Intelligent Building Solutions

Installation manual

CDM 2020 D
DIMMER UNIT

- **for incandescent light bulbs**
- **DIN-rail mounting**

CIB-tech

Introduction

The CDM 2020 D is a high-power incandescent light bulb dimming device, part of the CIB-tech automation system.

Additional Equipment Required

1. **Functional CIB-tech system**
   A minimal number of essential CIB-tech components to make a functional CIB-tech system[1]

2. **Command button (optional)**
   Simple normally-open type (contact is closed when button is pressed) push button. Most types of flush mounted or DIN-rail mounted simple push buttons are suitable[2]

Technical Specifications

Electrical characteristics

- **Power Supply**
  The CDM 2020 D functions as a node in a CIB-tech system, being powered from the CIB-tech system's power supply via the CIB-tech connectors.
  - Operating voltage range: 20 to 28V DC (nominal 24V DC)
  - Supply current
    - Standby current : 17mA
    - Maximum current: 40mA

- **Power rating (for dimmer output)**
  - Rated voltage: 230V AC
  - Rated current: 4,5A
  - Maximum load: 1000W

NOTE: Only for incandescent light bulbs

- **Signal Input**
  - Command button: N.O. with voltage free contacts

Mechanical characteristics

The CDM 2020 D has a standard 4-module wide enclosure for M36 type DIN-Rail

- Dimensions: 102mm W x 69mm L x 60mm D
- Weight: 170g

Environmental characteristics

- Operating temperature: -10ºC to 85ºC
- Storage temperature: -25ºC to 100ºC

NOTE: The CDM 2020 D device needs to dissipate some internally generated heat, therefore the device should not be used at full load, in ambient temperatures greater than 35ºC.

1 See “CIB-tech installation manual” for details.
2 For din-rail type push-button, IBS product BSS 10 DM or BSD 10 DM could bee used.

Key Features

- Digitally controls light intensity of incandescent light bulbs in 100 steps
- High power dimming output – typically used for multiple light bulbs
- Single push button is required to dim up / down and switch on /off
- Maintains previously set dim level when switched off
- Soft on/off and dim transitions
- Output state and level remotely controllable via the CIB-tech system
- Internal bi-color LED, indicating the output state (green : off / red : on)

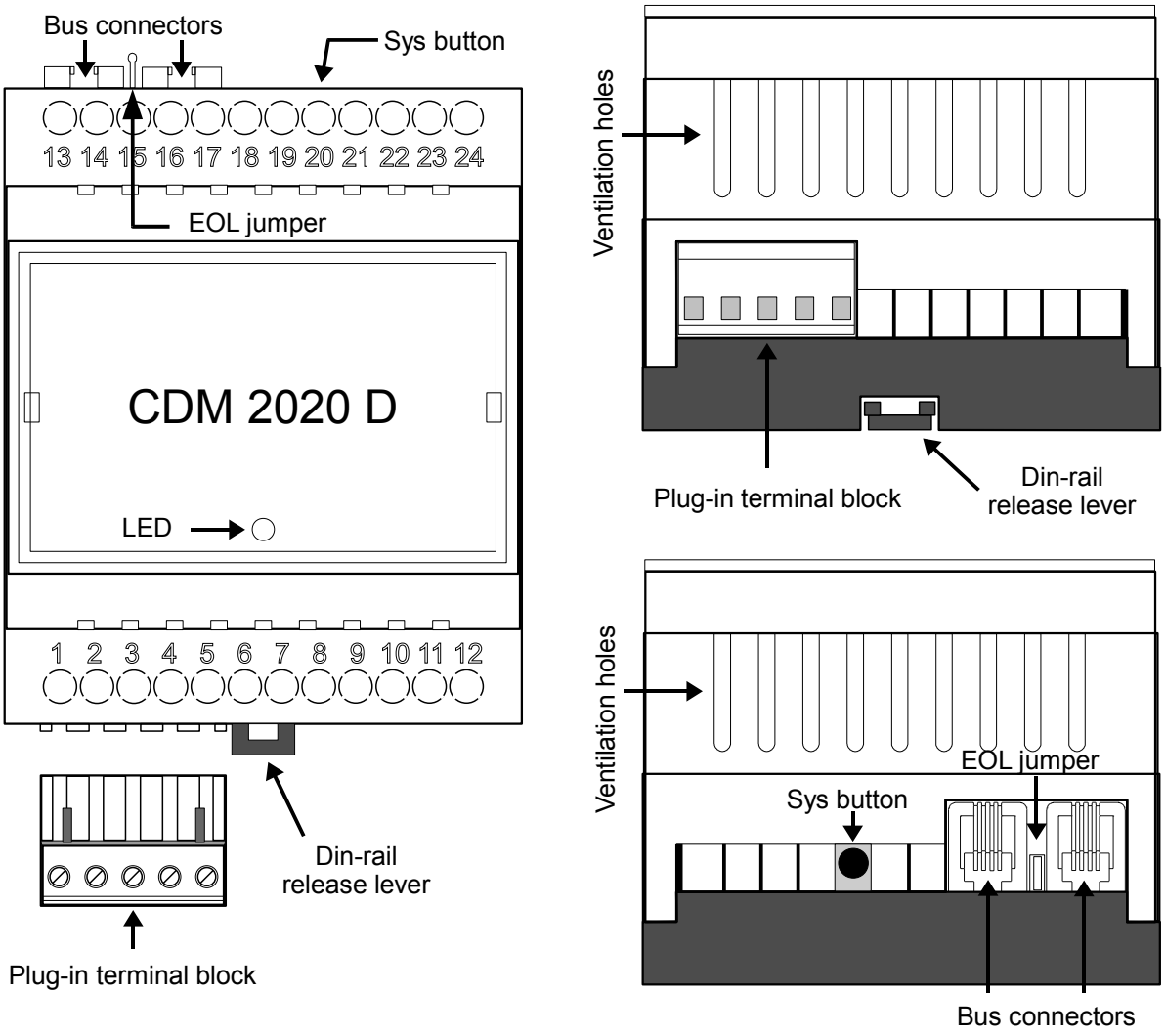
Installation

The CDM 2020 D is meant to be installed on a standard M36 type DIN-Rail.

Part description

- **Bus connectors:**
  - 4P4C modular jack connectors for CIB-tech connection[1]
- **Sys button:**
  - pushbutton for CIB-tech system configuration
- **EOL jumper:**
  - CIB-tech system's End Of Line jumper[1]
- **LED:**
  - indicator LED for output state (green: off / red: on)
- **DIN-rail release lever:**
  - lever for removing the device from the M36 DIN-Rail
- **Ventilation holes:**
  - holes for heat dissipation (do not cover these holes)
- **Connector type terminal block:** terminals for connecting external devices
  1. Push button – Common contact
  2. Push button – Normally open contact
  3. No connect
  4. Dimmer contact 1
  5. Dimmer contact 2

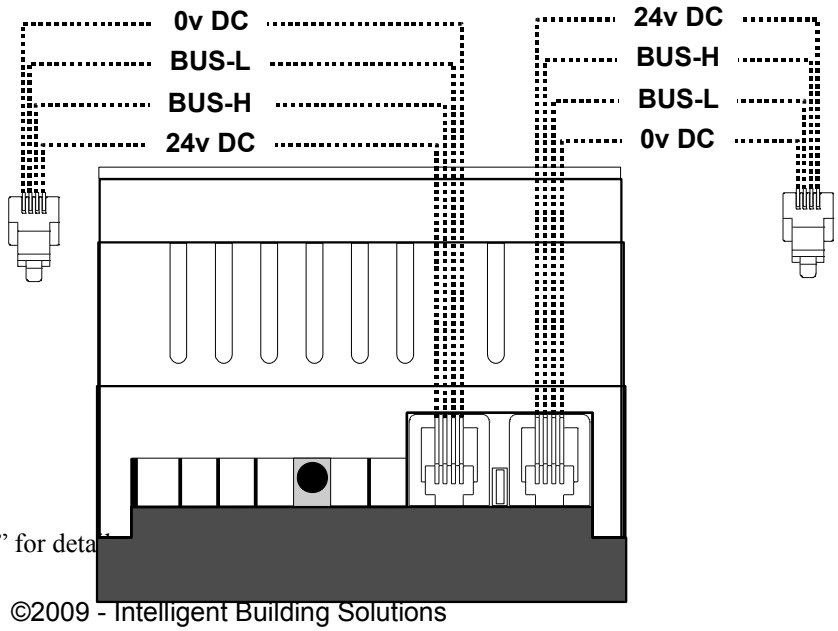
1 See “CIB-tech installation manual” for details.



Wiring diagrams

Connection to CIB-tech system:

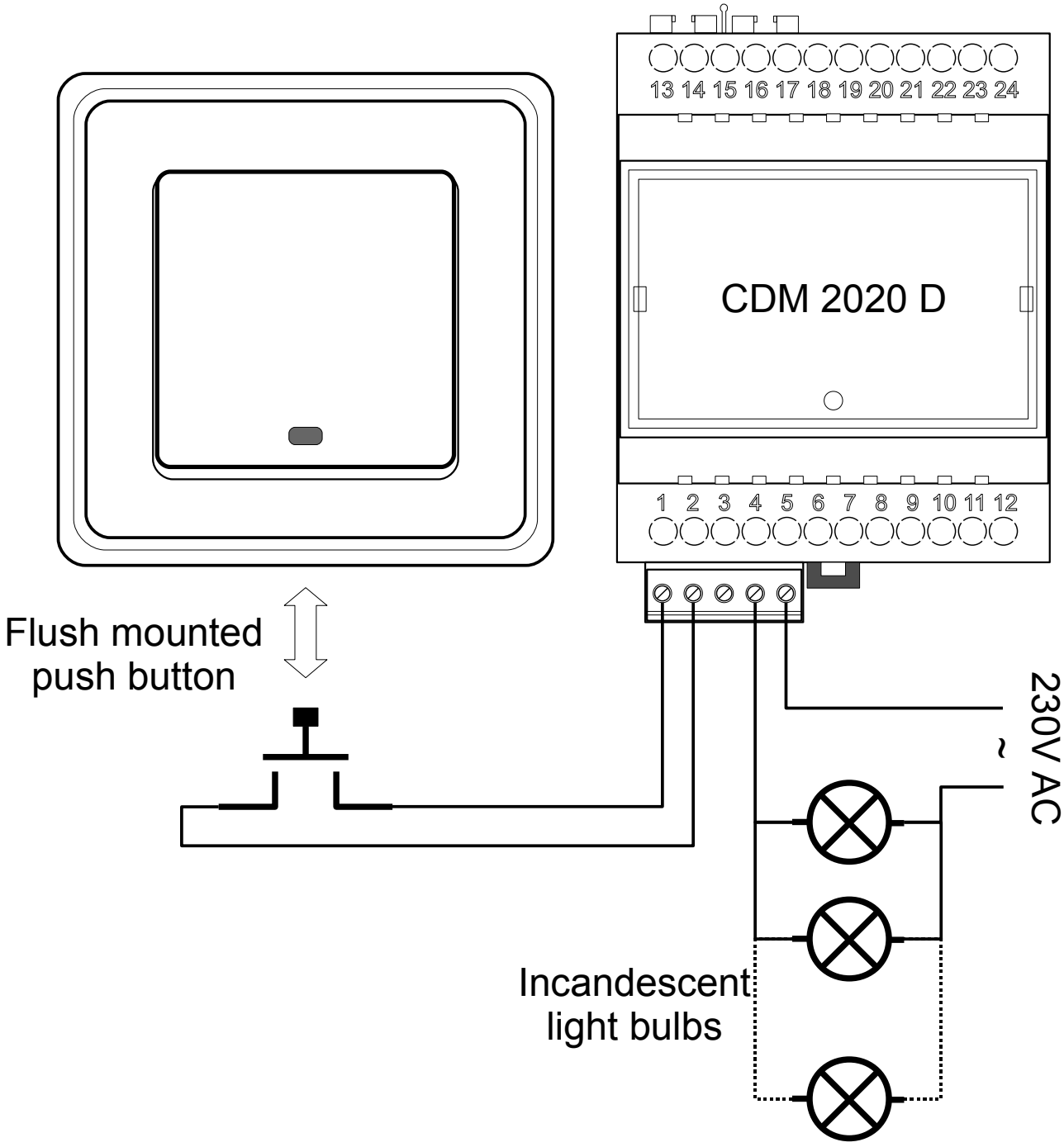
Use the CDM 2020 D device's two 4P4C modular jack connectors to connect it to the CIB-tech systems (chain like) bus. Do not forget to remove the EOL jumper if the device is not the last element of the chain[1]



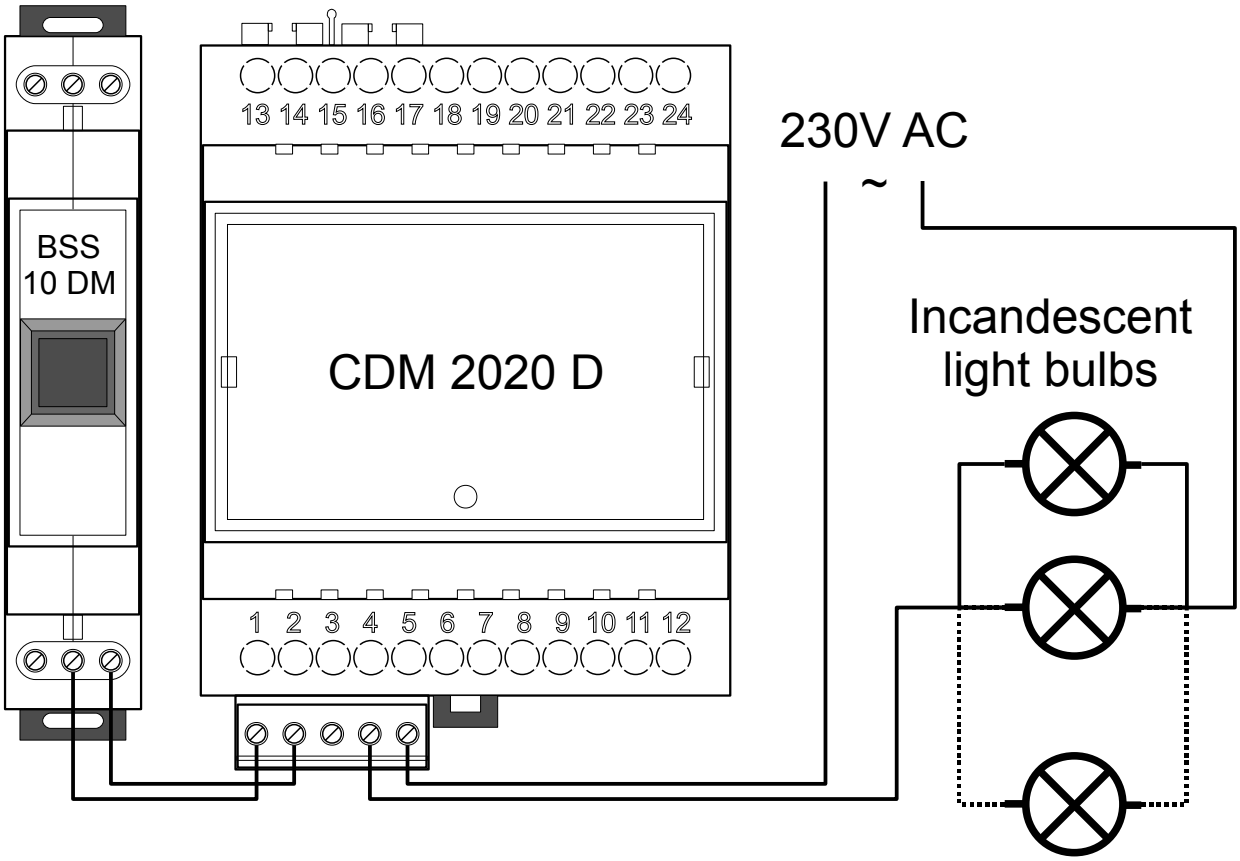
1 See "CIB-tech installation manual" for deta

Connecting the input devices

Typical connection:



Connection example with local, DIN-Rail mounted, push button :



NOTE: If two CDM 2020 D are connected to a double push button, always the terminal block contact 1 of each CDM 2020 D shall be connected together (to the common contact of the double push button), and never the terminal block contact 2.

Document Version 1.0

Technical Support:
http://www.ibs-smarthouse.com/
info@ibs-smarthouse.com