

User Manual

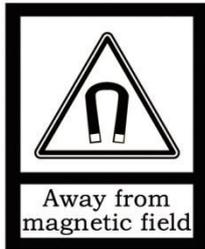
K-BUS® KNX Power Supply, 640mA_V1.1

BBPS-02/640.1

KNX/EIB Home and Building Control System

Attentions

1. Please keep devices away from strong magnetic field, high temperature, wet environment;



2. Do not fall the device to the ground or make them get hard impact;



3. Do not use wet cloth or volatile reagent to wipe the device;



4. Do not disassemble the devices.

Contents

| | |
|---|----------|
| Chapter 1 Introduction | 1 |
| Chapter 2 Technical Parameter | 2 |
| Chapter 3 Dimension and Connection Diagram | 3 |
| 3.1. Dimension drawing | 3 |
| 3.2. Connection Diagram | 4 |
| Chapter 4 Normal Working Test | 4 |

Important safeguards

- 1) Before use, please read this instruction carefully and use the power supply strictly according to the instruction.
- 2) This power supply is for indoor use only and shall be installed in distribution box which can provide the protection mechanism for avoid electric shock.
- 3) Please keep this equipment from humidity.
- 4) Before use, the input and output voltage must be checked to secure correct use.
- 5) The cover may under no circumstances be opened. If the cover is damaged, then the adaptor may no longer be used.
- 6) The power supply shall be installed and used according to national wiring rules.
- 7) For indoor use only.
- 8) The product is not a toy, keep it where the children can not reach it.
- 9) The power supply are only supply for KNX system equipment with bus line connection terminal.
- 10) Correct Disposal of this product:

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



Chapter 1 Introduction

KNX power supply produces and monitors KNX system voltage. There are two connection terminal of the output, one for KNX bus supply and signal transmission, one for auxiliary power supply, can provide 30V DC voltage with terminal device. The bus connection terminal has integrated the reactor inside the power supply; if the auxiliary power supply terminal is connected with an external reactor, it can also be used as the bus power supply terminal, and also with the function of signal transmission.

The KNX power supply is an analog-to-digital installation equipment. In order to facilitate the installation in the distribution box, according to the design of EN 60 715, it can be installed on a 35mm DIN rail. The device is connected with the screw post for electrical connection. The bus connection is directly connected through the KNX connection terminal (red/ black). The auxiliary power supply is also connected directly through the KNX connection terminal (yellow/ white), and the input end is connected to the power supply voltage of 230V AC.

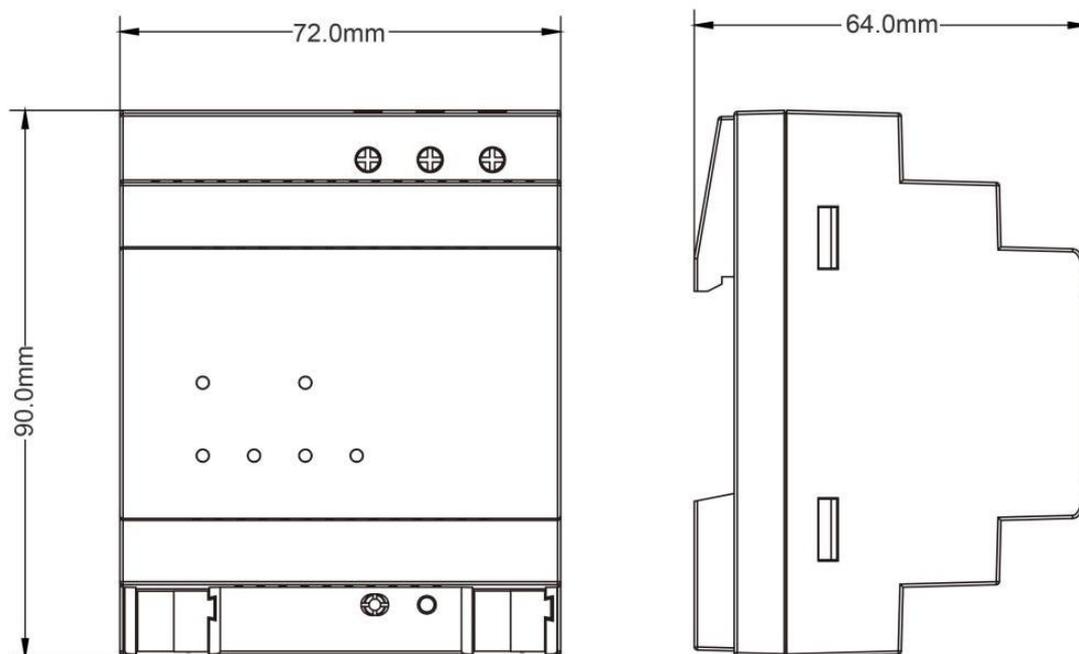
A reset of the power supply is triggered by pressing the reset button last for 22 seconds (it does not include the time for button action). When bus supply terminal is disconnected from the power supply, other devices on the bus will return to their initial state. If bus disconnect for a longer period, the bus supply terminal must be removed from power supply.

Chapter 2 Technical Parameter

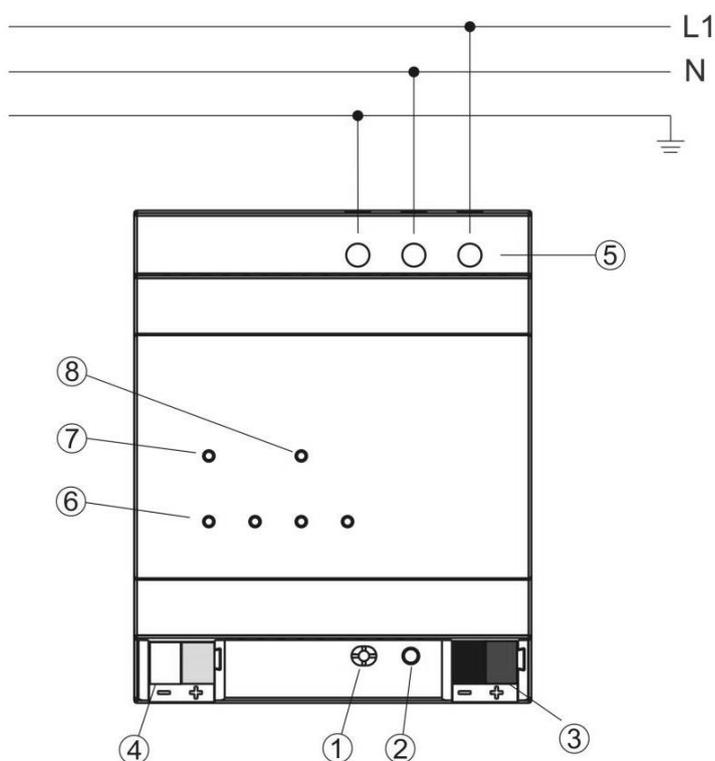
| | | |
|---------------------------|---------------------------------|---|
| Power supply | Input voltage | 100-240V AC, 47-63Hz |
| | Efficiency | ≥80% |
| Output | KNX output | 1 fold with integrated choke |
| | KNX nominal voltage | 30+1V/-2V DC, SELV |
| | Auxiliary voltage output | 1 fold without integrated choke |
| | Auxiliary voltage | 30±1V DC, SELV |
| | KNX nominal current | (Total of KNX and auxiliary voltage output) 640 mA, short-circuit-proof |
| | Sustained short-circuit current | <1.5A |
| | Mains failure buffer time | >200ms |
| Operation/ Display | Reset push button | 22s delay reset function (Press the button >0.5s, to reset the KNX bus voltage) |
| | Red LED1 | Reset the KNX Bus |
| | Green LED2 | Normal operation |
| | Red LED3 | Overload/short circuit($I > I_{max}$) |
| | Yellow LED4 | Current level2 $0 \leq I < 160(\pm 20)\text{mA}$ |
| | Yellow LED5 | Current level3 $160 \leq I < 320(\pm 20)\text{mA}$ |
| | Yellow LED6 | Current level4 $320 \leq I < 640(\pm 20)\text{mA}$ |
| | Yellow LED7 | Current level2 $640 \leq I < I_{max}$ |
| Connection | Power supply | 3-srew terminals |
| | Cable cross-section | Single-core 0.2—2.5mm ² Multi-core 0.2—1.5mm ² |
| | KNX output | Bus connection terminal (Red/Black) |
| | Auxiliary voltage output | Connection terminal (Yellow/White) |
| Temperature | Operation | - 5 °C ... + 45 °C |
| | Storage | - 25 °C ... + 55 °C |
| | Transport | - 25 °C ... + 70 °C |
| Environment | Humidity | <93%, except dewing |
| Mounting | On 35mm mounting rail | |
| Dimension | 90×72×64mm | |
| Weight | 0.3kg | |
| Housing, Color | Plastic, Beige | |

Chapter 3 Dimension and Connection Diagram

3.1. Dimension drawing



3.2. Connection Diagram



- ① Reset push button
- ② Reset indicator LED
- ③ KNX Bus connection terminal
- ④ Auxiliary voltage connection terminal
- ⑤ Main supply
- ⑥ Current level indicator
- ⑦ Output voltage normally indicator
- ⑧ Overload/short circuit indicator

Chapter 4 Normal Working Test

When power supply has been correctly installed, switch on the main power supply for the bus power, and the green LED “ON”, the circuit level indicator LEDs up according to the range of loads, and the other LEDs are switched off, that is, the device function correctly.