## Technical Data Powerline Devices



	PL-SAMDU	PL-AMD10V	PL-SAM1L PL-SAM1LT	PL-SAM2L	PL-SAM2
Contacts					
Contact material/contact gap	Power MOSFET	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 4)	10 A/250 V AC	5 A/ 250 V AC	3 A/250 V AC
Incandescent lamp and halogen lamp load $^{1)}$ 230V, I on $\leq$ 70A/10ms	up to 300 W <sup>2)</sup>	_	2000 W	1000 W	_
Inductive laod cos $\phi = 0.6/230\text{V}$ AC inrush current $\leq 35\text{A}$	up to 300 W 6)	_	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 4)	500 VA	250 VA	_
Compact fluorescent lamps with EVG* and energy saving lamps	_	_	up to 400 W	_	_
Dimmable 230V LED lamps	up to 300 W 3)	_	up to 400 W	_	_
Service life at rated load, $\cos \phi = 1$ or incandescent lamps 500W at 100/h	_	> 10 5	> 10 °	> 10 °	> 10 °
Service life at rated load, $\cos \phi = 0.6$ at 100/h	_	> 4 x 10 <sup>4</sup>			
Max. operating cyles	_	10³/h	10³/h	10°/h	10³/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 mm²	1.5 mm²	1.5 mm²	1.5 mm²	1.5 mm²
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)	0.6W	0.5 W	0.5 W	0.5 W	0.5 W
Local control current at 230V 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)

- Applies to lamps of max. 150W.
- <sup>2)</sup> Also transformers electronically (C load).
- Generally applies to 230V 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 150W. In this comfort position, no wound (inductive) transformers should be dimmed.
- Fluorescent lamps or LV halogen lamps with electronic ballast.
- <sup>5)</sup> All actuators with 2 contacts: Inductive load  $\cos \varphi = 0.6$  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

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