Technical Information

The high voltage generator KNH35 / KNH65 is a robust, all-round supply unit for the Eltex DC charging electrodes and other high voltage applications in industry and in laboratories.

The generator delivers a maximum of 30 kV / 60 kV and is available both with negative and positive polarity.

Versatile use

- Voltage or current constant operation selectable
- High output power with high efficiency
- Remote control and remote monitoring via analog interface
- Easy installation
- Minimum space required

Safe operation

- Self-monitoring and alarm function
- Password security
- Programmable voltage/ current limits
- Optional chopped operation
- Fail-safe operating data backup
- Sturdy steel enclosure
- Protection class IP54

Precise work

- Minimum output value deviations
- Good output value reproducibility

Easy operation

- Menu-assisted operation
- Two-line backlight display, messages in plain text
- Large operating keys
- Easy connection concept

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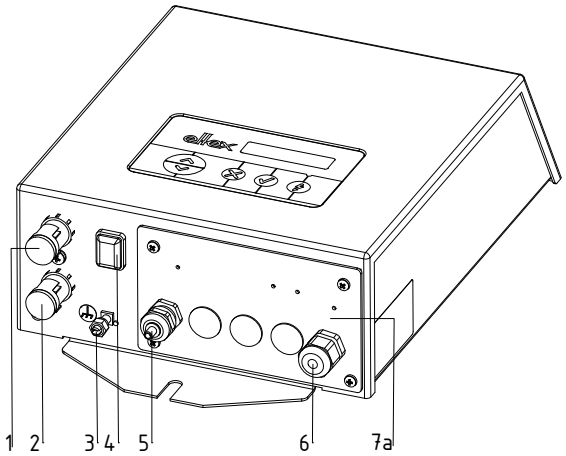
High-Voltage Generator KNH35 / KNH65

TI-en-3031-2004

eltex
electrostatic innovations



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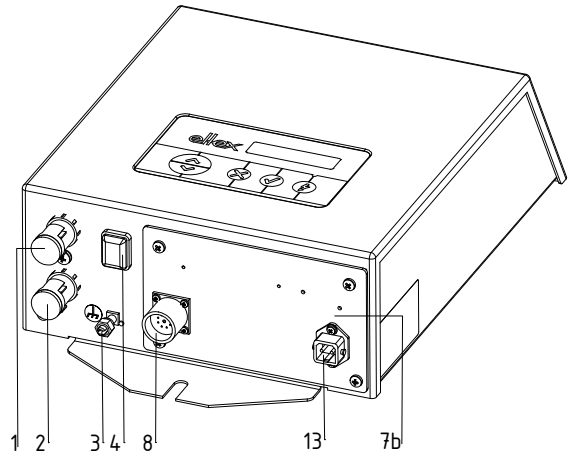
Electrical connection

1 High voltage output 1
2 High voltage output 2
3 Ground terminal
4 Operating switch ON/OFF
5 Cable gland: analog interface connection
6 Cable gland: mains voltage connection
7a Front plate with screw-type terminals



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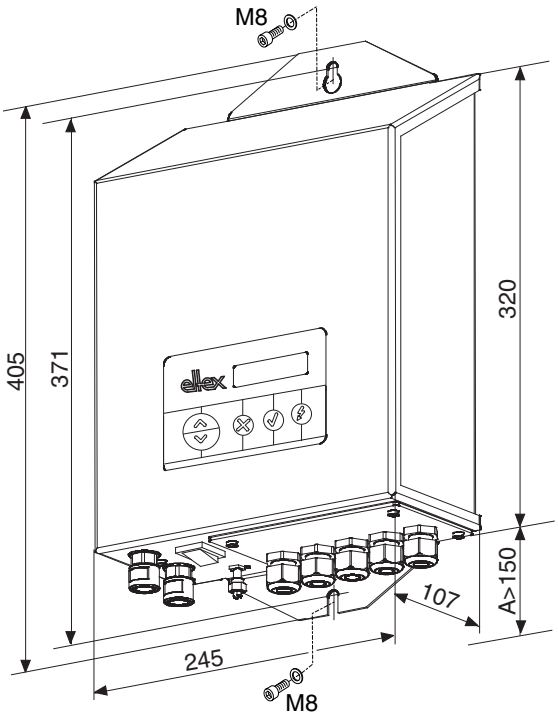
Plug-type design variant

1 High voltage output 1
2 High voltage output 2
3 Ground terminal
4 Operating switch ON/OFF
7b Front plate with sockets
8 Analog interface
13 Mains voltage input

Dimensions

with mounting bracket,
fixed with M8 screws

A = Space for cable connections



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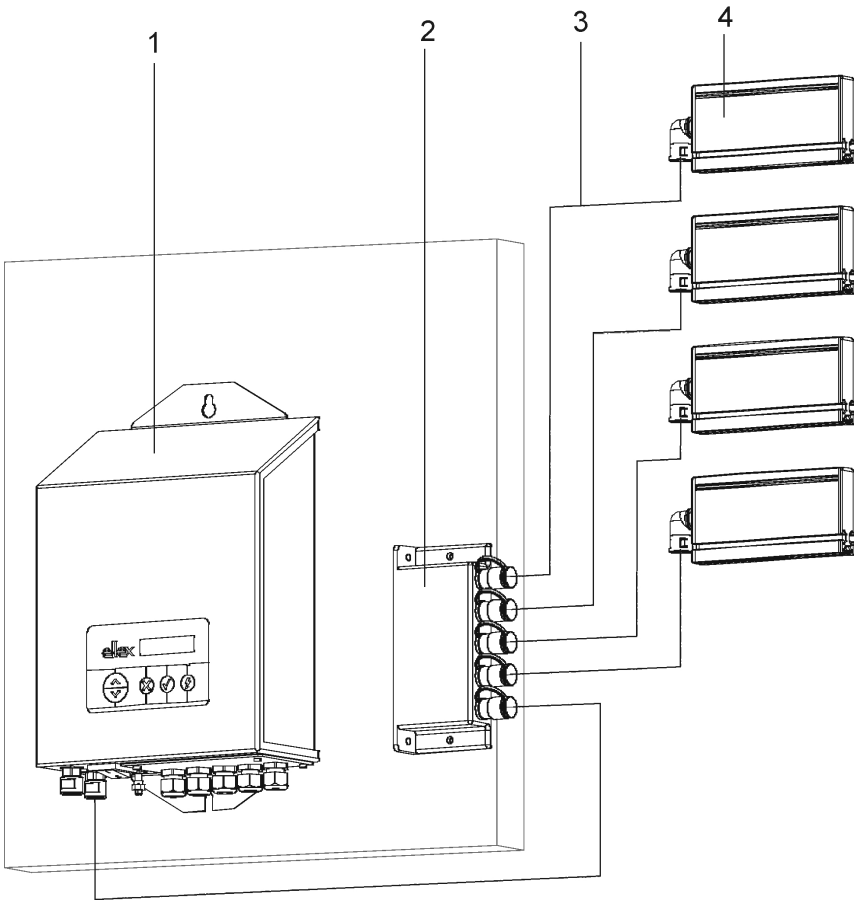
Connecting several electrodes via the distributor box KNHV



1 Generator
2 Distributor box KNHV3 / KNHV6
3 High voltage cable
4 Charging bars

The distributor box KNHV (available separately) allows the number of connected electrodes to be increased.
Note: The sum total of the electrode currents must not exceed the maximum output current of the generator.

Example:
Current per meter of active bar length: 1 mA
Sum total of active bar lengths: 2 meters
=> maximum total current: 2 mA

Analog interface

The analog interface allows the generator to be integrated into an SPC or into another environment using 0…10 V or 0…20 mA interfaces.

Technical specifications

Power ratings		
Supply voltage	KNH35/__ _ _ 1 and KNH65/__ _ _ 1 : 115 VAC ±10 %, 50 - 60 Hz KNH35/__ _ _ 2 and KNH65/__ _ _ 2 : 230 VAC ±10 %, 50 - 60 Hz	
Output voltage	3…30 kV ±2 % of full scale (KNH35), 6…60 kV ±2 % o.f.s. (KNH65) Display resolution 100 V, adjustable in increments of 100 V	
Output current	0,2…5 mA ±2 % of full scale (KNH35), 0,1…2.5 mA ±2 % o.f.s. (KNH65) Display resolution 10 µA, adjustable in increments of 10 µA	
AC component	<3 % at U_{max} and I_{max}	
Feedback control	Voltage constant or current constant control selectable	
External fusing	Circuit breaker 6A Tripping characteristic D in compliance with DIN EN 60898-1 (VDE 0641-11) and tripping characteristic K in compliance with DIN EN 60947-2 (VDE 0660-101)	
Power input	255 VA max.	
Enclosure	Sheet metal steel, 1.5 mm, enamelled	
Protection class	IP 54	
Ambient operating temperature	+5...+40°C (+41...+104°F) for hanging installation and free convection +5...+35°C (+41...+95°F) for horizontal mounting	
Storage temperature	-20…+70°C (-4…+158°F)	
Ambient humidity	max. 80 % r.h., non-condensing	
Dimensions with wall bracket	405 x 245 x 107 mm (H x W x D)	
Weight	KNH35: 5.2 kg; KNH65: 6.2 kg	
Connections, interfaces	Mains voltage and interfaces are designed as screw-type terminals; alternative plug-type connections are available	
High voltage output	2 high voltage connections for the direct connection of two consumers; number of consumers can be enlarged via distributor box KNHV3 resp. KNHV6	
Analog interface	Floating input for external high voltage release (24 V DC) input setpoint: 0...10 V or 0...20 mA Output voltage actual value and output current actual value: 0...20 mA Floating fault signal contact (max. 24 V / 2 A DC/AC)	
Order information	**30 kV**	**60 kV**
Generator	KNH35/ [1] [2] [3] [4] [5] [1] : Configuration A = standard [3] : K = terminals, S = plugs [5] : 1 = 115 V, 2 = 230 V	KNH65/ [1] [2] [3] [4] [5] [2] : N = negative, P = positive [4] : O = standard
Distributor	KNHV3	KNHV6
Generator-distributor cable	KA/RR (specify length)	KA/UU (specify length)

CE

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