

# Universal Interfaces US/U 4.2 and US/U 2.2

Intelligent Installation System

Intelligent and  
limitless



## Universal Interfaces US/U 4.2 and US/U 2.2



The functions implemented in modern buildings with ABB i-bus® EIB should be both simple to operate and intuitive. At the same time, clear and user-friendly operation is extremely important to the value of a building installation.

The universal interfaces meet individual requirements in both functional buildings and the residential sector. The planner and installer of the system thus has a feeling of certainty as regards the functions that are to be realised.

### Additional benefits



- **Only one application program**  
The device only has one application program which contains all the functions.
- **Compact design**  
This simplifies flush-mounted installation e.g. behind a conventional switch.
- **Two variants**  
Two versions of the universal interface are now available: US/U 4.2 with four inputs/outputs and US/U 2.2 with two inputs/outputs.
- **Flexible functionality**  
Each input/output can be assigned any function.  
This simplifies the planning and installation and ensures reliability.

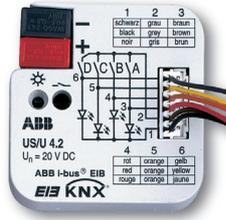
### Important highlights/functions



- **Scene control**  
Each input can recall and/or store a scene with up to 5 actuator groups.
- **Operation as a heating actuator**  
The device can control heating systems with a thermal valve drive (additional electronic relay ER/U 1.1 is required). Useful functions are possible such as continuous control, positive operations, automatic valve purging and fault operation when the room temperature controller has failed.
- **LED functions**  
The device can control LEDs e.g. to give the user status feedback for the operation. The LEDs can also flash.
- **Universal operating concepts**  
There is a universal distinction between a short and long push button action. Functions are also retrieved by a sequence of multiple push button actions.
- **Counting**  
The counting of switching processes is a frequent application e.g. to record energy consumption. The counting function also enables normal-rate consumption to be measured.

# Universal Interfaces

## US/U 4.2 and US/U 2.2



The universal interfaces US/U 2.2 (2-fold) and US/U 4.2 (4-fold) serve as interfaces for convenient operation in ABB i-bus® EIB installations using conventional push buttons/switches or for reading out technical binary signals. They also enable the control of LEDs and the electronic relay ER/U 1.1 for regulating electrothermal valve drives within the heating control system. The extremely compact design permits the insertion of the device in conventional 60 mm switch boxes e.g. behind a conventional push button or switch. The devices stand out due to their unique, comprehensive and clear functionality which enables them to be used in a wide variety of applications.

### Overview of the functions

Switching and dimming luminaires



Scene control

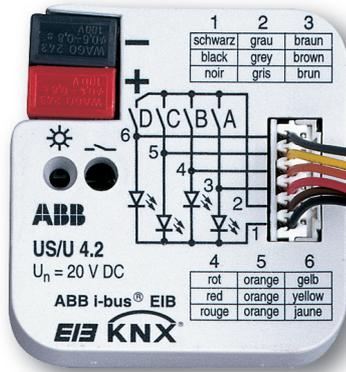
Counting pulses



Scanning contacts



Controlling shutters and blinds



Controlling thermal valve drives for heating systems (via ER/U 1.1)



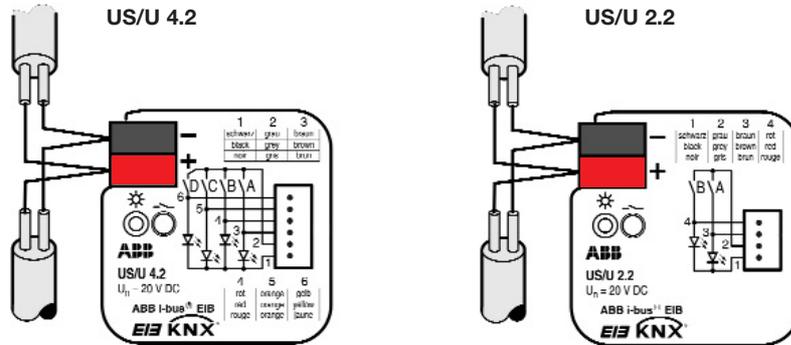
Sending fixed numerical values e.g. temperature values, positive operation



Controlling LEDs

# Universal Interfaces US/U 4.2 and US/U 2.2

## Circuit diagrams



## Technical data

<b>Power supply:</b>	Bus voltage	via ABB-i bus® EIB, power consumption < approx. 10 mA
<b>Inputs/outputs:</b>	Number	2 for US/U 2.2 4 for US/U 4.2 Can be parameterised individually as inputs or outputs
<b>Input:</b>	Permitted cable length Scanning voltage Input current	≤ 10 m 20 V DC 0.5 mA
<b>Output:</b>	Output voltage Output current Safety	5 V DC max. 2 mA, limited by series resistor of 1.5 kW Short-circuit-proof, overload protection, reverse voltage protection
<b>Operating and display elements:</b>	(Red) LED and push button	For assigning the physical address
<b>Connections:</b>	Inputs/outputs  ABB i-bus® EIB	4 cables for US/U 2.2 6 cables for US/U 4.2 approx. 30 cm long, can be extended to max. 10 m via bus connecting terminal, included with supply
<b>Miscellaneous</b>	Type of protection Protection class CE norm  Approval Installation Dimensions (W x H x D) Weight	IP 20 (EN 60529), when installed III in accordance with the EMC guideline and the low voltage guideline EIB-certified in switch box, 60 mm 39 x 40 x 12 mm 0.05 kg

Programming with ETS2 V1.2 or higher

## Selection table

Description	Version	Ordering info. Short code	Product code	bbn 40 16779 EAN	Weight 1 Pc. (kg)	Package (Pc.)
Universal interface	2-fold	<b>US/U 2.2</b>	GH Q631 0074 R0111	<b>56483 0</b>	0.05	1
Universal interface	4-fold	<b>US/U 4.2</b>	GH Q631 0070 R0111	<b>56481 6</b>	0.05	1



The information in this leaflet is subject to change without further notice.

Your EIB-Partner