

The POWER CHARGER PCSC high voltage generator is a universal high voltage supply unit for controlled charging and use of electrostatic effects.

Charging bars of the type R130A3 / R130A6 / R120 (note voltage limitation) and R23ATR may be connected to the device.

All generators of the POWER CHARGER PCSC family offer the following features:

- Up to 50% higher charging power than comparable Eltex charging generators
- Parallel control of charging voltage, charging current and charging capacity
- Temperature-controlled power limitation
- Robust, compact design
- Easy installation
- Low weight
- Industry-grade high voltage plug connection
- Integrated function and error monitoring
- LED display for visualization of the operating status
- Touchscreen operation (optional)
- Easy setup via an analog interface
- Integration of the generator into CANopen® networks
- Industrial Ethernet support

Technical Information



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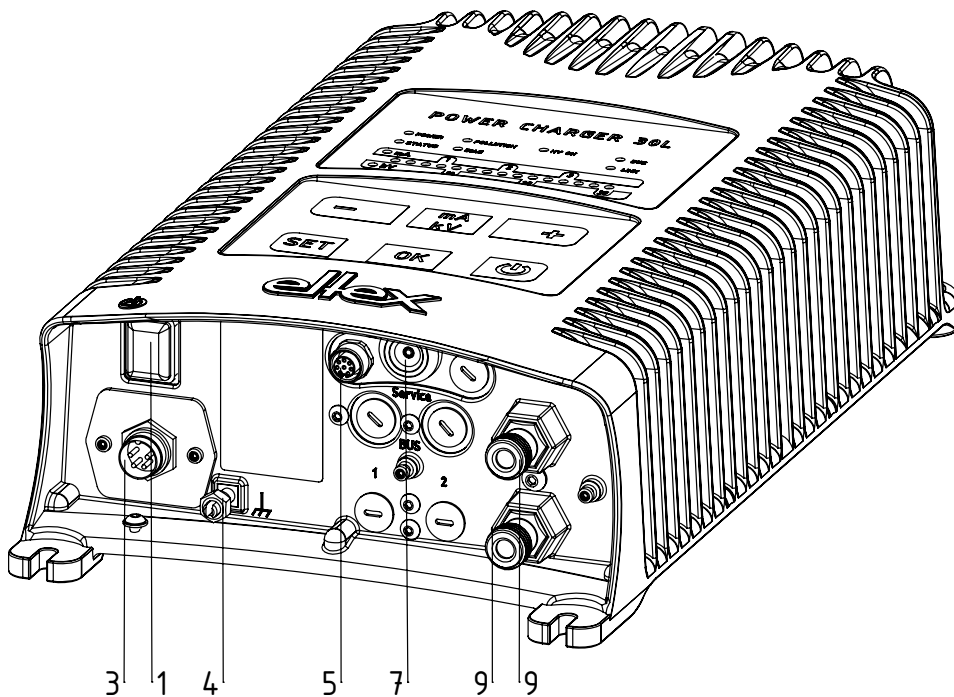
High voltage generator POWER CHARGER PCSC

TI-en-3041-1806



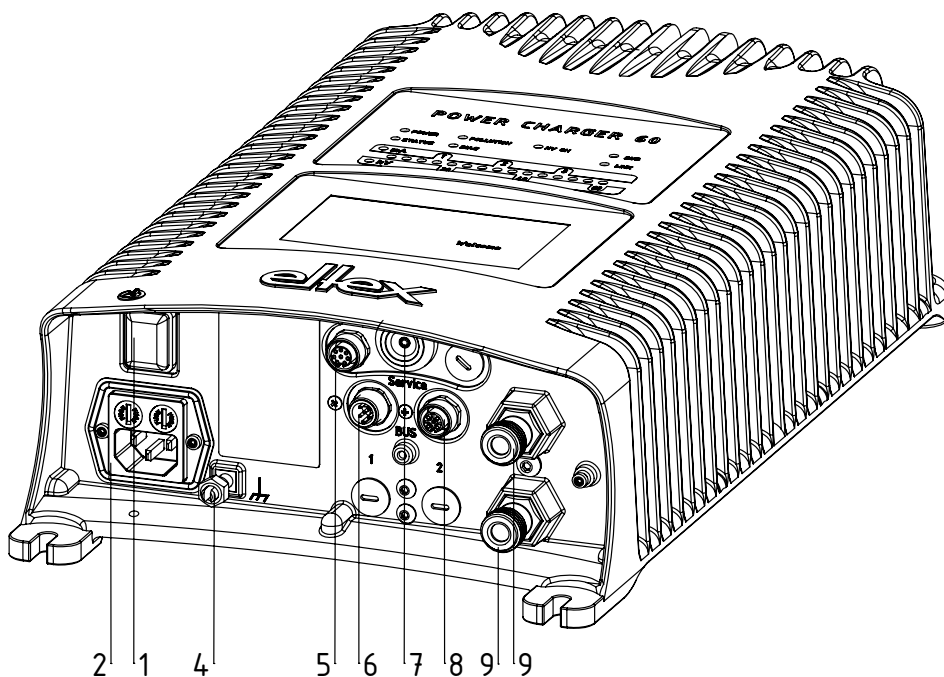
Outline of appliance

High voltage generator POWER CHARGER PCSC
with analog interface



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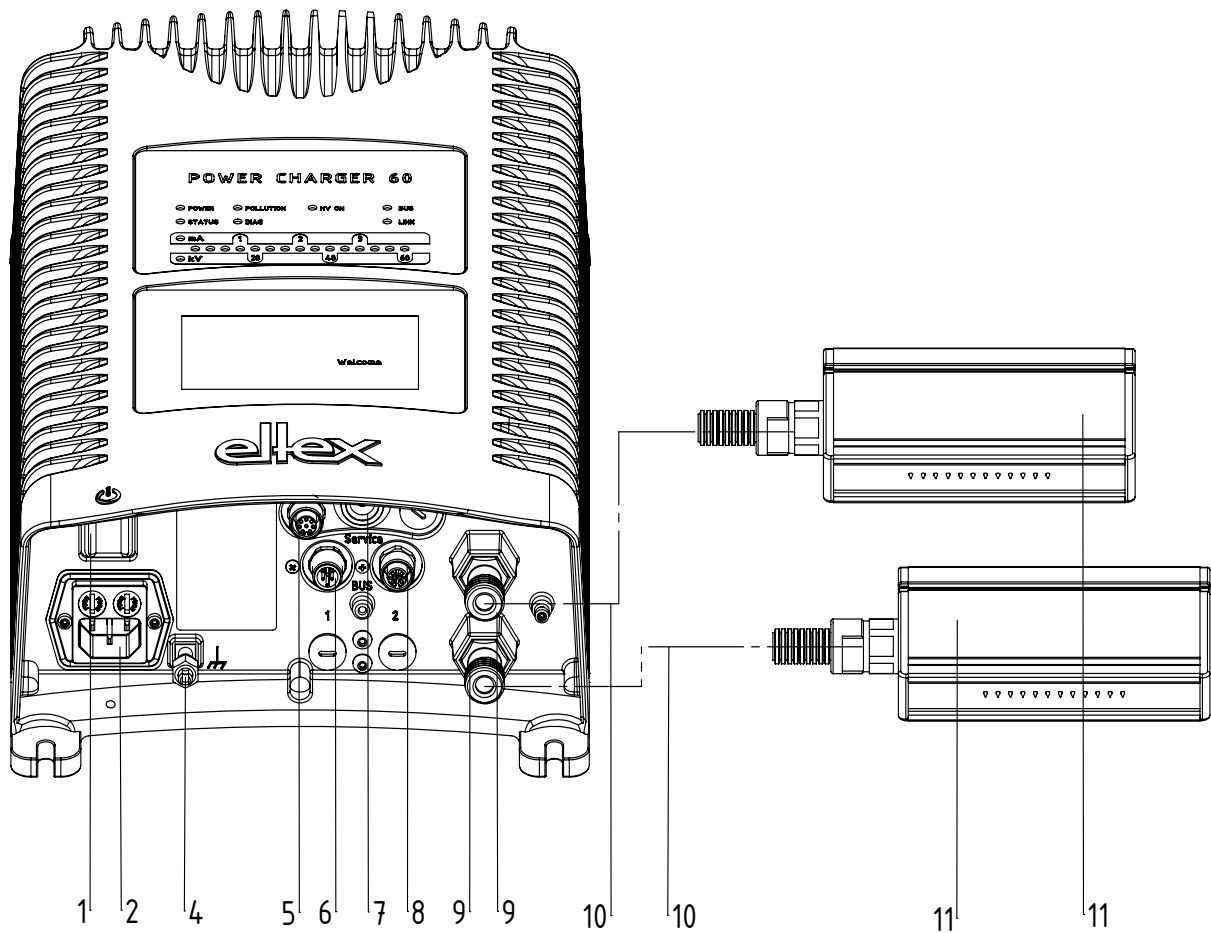
High voltage generator POWER CHARGER PCSC
with field bus



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High voltage generator POWER CHARGER PCSC with charging bar suitable for connection



- 1 Operating switch ON / OFF
- 2 System input 90 - 264 V AC
- 3 System input 24 V DC
- 4 Ground terminal
- 5 Analog interface
- 6 Interface 1 Field bus
- 7 Service interface
- 8 Interface 2 Field bus
- 9 High voltage output: Connection of the charging bar
- 10 High voltage cable
- 11 Charging bar

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Variants

The high voltage generators of the POWER CHARGER family are available in different variants. They can be combined depending on the output voltage, polarity, output power and interfaces etc.

Reference code with the individual variables:

PC /

| | Article- No. | Version | SC | Standard Version |
|---|-----------------|---------------------------|-----------------------|---|
| 1 | Variable | Discharge | X | No Discharge |
| 2 | Variable | Polarity | N P | Negative Positive |
| 3 | Variable | Voltage | 3 6 | 30 kV-Version 60 kV-Version (in preparation) |
| 4 | Variable | Supply / Output power | L S H | 24 V DC, 75 W Mains voltage 90 / 264 V AC, 75 W Mains voltage 90 / 264 V AC, 150 W |
| 5 | Variable | Accessory Plug / Cable | 0 L C E U | No plug / cable included 24 V plug Plug for power cable, confectionable Power cable with plug EU (CEE 7/7) Power cable with plug NA (NEMA 5-15) |
| 6 | Variable | Display | X D | Without Display Display integrated (in preparation) |
| 7 | Variable | Interface | A C M | Analog interface Analog interface + CANopen® Analog interface + ModbusTCP |
| 8 | Variable | Certification | X P | Without additional Certification Performance Level d (in preparation) |
| 9 | Variable | Version | 000 | Standard Version |

High Voltage Setting Range

Depending on the selected variant, you can set different maximum values for the output voltage, output current and output power.

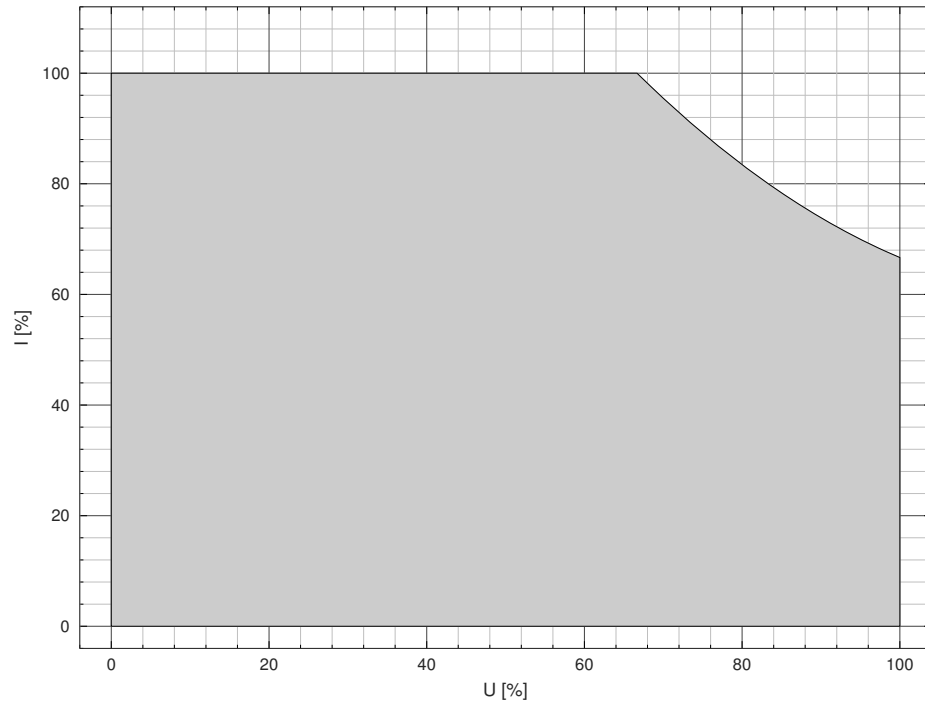


Diagram
Depandance
Current / Voltage

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Depandance current / voltage

| Supply / output power | Variable output voltage 30 kV | Variable output voltage 60 kV |
|--|-------------------------------------|---------------------------------------|
| L = 24 V DC, 75 W S = 90/264 V AC, 75 W | 3.75 mA at 20 kV 2.5 mA at 30 kV | 1.875 mA at 40 kV 1.25 mA at 60 kV |
| H = 90/264 V AC, 150 W | 7.5 mA at 20 kV 5 mA at 30 kV | 3.75 mA at 40 kV 2.5 mA at 60 kV |

Initial values min / max

| Supply / output power | Variable output voltage 30 kV | Variable output voltage 60 kV |
|--|--|---|
| L = 24 V DC, 75 W S = 90/264 V AC, 75 W | $U_{min} = 1.5 \text{ kV}$ $I_{min} = 50 \mu\text{A}$ $U_{max} = 30 \text{ kV}$ $I_{max} = 3.75 \text{ mA}$ | $U_{min} = 3 \text{ kV}$ $I_{min} = 50 \mu\text{A}$ $U_{max} = 60 \text{ kV}$ $I_{max} = 1.875 \text{ mA}$ |
| H = 90/264 V AC, 150 W | $U_{min} = 1.5 \text{ kV}$ $I_{min} = 50 \mu\text{A}$ $U_{max} = 30 \text{ kV}$ $I_{max} = 7.5 \text{ mA}$ | $U_{min} = 3 \text{ kV}$ $I_{min} = 50 \mu\text{A}$ $U_{max} = 60 \text{ kV}$ $I_{max} = 7.5 \text{ mA}$ |

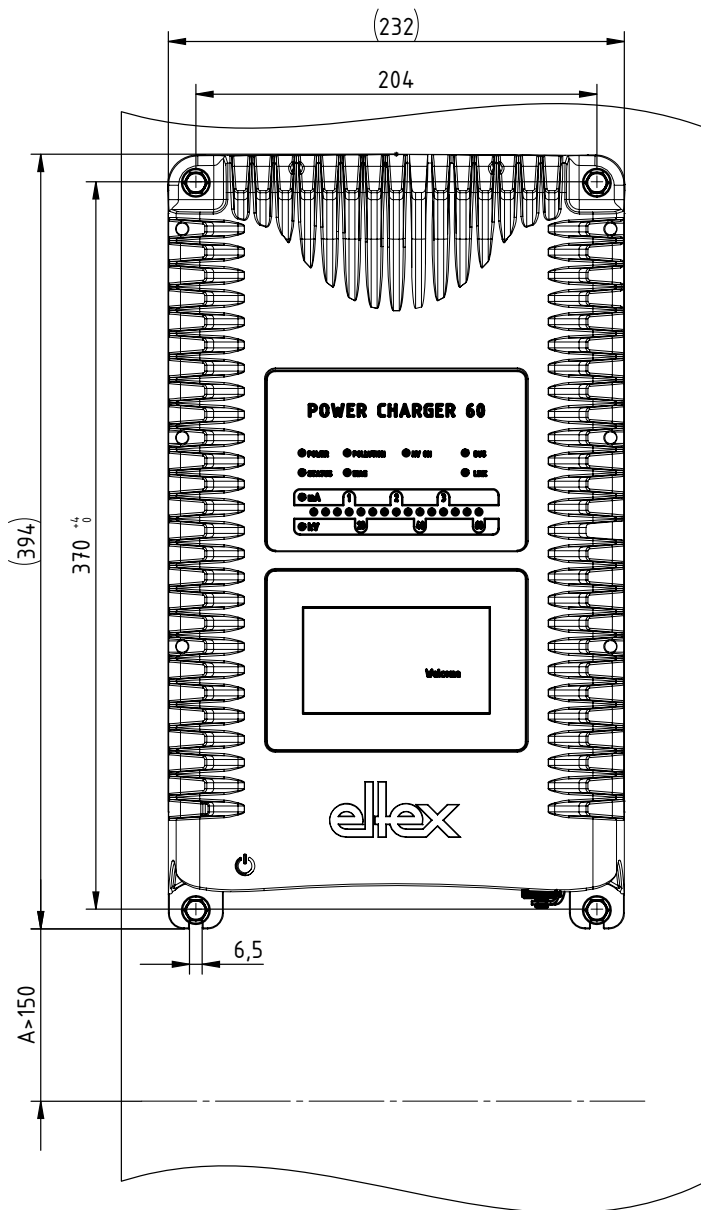
Technical specifications POWER CHARGER PCSC

| | |
|--|---|
| <p>Power ratings</p> <p>Supply Voltage</p> <p>Output voltage</p> <p>Output current</p> <p>Operating mode</p> <p>Enclosure</p> <p>Protection class</p> <p>Ambient operating temperature</p> <p>Storage temperature</p> <p>Ambient Humidity</p> <p>Dimensions with wall bracket</p> <p>Weight</p> | <p>PCSC/___L: 24 V DC \pm15%, 100 W PCSC/___S: 90 - 264 V AC, 47 - 63 Hz, 100 W PCSC/___H: 90 - 264 V AC, 47 - 63 Hz, 200 W</p> <p>U_{\min} - U_{\max} see table page 5</p> <p>I_{\min} - I_{\max} see table page 5</p> <p>Current constant resp. Voltage constant</p> <p>Aluminum coated</p> <p>IP54 according EN 60529</p> <p>+5...+50°C (+41...+122°F)</p> <p>-20...+80°C (-4...+176°F)</p> <p>max. 80% r.h. non-condensing</p> <p>106 x 232 x 394 mm (H x W x D)</p> <p>5.5 kg</p> |
| <p>Connections, interfaces</p> <p>High voltage output</p> <p>Analog interface</p> | <p>2 high voltage connections for the direct connection of two consumers</p> <p>Floating input for external high voltage release (24 V DC)</p> <p>Input setpoint: 0...10 V resp. 0 - 20 mA</p> <p>Output actual value: 0...20 mA</p> <p>Fault signal contact: max. 24 V DC \pm20% / 50 mA internal protection</p> <p>24 V DC-output: max. 24 V DC \pm20% / 50 mA) internal protection</p> |
| <p>Connections, interfaces (optional)</p> <p>CANopen®</p> <p>ModbusTCP</p> | <p>supported baud rates: 10 kBit/s, 20 kBit/s, 50 kBit/s, 125 kBit/s, 250 kBit/s, 500 kBit/s, 800 kBit/s, 1000 kBit/s</p> <p>supported transmission rates: 10 / 100 MBit/s</p> |



Dimensions

Dimensions High Voltage Generator with fixing positions



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Assembly with 4 x hexagon screws M5 (alternatively M6) including flat washer

Eltex offices and agencies

The addresses of all
Eltex agencies can be
found on our website at
www.eltex.com



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