

# **ZPS160MPA - Power Supply**

## ZN1PS-160MPA

#### **Technical Documentation**

- Reduced size: 90 x 60 x 35 mm (2 DIN rail units).
- KNX System Power Supply with additional 29VDC output.
- ZPS160M Power Supply generates and monitors the KNX System Voltage Supply.
- Maximum Bus KNX current: 160mA.
- KNX Coil included.
- Maximum additional output current: 250mA I<sub>BUS</sub>.
- No device needed when wiring the clamp.
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- Short-circuit and overload protection.
- CE directives OK.

1. Main power	2. Green	3. KNX bus	4. Additional	<b>5.</b> DIN
clamp	LED	connector	output clamp	rail

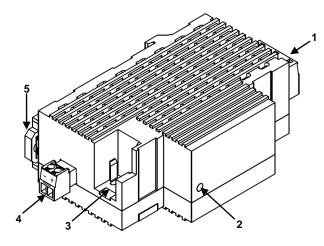


Figure 1: ZPS160MPA power supply

#### Instalation and Connection.

- This KNX Power Supply must be exclusively installed in a 35mm DIN rail in a distribution box or an electrical panel.
- Ensure adequate ventilation to prevent the range of permissible temperature of the device is not exceeded.
- Main Power must be connected to L, N and ground terminals, in accordance with the schematic represented in figure 2.
- The coil integrated KNX Output must be connected through a standard KNX connector as shown in the figure 2.
- The additional output connection must be connected according to the polarity indicated in the clamp.
- Two Power Supplies can be connected in parallel if the line length between both of them is at least 200 meters on the BUS side.

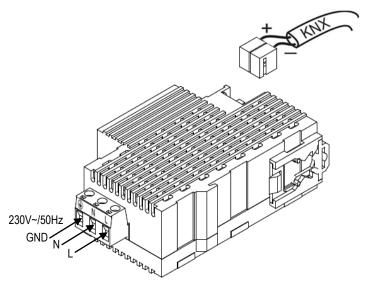


Figure 2: ZPS160MPA installation and connection

#### Controls and Indicators.

Green LED indicates the status of the device :

- LED ON: the device is working properly.
- LED OFF:
  - o Short-circuit on the BUS output or additional output. Eliminate the short-circuit.
  - o AC power failure. Check the AC power supply.
  - BUS or additional output line overload\*.
- A LED blinking every few seconds implies a slight BUS or additional output line overload\*.

\*Reduce the load on the BUS or the additional output line until its total consumption does not exceed the maximum current specified.

Note: To "Reset" the BUS line, pull out the KNX connector from the Power Supply for at least 20 seconds.



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### ZN1PS-160MPA

Technic	al Docum	entation

General System Specifications					
CONC		DESCRIPTION			
Device Type		Electric Operating Control Device			
Fytamal Davias Cyanhi	Voltage	230 V AC, 50 Hz			
External Power Supply	Consumption	Max. 100mA			
KNX Output	Voltage	29 VDC SELV			
·	Output (I <sub>BUS</sub> )	Max. 160mA			
Additional Output	Voltage	29 VDC SELV			
Additional Output	Output (I <sub>AUX</sub> )	$I_{AUX} + I_{BUS} \le 250 \text{mA}$			
Ambient Temperature		from -5°C to +45°C			
Storage/Transport Tempe	erature	from -20°C to +55°C			
Ambient Humidity (relative	e)	from 30 to 85% RH (no condensation)			
Storage Humidity (relative		from 30 to 85% RH (no condensation)			
Complementary Characte	ristics	Class B			
Safety Class		Class I			
Operation Type		Continuous Operation			
Device Action Type		Type 1			
Electrical solicitations per	iod	Long			
Assembly		Independent control assembly device to be mounted inside			
		distribution boxes or electrical panels.			
Min Clearances					
Power Failure Back-up tin	ne	200ms			
Max Current before Overl	oad	350mA			
	Voltage	250V AC ~ 50 Hz			
Protection fuse	Current	2.5 A			
	Response	Type F (fast response)			
Connection Type		Three screw terminals clamp			
Cable Section		from 0,25 mm² to 2,5 mm²			
Cable Type		Flexible cable with crimping terminals or rigid cable without terminals			
Operation Indicator		Green LED ON implies a correct BUS Voltage			
Weight		200 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 (230V) or any other external voltages at any point of the BUS. Connecting an external Voltage may endanger the security of the entire KNX System.
- Do not connect the main voltage (230V) or any other external voltages to the additional output terminal.
- Flexible cable with crimping terminals or rigid cable without terminals must be used for output connection.
- Ensure there is enough insulation between the AC Voltage cables and the BUS (or their extensions) ones.
- ¡Caution! Once the device is installed, it shouldn't be accessible.
- Electrical equipment must be installed and adjusted only by qualified personnel following 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.

Further information www.zennio.com

Ignoring the installation instructions may cause fire, electrical shock or injury to persons.