

# **ELTAKO POWERLINE**

THE IDEAL SUPPLEMENT TO THE ELTAKO WIRELESS BUILDING SYSTEM WITH ENOCEAN.

THE ELECTRICITY WIRING IN BUILDINGS ACTS AS THE ELTAKO POWERLINE BUS. NOW YOU CAN TRANSMIT SENSOR DATA AND TELEGRAMS TO ACTUATORS OVER THE EXISTING ELECTRICITY WIRING INSTEAD OF BROADCASTING WIRELESS TELEGRAMS - THAT IS THE BASIC DIFFERENCE BETWEEN THE TWO TECHNOLOGIES.

**PRODUCTS AND PRICES 2022** 

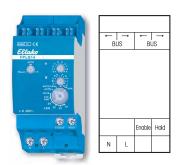


# **Eltako Powerline**

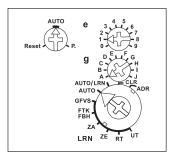
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# WIRELESS POWERLINE GATEWAY FPLG14 AND WIRELESS POWERLINE TUNNEL GATEWAY FPLT14





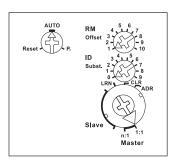
# Function rotary switches



Standard setting ex works.



### **Function rotary switches**



Standard setting ex works.

## FPLG14





Wireless Powerline gateway. Bidirectional. Standby loss only 0.4 watt.

Modular device for DIN-EN 60715 TH35 rail mounting.

2 module = 36 mm wide, 58 mm deep.

Supply voltage 230 V.

Connection to the Eltako-RS485 bus. Bus cross wiring and power supply with jumper.

This gateway translates wireless and Powerline telegrams in both directions.

Operation in conjunction with FAM14 or FTS14KS.

GFVS control functions for dimming, heating and shading are also possible.

**All** Powerline telegrams from the electricity wiring system are automatically translated into RS485 bus telegrams and may also be sent as wireless telegrams by connected FTD14 devices.

**Only** wireless and RS485 bus telegrams taught into the FPLG14 are translated into Powerline telegrams and modulated onto the electricity wiring system. Up to 120 different addresses. Teach-in takes place by means of rotary switches on the front of the devices or using the PCT14 as described in the user's manual.

FPLG14	Wireless Powerline gateway	EAN 4010312316771	97,10 €/pc.
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## FPLT14





Wireless Powerline tunnel gateway. Uni-and bidirectional. Standby loss only 0.4 watt.

Modular device for DIN-EN 60715 TH35 rail mounting.

2 module = 36 mm wide, 58 mm deep.

Supply voltage 230 V.

Connection to the Eltako-RS485 bus. Bus cross wiring and power supply with jumper.

This gateway transmits RS485 bus telegrams over powerline with large distance over the electrical net. Minimum 2 pcs FPLT14 are required.

Up to 10 FPLT14 can unidirectionally send the bus telegrams of their FAM14 / FTS14KS installation with Powerline to another FAM14 / FTS14KS installation via a local FPLT14.

Two FPLT14 can exchange the bus telegrams bidirectionally from 2 FAM14 / FTS14KS installations with Powerline via the installed wires. Teach-in up to 120 telegram IDs according to the operating instructions, also with PCT14. Because of the transmission delay, short-click evaluations for FUD and FSB actuators are not possible.

FPLT14	Wireless Powerline tunnel gateway	EAN 4010312317723	97,10 €/pc.
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## **PL-FGW**





Powerline wireless gateway. Bidirectional. 53x43 mm, 40 mm deep for mounting in 58 mm switch boxes. Standby loss 1.1 watt.

Supply voltage 230 V. Power consumption in operation 1.1 watt.

Powerline telegrams from the grid taught-in into the gateway are automatically transformed and sent into Eltako-wireless telegrams.

Wireless telegrams taught-in into the gateway are transformed into powerline telegrams and modulated to the power supply grid.

By pressing the reset button, the PL-FGW will be put into the teaching-in mode. The rotary switch selects, whether wireless or powerline telegrams should be taught-in.

One being taught powerline sensor is automatically assigned by operating in the learning mode , a free radio channel.

Up to 80 Powerline sensors or feedbacks can be taught-in. The function as a universal, direction or central pushbutton for a taught-in wireless sensor is assigned via slide switch of the PL-FGW. The Powerline address is set via rotary switch g and e which should be addressed with the wireless sensor. In addition to wireless switches also Eltako wireless sensors such as window contacts and motion detectors can be taught-in. Also control functions of the GFVS for dimmer switches and roller shutter control is possible. The implementation into practical Powerline telegrams für PL actuators is done automatically. Up to 100 different wireless sensor can be taught-in.

All records and configurations can be accessed via Sienna-Professional software and power supply. Other functions can then be selected which are not available through the direct teaching-in via rotary switch. In addition, the gateway can be set into the learn and deletion mode, so that a manual teaching-in can be carried out without direct access to the device.

The PL-FGW also serves as a relay station for communication between the temperature controller PL-SAMTEMP with EnOcean actuators FKS-MD1 and FKS-E. Up to 20 actuators and PL-SAMTEMP are managed here.

PL-FGW	Powerline wireless gateway	EAN 4010312324110	137,30 €/pc.
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## **PL-RPT**





Powerline repeater. 53x43 mm, 25 mm deep for mounting in 58 mm switch boxes. Standby loss only 0,5 watt.

The repeater supports greater ranges. With cable lengths of  $> 300 \, \text{m}$  the repeater is normally located in a distributor between the sensor and the actuator.

The repeater repeats commands from sensors with the same address q, e.

Feedback messages from actuators are not repeated.

Two rotary switches are located on the front to assign addresses:

The left-hand rotary switch determines the group address g with 16 alphanumeric digits from A to P. The right-hand rotary switch determines the element address e with 16 numerical values.

Above it is a slide switch which is a configuration switch with positions 0, 1 and 2.

Position 0: Central commands are repeated irrespective of the repeater's e address. With address e, e = 0, only central commands are repeated.

Position 1: With address g, e = 0 at the repeater, all commands of group g are repeated.

Position 2: Unassigned.

Addresses can be changed live or without voltage.

On the left of the rotary switches is a red LED to display all activities.

Next to that is the Reset button and to the right of that is Service Pin (P).

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

PL-RPT	Powerline repeater	EAN 4010312324103	85,80 €/pc.
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# DECENTRALISED ACTUATOR PL-SAMIL WITH SENSOR INPUT 230 V AND DECENTRALISED ACTUATOR PL-SAM2L WITH SENSOR INPUTS





## PL-SAM1L





Powerline actuator with 1 channel with sensor input.  $53 \times 43$  mm, 25 mm deep, for mounting in 58 mm switch boxes. Used as impulse switch or relay.  $1\,N0$  contact not potential free  $10\,A/250\,V$  AC, incandescent lamps 2000 watts. Sensor input  $230\,V$ . Standby loss only 0.5 watt. To control and switch at the same place.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor input functions as pushbutton (impulse switch).

Position 1: Sensor input functions as NO contact (relay).

Position 2: A change-over switch is evaluated as a pushbutton.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

Typical connections on page 12.

PL-SAM1L	Powerline actuator 1 channel with sensor input 230 V	EAN 4010312316665	110,00 €/pc.
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### PL-SAM2L





Powerline actuator with 2 channels. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. Used as impulse switch or relay. 1 + 1 NO contacts not potential free 5 A/250 V AC, incandescent lamps 1000 watts. 2 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at the same place.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs. Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15. Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor inputs function as pushbuttons (impulse switches).

Position 1: Sensor input functions as NC contact (relay).

Position 2: A change-over switch is evaluated as a pushbutton.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>. Next to them are three wires with wire end-sleeves for the two control inputs with internal low voltage.

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	PL-SAM2L	Powerline actuator 2 channels with	EAN 4010312316672	111,90 €/pc.
1		2 sensor inputs		



## PL-SAM2



Powerline Venetian blind actuator for 1 motor. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. 1 + 1 NO contact for motors up to 3 A. 2 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at the same place.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs.

The control inputs can be used for a Venetian blind pushbutton or a Venetian blind switch.

The runtime is preset to 120 seconds. This can be changed using the SIENNA-Professional installation software.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Start and stop by pressing Venetian blind pushbutton. Auto stop at end.

Position 1: Comfort switch for Venetian blind slat adjustment. Tip briefly to adjust slats.

>1 second same as position 0.

Position 2: Tip pushbutton to operate, release to stop. Auto stop at end.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>. Next to them are three wires with wire end-sleeves for the two control inputs with internal low voltage.

PL-SAM2	Powerline Venetian blind actuator for 1 motor	EAN 4010312316689	111,90 €/pc.
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# DECENTRALISED UNIVERSAL DIMMER ACTUATOR PL-SAMDU WITH SENSOR INPUT 230 V AND DECENTRALISED DIMMER ACTUATOR PL-AMD10V 1-10 VOLT





### **PL-SAMDU**







Powerline universal dimmer actuator. 53 x 43 mm, 40 mm deep for mounting in 58 mm switch boxes. Power MOSFET up to 300 W. Automatic lamp detection. Sensor input 230 V. Standby loss only 0,6 Watt. To control and dim at the same place.

 $Universal\ dimmer\ switch\ for\ lamps\ up\ to\ 300\ W,\ dependent\ on\ ventilation\ conditions.\ Dimmable\ energy\ saving\ lamps\ ESL\ and\ dimmable\ 230\ V-LED\ lamps,\ additionally\ dependent\ on\ the\ lamps\ electronics.\ No\ minimum\ load.$ 

Zero passage switching with soft ON and soft OFF to protect lamps.

Short-time control commands switch on/off, permanent control varies the brightness to the maximum level. A interruption of control changes the direction of dimming.

The brightness level is stored on switch-off (memory).

In case of a power failure the switch position and the brightness stage are stored and may be switched on when the power supply is restored.

Automatic electronic overload protection and overtemperature switch-off.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P.

The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch:

**The position AUT01** allows the dimming of all types of lamps up to 300 watts.

**The position LC1** is a comfort position for LED lamps up to 150 watts which are not being dimmed down enough when set to AUTO (trailing phase angle) dependent on the construction and must therefore be forced to leading phase angle.

**The position AUTO2** allows the dimming of all types of lamps up to 300 watts.

Increased minimum brightness compared to AUTO1.

In position LC1 no inductive (wound) transformers should be used. In addition, the maximum number of dimmable LED lamps can be lower than in the AUTO position dependent on the construction.

Mixing of L loads (inductive loads, e.g. wound transformers) and C loads (capacitive loads, e.g. electronic transformers) is not permitted. R loads (ohmic loads, e.g. 230 V incandescent lamps and halogen lamps) may be added anytime.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of  $0.2\,\text{mm}^2$  to  $1.5\,\text{mm}^2$ .

Typical connections on page 12.

	Powerline universal dimmer actuator 1 channel with sensor input 230 V	EAN 4010312316870	126,90 €/pc.
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## PL-AMD10V





Powerline dimmer actuator 1-10 V.  $53 \times 43$  mm, 25 mm deep, for mounting in 58 mm switch boxes. To switch and/or dim via a 1-10 V interface. 1 NO non-floating contact 600 VA. Standby loss only 0.5 watt. To activate and dim at different places.

Current sink of max. 30 mA for active and passive electronic ballasts. A Powerline sensor input is required for activation. Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P.

The right rotary switch defines the element address e with 16 numerical values from 0 to 15. Above it is a slide switch which has no function here.

To the left of the rotary switches is a red LED which indicates all activities. Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

PL-AMD10V	Powerline dimmer actuator 1-10 V	EAN 4010312316726	111,90 €/pc.
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# DECENTRALISED TLZ ACTUATOR PL-SAMILT WITH SENSOR INPUT 230 V AND DECENTRALISED ACTUATOR PL-SMIL WITH SENSOR INPUT 230 V



## **PL-SAM1LT**



Powerline TLZ (staircase time switch) actuator with 1 channel. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. Off delay settable from 1 minute to 120 minutes. Switch-off early warning settable. 1 NO contact not potential free 10 A/250 V AC, incandescent lamps 2000 watts. Sensor input 230 V. Standby loss only 0,5 watt. To control and switch at the same place.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch determines the off-delay time.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Pushbutton at sensor input with subsequent switching.

Position 1: Same as Position 0 but with switch-off early warning.

Position 2: A change-over switch is evaluated as a pushbutton.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

Typical connections on page 12.

PL-SAM1LT Powerline TLZ actuator 1 chann input 230 V	el with sensor	111,90 €/pc.
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### PL-SM1L



Powerline sensor input with 1 channel. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. Sensor input 230 V. Standby loss only 0,5 watt. To control and switch at different places.

When pressed, the sensor input acts on all actuators with the same address or as a central pushbutton if element address 0 is used.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor input with reset function as pushbutton.

Position 1: Sensor input functions as NO contact.

Position 2: A change-over switch is evaluated as a pushbutton.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

PL-SM1L	Powerline sensor input 230 V	EAN 4010312316740	106,00 €/pc.
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# DECENTRALISED 8-CHANNEL SENSOR INPUT PL-SM8 AND TEMPERATURE CONTROLLER PL-SAMTEMP FOR HEATING AND COOLING





## PL-SM8



Powerline sensor input with 8 channels. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. 8 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at different places.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above them is a slide switch which functions as a configuration switch.

Position 0: 2 adjacent inputs as direction pushbuttons for UP/DOWN or ON/OFF.

Position 1: All sensor inputs function separately as NO contacts.

Position 2: All sensor inputs function separately as pushbuttons.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2  $\text{mm}^2$  to 1.5  $\text{mm}^2$  .

The addresses of the 8 inputs can also be freely assigned if necessary using the SIENNA-Professional software

The socket strip located above this has 9 plug-in wires with wire end-sleeves.

8 control inputs with internal low voltage.

Typical connections on page 12.



# PL-SM8 Powerline sensor inputs, 8 channels, internal low voltage EAN 4010312316719 111,90 €/pc.

## **PL-SAMTEMP**



Powerline temperature controller with display, white, 55 x 55 mm, for mounting in switch systems. In addition a floating control contact 3 A/250 V AC for direct connection of heaters and coolers. Standby loss only 0,4 watt.

The scope of supply comprises a frame R1E and an intermediate frame ZR65/55 for the E-Design, the temperature controller upper part and a bottom part for attachment in 55 mm flush-mounted boxes. The complete display can be removed from the frame for screw mounting.

In normal mode the current room temperature is indicated in the display as well as icons for 'present' or 'absent' and for 'heating on' or 'cooling active'.

Press the pushbuttons (absent) and (present) to activate the associated setpoint.

In setup mode as described in the user's manual, press pushbuttons  $\triangle$  and  $\nabla$  to display the setpoint and actual temperatures and change the setpoints.

Control heating or cooling with Powerline actuators PL-SAM1L or PL-SAM2L.

PL-SAMTEMP	Powerline Temperature controller for heating	EAN 4010312316733	211,00 €/pc.
	and cooling		

### COUPLING ELEMENT PL-SW-PROF FOR SOFTWARE SIENNA®-PROFESSIONAL



## **PL-SW-PROF**

The coupling element with USB cable and 230 V power supply unit is included in the scope of supply. The software for installation and configuration of the powerline devices PL is available for download under eltako.com.

PL-SW-PROF is a Windows-based program for installing and configuring all PL and SIENNA components and is designed for electricians.

Powerline systems can either be installed or configured using a screwdriver or a PC/laptop. All changes can be made from the PC. Existing installations in a building can also be read and detected. The bus is coupled using a USB port on the PC. Thanks to Powerline technology, the nearest electric socket becomes a bus coupler.

Download in accordance with the included installation instructions from the homepage eltako.com/en -> Software -> Powerline. The operating instructions are available for download at the bottom of the page under Operating Instructions/SIENNA Professional.

SYSTEM REQUIREMENTS, LAPTOP/PC				
Processor	Intel® Pentium® III 366 MHz or higher			
Operating system	Server 2003, Windows XP, Vista (32 Bit), Windows 7 (32 Bit), Windows 8 (32 Bit and 64 Bit), Windows 10			
Programming environment	Microsoft .NET Framework 3.5 SP1 or higher			
Hard disc memory	32 MB free space on hard disc			
RAM memory	128 MB RAM			
Screen resolution	1024 x 768			
Interface	USB 1.1, 2.0 or 3.0			
TECHNICAL DATA ECHELON	COUPLING ELEMENT PL-20			
Technology	Powerline communication on B/C tape (5 Kb/s); acc. to FCC, CENELEC EN50065-1 and LONWORKS® protocol			
Bus coupler	Fused safety socket, 230 V~/50 Hz			
PC coupler	USB 1.1 or 2.0			
Current draw	Mains plug/power supply unit: maximum 250 mA at 18 V DC voltage. USB: maximum 50 mA at 5 V DC voltage			
Processor type	Neuron processor integrated in Powerline Smart Transceiver PL 3120			
Temperature range	-25ºC to +70ºC			

PL-SW-PR0F	Software PL-SW-PR0F	EAN 4010312316856	358,90 €/pc.*
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## NF2A

The mains filter up to 2 A 230 V/50 Hz is designed as a built-in filter. It attenuates interference signals from the consumer to the actuator and prevents that disturbances from the connected consumers are reaching the house network. Frequency range 110-140 kHz.

For installation mounting. 49 mm long, 32 mm wide, 24 mm deep.

NF2A	Mains filter up to 2 A, 230 V/50 Hz	EAN 4260194737057	31,30 €/pc.
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## FPP12



Wireless Powernet phase coupler to transmit wireless telegrams over the 230 V power mains. Only 0.2 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting.

1 module = 18 mm wide, 58 mm deep.

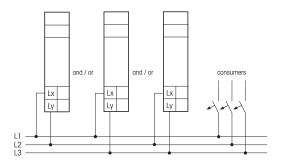
Voltage between the two outer conductors: 400 V/50 Hz.

Frequency range 115-132 kHz.

The phase coupler increases the capacitive coupling between 2 different outer conductors if, for example, the cables within the installation are not laid in parallel at a distance of at least several metres apart (as ribbon cables or jacketed cables).

Caution: The phase coupler may only be connected to the input side of the line circuit-breaker.

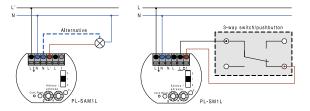
#### **Typical connection**



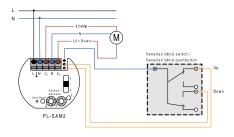
FPP12	Wireless Powernet phase coupler	EAN 4010312311769	28,00 €/pc.
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### TYPICAL CONNECTIONS

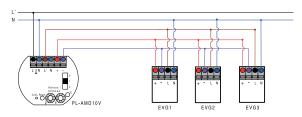
# Typical connection PL-SAM1L Additional switching point for an existing consumer



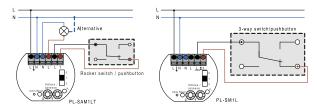
### Typical connection PL-SAM2



### Typical connection PL-AMD10V

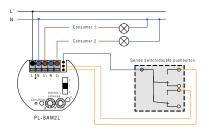


# Typical connection PL-SAM1LT Delayed switch-off

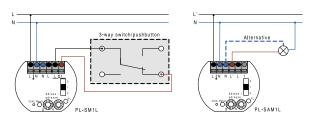


(e.g. staircase time switch or circulation pump) SAM1LT switches itself and associated actuators off after a preset time.

### Typical connection PL-SAM2L

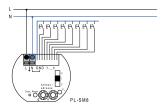


# Typical connection PL-SM1 Switch an additional consumer

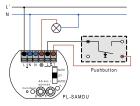


(e.g. mirror light in bathroom, socket in living room, outside light)

### **Typical connection PL-SM8**



### Typical connection PL-SAMDU



### **TECHNICAL DATA POWERLINE DEVICES**



Туре	PL-SAMDU	PL-AMD10V	PL-SAM1L PL-SAM1LT	PL-SAM2L	PL-SAM2
Contacts					
Contact material/contact gap	Power Mosfet	AgSnO <sub>2</sub> /0.5mm	AgSnO <sub>2</sub> /0.5 mm	AgSnO <sub>2</sub> /0.5 mm	AgSnO <sub>2</sub> /0.5 mm
Spacing of control connections/contact	-	-	3 mm	3 mm	3 mm
Test voltage control connections/contact	-	-	2000 V	2000 V	2000 V
Rated switching capacity each contact	-	600 VA <sup>4)</sup>	10A/250V AC	5A/250V AC	3A/250V AC
Incandescent lamp and halogen lamp load $^{1)}230\text{V},$ I on $\leq 70\text{A}/1013\text{ms}$	up to 300 W <sup>2)</sup>	-	2000 W	1000 W	-
Inductive laod cos $\phi$ = 0.6/230 V AC inrush current $\leq$ 35 A	up to 300 W <sup>6)</sup>	-	650 W	650 W <sup>5)</sup>	650 W <sup>5)</sup>
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	-	-	1000 VA	500 VA	-
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	-	600 VA <sup>4)</sup>	500 VA	250 VA	-
Compact fluorescent lamps with EVG* and energy saving lamps	-	-	up to 400 W	-	-
Dimmable 230 V LED lamps	up to 300W 3)	-	up to 400 W	-	-
Service life at rated load, $\cos \phi$ = 1 or incandescent lamps 500 W at 100/h	-	>105	>10 <sup>5</sup>	>10 <sup>5</sup>	>10 <sup>5</sup>
Service life at rated load, $\cos \varphi = 0.6$ at 100/h	-	> 4x10 <sup>4</sup>	>4x10 <sup>4</sup>	> 4x10 <sup>4</sup>	> 4x10 <sup>4</sup>
Max. operating cyles	-	10 <sup>3</sup> /h	10³/h	10 <sup>3</sup> /h	10 <sup>3</sup> /h
Connection type	Plug-in terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals
Minimum conductor cross-section	0.2 mm <sup>2</sup>	0.2 mm <sup>2</sup>	0.2 mm <sup>2</sup>	0.2 mm <sup>2</sup>	0.2 mm <sup>2</sup>
Maximum conductor cross-section	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Conductor stripping	8-9 mm	8-9 mm	8-9 mm	8-9 mm	8-9 mm
Type of enclosure/terminals	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20
Electronics					
Time on	100%	100%	100%	100%	100%
Max./min. temperature at mounting location	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Standby loss (active power)	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
Local control current at 230 V control input	0.4 mA	-	0.4 mA	0.4 mA	0.4 mA
Max. parallel capacitance (approx. length) of local control lead at 230 V AC	3 nF (10 m)	-	3 nF (10 m)	3 nF (10 m)	3 nF (10 m)

Powerline communication in the B/C-Band (5kb/s) corresponds to FCC, CENELEC EN 50065-1 and LONWORKS protocol

Applies to lamps of max. 150 W.

Also transformers electronically (C load).

Generally applies to 230 V LED lamps. Due to different lamp electronics, switch on/off problems and a restriction in the maximum number of lamps, however, the dimming ranges may be limited depending on the manufacturer; in particular when the connected load is very low (e.g. with 5 W LEDs). The comfort position LC1 at SAMDU optimizes the dimming range, which however results in a maximum capacity of only up to 150 W. In this comfort position, no wound (inductive) transformers should be dimmed.

Fluorescent lamps or LV halogen lamps with electronic ballast.

All actuators with 2 contacts: Inductive load cos φ = 0.6 as sum of both contacts 1000 W max.

A maximum of 2 transformers of the same type.

\* EVG = electronic ballast units; KVG = conventional ballast units

# DO YOU HAVE ANY QUESTIONS? WE HAVE THE ANSWERS FOR YOU.

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