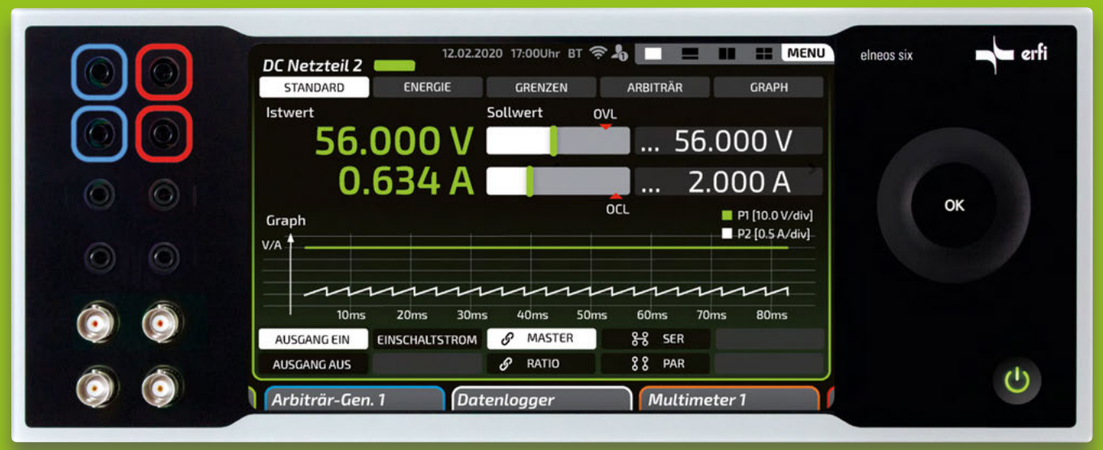
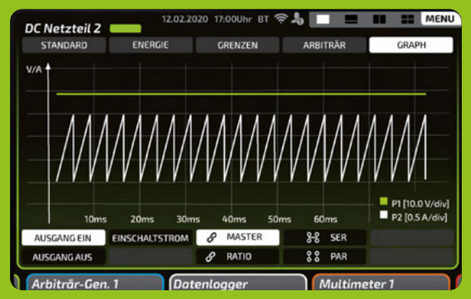


Standard view with live graphics display: *The large 8-inch display shows the measured values graphically in parallel at any time.*



Data logger and graphic display of measured values: *Visualisations and real-time recordings of freely programmable ramp functions for tracking voltage and current curves. Dynamically expandable in x/y direction by 2-finger spread gesture.*

Limiter: *The limiter allows the free monitoring of voltage and current ranges in conjunction with limits. Each state can be coupled with an acoustic signal and a freely selectable digital output.*

Ramp generator: *Owing the 8-inch display, any sequences can be entered directly without any programming. This is a decisive advantage for daily work. Alternatively, the sequences can be transferred and started via the interface.*

Energy meter: *The new control power supplies record the power graphically and numerically at any time.*

DC Precision Regulating Power Supply, linear

Oder no. EL6.LDC.032.01 to **EL6.LDC.100.06**

Dynamic control power supplies

The control units are a comprehensive innovation with the highest standards of accuracy, dynamics and quality. A powerful microprocessor system on the control card enables autonomous operation, independent of the main processor system of the control centre. This is a real-time system. The new control card of the unit has outstanding dynamics with which powerful arbitrary signals can be generated up to the kHz range.

New technical control data

The measuring accuracy of 24 bit resolution, the control times of a few microseconds and the control deviations in the microampere range, now define the current benchmark in the industry. The outstanding control dynamics open up new possibilities for the generation of fast arbitrary signals. A further highlight is the square-wave generator up to 1 kHz with resistive load and up to approx. 330 Hz with 100% modulation of the signal.

Technical data and features | **(order data preferred types p. 88-89 | device p. 95-96)**

Editable ramp function on the 8-inch display
Direct convenient input of ramp parameters on the large 8-inch multi-touch display. Input of:
1. Voltage ramps with current limitation
2. Current ramps with voltage limitation

Readout of all device statuses
All unit statuses can be read out via the interfaces. The states are displayed directly in the *highlink Power* control software. This query option can also be very useful in the area of test systems.

Constant voltage and constant current source
Automatic change of the operating modes CV and CC – *elneos six* serves as a voltage source as well as a current source. These features allow the generation of voltage as well as current ramps.

Preset function (Output-OFF/ON)
Function for switching the output on or off. If the output is deactivated, the maximum current can be changed. After the output is switched on, the new maximum current value becomes active – the circuit no longer has to be manually disconnected.

Setting accuracy
16 Bit D/A converter (1mV, 1mA);

Measurement accuracy
24 Bit A/D converter (0,01 mV; 0,01 mA);

Voltage ranges
0-66 V (depending on model);

Current ranges
0-20 A (depending on model);

Temperature coefficient
Voltage: 0,002%/K
Current: 0,008%/K;

Residual ripple
Voltage: 100 µVeff
Current: 200 µAeff;

Integrated square wave generator
up to 1 kHz with resistive load;

Control deviation 1
Voltage: 300 µV/A,
Current: 150 µA/V (with load change 0-100 %);

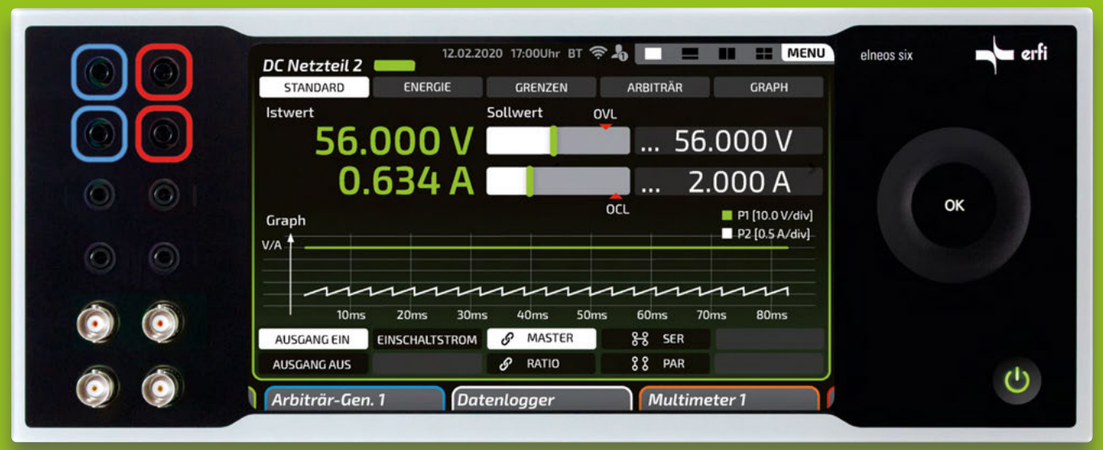
Control deviation 2
Voltage & current: <0,01 % (10% for mains change);

Staged pre-control
New software-controlled winding changeover with minimal heat generation;

Settling time
12 µs Load step 0-100%;

Subject to technical and formal changes.

More detailed information in the Technical Compendium from page 148-149.



2/3 screen mode: *Control unit in the main screen, with power display and horizontal sliders for coarse adjustment.*

2/3 screen mode: *Control setting unit in small window with numeric keypad. Even in the small window, the units can be operated and setpoints can be entered.*

2/3 screen mode: *After entering the values, the device bar can be easily moved by swiping gestures on the display or by 3D gestures (Smart scroll). The devices glide elegantly horizontally across the screen.*

Menu bar and dynamic screen scaling: *When the menu bar is displayed, the screen dynamically collapses and remains completely legible and operable during the display. Disturbing cross-fades of menus are thus completely avoided.*

Connection panel and screen scaling: *When the connection panels are displayed, all screens move to the right and adapt to the size. The values in the connection panel of the current assignment are clearly visible.*

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DC Precision Regulating Power Supply, linear

Oder no. EL6.LDC.032.01 to **EL6.LDC.100.06**

Special features	(order data preferred types p. 88-89 | device p. 95-96)
Precision setpoint setting of current and voltage through high-quality 16-bit D/A converter *Resolution:* I_{Soll} approx. 1 mA with current range 20 A U_{Soll} approx. 1 mV at voltage range 66 V	**Precision measuring device** of current and voltage through precision 24 bit A / D converter *Resolution:* I_{Ist} approx. 0.01 mA and current range 5 A U_{Ist} approx. 0.01 mV at voltage range 66 V
Fast and efficient stage pre-control The power loss is greatly reduced by a new software-based winding circuit. The multistage pre-regulation works depending on the output voltage and reduces the voltage via the series transistor. With this technology, the advantages of a power regulation power supply unit can be used with the highest accuracy and without the previous disadvantage of heat generation. The devices are therefore compact and have best temperature coefficients. The service life is increased and the environment is not affected. This means that several functions and devices can be integrated in a very small space. *Arbitrary signals up to the kHz range:* When the output is activated and a load is connected, the output is stably regulated within 12 µs. This creates the prerequisite for high-energy arbitrary signals in the kHz range.	**Value acquisition through real-time measurement** Ramp and arbitrary functions are time-critical and complex processes. *elneos six*'s circuitry enables it to process these processes autonomously within the control card, so that the transmission speed of the interface has no influence on these processes. The new measurement and control card has a high level of intrinsic intelligence and enables real-time measurements of current and voltage. *Maximum measuring speed:* Depending on the unit configuration, approx. 10 to 20 measurements per second at the highest resolution (24 bit). **Safe-Guard function (safety shutdown)** By touching with the 3-finger gesture, the unit immediately switches off all outputs. This way, dangerous situations can be avoided in time. **Safe Start function (safety start)** Through a digital interface, outputs can be switched on at a desired time.
Programmable OVL and OCL function *OVL = Over Voltage Limit* *OCL = Over Current Limit* The values can be set by entering them on the display or by remote control. The user can then only move within the specified limits.	**Data logger** An integrated data logger enables the storage of up to 100,000 measured values per channel. The 5 channels can simultaneously visualise 5 different measured values. Up to 500,000 measured values can be stored and read out via interface.
Limiter The limiter provides programmable current or voltage range limits for 10 digital outputs. The limiter allows programming below, within and above the range. This means that, e.g. any 3 outputs can be programmed for 3 states and used to control the indication light.	**Zoom function of the ramp functions** The capacitive 8-inch multi-touch display allows the X-Y graph to be dynamically zoomed in or out at the desired point in the X-Y direction using the 2-finger gesture. In addition, *elneos six* offers a repeat function of the programmed ramps from 1 to infinity.

Subject to technical and formal changes.

More detailed information in the Technical Compendium from page 148-149.