000...100.000 h

Safety instructions:

- The emergency-stop may only be used in lighting conditions in which a clear and unambiguous perceptibility of the red illuminated (active) mushroom head is guaranteed; e.g. indoors or in covered places without direct sunlight (normal industrial environment)
- Before using the emergency-stop a safety review of the entire system is required.
- Depending on the designer's risk assessment, the illumination of the emergency-stop has to be monitored by means of a "diagnostic unit", and in case of a failure one has to react in accordance with the risk evaluation.
- The illumination of the emergency-stop has to be checked regularly as to its clear perceptibility. The emergency-stop has to be exchanged in case the clear perceptibility is no longer given.

- Observe the operating instructions

Standard compliant applications:

- pluggable operator stations
- wireless operator stations
- pluggable system components (system components which are stationary available but only temporarily in operation)



Data acc. to UL

Rating	42 V dc/100 mA
Category	NISD2/8
Torque	1.3 ... 1.9 Nm (head nut)

Data acc. to UL 60947-5-1/ CSA-C22.2 No. 60947-5-1

Ratings	42 V dc/100 mA
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