From 6 kJ/s up to 15 kJ/s From 10 kV up to 50 kV



ACRX Series

HV capacitor charging power supplies



Instrumented version



Non-instrumented version

Technical specifications

Characteristics	Values
Input voltage	400 V_{AC} or 480 V_{AC} / 3 phases without neutral
Output power	6, 8, 10, 12, or 15 kJ/s
Output voltage	10 kV, 15 kV, 20 kV, 25 kV, 40 kV or 50 kV
Polarity	Positive Negative Floating (Up to 10 kV)
Inrush current	$<$ 3 x I_{nominal} (for up to 100 ms maxi)
Efficiency	> 85%
Monitoring accuracies	+/- 0,5% of the full scale
Output voltage programming	10 to 100% of the full scale
Storage temperature	0°C to 85°C (30°F to 185°F)
Operating temperature	+ 10°C to 35°C (50°F to 95°F)
Humidity	40% to 90%, non-condensing
	Safety requirements: EN 61010-1 : 2001
EN standards	EMC Emission: EN 61000-6-4 : 2001
	EMC Immunity: EN 61000-6-2 : 2001
Warranty	2 years for normal operating conditions

Human Machine Interface

The power supplies can be operated in remote mode (0-10V program and monitor). The analog programming, analog monitoring, faults and controls are available on the 25 pins Sub-D connector. On the front panel, lights are available to indicate the power supplies status.



RS 232 / Ethernet

Using the switch located on the front panel, it is possible to control the charger in using the SUB-D connector 9 points (RS 232) or the connector RJ-45 (Ethernet).

Optical links

An outer housing converts information in the lighting form. Optical fibers connecting the charger to the housing guarantee immunity against parasites and insulation between power and electrical control.



Current regulation

This option allows to adjust the charging current.

The power supply can be used with a constant current independently of the input voltage.

The current setting range depends on the characteristics of the current power / voltage output of the power supply.



Outline drawing



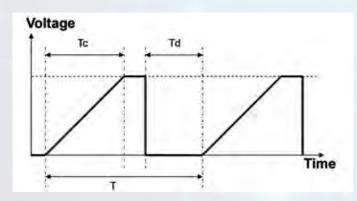




The power supply is a standard 19 inches width rack, with a 5U height (222 mm). The depth is between 510 mm to 600 mm, depending on the output power.

A plug and a 3 meters high voltage cable are supplied with the charger.

Charging profile and definitions



The dead time (Td) after discharge is adjustable. It could vary from 100 µs to 10 ms (400 µs is installed in factory by default).

T: Period (s)

F = 1/T: Repetition frequency (Hz)

Tc: Charging time (s) Td: Dead time (s)

 $E = \frac{1}{2} C V^2$ Ps = E / T

<u>With</u>

E: Energy stored in the capacitor load (J)

Ps: Mean output power (J/s)

V: Output voltage (V)
C: Capacitor value (F)

Eurofeedback answers the customer specifications for specific needs (power, voltage control protocols, mechanical...).

For more information, please ask our distributor:

Eurofeedback company



Eurofeedback is a member of the AF1 Group.

The company is located in Evry (91), 30 km south from Paris, 15 km from Orly airport and close to the A6 highway.

For more than 20 years, the company designs and manufactures specific equipments upon customers request, in the high voltage field.

A team of 7 engineers, specialized in power electronics, helps you to choose the power supply best suited for your requirements.

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Edition 12-2013