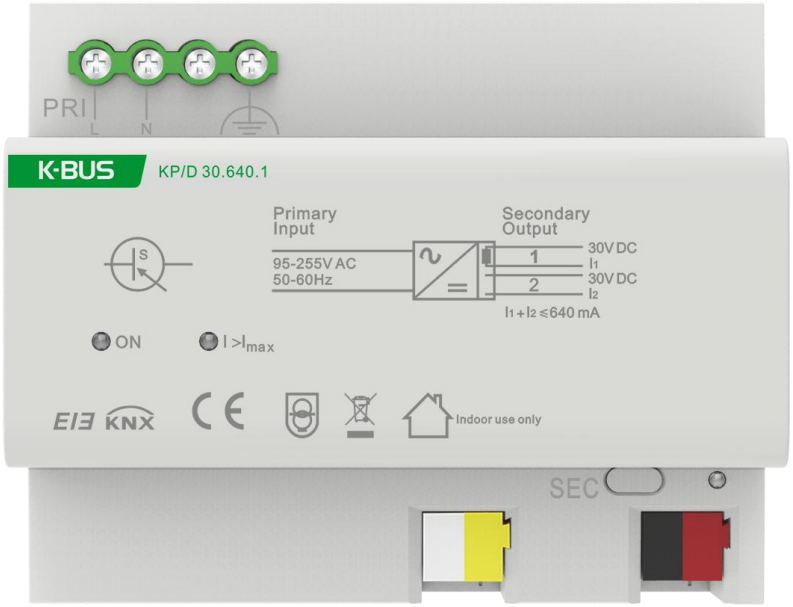
User Manual

K-BUS® Power Supply_V1.1

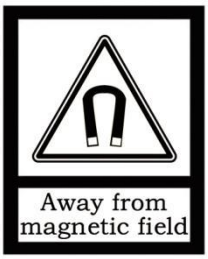
KP/D 30.640.1



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

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 EIB / 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 60715, 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.

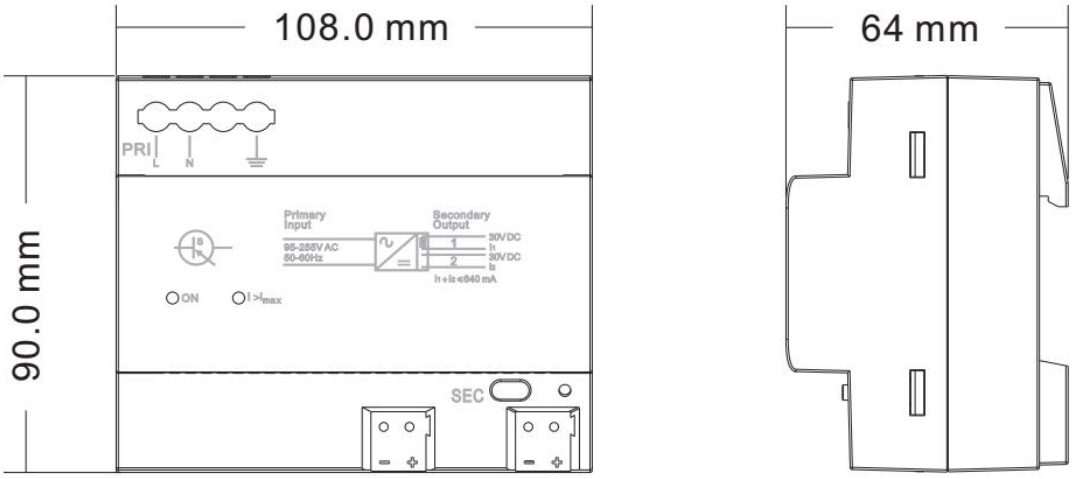
A reset of the power supply is triggered by pressing the reset button last for 22 seconds (regardless of the duration of the button action).When bus supply terminal is disconnected from the power supply,other devices on the bus will return to their initial state. If bus disconnect for a longer period, the bus supply terminal must be removed from power supply.

Chapter 2 Technical Parameter

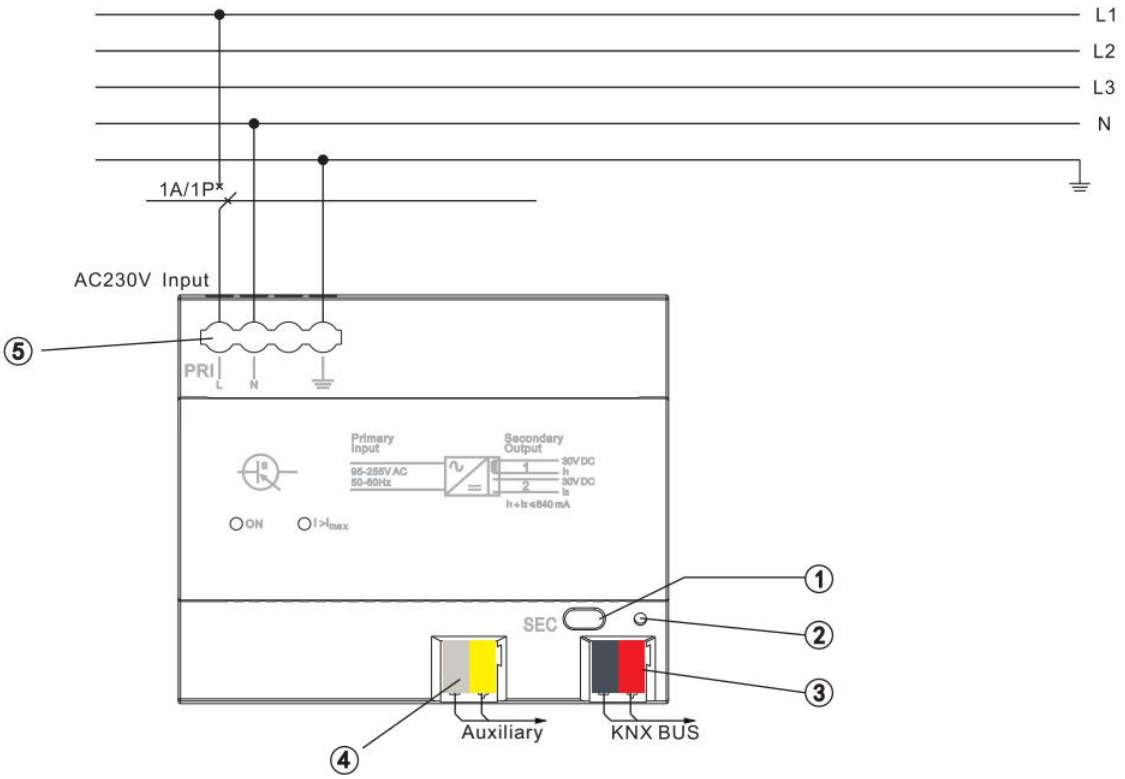
Power supply	Input voltage	95V ~255 V AC，50/60Hz
	Power loss	<6 W
	Efficiency	75%
Output	KNX output (DPSU)	1 fold with integrated choke
	KNX nominal voltage	30 V DC +1/−2 V, SELV
	Auxiliary voltage output	1 (without choke)
	Auxiliary voltage	30 V DC +1/−1 V, SELV
	KNX nominal current	(Total of KNX and auxiliary voltage output) 640 mA, short-circuit-proof
	Sustained short-circuit current	< 1.3 A
	Mains failure back-up time	>200ms
Operating and display	Green LED “ON”	Output voltage is OK
	Red LED “I>Imax”	Overload or short circuit
	Reset button（SEC）	Reset at the KNX output (starts when the push button is pressed and lasts 22 seconds);
	Red LED	Reset at the KNX output.
Connection	Power supply	2-srew terminals
	Cable cross-section	Single-core 0.2—4.0mm2
		Multi-core 0.2—2.5mm2
	KNX output	Bus connection terminal (red/black)
	Auxiliary voltage output	Connection terminal (yellow/white)
Protection	IP 20, EN 60529	
Temperature	Operation	-5 °C ~ + 45 °C
	Storage	− 25 °C ~ + 55 °C
	Transport	− 25 °C ~ + 70 °C
Housing, Color	Plastic, Beige	
Mounting	On 35mm mounting rail	
Dimension	90mm×108mm×64mm	
Weight	0.2kg	
CE norm	In accordance with the EMC guideline and the low voltage guideline	

Chapter 3 Dimension and Connection Diagram

3.1. Dimension drawing



3.2. Connection Diagram



1. Reset push button
2. Red LED (Reset)
3. Bus connection terminal (KNX output)
4. Connection terminal (auxiliary voltage output)
5. Mains supply

ON: Green LED（output voltage is OK）

$I>I_{max}$: Red LED（overload/ short circuit）

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”, all other LEDs are switched off, that is, the device function correctly.