



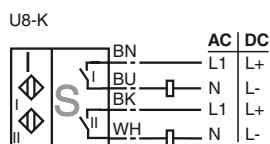
Model Number

NBN3-F31-U8-K

Features

- Direct mounting on standard actuators
- Compact and stable housing
- Fixed setting

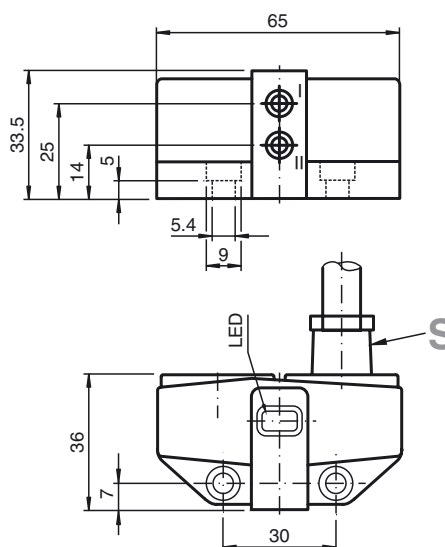
Connection



Accessories

- BT65A**
Activator for F31 series
- BT65X**
Activator for F31 series
- BT115A**
Activator for F31 series
- BT115X**
Activator for F31 series
- BT65B**
Activator for F31 series
- BT115B**
Activator for F31 series

Dimensions



Technical Data

General specifications		
Switching element function		AC/DC binary NO
Rated operating distance	s_n	3 mm
Installation		flush mountable
Output polarity		AC/DC
Assured operating distance	s_a	0 ... 2.43 mm
Reduction factor r_{AI}		0.45
Reduction factor r_{Cu}		0.38
Reduction factor r_{304}		1
Reduction factor r_{S137}		1.04

Nominal ratings		
Operating voltage	U_B	20 ... 253 V AC/DC
Switching frequency	f	25 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protection		yes
Short-circuit protection		yes
Voltage drop	U_d	≤ 8 V
Operating current	I_L	4 ... 400 mA
Off-state current	I_r	≤ 1.7 mA
Operating voltage display		LED, green
Switching state indication		LED, yellow

Functional safety related parameters		
MTTF _d		529 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %

Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)

Mechanical specifications		
Connection type		cable PVC , 5 m
Core cross-section		0.5 mm ²
Housing material		PBT
Sensing face		PBT
Protection degree		IP67

Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates		
Protection class		
		II
Rated insulation voltage	U_i	253 V
Design-impulse-voltage withstand	U_{imp}	4 kV
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose

Release date: 2013-02-12 13:06 Date of issue: 2013-02-12 186325_eng.xml