Electronic DC Loads

HIGH POWER PLI SERIES

PLI Series – Brief Profile

The electronic loads of PLI series offer convenient operation via a graphical user interface. The particular strength of the devices lies in the very extensive equipment of interfaces. In addition to Ethernet, USB, RS-232 and analog I/O port, a CAN interface is also installed as standard.
GPIB is optionally available (PLI02).

- Ethernet + USB + RS-232 + CAN + I/O Port as standard
- Basic operating modes CC - CV - CR - CP
- Combined operating modes CC+CV, CR+CV, CP+CV, CV+CC, CR+CC, CP+CC
- Adjustable protections for V and I
- Optional MPP Tracking
- SCPI programming with measurement function
- Dynamic loads with synchronous DAQ
- Data logging directly to USB flash drive
- Funktions for testing energy storage devices
- Watchdog function
- Temporary overload capacity, depending on model
- High power density up to 28,800 W
- Electronic protection
- Silent fan cooling
- Digital input and programmable control output

Interfaces

◉	RS-232
◉	USB
◉	LAN
○	GPIB
◉	CAN
◉	Analog
○	Analog isolated

◉ Standard ○ Option — not available

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Operating Modes

The devices have the basic operating modes constant current, constant voltage, constant resistance and constant power (CC - CV - CR - CP Mode). A limit value for undervoltage and overcurrent can be set in each operating mode.
This allows the combined operating modes CC+CV, CR+CC+CV, CP+CC+CV, CV+CC to be realized.

Protection, Monitoring

- Current protection
- Power protection
- Overtemperature protection
- Overvoltage indication
- Reverse voltage indication
- Undervoltage indication
- Protection of the GND lines at the I/O port

Loading Capacity

The range of models includes power classes from 600 W to 28,800 W.
The models up to 300 V can also be temporarily overloaded. The level and duration of the possible overload power depends on the operating temperature of the power stage. The device displays the currently possible load capacity.
This means that these devices can also be used for significantly more powerful short-term applications.

Cooling

The units are air-cooled. In order to keep the operating noise low, for sizes starting from 5 U, the fans are controlled according to temperature and current. For better utilization of the maximum possible overload capacity, the fans can be set to full power.

I/O Port

Analog signals in realtime!

Standard I/O port for:

- Analog load setting I and V
- Analog setting of I and V protections
- Load on-off
- Analog voltage monitor output
- Analog current monitor output
- Trigger input
- Trigger output
- Digital input and programmable control output

Galvanically Isolated I/O Port (Option PLI06)

Option PLI06 can be installed for galvanic isolation of the analog I/O port from the load circuit.
By using this card ground loops are prevented and it is possible to test bipolar voltages with common analog control using two devices.

Factory Calibration Certificate

(FCC-PLIxx)

2 x for free

The devices are supplied with a free Factory Calibration Certificate (FCC). The FCC meets the requirements of DIN EN ISO 9000ff. This calibration certificate documents the traceability to national standards for the representation of the physical unit in accordance with the International System of Units (SI). Within the warranty period, we calibrate a second time free of charge. The recommended calibration interval is 2 years.

Mechanics

Retractable handle

The PLI series is designed in stable 19" technology and can be used as a desktop unit or installed in 19" racks. From 5 U there are retractable heavy-duty carrying handles on the top of the unit. Optional mounting kits are available for 19" installation for units up to 3,200 W. Larger units are already equipped for installation.

Castors

Steerable castors (option PLI14) can be mounted on large devices for easier transport. This often avoids the need for a 19" rack.
This option is available for units from 5 U and upwards and is only suitable for hard floors.

Safety Covers

Safety cover for PLI starting from 5 U

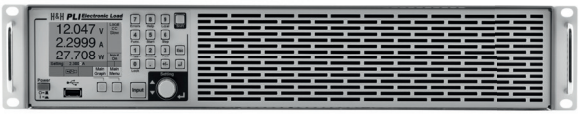
For devices for dangerous input voltages, covers are supplied as protection against accidental contact of the load inputs.

19" Rack Mounting Kits (Options)

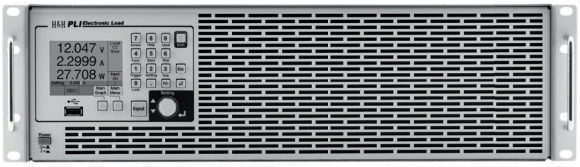
Option PLI10
Installation kit for 1 device
PLI6xx

Option PLI11
Installation kit for 2 devices
PLI6xx

Option PLI12
Installation kit for 1 device
PLI14xx/21xx



Option PLI13
Installation kit for 1 device
PLI32xx



Overcurrent and Undervoltage Protection

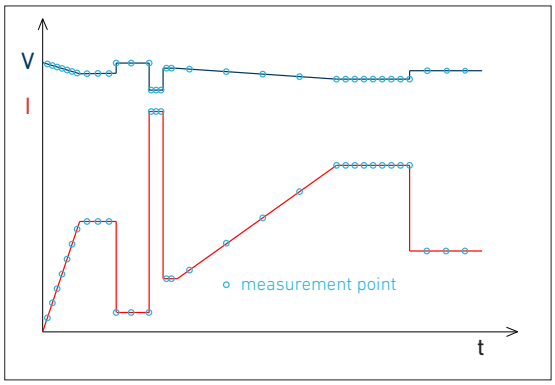
Adjustable overcurrent and undervoltage protections are permanently active. Both protections work in all operating modes.
Undervoltage protection operates in two different modes:

- regulating transition (e.g. CC-CV operation at battery discharge)
- switching transition (short dead time, e.g. when switching the input voltage)

Static Data Logging

At slow processes the electronic load can directly save voltage and current to a USB flash drive. Logging intervals are in the seconds range.

Load Profiles (List Function)



Waveform generated by LIST function with synchronized data acquisition of time, voltage, current

In all operating modes the electronic load can produce load profiles by LIST function. Up to 300 settings with variable dwell and ramp times are possible. Sample times can be defined for each section separately.
The electronic load synchronously measures voltage and current and saves the data with timestamp.

Data Acquisition (DAQ)

The electronic load can synchronously store data records of voltage and current with time stamp in a defined interval. Up to 40,000 data records are stored in a ring buffer.
After the recording is finished, the data can be read by SCPI queries or transferred to a USB flash drive.

Watchdog Function

To protect the DUT from communication problems, the electronic load in digital remote control mode has a watchdog function that switches off the load input if the previously programmed watchdog delay time expires without the watchdog being reset.
The watchdog delay time is set by SCPI command, another command activates the watchdog.
When the watchdog is active, a control program must ensure that the command to reset the watchdog is periodically sent to the electronic load.

Trigger Model

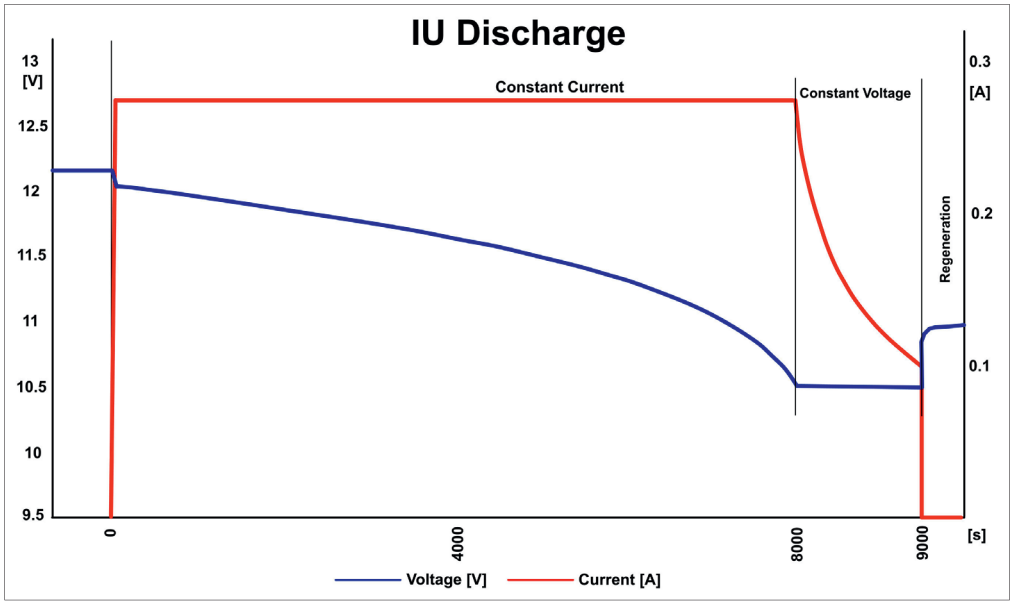
Several functions or settings can be triggered by a configurable trigger model:

- Start/stop LIST function
- Start/stop data acquisition
- Set triggered settings of all operating modes

Trigger sources:

- External
- Bus
- Manual
- Voltage
- Current

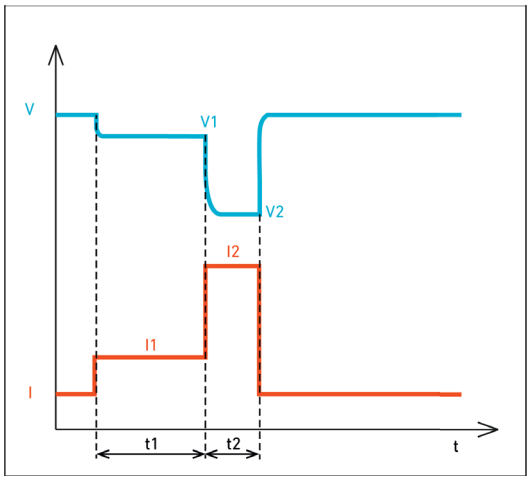
Discharge Function, Enery Storage Test



IUa discharge with follow-up time

The discharge function tests energy storage devices such as batteries, ultracaps, electrolytic capacitors and solar panels etc. by discharging them in CC, CP or CR mode. The discharge function can be combined with the list function so that pulsed discharge is possible.
IUa discharge (CC+CV discharge) is also possible: the test object is discharged with constant current up to a defined voltage. This voltage is then kept constant until a defined minimum current is reached.
Stop criteria are charge, energy, time, current, voltage.
During data logging, a follow-up time can be defined to observe the regeneration phase.

Internal Resistance Measurement



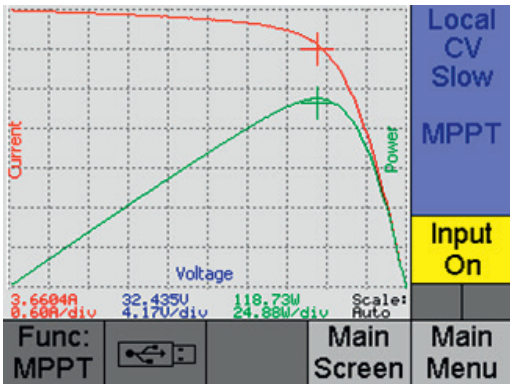
Ri calculation timing

The electronic load can measure the internal DC resistance of the connected DUT. The determination of the internal resistance Ri is based on the principle specified in various standards for batteries and accumulators, e.g. DIN EN 61951, DIN EN 61960.
At intervals of a few seconds, the load measures the terminal voltage of the DUT (V1, V2) at two defined load levels (I1, I2) and calculates Ri from this.
The load levels I1 and I2 as well as their durations are adjustable.
In manual mode, the load can store the parameters and the result of the measurement on a connected USB stick at the touch of a button, so that a high throughput with many DUTs can be achieved.

Changing Regulation Speed

Sometimes special DUTs or very long load cables require modification of the electronic load's regulation time constant to avoid oscillations and establish stable operation.
Regulation speed slow - medium - fast are selectable at PLI loads.

MPP Tracking

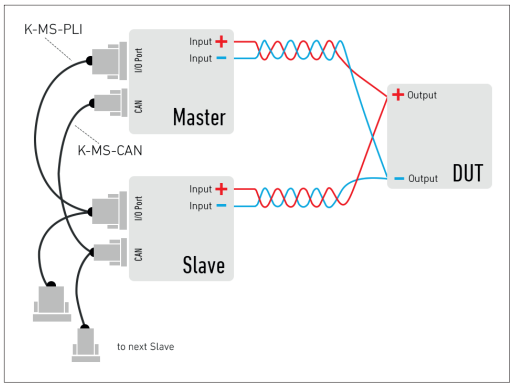


V/I and V/P characteristic at the user interface

The Maximum Power Point Tracking (MPPT) function consists of the two sub-functions Sweeping and Tracking, which alternate continuously in an adjustable interval.

If the measured open circuit voltage at startup is higher than the minimum voltage, the electronic load performs a sweep and then adjusts the global MPP found. The swept V/I curve is displayed together with the V/P curve in the function graph of the user interface. The previously found MPP is marked by a '+' in the diagram. The V/I characteristic can be read out via a data interface. It is composed as follows:
<Volt_0>,<Curr_0>,<Volt_1>,<Curr_1>,...,<Volt_249>,<Curr_249>

Master-Slave Operation



Master-Slave operation in system connection

Up to 5 PLI loads of the same type and firmware revision can be connected in parallel in Master-Slave operation to increase power or current.
The system operates externally as if it were one device. The Master unit regulates the total current of the system, displays the total measured values and delivers these when queried via one of the data interfaces.

Limitations:
DAQ functions are not available in Master-Slave operation, functions for setting and reading device parameters are limited. The CAN interface is not available for data communication. When using the Master-Slave cables K-MS-PLI, the I/O port cannot be used either.

Save Settings

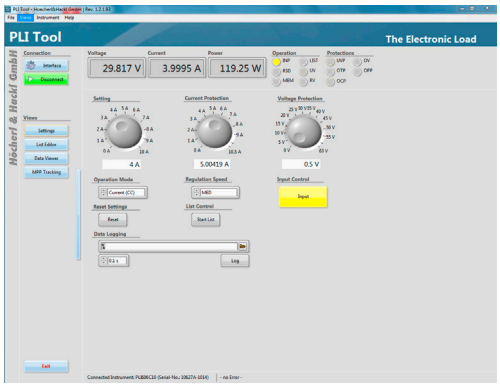
In order to be able to quickly reconstruct frequently recurring test tasks, the settings active in the electronic load can be stored non-volatile so that they can be reloaded at a later time. 9 memory positions are available.
The PLI load can optionally set the reset state when switching on, the last active settings at switching off or memory positions 1 to 9.

Drivers

Current NI-certified LabVIEW drivers can be downloaded here:
www.hoecherl-hackl.com/ or
www.ni.com/downloads/instrument-drivers/

Software Tool

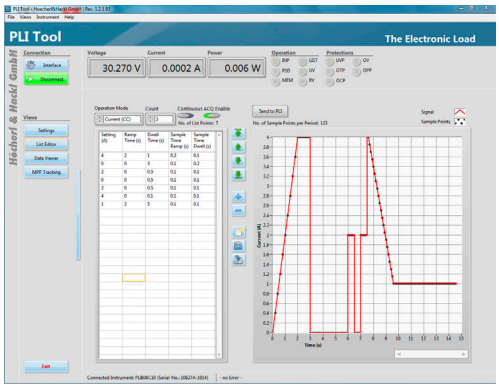
Setting Menu



The PLI software tool is a graphical software tool to control the PLI series electronic loads. The user can choose different functions with the aid of the navigation bar.
The most important load settings are done in the main menu ("Settings"). Several graphical widgets inform the user about the measurements and the current device status. Further on, a data logging function can be activated in the main menu.

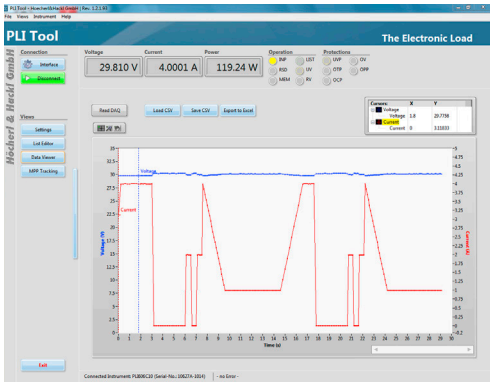
www.hoecherl-hackl.com
–> Download area

List Editor



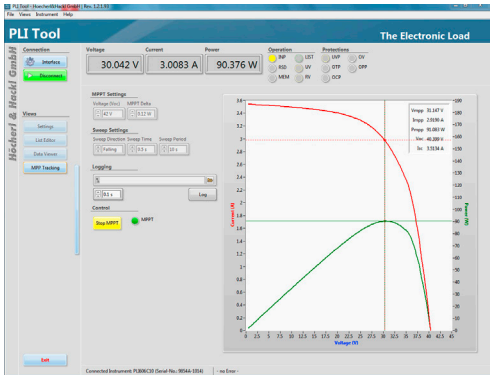
The list editor can be used to easily create dynamic load profiles for the electronic load. The user can enter the nominal setting values for current, voltage, power and resistance, the corresponding rise and fall times and the corresponding dwell times for each setting point of the list. Additionally, the List function allows the user to enable a synchronous data logging function for current and voltage measurements where the sampling times can be individually adjusted for each part of the load profile.

Data Viewer



Measurement values of the internal DAQ memory can be exported from the electronic load and displayed as a diagram with the aid of the "Data Viewer". The measurement data can also be saved on a data storage as a .CSV file for further processing.

MPP Tracking
(with Option PLI21)



The MPPT function acquires measurement data from a connected solar panel.
The function changes continuously between the MPPT process and a sweep process. During the MPPT process, the load controls the optimum global MPP found at the sweep process.

Model Overview 600 ... 1,400 W

Model (Order number)	PLI606C10	PLI1406C20	PLI2106C30
Maximum input voltage Vmax	60 V	60 V	60 V
Maximum current Imax [1]	10 A	20 A	30 A
Continuous power	600 W	1,200 W	1,800 W
Short-time power [2]	600 W	1,200 W	1,800 W
Voltage setting	0 ... 60 V	0 ... 60 V	0 ... 60 V
Current setting	0 ... 10 A	0 ... 20 A	0 ... 30 A
Resistance setting	200 mΩ ... 64.5 Ω	100 mΩ ... 32.2 Ω	67 mΩ ... 21.5 Ω
Power setting [3]	0 ... 600 W	0 ... 1,200 W	0 ... 1,800 W
Rise/fall time [4]	30 µs	30 µs	30 µs
Load terminals [5] rear/front	BPK4-30L / BPK4-30L	BPK4-30L / -	BPK4-30L / -
Power consumption	35 VA	55 VA	75 VA
Noise max. [6]	55 dB(A)	57 dB(A)	60 dB(A)
Weight ca.	9 kg	15 kg	17.5 kg
Dimensions [7] W x H x D Housing / installation depth	222 x 96 x 495 mm ½19", 2 U / 475 mm	444 x 96 x 490 mm 19", 2 U / 470 mm	444 x 96 x 490 mm 19", 2 U / 470 mm

Model (Order number)	PLI606	PLI612	PLI630	PLI660	PLI680
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	60 A	20 A	16 A	8 A	6 A
Continuous power	600 W	600 W	600 W	600 W	600 W
Short-time power [2]	1,200 W	1,200 W	900 W	600 W	600 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 60 A	0 ... 20 A	0 ... 16 A	0 ... 8 A	0 ... 6 A
Resistance setting	33 mΩ ... 10.7 Ω	100 mΩ ... 64.5 Ω	125 mΩ ... 201 Ω	250 mΩ ... 806 Ω	334 mΩ ... 1,433 Ω
Power setting [3]	0 ... 1,200 W	0 ... 1,200 W	0 ... 900 W	0 ... 600 W	0 ... 600 W
Rise/fall time [4]	50 µs	50 µs	30 µs	30 µs	20 µs
Load terminals [5] rear/front	FKS20/5-SM8 / BPK4-60L	BPK4-30L / BPK4-30L	BPK4-30L / BPK4-30L	BPK4-30L / BPK4-30L	BPK4-30L / BPK4-30L
Power consumption	35 VA	35 VA	35 VA	35 VA	35 VA
Noise max. [6]	55 dB(A)	55 dB(A)	55 dB(A)	55 dB(A)	55 dB(A)
Weight ca.	9 kg	9 kg	9 kg	9 kg	9 kg
Dimensions [7] W x H x D Housing / installation depth	222 x 96 x 555 mm ½19", 2 U / 530 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm

Model (Order number)	PLI1406	PLI1412	PLI1430	PLI1460	PLI1480
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	120 A	40 A	32 A	16 A	12 A
Continuous power	1,400 W	1,400 W	1,400 W	1,400 W	1,400 W
Short-time power [2]	2,800 W	2,800 W	2,100 W	1,400 W	1,400 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 120 A	0 ... 40 A	0 ... 32 A	0 ... 16 A	0 ... 12 A
Resistance setting	17 mΩ ... 5,37 Ω	50 mΩ ... 32.2 Ω	63 mΩ ... 100 Ω	125 mΩ ... 403 Ω	167 mΩ ... 716 Ω
Power setting [3]	0 ... 2,800 W	0 ... 2,800 W	0 ... 2,100 W	0 ... 1,400 W	0 ... 1,400 W
Rise/fall time [4]	50 µs	50 µs	30 µs	30 µs	25 µs
Load terminals [5] rear/front	FKS20/5-SM8 / -	BPK4-60L / -	BPK4-60L / -	BPK4-30L / -	BPK4-30L / -
Power consumption	55 VA	55 VA	55 VA	55 VA	55 VA
Noise max. [6]	57 dB(A)	57 dB(A)	57 dB(A)	57 dB(A)	57 dB(A)
Weight ca.	15 kg	15 kg	14.5 kg	15 kg	15 kg
Dimensions [7] W x H x D Housing / installation depth	444 x 96 x 545 mm 19", 2 U / 530 mm	444 x 96 x 485 mm 19", 2 U / 475 mm	444 x 96 x 485 mm 19", 2 U / 475 mm	444 x 96 x 485 mm 19", 2 U / 475 mm	444 x 96 x 485 mm 19", 2 U / 475 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 2,100 ... 4,800 W

Model (Order number)	PLI2106	PLI2112	PLI2130	PLI2160	PLI2180
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	180 A	60 A	48 A	24 A	18 A
Continuous power	2,100 W	2,100 W	2,100 W	2,100 W	2,100 W
Short-time power [2]	4,200 W	4,200 W	3,150 W	2,100 W	2,100 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 180 A	0 ... 60 A	0 ... 48 A	0 ... 24 A	0 ... 18 A
Resistance setting	12 mΩ ... 3.58 Ω	33 mΩ ... 21.5 Ω	42 mΩ ... 67.2 Ω	84 mΩ ... 268 Ω	112 mΩ ... 477 kΩ
Power setting [3]	0 ... 4,200 W	0 ... 4,200 W	0 ... 3,150 W	0 ... 2,100 W	0 ... 2,100 W
Rise/fall time [4]	50 µs	50 µs	30 µs	30 µs	40 µs
Load terminals [5] rear/front	FKS20/5-SM8	BPK4-60L	BPK4-60L	BPK4-30L	BPK4-30L
Power consumption	75 VA	75 VA	75 VA	75 VA	75 VA
Noise max. [6]	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)
Weight ca.	17.5 kg	17.5 kg	17.5 kg	17.5 kg	17.5 kg
Dimensions [7] W x H x D Housing / installation depth	444 x 96 x 545 mm 19", 2 U / 530 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm	222 x 96 x 490 mm ½19", 2 U / 475 mm

Model (Order number)	PLI3206	PLI3212	PLI3230	PLI3260	PLI3280
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	300 A	150 A	60 A	40 A	30 A
Continuous power	3,200 W	3,200 W	3,200 W	3,200 W	3,200 W
Short-time power [2]	6,400 W	6,400 W	4,800 W	3,200 W	3,200 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 300 A	0 ... 150 A	0 ... 60 A	0 ... 40 A	0 ... 30 A
Resistance setting	7 mΩ ... 2.15 Ω	14 mΩ ... 8.6 Ω	33 mΩ ... 53.7 Ω	50 mΩ ... 161 Ω	66.7 mΩ ... 286 Ω
Power setting [3]	0 ... 6,400 W	0 ... 6,400 W	0 ... 4,800 W	0 ... 3,200 W	0 ... 3,200 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS25/8-SM10	FKS25/8-SM10 with safety cover	BPK4-60L	BPK4-60L	BPK4-30L
Power consumption	140 VA	140 VA	140 VA	140 VA	140 VA
Noise max. [6]	70 dB(A)	70 dB(A)	70 dB(A)	70 dB(A)	70 dB(A)
Weight ca.	22.5 kg	22.5 kg	22.5 kg	20.5 kg	22.5 kg
Dimensions [7] W x H x D Housing / installation depth	444 x 141 x 535 mm 19", 3 U / 520 mm	444 x 141 x 545 mm 19", 3 U / 530 mm	444 x 141 x 490 mm 19", 3 U / 475 mm	444 x 141 x 490 mm 19", 3 U / 475 mm	444 x 141 x 490 mm 19", 3 U / 475 mm

Model (Order number)	PLI4806	PLI4812	PLI4230	PLI4260	PLI4280
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	450 A	225 A	90 A	60 A	45 A
Continuous power	4,800 W	4,800 W	4,200 W	4,200 W	4,200 W
Short-time power [2]	9,600 W	9,600 W	6,300 W	4,200 W	4,200 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 450 A	0 ... 225 A	0 ... 90 A	0 ... 60 A	0 ... 45 A
Resistance setting	5 mΩ ... 1.43 Ω	9 mΩ ... 5.73 Ω	23 mΩ ... 35.8 Ω	34 mΩ ... 107 Ω	45 mΩ ... 191 Ω
Power setting [3]	0 ... 9,600 W	0 ... 9,600 W	0 ... 6,300 W	0 ... 4,200 W	0 ... 4,200 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS25/10-SM10	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	190 VA	190 VA	190 VA	190 VA	190 VA
Noise max. [6]	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Weight ca.	39 kg	39 kg	39 kg	38 kg	39 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 237 x 550 mm 19", 5 U / 510 mm	482 x 237 x 635 mm 19", 5 U / 595 mm	482 x 237 x 635 mm 19", 5 U / 595 mm	482 x 237 x 635 mm 19", 5 U / 595 mm	482 x 237 x 635 mm 19", 5 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 5,600 ... 9,600 W

Model (Order number)	PLI6406	PLI6412	PLI5630	PLI5660	PLI5680
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	600 A	300 A	120 A	80 A	60 A
Continuous power	6,400 W	6,400 W	5,600 W	5,600 W	5,600 W
Short-time power [2]	12,800 W	12,800 W	8,400 W	5,600 W	5,600 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 600 A	0 ... 300 A	0 ... 120 A	0 ... 80 A	0 ... 60 A
Resistance setting	4 mΩ ... 1.07 Ω	7 mΩ ... 4.3 Ω	17 mΩ ... 26.8 Ω	25 mΩ ... 80.6 Ω	34 mΩ ... 143.3 Ω
Power setting [3]	0 ... 12,800 W	0 ... 12,800 W	0 ... 8,400 W	0 ... 5,600 W	0 ... 5,600 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	275 VA	275 VA	275 VA	275 VA	275 VA
Noise max. [6]	73 dB(A)	73 dB(A)	73 dB(A)	73 dB(A)	73 dB(A)
Weight ca.	56 kg	56 kg	56 kg	56 kg	56 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 370 x 550 mm 19", 8 U / 510 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm

Model (Order number)	PLI8006	PLI8012	PLI7030	PLI7060	PLI7080
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	750 A	375 A	150 A	100 A	75 A
Continuous power	8,000 W	8,000 W	7,000 W	7,000 W	7,000 W
Short-time power [2]	16,000 W	16,000 W	10,500 W	7,000 W	7,000 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 750 A	0 ... 375 A	0 ... 150 A	0 ... 100 A	0 ... 75 A
Resistance setting	3 mΩ ... 0.86 Ω	6 mΩ ... 3.44 Ω	14 mΩ ... 21.5 Ω	20 mΩ ... 64.5 Ω	27 mΩ ... 114.7 Ω
Power setting [3]	0 ... 16,000 W	0 ... 16,000 W	0 ... 10,500 W	0 ... 7,000 W	0 ... 7,000 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	320 VA	320 VA	320 VA	320 VA	320 VA
Noise max. [6]	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)
Weight ca.	57 kg	57 kg	57 kg	57 kg	57 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 370 x 550 mm 19", 8 U / 510 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm

Model (Order number)	PLI9606	PLI9612	PLI8430	PLI8460	PLI8480
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	900 A	450 A	180 A	120 A	90 A
Continuous power	9,600 W	9,600 W	8,400 W	8,400 W	8,400 W
Short-time power [2]	19,200 W	19,200 W	12,600 W	8,400 W	8,400 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 900 A	0 ... 450 A	0 ... 180 A	0 ... 120 A	0 ... 90 A
Resistance setting	3 mΩ ... 0.71 Ω	5 mΩ ... 2.86 Ω	12 mΩ ... 17.9 Ω	17 mΩ ... 53.7 Ω	23 mΩ ... 95.5 Ω
Power setting [3]	0 ... 19,200 W	0 ... 19,200 W	0 ... 12,600 W	0 ... 8,400 W	0 ... 8,400 W
Rise/fall time [4]	25 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	380 VA	380 VA	380 VA	380 VA	380 VA
Noise max. [6]	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)
Weight ca.	63 kg	63 kg	63 kg	63 kg	63 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 370 x 550 mm 19", 8 U / 510 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 9,800 ... 14,400 W

Model (Order number)	PLI11206	PLI11212	PLI9830	PLI9860	PLI9880
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,050 A	525 A	210 A	140 A	105 A
Continuous power	11,200 W	11,200 W	9,800 W	9,800 W	9,800 W
Short-time power [2]	22,400 W	22,400 W	14,700 W	9,800 W	9,800 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1,050 A	0 ... 525 A	0 ... 210 A	0 ... 140 A	0 ... 105 A
Resistance setting	2 mΩ ... 0.61 Ω	4 mΩ ... 2.45 Ω	10 mΩ ... 15.3 Ω	15 mΩ ... 46 Ω	19.1 mΩ ... 81.9 Ω
Power setting [3]	0 ... 22,400 W	0 ... 22,400 W	0 ... 14,700 W	0 ... 9,800 W	0 ... 9,800 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	450 VA	450 VA	450 VA	450 VA	450 VA
Noise max. [6]	75 dB(A)	75 dB(A)	75 dB(A)	75 dB(A)	75 dB(A)
Weight ca.	80 kg	80 kg	80 kg	74 kg	74 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 503 x 550 mm 19", 11 U / 510 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm

Model (Order number)	PLI12806	PLI12812	PLI11230	PLI11260	PLI11280
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,200 A	600 A	240 A	160 A	120 A
Continuous power	12,800 W	12,800 W	11,200 W	11,200 W	11,200 W
Short-time power [2]	25,600 W	25,600 W	16,800 W	11,200 W	11,200 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1.200 A	0 ... 600 A	0 ... 240 A	0 ... 160 A	0 ... 120 A
Resistance setting	2 mΩ ... 0.53 Ω	4 mΩ ... 2.15 Ω	9 mΩ ... 13.4 Ω	13 mΩ ... 40.3 Ω	17 mΩ ... 71.6 Ω
Power setting [3]	0 ... 25,600 W	0 ... 25,600 W	0 ... 16,800 W	0 ... 11,200 W	0 ... 11,200 W
Rise/fall time [4]	25 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	500 VA	500 VA	500 VA	500 VA	500 VA
Noise max. [6]	76 dB(A)	76 dB(A)	76 dB(A)	76 dB(A)	76 dB(A)
Weight ca.	82 kg	82 kg	82 kg	82 kg	82 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 503 x 550 mm 19", 11 U / 510 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm

Model (Order number)	PLI14406	PLI14412	PLI12630	PLI12660	PLI12680
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,350 A	675 A	270 A	180 A	135 A
Continuous power	14,400 W	14,400 W	12,600 W	12,600 W	12,600 W
Short-time power [2]	28,800 W	28,800 W	18,900 W	12,600 W	12,600 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1,350 A	0 ... 675 A	0 ... 270 A	0 ... 180 A	0 ... 135 A
Resistance setting	2 mΩ ... 47.7 mΩ	3 mΩ ... 1.91 Ω	8 mΩ ... 11.9 Ω	12 mΩ ... 35.8 Ω	15 mΩ ... 63.7 Ω
Power setting [3]	0 ... 28,800 W	0 ... 28,800 W	0 ... 18,900 W	0 ... 12,600 W	0 ... 12,600 W
Rise/fall time [4]	30 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	540 VA	540 VA	540 VA	540 VA	540 VA
Noise max. [6]	76 dB(A)	76 dB(A)	76 dB(A)	76 dB(A)	76 dB(A)
Weight ca.	89 kg	87 kg	89 kg	84 kg	89 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 503 x 550 mm 19", 11 U / 510 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 14,000 ... 19,200 W

Model (Order number)	PLI16006	PLI16012	PLI14030	PLI14060	PLI14080
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,500 A	750 A	300 A	200 A	150 A
Continuous power	16,000 W	16,000 W	14,000 W	14,000 W	14,000 W
Short-time power [2]	32,000 W	32,000 W	21,000 W	14,000 W	14,000 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1.500 A	0 ... 750 A	0 ... 300 A	0 ... 200 A	0 ... 150 A
Resistance setting	2 mΩ ... 0.430 Ω	3 mΩ ... 1.72 Ω	7 mΩ ... 10.7 Ω	10 mΩ ... 32.2 Ω	14 mΩ ... 57.3 Ω
Power setting [3]	0 ... 32,000 W	0 ... 32,000 W	0 ... 21,000 W	0 ... 14,000 W	0 ... 14,000 W
Rise/fall time [4]	30 µs	25 µs	25 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	600 VA	600 VA	600 VA	600 VA	600 VA
Noise max. [6]	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	104 kg	104 kg	104 kg	104 kg	104 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 637 x 552 mm 19", 14 U / 510 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm

Model (Order number)	PLI17606	PLI17612	PLI15430	PLI15460	PLI15480
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,650 A	825 A	330 A	220 A	165 A
Continuous power	17,600 W	17,600 W	15,400 W	15,400 W	15,400 W
Short-time power [2]	35,200 W	35,200 W	23,100 W	15,400 W	15,400 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1,650 A	0 ... 825 A	0 ... 330 A	0 ... 220 A	0 ... 165 A
Resistance setting	2 mΩ ... 0.391 Ω	3 mΩ ... 1.56 Ω	7 mΩ ... 9.77 Ω	10 mΩ ... 29.3 Ω	13 mΩ ... 52.1 Ω
Power setting [3]	0 ... 35,200 W	0 ... 35,200 W	0 ... 23,100 W	0 ... 15,400 W	0 ... 15,400 W
Rise/fall time [4]	30 µs	25 µs	25 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	675 VA	675 VA	675 VA	675 VA	675 VA
Noise max. [6]	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	105 kg	106 kg	105 kg	98 kg	105 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 637 x 550 mm 19", 14 U / 510 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm

Model (Order number)	PLI19206	PLI19212	PLI16830	PLI16860	PLI16880
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,800 A	900 A	360 A	240 A	180 A
Continuous power	19,200 W	19,200 W	16,800 W	16,800 W	16,800 W
Short-time power [2]	38,400 W	38,400 W	25,200 W	16,800 W	16,800 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1,800 A	0 ... 900 A	0 ... 360 A	0 ... 240 A	0 ... 180 A
Resistance setting	2 mΩ ... 0.358 Ω	3 mΩ ... 1.43 Ω	6 mΩ ... 8.96 Ω	9 mΩ ... 26.88 Ω	12 mΩ ... 47.7 Ω
Power setting [3]	0 ... 38,400 W	0 ... 38,400 W	0 ... 25,200 W	0 ... 16,800 W	0 ... 16,800 W
Rise/fall time [4]	30 µs	30 µs	25 µs	20 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	700 VA	700 VA	700 VA	700 VA	700 VA
Noise max. [6]	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	112 kg	112 kg	112 kg	112 kg	112 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 637 x 550 mm 19", 14 U / 510 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 18,200 ... 24,000 W

Model (Order number)	PLI20806	PLI20812	PLI18230	PLI18260	PLI18280
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	1,950 A	975 A	390 A	260 A	195 A
Continuous power	20,800 W	20,800 W	18.200 W	18,200 W	18,200 W
Short-time power [2]	41,600 W	41,600 W	27,300 W	18,200 W	18,200 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 1,950 A	0 ... 975 A	0 ... 390 A	0 ... 260 A	0 ... 195 A
Resistance setting	2 mΩ ... 0.33 Ω	3 mΩ ... 1.32 Ω	6 mΩ ... 8.27 Ω	8 mΩ ... 24.8 Ω	11 mΩ ... 44.1 Ω
Power setting [3]	0 ... 41.600 W	0 ... 41,600 W	0 ... 27,300 W	0 ... 18,200 W	0 ... 18,200 W
Rise/fall time [4]	30 µs	30 µs	25 µs	25 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	770 VA	770 VA	770 VA	770 VA	770 VA
Noise max. [6]	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	126 kg	126 kg	126 kg	126 kg	126 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 770 x 550 mm 19", 17 U / 510 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm

Model (Order number)	PLI22406	PLI22412	PLI19630	PLI19660	PLI19680
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	2,100 A	1,050 A	420 A	280 A	210 A
Continuous power	22,400 W	22,400 W	19,600 W	19,600 W	19,600 W
Short-time power [2]	44,800 W	44,800 W	29,400 W	19,600 W	19,600 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 2,100 A	0 ... 1050 A	0 ... 420 A	0 ... 280 A	0 ... 210 A
Resistance setting	1 mΩ ... 0.30 Ω	2 mΩ ... 1.22 Ω	5 mΩ ... 7.68 Ω	8 mΩ ... 23 Ω	10 mΩ ... 40.9 Ω
Power setting [3]	0 ... 44,800 W	0 ... 44,800 W	0 ... 29,400 W	0 ... 19,600 W	0 ... 19,600 W
Rise/fall time [4]	30 µs	30 µs	25 µs	25 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	810 VA	870 VA	870 VA	870 VA	870 VA
Noise max. [6]	78 dB(A)	78 dB(A)	78 dB(A)	78 dB(A)	78 dB(A)
Weight ca.	131 kg	131 kg	124 kg	131 kg	131 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 770 x 550 mm 19", 17 U / 510 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm

Model (Order number)	PLI24006	PLI24012	PLI21030	PLI21060	PLI21080
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	2,250 A	1,125 A	450 A	300 A	225 A
Continuous power	24,000 W	24,000 W	21,000 W	21,000 W	21,000 W
Short-time power [2]	48,000 W	48,000 W	31,500 W	21,000 W	21,000 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 2,250 A	0 ... 1,125 A	0 ... 450 A	0 ... 300 A	0 ... 225 A
Resistance setting	1 mΩ ... 0.28 Ω	2 mΩ ... 1.14 Ω	5 mΩ ... 7.16 Ω	7 mΩ ... 21.5 Ω	9 mΩ ... 38.2 Ω
Power setting [3]	0 ... 48.000 W	0 ... 48.000 W	0 ... 31,500 W	0 ... 21,000 W	0 ... 21,000 W
Rise/fall time [4]	35 µs	30 µs	25 µs	25 µs	20 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	875 VA	875 VA	875 VA	875 VA	875 VA
Noise max. [6]	78 dB(A)	78 dB(A)	78 dB(A)	78 dB(A)	78 dB(A)
Weight ca.	136 kg	136 kg	136 kg	136 kg	136 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 770 x 550 mm 19", 17 U / 510 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm	482 x 770 x 635 mm 19", 17 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Model Overview 22,400 ... 28,800 W

Model (Order number)	PLI25606	PLI25612	PLI22430	PLI22460	PLI22480
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	2,400 A	1,200 A	480 A	320 A	240 A
Continuous power	25,600 W	25,600 W	22,400 W	22,400 W	22,400 W
Short-time power [2]	51,200 W	51,200 W	33,600 W	22,400 W	22,400 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 2,400 A	0 ... 1,200 A	0 ... 480 A	0 ... 320 A	0 ... 240 A
Resistance setting	1 mΩ ... 0.26 Ω	2 mΩ ... 1.07 Ω	5 mΩ ... 6.72 Ω	7 mΩ ... 20.1 Ω	9 mΩ ... 35.8 Ω
Power setting [3]	0 ... 51,200 W	0 ... 51,200 W	0 ... 33,600 W	0 ... 22,400 W	0 ... 22,400 W
Rise/fall time [4]	35 µs	30 µs	30 µs	25 µs	30 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	900 VA	900 VA	900 VA	900 VA	900 VA
Noise max. [6]	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight ca.	142 kg	142 kg	142 kg	142 kg	142 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 904 x 550 mm 19", 20 U / 510 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm

Model (Order number)	PLI27206	PLI27212	PLI23830	PLI23860	PLI23880
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	2,550 A	1,275 A	510 A	340 A	255 A
Continuous power	27,200 W	27,200 W	23,800 W	23,800 W	23,800 W
Short-time power [2]	54,400 W	54,400 W	35,700 W	23,800 W	23,800 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 2,550 A	0 ... 1,275 A	0 ... 510 A	0 ... 340 A	0 ... 255 A
Resistance setting	1 mΩ ... 0.25 Ω	2 mΩ ... 1.01 Ω	4 mΩ ... 6.32 Ω	6 mΩ ... 18.9 Ω	8 mΩ ... 33.7 Ω
Power setting [3]	0 ... 54,400 W	0 ... 54.400 W	0 ... 35,700 W	0 ... 23,800 W	0 ... 23,800 W
Rise/fall time [4]	35 µs	30 µs	30 µs	25 µs	30 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	1,000 VA	1,000 VA	1,000 VA	1,000 VA	1,000 VA
Noise max. [6]	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight ca.	152 kg	152 kg	152 kg	152 kg	152 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 904 x 550 mm 19", 20 U / 510 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm

Model (Order number)	PLI28806	PLI28812	PLI25230	PLI25260	PLI25280
Maximum input voltage Vmax	60 V	120 V	300 V	600 V	800 V
Maximum current Imax [1]	2,700 A	1,350 A	540 A	360 A	270 A
Continuous power	28,800 W	28,800 W	25,200 W	25,200 W	25,200 W
Short-time power [2]	57,600 W	57,600 W	37,800 W	25,200 W	25,200 W
Voltage setting	0 ... 60 V	0 ... 120 V	0 ... 300 V	0 ... 600 V	0 ... 800 V
Current setting	0 ... 2,700 A	0 ... 1,350 A	0 ... 540 A	0 ... 360 A	0 ... 270 A
Resistance setting	1 mΩ ... 0.23 Ω	2 mΩ ... 0.95 Ω	4 mΩ ... 5.97 Ω	6 mΩ ... 17.9 Ω	8 mΩ ... 31.8 Ω
Power setting [3]	0 ... 57,600 W	0 ... 57,600 W	0 ... 37,800W	0 ... 25,200 W	0 ... 25,200 W
Rise/fall time [4]	35 µs	30 µs	30 µs	25 µs	30 µs
Load terminals [5] rear/front	FKS40/12-SM12	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	1,050 VA	1,050 VA	1,050 VA	1,050 VA	1,050 VA
Noise max. [6]	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight ca.	160 kg	160 kg	160 kg	155 kg	160 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 904 x 550 mm 19", 20 U / 510 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm	482 x 904 x 635 mm 19", 20 U / 595 mm

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

PLI Series

Models upt to 1,200 V

Model (Order number)	PLI24K12HV	PLI36K12HV	PLI48K12HV	PLI60K12HV	PLI72K12HV
Maximum input voltage Vmax	1,200 V	1,200 V	1,200 V	1,200 V	1,200 V
Maximum current Imax [1]	12 A	18 A	24 A	30 A	36 A
Continuous power	2,400 W	3,600 W	4,800 W	6,000 W	7,200 W
Short-time power [2]	2,400 W	3,600 W	4,800 W	6,000 W	7,200 W
Voltage setting	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V
Current setting	0 ... 12 A	0 ... 18 A	0 ... 24 A	0 ... 30 A	0 ... 36 A
Resistance setting	167 mΩ ... 1075 Ω	112 mΩ ... 716 Ω	84 mΩ ... 537 Ω	67 mΩ ... 430 Ω	56 mΩ ... 358 Ω
Power setting [3]	0 ... 2.400 W	0 ... 3.600 W	0 ... 4.800 W	0 ... 6.000 W	0 ... 7.200 W
Rise/fall time [4]	20 µs	20 µs	20 µs	20 µs	20 µs
Load terminals [5] rear/front	SBU4-32	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	140 VA	190 VA	275 VA	320 VA	380 VA
Noise max. [6]	70 dB(A)	71 dB(A)	73 dB(A)	74 dB(A)	74 dB(A)
Weight ca.	22.5 kg	39 kg	56 kg	57 kg	63 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 141 x 635 mm 19", 3 U / 595 mm	482 x 237 x 635 mm 19", 5 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm	482 x 370 x 635 mm 19", 8 U / 595 mm

Model (Order number)	PLI84K12HV	PLI96K12HV	PLI108K12HV	PLI120K12HV	PLI132K12HV
Maximum input voltage Vmax	1,200 V	1,200 V	1,200 V	1,200 V	1,200 V
Maximum current Imax [1]	42 A	48 A	54 A	60 A	66 A
Continuous power	8,400 W	9,600 W	10,800 W	12,000 W	13,200 W
Short-time power [2]	8,400 W	9,600 W	10,800 W	12,000 W	13,200 W
Voltage setting	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V	0 ... 1,200 V
Current setting	0 ... 42 A	0 ... 48 A	0 ... 54 A	0 ... 60 A	0 ... 66 A
Resistance setting	48 mΩ ... 307 Ω	42 mΩ ... 268 Ω	38 mΩ ... 238 Ω	34 mΩ ... 215 Ω	31 mΩ ... 195 Ω
Power setting [3]	0 ... 8,400 W	0 ... 9,600 W	0 ... 10,800 W	0 ... 12,000 W	0 ... 13,200 W
Rise/fall time [4]	25 µs	25 µs	25 µs	25 µs	25 µs
Load terminals [5] rear/front	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	450 VA	500 VA	540 VA	600 VA	675 VA
Noise max. [6]	75 dB(A)	76 dB(A)	76 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	74 kg	82 kg	85 kg	104 kg	98 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 503 x 635 mm 19", 11 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm	482 x 637 x 635 mm 19", 14 U / 595 mm

Model (Order number)	PLI144K12HV
Maximum input voltage Vmax	1,200 V
Maximum current Imax [1]	72 A
Continuous power	14,400 W
Short-time power [2]	14,400 W
Voltage setting	0 ... 1,200 V
Current setting	0 ... 72 A
Resistance setting	28 mΩ ... 179 Ω
Power setting [3]	0 ... 14,400 W
Rise/fall time [4]	25 µs
Load terminals [5] rear/front	FKS25/10-SM10 with safety cover
Power consumption	700 VA
Noise max. [6]	77 dB(A)
Weight ca.	112 kg
Dimensions [7] W x H x D Housing / installation depth	482 x 637 x 635 mm 19", 14 U / 595 mm

You need a load with higher power?
Ask us!

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

300 V Models with Extended Current Range

Model (Order number)	PLI3230EC	PLI4230EC	PLI5630EC	PLI7030EC	PLI8430EC	PLI9830EC
Maximum input voltage Vmax	300 V	300 V	300 V	300 V	300 V	300 V
Maximum current Imax [1]	208 A	312 A	416 A	520 A	624 A	728 A
Continuous power	3,200 W	4,200 W	5,600 W	7,000 W	8,400 W	9,800 W
Short-time power [2]	3,200 W	4,200 W	5,600 W	7,000 W	8,400 W	9,800 W
Voltage setting	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V
Current setting	0 ... 208 A	0 ... 312 A	0 ... 416 A	0 ... 520 A	0 ... 624 A	0 ... 728 A
Resistance setting	25 mΩ ... 15.5 Ω	17 mΩ ... 10.3 Ω	13 mΩ ... 7.75 Ω	10 mΩ ... 6.2 Ω	9 mΩ ... 5.16 Ω	7 mΩ ... 4.3 Ω
Power setting [3]	0 ... 3,200 W	0 ... 4,200 W	0 ... 5,600 W	0 ... 7,000 W	0 ... 8,400 W	0 ... 9,800 W
Rise/fall time [4]	30 µs	30 µs	30 µs	30 µs	30 µs	30 µs
Load terminals [5] rear/front	FKS25/8-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover
Power consumption	140 VA	190 VA	275 VA	320 VA	380 VA	450 VA
Noise max. [6]	70 dB(A)	71 dB(A)	73 dB(A)	74 dB(A)	74 dB(A)	75 dB(A)
Weight ca.	22.5 kg	39 kg	56 kg	59 kg	63 kg	80 kg
Dimensions [7] W x H x D (mm) Housing / installation depth (mm)	482 x 141 x 535 19", 3 U / 520	482 x 237 x 550 19", 5 U / 510	482 x 370 x 635 19", 8 U / 595	482 x 370 x 635 19", 8 U / 595	482 x 370 x 635 19", 8 U / 595	482 x 370 x 635 19", 8 U / 595

Model (Order number)	PLI11230EC	PLI12630EC	PLI14030EC	PLI15430EC	PLI16830EC	PLI18230EC
Maximum input voltage Vmax	300 V	300 V	300 V	300 V	300 V	300 V
Maximum current Imax [1]	832 A	936 A	1,040 A	1,144 A	1,248 A	1,352 A
Continuous power	11,200 W	12,600 W	14,000 W	15,400 W	16,800 W	18,200 W
Short-time power [2]	11,200 W	12,600 W	14,000 W	15,400 W	16,800 W	18,200 W
Voltage setting	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V
Current setting	0 ... 832 A	0 ... 936 A	0 ... 1,040 A	0 ... 1,144 A	0 ... 1,248 A	0 ... 1,352 A
Resistance setting	7 mΩ ... 3.87 Ω	6 mΩ ... 3.44 Ω	5 mΩ ... 3.10 Ω	5 mΩ ... 2.81 Ω	5 mΩ ... 2.58 Ω	4 mΩ ... 2.38 Ω
Power setting [3]	0 ... 11,200 W	0 ... 12,600 W	0 ... 14,000 W	0 ... 15,400 W	0 ... 16,800 W	0 ... 18,200 W
Rise/fall time [4]	30 µs	30 µs	30 µs	30 µs	30 µs	30 µs
Load terminals [5] rear/front	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover
Power consumption	500 VA	540 VA	600 VA	675 VA	700 VA	770 VA
Noise max. [6]	76 dB(A)	76 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	82 kg	87 kg	104 kg	105 kg	112 kg	126 kg
Dimensions [7] W x H x D (mm) Housing / installation depth (mm)	482 x 503 x 635 19", 11 U / 5095	482 x 503 x 635 19", 11 U / 5095	482 x 637 x 635 19", 14 U / 595	482 x 637 x 635 19", 14 U / 595	482 x 637 x 635 19", 14 U / 595	482 x 770 x 635 19", 17 U / 595

Model (Order number)	PLI19630EC	PLI21030EC	PLI22430EC	PLI23830EC	PLI25230EC
Maximum input voltage Vmax	300 V	300 V	300 V	300 V	300 V
Maximum current Imax [1]	1,456 A	1,560 A	1,664 A	1,768 A	1,872 A
Continuous power	19,600 W	21,000 W	22,400 W	23,800 W	25,200 W
Short-time power [2]	19,600 W	21,000 W	22,400 W	23,800 W	25,200 W
Voltage setting	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V	0 ... 300 V
Current setting	0 ... 1,456 A	0 ... 1,560 A	0 ... 1,664 A	0 ... 1,768 A	0 ... 1,872 A
Resistance setting	4 mΩ ... 2.21 Ω	4 mΩ ... 2.0 Ω	3 mΩ ... 1.93 Ω	3 mΩ ... 1.82 Ω	3 mΩ ... 1.72 Ω
Power setting [3]	0 ... 19,600 W	0 ... 21,000 W	0 ... 22,400 W	0 ... 23,800 W	0 ... 25,200 W
Rise/fall time [4]	30 µs	30 µs	30 µs	30 µs	30 µs
Load terminals [5] rear/front	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover
Power consumption	810 VA	875 VA	900 VA	1000 VA	1050 VA
Noise max. [6]	78 dB(A)	78 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight ca.	131 kg	136 kg	142 kg	152 kg	160 kg
Dimensions [7] W x H x D(mm) Housing / installation depth (mm)	482 x 770 x 635 19", 17 U / 595	482 x 770 x 635 19", 17 U / 595	482 x 904 x 635 19", 20 U / 595	482 x 904 x 635 19", 20 U / 595	482 x 904 x 635 19", 20 U / 595

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

600 V Models with Extended Current Range

Model (Order number)	PLI3260EC	PLI4260EC	PLI5660EC	PLI7060EC	PLI8460EC	PLI9860EC
Maximum input voltage Vmax	600 V	600 V	600 V	600 V	600 V	600 V
Maximum current Imax [1]	104 A	156 A	208 A	260 A	312 A	364 A
Continuous power	3,200 W	4,200 W	5,600 W	7,000 W	8,400 W	9,800 W
Short-time power [2]	3,200 W	4,200 W	5,600 W	7,000 W	8,400 W	9,800 W
Voltage setting	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V
Current setting	0 ... 104 A	0 ... 156 A	0 ... 208 A	0 ... 260 A	0 ... 312 A	0 ... 364 A
Resistance setting	49 mΩ ... 62.0 Ω	33 mΩ ... 41.3 Ω	25 mΩ ... 31 Ω	20 mΩ ... 24.8 Ω	17 mΩ ... 20.6 Ω	14 mΩ ... 17.7 Ω
Power setting [3]	0 ... 3,200 W	0 ... 4,200 W	0 ... 5,600 W	0 ... 7,000 W	0 ... 8,400 W	0 ... 9,800 W
Rise/fall time [4]	30 µs	30 µs	30 µs	30 µs	30 µs	30 µs
Load terminals [5] rear/front	FKS25/8-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover
Power consumption	140 VA	190 VA	275 VA	320 VA	380 VA	450 VA
Noise max. [6]	70 dB(A)	71 dB(A)	73 dB(A)	74 dB(A)	74 dB(A)	75 dB(A)
Weight ca.	20.5 kg	38 kg	56 kg	57 kg	63 kg	74 kg
Dimensions [7] W x H x D (mm) Housing / installation depth (mm)	482 x 141 x 535 19", 3 U / 520	482 x 237 x 550 19", 5 U / 510	482 x 370 x 635 19", 8 U / 595	482 x 370 x 635 19", 8 U / 595	482 x 370 x 635 19", 8 U / 595	482 x 503 x 635 19", 11 U / 595

Model (Order number)	PLI11260EC	PLI12660EC	PLI14060EC	PLI15460EC	PLI16860EC	PLI18260EC
Maximum input voltage Vmax	600 V	600 V	600 V	600 V	600 V	600 V
Maximum current Imax [1]	416 A	468 A	520 A	572 A	624 A	676 A
Continuous power	11,200 W	12,600 W	14,000 W	15,400 W	16,800 W	18,200 W
Short-time power [2]	11,200 W	12,600 W	14,000 W	15,400 W	16,800 W	18,200 W
Voltage setting	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V
Current setting	0 ... 416 A	0 ... 468 A	0 ... 520 A	0 ... 572 A	0 ... 624 A	0 ... 676 A
Resistance setting	13 mΩ ... 15. Ω	11 mΩ ... 13.7 Ω	10 mΩ ... 12.4 Ω	9 mΩ ... 11.2 Ω	8 mΩ ... 10.3 Ω	8 mΩ ... 9.5 Ω
Power setting [3]	0 ... 11,200 W	0 ... 12,600 W	0 ... 14,000 W	0 ... 15,400 W	0 ... 16,800 W	0 ... 18,200 W
Rise/fall time [4]	30 µs	30 µs	30 µs	30 µs	30 µs	30 µs
Load terminals [5] rear/front	FKS25/10-SM10 with safety cover	FKS25/10-SM10 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover
Power consumption	500 VA	540 VA	600 VA	675 VA	700 VA	770 VA
Noise max. [6]	76 dB(A)	76 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Weight ca.	82 kg	89 kg	104 kg	105 kg	112 kg	126 kg
Dimensions [7] W x H x D (mm) Housing / installation depth (mm)	482 x 503 x 635 19", 11 U / 595	482 x 503 x 635 19", 11 U / 595	482 x 637 x 635 19", 14 U / 595	482 x 637 x 635 19", 14 U / 595	482 x 637 x 635 19", 14 U / 595	482 x 770 x 635 19", 17 U / 595

Model (Order number)	PLI19660EC	PLI21060EC	PLI22460EC	PLI23860EC	PLI25260EC
Maximum input voltage Vmax	600 V	600 V	600 V	600 V	600 V
Maximum current Imax [1]	728 A	780 A	832 A	884 A	936 A
Continuous power	19,600 W	21,000 W	22,400 W	23,800 W	25,200 W
Short-time power [2]	19,600 W	21,000 W	22,400 W	23,800 W	25,200 W
Voltage setting	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V	0 ... 600 V
Current setting	0 ... 728 A	0 ... 780 A	0 ... 832 A	0 ... 884 A	0 ... 936 A
Resistance setting	7 mΩ ... 8.86 Ω	7 mΩ ... 8.27 Ω	6 mΩ ... 7.75 Ω	6 mΩ ... 7.29 Ω	6 mΩ ... 6.89 Ω
Power setting [3]	0 ... 19,600 W	0 ... 21,000 W	0 ... 22,400 W	0 ... 23,800 W	0 ... 25,200 W
Rise/fall time [4]	30 µs	40 µs	40 µs	50 µs	50 µs
Load terminals [5] rear/front	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover	FKS40/12-SM12 with safety cover
Power consumption	810 VA	875 VA	900 VA	1000 VA	1050 VA
Noise max. [6]	78 dB(A)	78 dB(A)	80 dB(A)	80 dB(A)	80 dB(A)
Weight ca.	131 kg	136 kg	142 kg	152 kg	155 kg
Dimensions [7] W x H x D (mm) Housing / installation depth (mm)	482 x 770 x 635 19", 17 U / 595	482 x 770 x 635 19", 17 U / 595	482 x 904 x 635 19", 20 U / 595	482 x 904 x 635 19", 20 U / 595	482 x 904 x 635 19", 20 U / 595

1. Each current range of a higher voltage class in the same power class can be chosen as special current range.
2. Level and duration of short-time power see diagram in technical data at page 45.
3. The setting range reaches up to the short-time power.
4. Rise and fall times are defined from 10 ... 90 % and 90 ... 10 % of maximum current at "fast" regulation speed (constant current mode, Tolerance ±20 %). Rise and fall time in „medium" regulation speed: ca. 150 µs, „slow": ca. 2 ms.
5. Description of available terminals starting at page 101.
6. Measured at the front in distance of 1 m.
7. Device height incl. feet, largest width and depth. Installation depth without wiring. 1 U = 44.45 mm. Detailed dimensions by means of 3D models at www.hoecherl-hackl.com/downloads.

Options (Summary) and Accessories

Order number	Article	Description
52-200-001-17	PLI02	GPIB interface
56-003-000-17	PLI21	MPPT function with unlock code
67-004-030-17	K-RS-SNM 9-9	RS-232 cable (nullmodem cable) PLI series
53-100-006-17	PLI06-N	Galvanically isolated I/O port instead of standard I/O port
53-100-005-17	PLI06	Galvanically isolated I/O port for retrofitting of existing device
64-303-000-17	PLI10	19" installation kit for 1 device PLI6xx
64-304-000-17	PLI11	19" installation kit for 2 devices PLI6xx
64-305-000-17	PLI12	19" installation kit for 1 device PLI14XX / PLI21XX
64-306-000-17	PLI13	19" installation kit for 1 device PLI32XX
64-400-000-17	PLI14	Castors for devices starting at 5 U (1 set = 4 devices)
63-000-001-17	PLI17	Switch box external load activation via I/O port
66-001-000-17	PLI18	12 VDC mains supply, reverse polarity protection, 4 mm pole terminals (only for PLI14xx)
65-002-000-17	FCC-PLIxx	Factory Calibration Certificate
64-407-000-17	SAB-PLI-3B	Additional safety cover for load terminals for devices with 3 U (production series B)
64-403-000-17	SAB-PLI-5	Additional safety cover for load terminals for devices with 5 U
67-036-020-17	K-MS-PLI	Master-Slave cable I/O port (2 m)
67-037-020-17	K-MS-CAN	Master-Slave cable CAN (2 m)
49-001-000-17	SX	Modified setting range for PLI Serie only after consulting H&H
49-002-000-17	SSX	Custom-specific setting range only after consulting H&H
		Load cables see starting at page 105

PLI Series Technical Data

Accuracy of setting		
	of setting	of corresponding range
Voltage	±0.2 %	±0.05 %
Current	±0.2 %	±0.05 %
Resistance (t 5 % to 100 % of voltage range)	±1.4 %	±0.3 % of current range
Power (at V and I > 30 % of range) (at V or I < 30 % of range)	±0.35 % ±0.7 %	±0.1 % ±0.25 %
Resolution	14 bits	
Accuracy of adjustable settings		
	of setting	of corresponding range
Overcurrent protection	±1.4 %	±0.3 %
Undervoltage protection	±1.4 %	±0.3 %
Resolution	12 bits	
Accuracy of display/measurement slow		
	of measured value (real value)	of corresponding range
Voltage	±0.01 %	±0.005 %
Current	±0.2 %	±0.05 %
Resistance	is calculated from current and voltage	
Power	is calculated from current and voltage	
Resolution	23 bits	
Sampling rate	250 ms, not triggerable	
Accuracy of measurement fast		
	of measured value (real value)	of corresponding range
Voltage	±0.1 %	±0.05 %
Current	±0.2 %	±0.1 %
Resistance	calculated from voltage and current values	
Power	calculated from voltage and current values	
Resolution	16 Bit	
Sampling rate	200 µs ... 1000 s	
Accuracy of trigger voltage and current measurement		
Voltage	±1 % of range	
Current	±1 % of range	
Dynamic function (LIST)		
No. of load levels	max. 300, ith ramp and dwell time setting	
	min.	max.
Dwell time	200 µs	1000 s
Ramp time	0 s	1000 s
Resolution	200 µs	
Accuracy of the setting times	±0.02 %	
Delay at triggered start	max. 300 µs	

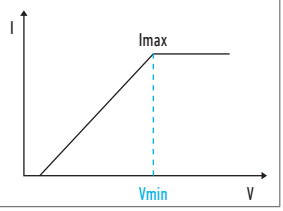
Data acquisition	
to external USB flash drive	
Sampling rate	0.5 to 30 s, resolution 0.1 s
Measurement data	timestamp, voltage, current
No. of measurement points	limited by USB memory capacity
File format	.csv
to internal memory	
Sampling rate	200 µs ... 1000 s, resolution 200 µs, synchronized with dynamic function
Measurement data	timestamp, voltage, current
No. of measurement points	max. 40,000
Settings memories	
No. of user settings	9, selectable (incl. programmed list) 1 for last device settings at power-off or power fail

I/O port: accuracy of analog control 0 ... 10 V		
	of setting	of corresponding range
Voltage	±0.2 %	±0.1 %
Current	±0.2 %	±0.1 %
Overcurrent protection	±1 %	±0.4 %
Undervoltage protection	±1 %	±0.4 %
	Input resistance of analog inputs >10 kΩ	
I/O port: accuracy of analog monitor outputs 0 ... 10 V		
	of analog signal of real value	offset voltage
Voltage	±0.2 %	±15 mV
Current	±0.2 %	±15 mV
	load capacity minimal 2 kΩ	
I/O port: permissible potentials		
	standard I/O port	isolated I/O port (option PLI06)
GND - neg. load input	max. 2 V [1)]	max. 800 V [1)]
GND - PE	max. 125 V [1)]	max. 125 V [1)]
I/O port: control outputs and inputs		
Outputs	status load input (on/off) overload (OV, OCP, OPP, OTP) trigger output programmable output (by SCPI command)	
Output level	selectable, 3.3 V, 5 V, 12 V or externally programmable up to 30 V	
Control inputs	load input on/off operating mode selection trigger input digital input control input (activates analog control signals) Remote shut-down	
input level	3 ... 30 V	

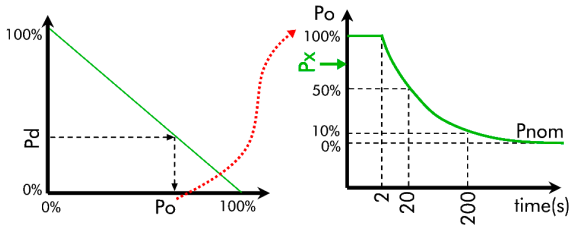
The specified accuracies refer to an ambient temperature of 23 ±5 °C. The specified accuracies are valid when the unit is connected to undisturbed voltages (ripple and noise < 0.1 %). At voltages with higher disturbance values the accuracy can change for the worse.

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

Technical Data (continued)

Input		
Input resistance	> 50 kΩ when load input is off diode function at reverse polarity up to nominal current	
Input capacity	ca. 2 µF/600 W	
Parallel operation	up to 5 devices in Master-Slave operation	
Max. input voltage Vmax	see model overview	
Min. input voltage Vmin for max. current Imax	models up to 120 V: 1.2 V models from 300 V: 2 V PLIxxxxEC: 5 V	

Input: permissible potentials		
	standard I/O port	isolated I/O port (option PLI06)
neg. load input - PE	max. 125 V [1]	max. 800 V [1]
Power		
Continuous power	see model overview (at Ta = 21 °C)	
Derating	-1,2 %/°C for Ta > 21 °C	
Overload capability (short-time power)	see model overview The max. possible overload Po depends on the temperature of the device and therefore on the previously consumed continuous power Pd. The possible overload duration depends on the value of the overload Px.	



Protection and monitoring	
Protective devices	overcurrent overpower overtemperature
Monitoring	overvoltage indication reverse polarity indication undervoltage indication (if the input voltage is too low for the set current)
Terminals	
Load input	see model overview
Sense	PH2/7.62-BU16, see starting at page 101

Operating conditions	
Operating temperature	5 ... 40 °C
Stock temperature	-25 ... 65 °C
Max. operating height	2,000 m above sea level
Pollution degree	2
Overvoltage category of mains	II
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. weight	see model overview
Supply voltage (mains)) with option PLI18	115/230 V AC (±10 %), selectable, 50 ... 60 Hz 11 ... 15 V DC
Power consumption	see model overview

Housing	
Color Front Rear Top, side panels	 RAL7035 (light grey) stainless steel RAL7037 (dusty grey)
Safety and EMC	
Protection class	1
Protection	IP20
Measuring category	O (CAT I according to EN61010:2004)
Electrical safety	DIN EN 61010-1 DIN EN 61010-2-030
EMV	DIN EN 61326-1 DIN EN 55011 DIN EN 61000-3-2 DIN EN 61000-3-3
Calibration, warranty	
FCC-PLIxx	Factory Calibration Certificate, twice for free
Warranty	2 years

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