



**Thank you for choosing NIVELCO instrument**  
**We are convinced that you will be satisfied with our product!**

## 1. APPLICATION

The rail mountable NIPOWER PPK-421 and PPK-431 switching-mode power supply modules provide 12 V or 24 V stabilized DC output for low power consumption devices. The output current is limited by an electronic fuse. Both devices are short-circuit protected.

## 2. TECHNICAL DATA

### 2.1 GENERAL DATA

Type	PPK-421	PPK-431
Power supply ( $U_{IN}$ )	100...240 V AC / 50...60 Hz	
Efficiency	88%	89%
Consumption without load	max. 8 VA / 0.3 W	max. 8 VA / 0.4 W
Consumption with maximum load	max. 50 VA / 30 W	max. 60 VA / 33 W
Inrush current*	max. 25 A / 115 V AC / 60 Hz max. 45 A / 240 V AC / 50 Hz	
Output voltage ( $U_{OUT}$ )	12 V DC (11...13 V DC adjustable)	24 V DC (23...25 V DC adjustable)
Tolerance of output voltage	5%	
Output current**	2000 mA	1250 mA
Rated Power	24 W	30 W
Ripple & Noise	120 mV	150 mV
Output voltage indicator	blue LED	
Overload protection	from 130...200% rated output power	
Overvoltage protection	from 110...145% rated output voltage	
Overcurrent protection	from 110...180% rated output current	
Short-circuit protection	temporarily disconnecting the output	
Ambient temperature	-20...+50°C (-4...+122°F)	
Ambient humidity	20 ~ 90% RH (non-condensing)	
Electrical strength between input and output	3 kV AC	
Insulation resistivity	100 M $\Omega$ / 500 V DC / 25°C (77°F) / 70% RH	
Overvoltage category	III.	
Pollution degree	2	
Electrical connection	Terminal, wire cross section: max. 2.5 mm <sup>2</sup> (AWG14)	
Terminal torque	input / output terminals: 0.3 / 0.5 Nm	
Electrical protection	Class II reinforced insulation	
Mechanical connection	DIN EN 60715 rail	
MTBF	200 000 hours minimum, full load at 25°C (77°F) ambient temperature	
Ingress protection	IP20	
Weight	120 g (0.26 lb)	

\* The stated values are valid for the full load from the source

\*\* Correct air-flow is needed to prevent overheating

## 2.2 ORDER CODE

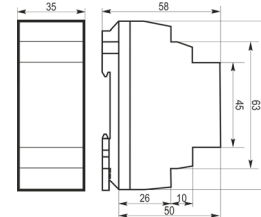
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Output	Code
12 V DC	2
24 V DC	3

## 2.3 ACCESSORIES

- User's manual
- Warranty Card
- EU-Declaration of Conformity

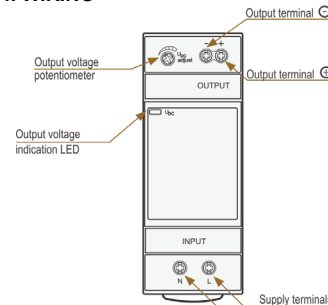
## 2.4 DIMENSIONS



## 3. INSTALLATION

The PPK-421 and PPK-431 power supply units can be mounted onto an EN 60715 rail.

## 4. WIRING



The devices must be connected to the power line in accordance with the technical data.

## 5. MAINTENANCE AND REPAIR

The instrument does not require regular maintenance. All repairs will be performed at Manufacturer's premises.

Before returning the device for repairs, it must be cleaned carefully, the parts in contact with the medium that might contain harmful substances must be decontaminated. Our official form (Returned Equipment Handling Form) must be enclosed. Download it from our website [www.nivelco.com](http://www.nivelco.com).

## 6. STORAGE CONDITIONS

Humidity: max. 90%  
 Ambient temperature: -40...+80°C  
 (-40...+176°F)

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NIVELCO reserves the right to  
 change technical data without notice!