TECHNICAL DOCUMENTATION



160mA KNX universal power supply with 29VDC auxiliary output

ZPSU160

FEATURES

- 160mA KNX power supply with 29VDC auxiliary output
- 110-240VAC 50/60Hz power input
- Nominal output current: 160mA on KNX bus and 250mA total (KNX+Aux)
- Power generation for the KNX system (with LED indicator)
- Short-circuit and overvoltage protection
- Reset button and overload status LED
- KNX coil included
- Dimensions 67 x 90 x 35mm (2 DIN units)
- DIN rail mounting (EN 50022), with fixing clamp
- Conformity with the CE directives (CE-mark on the right side)

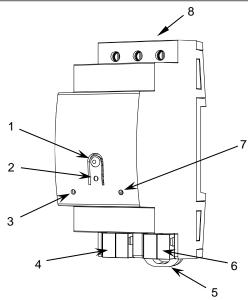


Figure 1: KUPSupply 160mA

Reset button	Reset status LED	Power supply status LED	Auxiliary power output
5. Fixing clamp	KNX connector	Overload status LED	Main power supply

RESET BUTTON: long press to completely reset the bus and auxiliary power output. It is recommended to hold it for at least 5 seconds to verify the reset of all the devices in the line.

RESET STATUS LED: it indicates that a reset of the KNX system has been performed by using the corresponding reset button (red blinking). The reset LED will blink slightly in red while the Reset button is pressed.

POWER SUPPLY STATUS LED: it indicates the status of the power supply (green color: the device is working properly; LED off: power supply failure; green blinking: short-circuit on KNX bus and/or auxiliary power output).

OVERLOAD STATUS LED: it indicates an overload on the KNX line or on the auxiliary power output (red color: overload on bus and/or auxiliary power output line; red blinking: cut-off due to overload/short circuit on the KNX bus and/or the auxiliary power output)*.

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

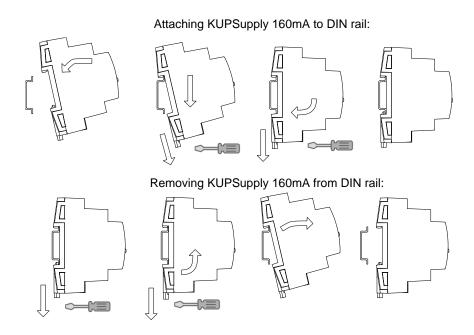
GENERAL SPECIFICATIONS					
CONCEPT		DESCRIPTION			
Type of device		Electric operation control device			
External power supply	Voltage	110-240VAC 50/60Hz			
	Maximum consumption	150mA@110VAC / 80mA@230VAC			
	Voltage (typical)	29VDC SELV (with KNX coil)			
KNX supply	Maximum rated current (I _{BUS})	160mA			
	Connection type	Typical TP1 bus connector for 0.80mm Ø rigid cable			
Operation temperature		0°C +55°C			
Storage temperature		-20°C +55°C			
Operation humidity		5 95%			
Storage humidity		5 95%			
Protection class / Overvoltage category		II / III (4000V)			
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period		Long			
Complementary characteristics		Class B			
Degree of protection / Pollution degree		IP20 / 2 (clean environment)			
Installation		Independent device to be mounted inside electrical panels with DIN rail (EN			
		50022)			
Minimum clearances		Not required			
Power failure back-up tir	ne	100ms			
Maximum current before overload notification		300mA			
Operation indicator		See previous section			
Weight		138g			
PCB CTI index		175V			
Housing material		PC FR V0 halogen free			

EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS				
CONCEPT		DESCRIPTION		
Power supply protection fuse	Voltage	110-240VAC 50/60Hz		
	Current	4A		
	Response type	F (Fast acting)		
Connection method		Screw terminal block		
Cable cross-section		0.5-2.5mm² (IEC) / 26-12AWG (UL)		

AUXILIARY POWER OUTPUT SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Voltage (typical)	29VDC SELV	
Maximum rated current (I _{AUX})	I _{AUX} + I _{BUS} ≤ 250mA	
Connection type	Typical TP1 bus connector for 0.80mm Ø rigid cable	

INSTALLATION AND CONNECTION

- This KNX power supply unit must be exclusively installed in a 35mm DIN rail inside a distribution box or an electrical panel.
- Ensure suitable ventilation to prevent the temperature from exceeding the permissible range.
- Main power must be connected to L, N and ground terminals.
- Both the coil-integrated KNX bus output and the auxiliary power output must be connected through a standard KNX connector, respecting the polarity marked on the enclosure.





SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- The facility must be equipped with a device that ensures the omnipolar sectioning. Installation of a 10A mini-circuit-breaker is recommended. To prevent accidents, it must remain open in case of manipulation of the device.
- The device has a short-circuit protection fuse that, in case of activation, should only be rearmed or replaced by the Zennio technical service.
- | This device contains a security short-circuit proof transformer.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- For indoor use only.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.