EN

BX-PS1280 | BX-PS640

KNX Power supply

Product description and operation:

BX-PS1280 and BX-PS640 are KNX power supplies with 1280 mA and 640 mA current output, high efficiency and small dimensions. They are equipped with protections against overload/short circuit and output overvoltage. The devices have a KNX output with integrated choke and an additional output for auxiliary power supply. Diagnostic LEDs indicate the status of normal operation, the conditions of overload and overvoltage, and the RESET status.

Operating Parts:

1. KNX bus terminal
2. Status LEDs
3. AC input power screw terminals (L, N, PE).
4. Auxiliary power terminals

Installation:

Connect KNX bus.

Connect AC power cable with Line (L), Neutral (N) and Earth (⏚).

Meaning of the status LEDs:

ON (Green): Normal operation
OV (Yellow): Overvoltage
OC (Red): Overload/short circuit
RESET (Red): Reset the bus (only for model with RESET button)

Protection:

OVERLOAD: overcurrent signal for output current above 1,6 A (for BX-P1280) and above 0.9A (for BX-PS640)
OVER VOLTAGE: over voltage signal for output voltage >32.5 V

Auxiliary Power Supply:

Use only auxiliary output to power the KNX devices.
For BX-PS1280: the total current IKNX+IAUX should be equal or less than 1280 mA. ($I_{KNX} + I_{AUX} \leq 1280mA$)
For BX-PS640: the total current $I_{KNX} + I_{AUX}$ should be equal or less than 640 mA. ($I_{KNX} + I_{AUX} \leq 640mA$)

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Technical Data

Electrical data:

For BX-PS1280:
Input voltage range: 200 ÷ 240 VAC
Input frequency: 50/60 Hz
Input current: 0,5 A / 230V AC
Output voltage: 30 V DC +1/-2 V DC, SELV
Rated output current: 1280 mA

For BX-PS640:
Input voltage range: 100 ÷ 240 V AC
Input frequency: 50/60 Hz
Input current: 0.25 A at 230 V AC
Output voltage: 30 V DC +1/-2 V DC, SELV
Rated output current: 640 mA

Mechanical data:

Module Box: PC-ABS
Dimensions: 4 DIN modules
Modules installation: rapid mounting on DIN rail according to EN 60715-TH35

Electrical safety:

Protection degree: IP20 (EN 60529)
Pollution Degree: 2
Overvoltage category: III
Reference standards: EN IEC 63044-3, EN IEC 61558-1, EN IEC 61558-2-16
Compliance with the Low Voltage Directive (LVD) 2014/35/EU

Electromagnetic compatibility:

Reference standards: EN IEC 50491-5-2, EN IEC 50491-5-3
Compliance with the electromagnetic compatibility directive (EMC) 2014/30/EU

Conditions of use:

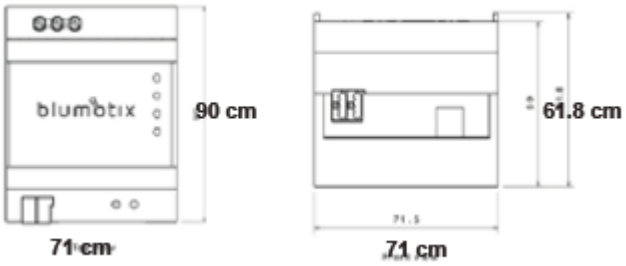
Operating temperature: -5 ° C ÷ +45 ° C
Storage temperature: -20 ° C ÷ +55 ° C
Relative humidity (non-condensing): max. 93%
Installation environment: indoor, dry places
Reference standards: EN 50491-2

Terminals and connections:

Maximum cable section: 0,05-3,31 mm² / 30-12AWG
Maximum torque: 0,5 Nm / 5Lb.In
KNX bus: Red: positive, Black negative, 2 pins, d=0,8 mm

Certifications: CE, KNX

Dimensions:



Symbols used in device marking:

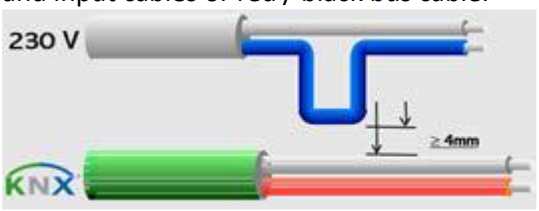
KNX	KNX registration / certification logo
TP1	Twisted Pair cable communication system, type 1. The devices operate and communicate with each other on the same KNX/EIB bus line
	Size tightening tool for terminal block, slotted screwdriver
	Tightening torque referred to the terminal block
	Recommended stripping length of the KNX bus rigid conductor
	Indicates that the product must be collected separately from other waste at the end of its useful life
CE	European Conformity Mark

IMPORTANT SAFETY NOTES

The device must be used for permanent indoor installation, in closed and dry environments.
The device must be installed in low voltage distribution panels guaranteeing the IP20 protection degree using the appropriate covers supplied with the electrical panels so that only the front panel is accessible. This device is not suitable for use in locations where children are likely to be present.

Installation instructions:

The device must be installed keeping a minimum distance of 4 mm between electrical power line (mains) and input cables or red / black bus cable.



The device is intended to be connected to a KNX network installed within an equipotential earthing system.

The length of the bus line between the actuator and the power supply shall not exceed 350 metres.
The length of the bus line between two KNX devices shall in any case not exceed 700 metres.
To avoid unwanted electrical noises and surges, do not create loop circuits.
The circuits of EIB/KNX bus lines must not be connected to 230 V cables.
The device must be mounted and commissioned by an authorized installer.
The applicable safety and accident prevention regulations must be observed.
The device must not be opened. Any faulty devices should be returned to manufacturer.
For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
KNX bus allows to remotely send commands to the system actuators. Always make sure that the execution of remote commands do not lead to hazardous situations, and that the user always has a warning about which commands can be activated remotely.
The unused conductors of the bus cable should never come into contact with elements under voltage or the ground conductor, same rule for the shield and internal core if present.

Disposal:
The crossed-out bin symbol on the equipment or packaging means the product must not be included with other general waste at the end of its working life. The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one. An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

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