

# Intelligent Building Solutions

## Installation Manual



**CIF 20 DU**

**CIB-tech - USB interface**

DIN-rail mounting

**CIB-tech**

# Introduction

The CIF 20 DU connects the CIB-tech automation system to a host computer running the CIB-tech systems interface software<sup>1</sup>.

## Additional Equipment Required

### 1. Functional CIB-tech system

A minimal number of essential CIB-tech components to make a functional CIB-tech system<sup>2</sup>

### 2. USB cable

A standard USB-A to USB-B cable of a maximum length of 3 m is required for connecting the CIF 20 DU to the host computer.

# Technical Specifications

## Electrical characteristics

### ● Power Supply

Due to the galvanic isolation of the CIB-tech network from the host computer, the CIF 20 DU requires double power supply. It is powered both from the CIB-tech system's power supply via the CIB-tech connector and from the host computer via the USB connector.

- Power from CIB-tech system:
  - Operating voltage range: 20 to 28V DC (nominal 24V DC)
  - Supply current
    - Standby current : 21mA
    - Maximum current: 24mA
- Power from USB:
  - Operating voltage: 5V DC
  - Operating current: 50mA

## USB specifications

- USB 2.0 device (full speed)
- USB-B connector
- USB serial converter

## Mechanical characteristics

The CIF 20 DU has a standard 2-module wide enclosure for M36 type DIN-Rail.

- Dimensions: 89mm W x 35mm L x 60mm D
- Weight: 75g

## Environmental characteristics

- Operating temperature: -10°C to 85°C
- Storage temperature: -25°C to 100°C

1 The ESS software system is an open source CIB-tech interface software that is available for download at IBS homepage: <http://www.ibs-smarthouse.com/>

2 See "CIB-tech installation manual" for details.

# Installation

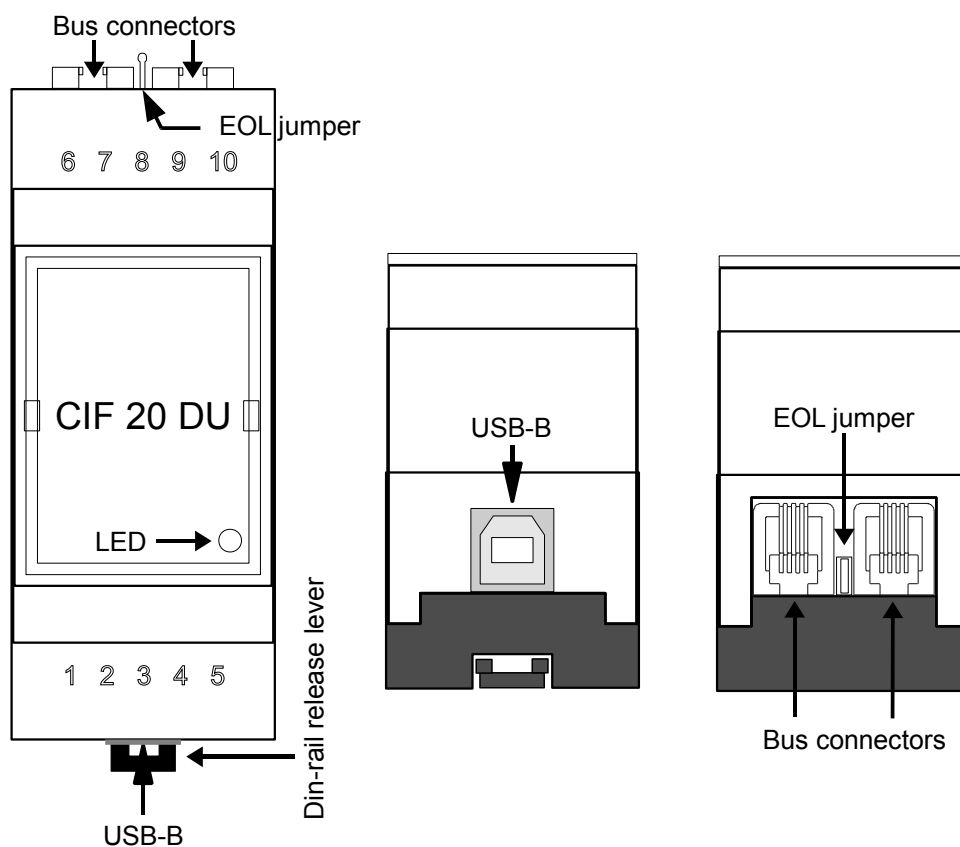
The CIF 20 DU is meant to be installed on a standard M36 type DIN-Rail.

To install the device:

- mount the CIF 20 DU on the DIN-Rail;
- connect the CIB-tech network cable to the CIF 20 DU device (see connection diagrams below);
- connect the device to the host computer via the USB cable<sup>2</sup>;

## Part description

- **Bus connectors:**
  - 4P4C modular jack connectors for CIB-tech connection<sup>1</sup>
- **EOL jumper:**
  - CIB-tech system's End Of Line jumper<sup>1</sup>
- **LED:** indicator LED for network attachment state
  - red: interface to the CIB-tech network is off-line
  - green: interface to the CIB-tech network is on-line)
- **USB-B connector:**
  - USB device connector for connecting the CIF 20 DU to the host computer
- **DIN-rail release lever:** lever for removing the device from the M36 DIN-Rail



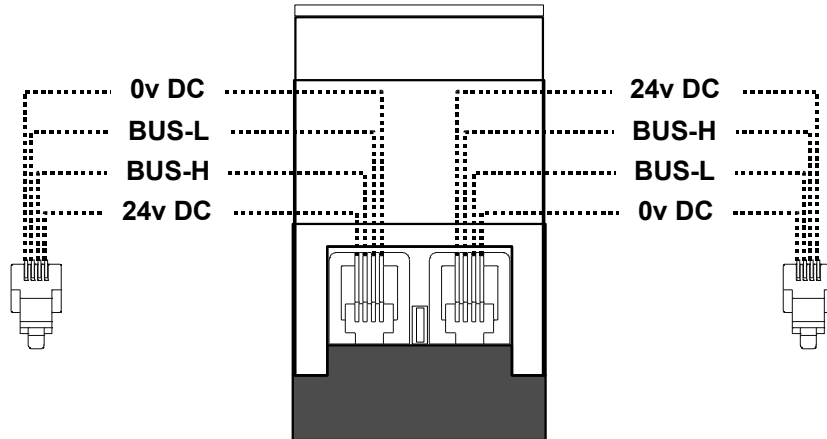
## Wiring diagrams

<sup>2</sup> USB drivers for CIF 20 DU are available for download at IBS homepage: <http://www.ibs-smarthouse.com/>

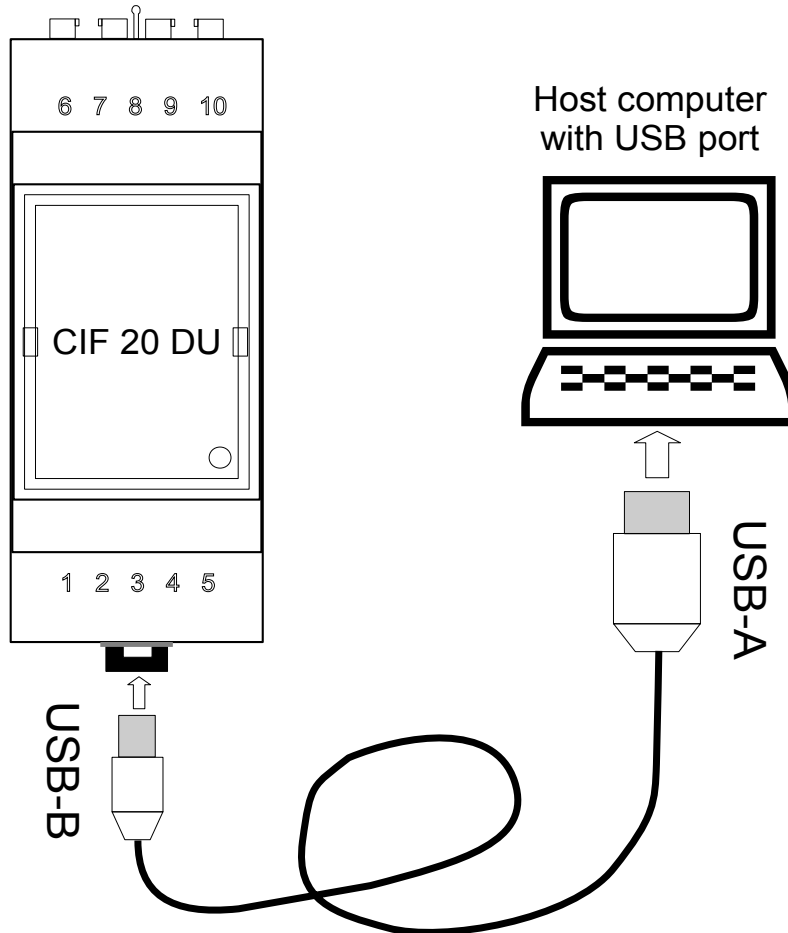
<sup>1</sup> See "CIB-tech installation manual" for details.

**Connection to CIB-tech system:**

Use the CIF 20 DU device's two 4P4C modular jack connectors to connect it to the CIB-tech systems (chain like) bus. Do not forget to remove the EOL jumper if the device is not the last element of the chain<sup>1</sup>



**Connecting to host computer:**



**NOTE:** Use a USB-A to USB-B cable to connect the CIF 20 DU to the host computer.

<sup>1</sup> See "CIB-tech installation manual" for details.

Technical Support:  
<http://www.ibs-smarthouse.com/>  
[info@ibs-smarthouse.com](mailto:info@ibs-smarthouse.com)

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