



Model Number

NCN3-F31-B3B-V1

Valve positioner and valve control module

Features

- Direct mounting on standard actuators
- A/B slave with extended addressing possibility for up to 62 slaves
- Mode of operation, programmable
- Degree of protection IP67
- Communication monitoring, turn-off

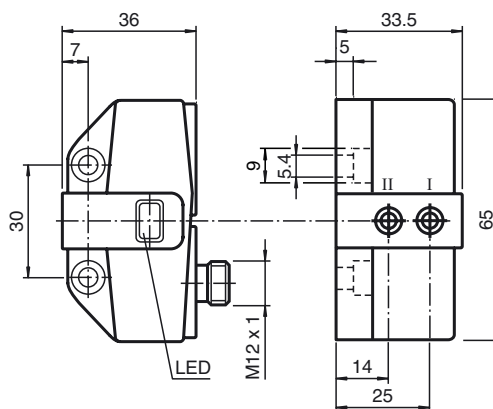
Accessories

- 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
- V1-W-2M-PUR**
Female cordset, M12, 4-pin, PUR cable
- V1-G-2M-PUR**
Female cordset, M12, 4-pin, PUR cable
- V1-G**
Female connector, M12, 4-pin, field attachable

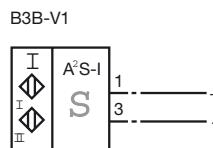
Technical Data

General specifications	
Switching function	Normally open/closed (NO/NC) programmable
Output type	AS-Interface
Rated operating distance	s_n 3 mm
Installation	flush mountable
Assured operating distance	s_a 0 ... 2.43 mm
Reduction factor r_{AI}	0.5
Reduction factor r_{Cu}	0.45
Reduction factor r_{304}	1
Reduction factor r_{St37}	1.2
Slave type	A/B slave
AS-Interface specification	V3.0
Required master specification	≥ V2.1
Nominal ratings	
Operating voltage	U_B 26.5 ... 31.9 V via AS-i bus system
Switching frequency	f 0 ... 100 Hz
No-load supply current	I_0 ≤ 35 mA
Functional safety related parameters	
MTTF _d	842 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Indicators/operating means	
LED PWR	AS-Interface voltage; LED green
LED IN	switching state (input); LED yellow
Electrical specifications	
Rated operating voltage	U_e 26.5 ... 31.6 V from AS-Interface
Rated operating current	I_e 100 mA
Programming instructions	
Parameter bits (programmable via AS-i)	
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection (system side)	4-pin, M12 x 1 connector
Connector housing	metal
Housing material	PBT
Degree of protection	IP67
Compliance with standards and directives	
Standard conformity	
Electromagnetic compatibility	EN 50295:1999-10
Standards	
	EN 60947-5-2:2007
	EN 60947-5-2/A1:2012
	IEC 60947-5-2:2007
	IEC 60947-5-2 AMD 1:2012
Approvals and certificates	
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V

Dimensions

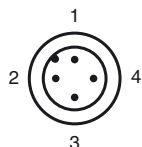


Electrical Connection



Release date: 2019-05-16 15:36 Date of issue: 2019-05-16 226324_eng.xml

Pinout

**Programming Instructions**

Address	00 preset, alterable via Busmaster or programming units
IO-code	D
ID-code	A
ID1-code	7
ID2-code	E

Data bit

Bit	Function
D0	not used
D1	not used
D2	switch output sensor 1 ¹⁾ (0=damped; 1=undamped)
D3	switch output sensor 2 ¹⁾ (0=damped; 1=undamped)

Parameter bit

Bit	Function
P0	Watchdog (0=inactive; 1=active)
P1	switching element function sensor II ²⁾ 0=NO; 1= NC)
P2	switching element function sensor I ²⁾ 0=NO; 1= NC)
P3	not used

1) Applies to NC function (P1/P2=1; preset), with NO function (P1/P2=0) reversed characteristics

2) Default setting: NC