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# **ABB i-bus® KNX Binary Inputs**

## Seamlessly Control, Process Signals and More.



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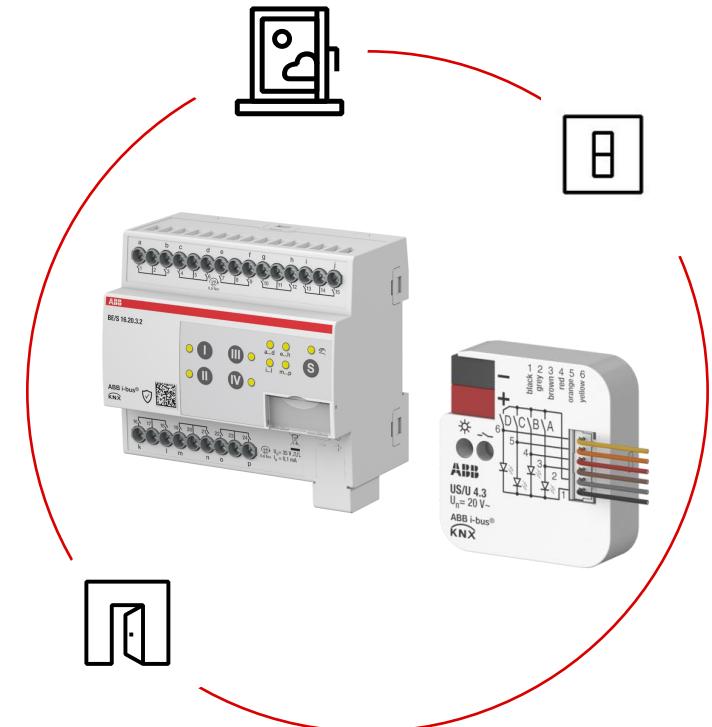
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# Introduction

# ABB i-bus® KNX Binary Inputs

## Introduction

ABB i-bus® KNX binary inputs serve as an interface for the operation of KNX systems via conventional push buttons and switches as well as for processing binary signals.

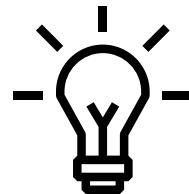


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# Main Benefits

# ABB i-bus® KNX Binary Inputs

## Main Benefits



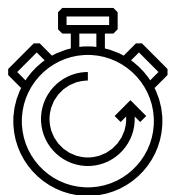
### Comprehensive Portfolio

- A larger portfolio that meets all requirements
- Simplicity of device selection
- Harmonized look and feel (e.g., keypad)
- More value for money



### Security

- Excellent security of the KNX installation with KNX Data Secure
- Forward and backward compatibility



### Reduction of Commissioning Time

- Improved user experience through optimized ETS Application (structure, wording, functionality)
- Reducing time by using templates



### Functionality

- Simplifying complex functions
- Logic
- Support of S0-Signals for counter application

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# Main Features

# ABB i-bus® KNX Binary Inputs

## Range Overview



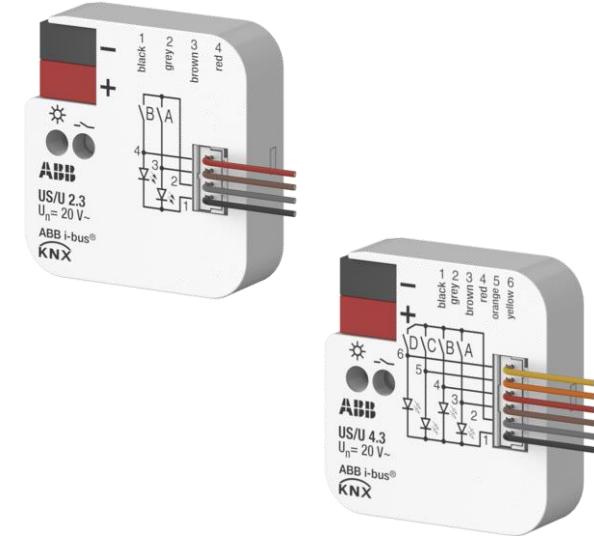
### Binary Inputs with Contact Scanning

- BE/S x.20.3.2
- 4, 10 and 16 inputs
- Keypad for status indication and manual operation
- Optimized functionality (e.g., logic function)
- KNX Data Secure



### Binary Inputs 10...230 V

- BE/S x.230.3.2
- 4, 8, 10, 12 and 16 inputs
- Keypad for status indication and manual operation
- Optimized functionality (e.g., logic function)
- KNX Data Secure



### Universal Interfaces

- US/U x.3
- 2 and 4 inputs
- Output voltage is lower for LED control (3.3 V instead of 5 V)
- Optimized functionality (e.g., logic function)
- KNX Data Secure

# ABB i-bus® KNX Binary Inputs

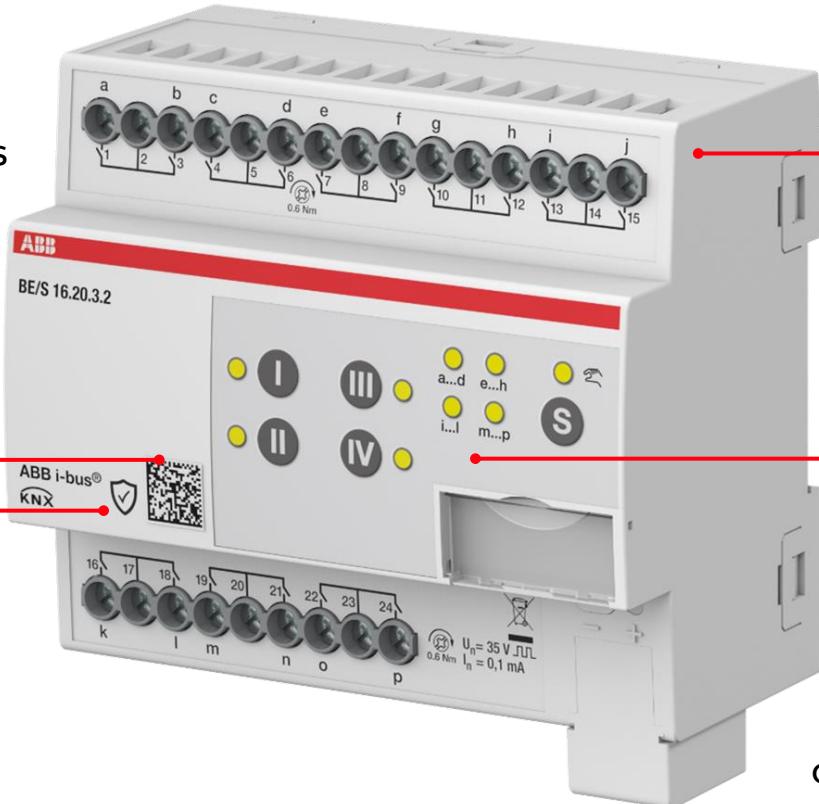
## Hardware Features

### Traceability

Implementing digital service features and diagnostics

### KNX Data Secure

Excellent security of the KNX installation with KNX Data Secure



### Comprehensive Portfolio

A larger portfolio that meets all requirements

Simplicity of device selection

### New Keypad

Harmonized look and feel over the newest portfolios

# ABB i-bus® KNX Binary Inputs

## Software Features

- Improved usability
  - Templates & naming of channels and group objects
  - Reduced parameter texts & seldomly needed parameters are hidden
  - Parameterization in tables (e.g., Multiple operation)
- Central configuration
- Improved detection of input signals, even in the presence of interferences
- 11 different applications
  - Switching, Blind/Shutter, Switch/Dim, Scenes, Send value/Multiple operation, Fault indicator, Switching sequence, Counter
  - Logics (And, Or, Exclusive Or)
- Manual operation
- KNX Data Secure

15.15.3 BE/S16.20.3.2 Binary Input, 16-fold, Contact scanning, MDRC > Configuration

Binary input v1.0 03.01.2024

	Application	Template	Description
Eingang a	Switch	<input checked="" type="checkbox"/>	Living Room
Input b	Blind/Shutter	<input checked="" type="checkbox"/>	Test
Eingang c	Switch/Dim	<input checked="" type="checkbox"/>	123
Input d	Scenes	<input type="checkbox"/>	
Eingang e	Send value/Multiple operation	<input checked="" type="checkbox"/>	
Input f	Fault indicator	<input checked="" type="checkbox"/>	
Eingang g	Switching sequence	<input type="checkbox"/>	
Input h	Counter	<input checked="" type="checkbox"/>	
Input i+j	Switch (2-button)	<input checked="" type="checkbox"/>	
Input k+l	Blind/Shutter (2-button)	<input checked="" type="checkbox"/>	
Input m+n	Switch/Dim (2-button)	<input checked="" type="checkbox"/>	
Eingang o	deactivated	<input type="checkbox"/>	
Input p	Switch	<input checked="" type="checkbox"/>	

Enable manual operation

Manual operation

Enable Logic

Logic 1-4

Logic 5-8

Logic 9-12

Logic 13-16

*In order to be able to use the inputs for logic, the fault indicator application must be active.*

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# KNX Data Secure

# ABB i-bus® KNX Binary Inputs

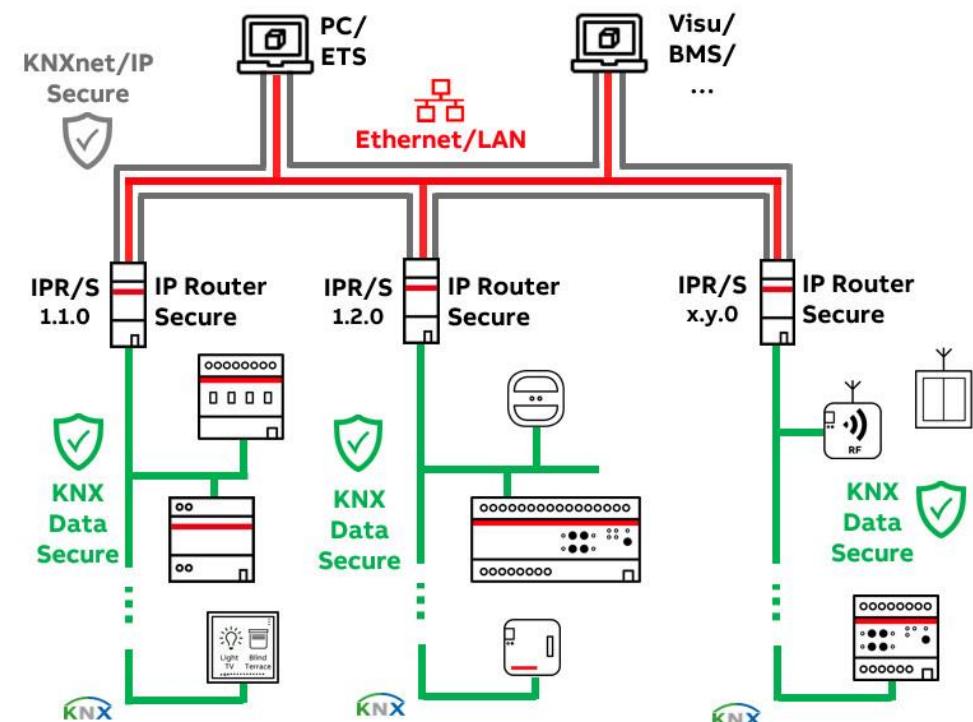
## KNX Data Secure



### Overview

- KNX Data Secure ensures the encryption of telegrams on twisted pair (TP)
- This is where most of the KNX devices are connected
- KNX Data Secure is mandatory for KNX RF Multi Standard and recommended for KNX TP
- In a KNX TP/RF system, secure and plain devices can be used in parallel  
→ Not all devices have to be secure
- In a KNX installation, KNXnet/IP Secure and KNX Data Secure devices can be used in parallel
- Secure commission (download of individual address and application)
- Secure devices are protected against unauthorized programming
- KNX Secure is based on “Advanced Encryption Standard (AES 128 bit) and is standardized according to ISO/IEC 18033-3

For more information about KNX Data Secure  
watch our Webinar recording!



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# Ordering Details

# ABB i-bus® KNX Binary Inputs

## Ordering Details

More information available on  
the product pages!

Product Type	Product ID	EAN	Product Name	Description	Module Width
BE/S 4.20.3.2	2CDG110276R0011	40 53546 11082 1	Binary Input, 4-fold, Contact Scanning, Manual Operation, MDRC	Detects AC/DC signals in the voltage range from 12...230 V. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals.	2
BE/S 10.20.3.2	2CDG110277R0011	40 53546 11083 8	Binary Input, 10-fold, Contact Scanning, Manual Operation, MDRC	The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply. The devices support KNX Data Secure.	4
BE/S 16.20.3.2	2CDG110278R0011	40 53546 11084 5	Binary Input, 16-fold, Contact Scanning, Manual Operation, MDRC	Scans floating contacts with internally generated scanning voltage. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals.	6
BE/S 4.230.3.2	2CDG110279R0011	40 53546 11085 2	Binary Input, 4-fold, 10-230V, Manual Operation, MDRC	The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply. The devices support KNX Data Secure.	2
BE/S 8.230.3.2	2CDG110280R0011	40 53546 11086 9	Binary Input, 8-fold, 10-230V, Manual Operation, MDRC	Scans floating contacts with internally generated scanning voltage. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals.	4
BE/S 10.230.3.2	2CDG110281R0011	40 53546 11087 6	Binary Input, 10-fold, 10-230V, Manual Operation, MDRC	The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply. The devices support KNX Data Secure.	4
BE/S 12.230.3.2	2CDG110282R0011	40 53546 11088 3	Binary Input, 12-fold, 10-230V, Manual Operation, MDRC	Scans floating contacts with internally generated scanning voltage. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals.	6
BE/S 16.230.3.2	2CDG110283R0011	40 53546 11089 0	Binary Input, 16-fold, 10-230V, Manual Operation, MDRC	The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply. The devices support KNX Data Secure.	6

# ABB i-bus® KNX Binary Inputs

## Ordering Details

More information available on  
the product pages!

Product Type	Product ID	EAN	Product Name	Description	Module Width
US/U 2.3	2CDG110308R0011	40 53546 11157 6	Universal Interface, 2-fold, FM	The universal interface has 2 or 4 channels which can be parametrized as inputs or outputs with the ETS software. Conventional push-buttons, auxiliary contacts and LEDs can be connected. The connecting cables can be extended up to 10 m. The contact scanning voltage and the supply voltage for the LEDs are made available by the device, the series resistors for the LEDs are integrated. The devices support KNX Data Secure.	-
US/U 4.3	2CDG110309R0011	40 53546 11158 3	Universal Interface, 4-fold, FM		-

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# **Resources and Support**

# ABB i-bus® KNX Binary Inputs

## Resources

### Product information



[Product webpage](#)

### Documentation



[KNX Product Range Overview](#)



[Selection tables](#)

### Training



[Webinar](#)

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