

## **User Manual**

# LON Power Supply LPS133

## Art. no. MTN884019

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## LON Power Supply LPS 133





#### 1. Description

- power supply for devices with Link Power Transceivers
- output current: max. 1.3 A (short-circuit- and overload-proof)
- adjustable bus terminator for free or line topology or without termination
- monitoring of the output current by relay contact (NC)
- supply voltage: AC 120 / 230 V
- mounting on DIN rail TH 35 according to EN 60 715
- width of device: approx.180 mm (10 pitch)

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#### 2. Function

The power supply provides the energy for the devices with link power transceiver (LPT) connected to the corresponding network segment. Depending on the energy consumption of the individual nodes, up to 64 devices with LPT transceiver can be connected to the power supply.

The device outputs are short-circuit- and overload-proof. The bus power LED assigns the state of the output supply voltage.

For the network segment connected, an adjustable bus terminator for line or free topology networks is integrated. The configuration of the termination is done by a DIP-switch. The DIP-switch also provides a configuration to deactivate the termination.

The Power Supply is equipped with a reset button. By pushing this button for a time longer than two seconds the device no longer gives output voltage to the connected LON channel. By pushing again for longer than two seconds the device provides the supply voltage for the connected channel.

The device is equipped with a floating contact (normally closed) monitoring the output voltage. The contact will be open if the output voltage is no longer provided. The supply voltage for this contact is not provided by the device.

#### 3. Mounting

The Power Supply has been designed for mounting on DIN rail TH 35 according to EN 60 715. The 120/230 V mains is connected via pluggable screw-type terminals for cross sections up to 1.5 mm<sup>2</sup> and the bus network is connected via pluggable screw-type terminals for a cross section up to 1.5 mm<sup>2</sup>. The connection to functional earth (PE) is necessary for the function of the device.

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#### !Warning:

Safety clearances according to DIN VDE 0110 Part 1 must be maintained. A clearance of at least 4 mm must exist between individual 230 V conductors and the bus cables.



#### **!Danger to life due to electric current!**

Always deactivate/remove the upstream fuses before working on the device.

#### 4. Remarks

Electrical devices may only be fitted and mounted by a skilled person.

For planning and building electrical systems the relevant standards, guidelines, regulations and requirements of the particular country have to be considered. In addition to that, the device-specific instructions have to be considered as well.

For project planning, mounting and commissioning, detailed knowledge about the LON technology is assumed.

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#### 5. Technical Data

Power supply	
Supply voltage:	AC 120 V/60 Hz; AC230 V/50 Hz
Fuse:	3.15 A1, 230 V (internal)
Network interface	
Rated output voltage :	DC 40.6 42.4 V according to LonWorks specification
Rated output current:	1.3 A (short-circuit- and overload-proof) at 230 V
	1 A (short-circuit- and overload-proof) at 120 V
Output	
Relay:	normally closed contact, will open when the output voltage breaks
Nominal input voltage:	AC/DC 42 V (SELV)
Operating interfaces	
Reset button:	by pushing for a time longer than 2 seconds the output voltage can be
	switched ON or OFF
Selector switch for termination:	All OFF: no termination
	1 and 2 ON, 3 and 4 OFF: termination for bus topology (110 Ohm)
	1, 2 and 4 OFF, 3 ON: termination for free topology (55 Ohm)
Operating indicators	
Bus power LED:	lit: bus power all right
·	off: no bus power
	Flashes 2x: bus power overload or short circuit (retry of reset)
	Flashes 3x: device is overheated
	Fast flashing: reset button was pressed
Connections	5
Mains:	screw-type terminals for cross-sections of up to 1.5 mm <sup>2</sup>
Network:	pluggable screw-type terminals for cross-sections of up to 1.5 mm <sup>2</sup>
Housing	p
Dimensions	90 x 180 x 65 mm (H x W x D), 10 pitch
Protection class:	IP 20
Environmental requirements	
Operating temperature:	+5 °C +40 °C
Max humidity:	5 93 % relative humidity without moisture condensation
EC quidelines	
Lo guidelines	Low voltage guideline 2006/05/EEC
	EWC quideline 2004/108/EEC
	LIVIC guideline 2004/100/EEC