Datasheet Series PLA



Model	PLA880			
Order no.	22-012-000-01			
Max. input voltage Vmax		800 V		
Min. input voltage Vmin		1.2 V		
Max. load current Imax		8 A		
Continuous power		800 W		
Short-time power ¹⁾		800 W		
Voltage setting		0 800 V		
Current setting		0 8 A		
Resistance setting		0.25 0hm 500 0hm		
Power setting ²⁾		0 800 W		
Rise and fall time fast / medium / slow $^{ m 3)}$		50 µs		
Load terminals (front) 4)		SBU4-32		
Load terminals (rear) ⁵⁾		SBU4-32		
Power consumption		55 VA		
Max. noise ⁶⁾		55 dB(A)		
Weight ca.		7 kg		
Housing ⁷⁾		19" - 2 HU		

- $1. \quad \mbox{Level and duration of the peak power depend on the previous power.}$
- 2. The setting range extends max. to the possible shorttime power.
- 3. Rise and fall times are defined of 10 ... 90 % and 90 ... 10 % of the maximum current (current mode, FAST, tolerance ±20 %). Rise and fall time at setting "slow": approx. 500 µs.
- 4. PK4-30L: Pole terminal for 4 mm laboratory jack + stripped wires, max. 30 A BPK4-30L: Pole terminal touch-protected for 4 mm laboratory jack + stripped wires, max. 30 A. BPK4-60L: Pole terminal touch-protected for 4 mm laboratory jack + stripped wires, max. 60 A. SBU4-32: Safety socket for 4 mm safety connector, max. 32 A
- FKS20/4-SM8: Flat copper bar 20x4 mm mounted vertically with M8 screw
 PK4-30L: Pole terminal for 4 mm laboratory jack + stripped wires, max. 30 A
 BPK4-30L: Pole terminal touch-protected for 4 mm laboratory jack + stripped wires, max. 30 A.
 BPK4-60L: Pole terminal touch-protected for 4 mm laboratory jack + stripped wires, max. 60 A.
 SBU4-32: Safety socket for 4 mm safety connector, max. 32 A
 FKS20/4-SM8: Flat copper bar 20x4 mm mounted vertically with M8 screw
- $6. \quad \text{Measured on the front from distance of 1 m} \\$
- 7. Device height incl. equipment feet. Maximum width and depth incl. handle. Installation depth without connection cable. 1 HU = 44.45 mm

PLA Series

Technical Data

Accuracy of setting					
	of setting value	of corresponding range			
Voltage	±0.1 %	±0.05 %			
Current	±0.2 %	±0.05 %			
Resistance (at 5 % to 100 % of voltage range)	±1.4 %	±0.3 % of current range			
Power (at V and I > 10 % of range)	±0.7 %				
(at V or I 5 10 % of range)	±2 %				
Resolution	12 Bit				
Accuracy of adjustable	e protections				
	of setting value	of corresponding range			
Overcurrent protection	±0.5 %	±0.05 %			
Undervoltage protection	±0.3 %	±0.02 %			
Resolution	12 Bit				
Accuracy of measuren	nent				
	of measured (real) value	of corresponding range			
Voltage	±0.1 %	±0.05 %			
Current	±0.2 %	±0.05 %			
Resistance	is calculated from voltage and current				
Power	is calculated from voltage ar	nd current			
Resolution	16 bits				
Sampling rate	100 μs, not triggerable				
Accuracy of displays (user interface)				
Display user inter- face	accuracy of each measurement, ±1 digit of the display value				
Resolution	see display resolution page	22			
Dynamic function (LIS	T)				
Number of load levels	max. 100, with corresponding ramp and dwell time				
	min.	max.			
Dwell time	1 ms	100 s			
Ramp time	0 s	100 s			
Resolution	1 ms				
Accuracy of setting times	±0.02 %				
Data acquisition					
	to internal memory				
Sampling rate	1 ms 100 s, 1 ms resolutio				
Measurement data	time stamp, voltage, current				
Number of measu- rement points	max. 100				
Settings memories					
Number of user settings	10, selectable (incl. programmed list)				
Accuracy of analog co	ntrol 0 10 V				
	of the setting value	of the corresponding range			
Voltage	±0.2 %	±0.05 %			
Current	±0.2 %	±0.05 %			
	input resistance of analog inputs >10 $k\Omega$ GND max. 2 V $^{1)}$ with respect to negative load input				

The specified accuracies refer to an ambient temperature of 23 \pm 5 °C. The specified accuracies are valid when the unit is connected to undisturbed voltages (ripple and noise < 0.1 %). At voltages with higher disturbance values the accuracy can change for the worse.

¹⁾ positive/negative DC voltage or RMS value of a sinusoidal AC voltage

Status and	Status load input (on/off)			
control outputs	overload (OV, OCP, OPP, OTP)			
Output level Control inputs	load input (on/off)	5 V		
controt inputs	control input (activates I/O port)			
Input level	3 30 V			
Accuracy of analog mon	itor outputs 0 10 V			
	of analog signal	offset voltage		
	of real value			
Voltage	±0.1 %	±15 mV		
Current	±0.2 % ±15 mV			
	minimum load 2 kΩ GND max. 2 V ¹⁾ with respect	to negative load input		
Input				
Input resistance	>50 kΩ when load input is off diode function at reverse polarity up to nominal current			
Input capacity		max. 3 μF		
Parallel operation	up to 5 devices in Master-Slave operation (hardware-controlled)			
Maximum input voltage Vmax	see model overview			
Minimum input voltage Vmin	linear derating to 0 V			
voltage vitilit	I Imax			
		Vmin V		
Permissible potential	negative load input - PE: 125	5 V ¹⁾		
Power	1			
Continuous power	see model overview (at Ta = 21 °C)			
Derating	-1.2 %/°C für Tu > 21 °C			
Overload capacity	see model overview The possible short-time pow rature of the device and with taken before.			
Protection and monitori	ng			
Protective devices	overcurrent			
	overpower overtemperature			
Monitoring	overvoltage indication			
	reverse polarity indication undervoltage display (if the i	nput voltage is too low for th		
	set current)			
Operating conditions				
Operating temperature	5 40 °C			
Stock temperature	-25 65 °C			
Max. operating height	2000 m above sea level			
Pollution degree	2			
Max. humidity	80 % at 31 °C, linear decreas	sing to 50 % at 40 °C		
Min. distance rear panel - wall or other objects	70 cm			
Cooling	temperature-controlled air cooling			
Noise	see model overview			
Supply voltage (mains)	85 264 V AC, 50 60 Hz			
with Option PLA180	10 18 V DC			
Power consumption	see model overview			

Technical Data (continued)

Terminals				
Load input	see model overview			
Sense	at I/O port, only at models up to 120 V			
Housing				
Color Front and rear panel Side panels and top	RAL7032 (pebble grey) RAL7037 (dusty grey)			
Dimensions, weight	see model overview			
Safety and EMC				
Protection class	1			
Protection	IP20			
Measuring category	O (CAT I according to EN 61010:2004)			
Electrical safety	DIN EN 61010-1 DIN EN 61010-2-030			
EMV, CE marking	DIN EN 55011 DIN EN 61326-1 DIN EN 61000-3-2 DIN EN 61000-3-3			
Calibration, warranty				
FCC-PLAxx	Factory Calibration Certificate, twice free of charge			
Warranty	2 years			