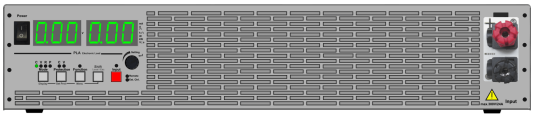
Datasheet Series PLA

Höcherl & Hackl
The electronic load

Model	PLA806C16	
Order no.	22-009-001-01	

Max. input voltage Vmax	60 V
Min. input voltage Vmin	1.2 V
Max. load current Imax	16 A
Continuous power	800 W
Short-time power [1]	960 W
Voltage setting	0 ... 60 V
Current setting	0 ... 16 A
Resistance setting	0.125 Ohm ... 250 Ohm
Power setting [2]	0 ... 960 W
Rise and fall time fast / medium / slow [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. 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
5. 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. 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

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) (at V or I 5 ... 10 % of range)	±0.7 % ±2 %	
Resolution	12 Bit	

Accuracy of adjustable protections		
	of setting value	**of corresponding range**
Overcurrent protection	±0.5 %	±0.05 %
Undervoltage protection	±0.3 %	±0.02 %
Resolution	12 Bit	

Accuracy of measurement		
	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 and current	
Resolution	16 bits	
Sampling rate	100 µs, not triggerable	

Accuracy of displays (user interface)	
Display user interface	accuracy of each measurement, ±1 digit of the display value
Resolution	see display resolution page 22

Dynamic function (LIST)		
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 %	

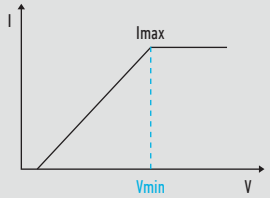
Data acquisition	
	to internal memory
Sampling rate	1 ms ... 100 s, 1 ms resolution
Measurement data	time stamp, voltage, current
Number of measurement points	max. 100

Settings memories	
Number of user settings	10, selectable (incl. programmed list)

Accuracy of analog control 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 kΩ GND max. 2 V [1] with respect to negative load input	

I/O port outputs and inputs	
Status and control outputs	Status load input (on/off) overload (OV, OCP, OPP, OTP)
Output level	5 V
Control inputs	load input (on/off) control input (activates I/O port)
Input level	3 ... 30 V

Accuracy of analog monitor outputs 0 ... 10 V		
	of analog signal **of real value**	**offset voltage**
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	1.2 V for maximum current, linear derating to 0 V 
Permissible potential	negative load input - PE: 125 V [1]

Power	
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 power depends on the temperature of the device and with that on the normal rating taken before.

Protection and monitoring	
Protective devices	overcurrent overpower overtemperature
Monitoring	overvoltage indication reverse polarity indication undervoltage display (if the input voltage is too low for the 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 decreasing 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) with Option PLA18o	85 ... 264 V AC, 50 ... 60 Hz 10 ... 18 V DC
Power consumption	see model overview

The specified accuracies refer to an ambient temperature of 23 ±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

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