# ZPS320MPA230 - 320mA Power Supply ZN1PS-320MPA230

### **Technical Documentation**

#### **FEATURES**

- Size: 80 x 90 x 60 mm (4.5 DIN rail units).
- KNX System Power Supply with additional 29VDC output.
- 230V~ 50/60Hz input voltage.
- ZPS320MPA230 power supply generates and monitors the KNX system voltage supply.
- Maximum current 320mA (KNX bus plus additional output consumption).
- KNX coil included.
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- Short-circuit and overload protection.
- Reset button and overload status LED.
- CE directive compliance.

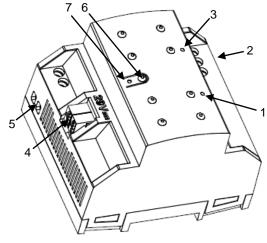


Figure 1: ZPS320MPA230 power supply

0	Safety isolating transformer, short-circuit proof
	For indoor use only

OVERLOAD LED
Main Power
POWER LED
Bus Output
Additional Output
RESET button
RESET LED

#### Installation and Connection.

- This KNX power supply must be exclusively installed in a 35mm DIN rail inside a distribution box or an electrical panel.
- Ensure adequate ventilation to prevent the range of the permissible temperatures from being exceeded.
- Main power must be connected to L, N and ground terminals, in accordance with the schematic represented in figure 2.
- The coil integrated bus output must be connected through a standard KNX connector.
- The additional output connection must be connected according to the polarity indicated in the enclosure.

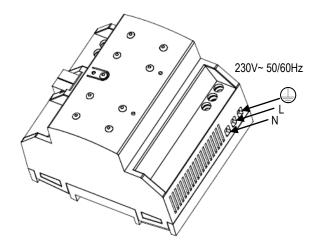


Figure 2: ZPS320MPA230 installation and connection

#### Controls and indicators.

POWER LED indicates the status of the device :

- LED ON (green): the device is working properly.
- LED OFF: input voltage failure.
- LED blinking (green): KNX bus and/or additional output short-circuit.

OVERLOAD LED indicates if the maximum current specified is exceeded:

- LED OFF: maximum current specified is not exceeded.
- LED blinking (red): switch off due to overload in the KNX bus and/or the additional output\*.
- LED ON (red): bus and/or additional output line overload\*.

\*Reduce the load on the bus and/or the additional output lines until its total consumption does not exceed the maximum current specified.

<u>Note</u>: To reset the ZPS320MPA230 power supply, press the RESET button during 5 seconds. The RESET LED will blink slightly in RED while the RESET button is pressed.



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### **Technical Documentation**

General System Specifications			
CONC		DESCRIPTION	
Device type		Electric Operating Control Device	
Estamal naviar avant.	Voltage	230V~ 50/60Hz	
External power supply	Consumption	Max. 150mA	
Bus output	Voltage	29VDC SELV (KNX coil included)	
•	Output (I <sub>BUS</sub> )	Max. 320mA	
A delitional cutout	Voltage	29VDC SELV	
Additional output	Output (I <sub>AUX</sub> )	$I_{AUX} + I_{BUS} \le 320 \text{mA}$	
Ambient temperature (T <sub>a</sub> )		from -5°C to +45°C	
Storage/Transport tempe	rature (T <sub>ST</sub> )	from -20°C to +55°C	
Ambient humidity (relative	e)	from 30 to 85% RH (no condensation)	
Storage humidity (relative	e)	from 30 to 85% RH (no condensation)	
Complementary characte	eristics	Class B	
Safety class		Class I	
Operation type		Continuous operation	
Device action type		Type 1	
Electrical solicitations per	riod	Long	
Type of protection		IP20. Clean environment	
A a a a mala lui		Independent control assembly device to be mounted inside	
Assembly		distribution boxes or electrical panels.	
Minimum clearances			
Power failure back-up tim	ne	500ms	
Max current before overload		800mA	
	Voltage	250V~	
Protection fuse	Current	2.5 A	
	Response	Type F (fast response)	
Connection type		Three screw terminals block	
Cable section		from 0,25 mm <sup>2</sup> to 4 mm <sup>2</sup>	
Operation indicator		Green POWER LED ON implies a correct bus voltage. Red	
Operation indicator		OVERLOAD LED ON implies maximum output current exceeded.	
Weight		284 gr.	
PCB CTI index		175 V	
Enclosure		PC+ABS FR V0 halogen free	



## **Safety Instructions**

- The installation must be equipped with a device which ensures the omni-polar sectioning. It is recommended to install a 10A magneto-thermal switch.
- Do not connect the main voltage or any other external voltages at any point of the bus or additional output terminal. Connecting an external voltage may endanger the security of the entire KNX System.
- Ensure there is enough insulation between the AC voltage cables and the bus (or their extensions) ones.
- Avoid covering the ventilation grilles to prevent exceeding the admissible temperature.
- Caution! Once the device is installed, it shouldn't be accessible.
- Electrical equipment must be installed and adjusted only by qualified personnel following the applicable regulations required by law for preventing accidents.
- To prevent electrical accidents, disconnect the main power before working with the device. Use the magneto-thermal cut off switch.
- Ignoring the installation instructions may cause incidents in the electrical installation.
- The device has a short-circuit protection fuse that, in case of activation, it should not be rearmed or replaced except for our technical department.