

## Application note

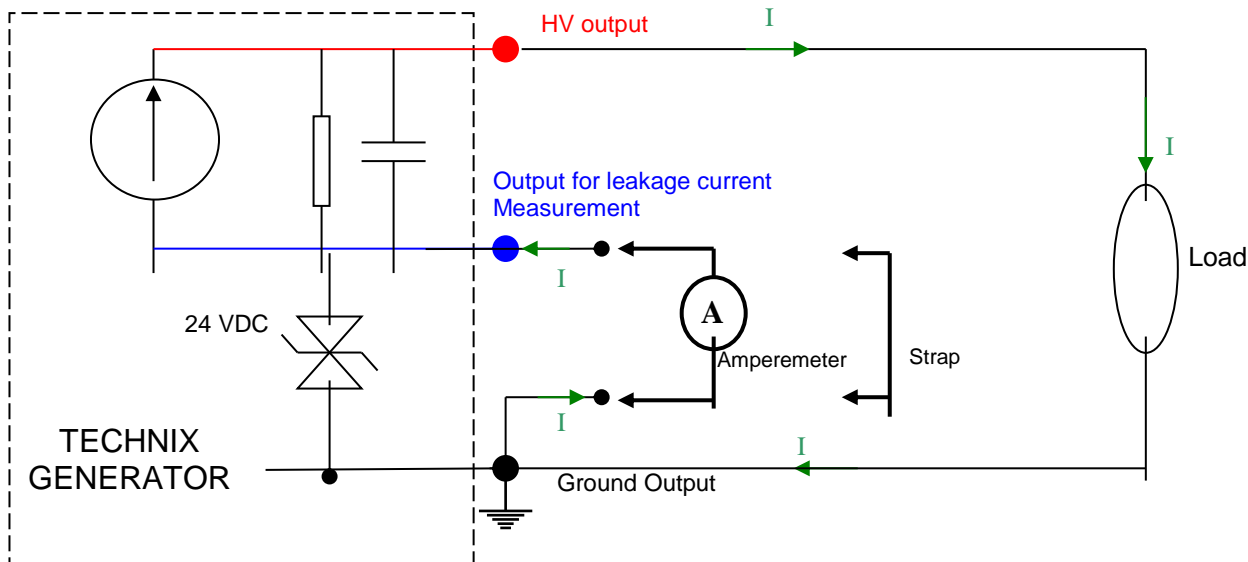
# ZERO FLOATING OPTION

Some applications require to measure very small current delivered by the generator in certain steps of a process.

This small current is generally called “leakage current”.

For instance, determining the dielectric parameter of a capacitor is possible by measuring the leakage current delivered by the generator once the capacitor is charged.

A special option, called “ZERO FLOATING”, is needed for measuring this leakage current because it is not significant compared to the current the generator can deliver. Thus, reading it on the displays of front panel is not accurate at all.



With this option 3 outputs are available for the customer :

- HV Output
- Measurement Output
- Ground Output

Measurement of leakage current is made by using an external Ampere meter inserted between Measurement Output and Ground Output.

With an appropriate Ampere meter, very small currents (nA or  $\mu$ A) can be measured.

Accuracy of the current measurement depends on the accuracy of the Ampere meter.

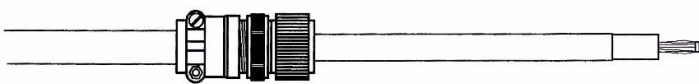
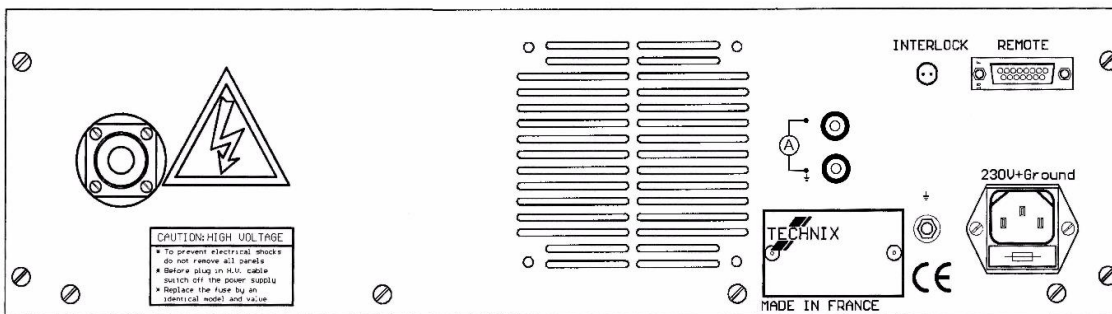
Remarks :

1- When an output Ampere meter is not connected, Measurement Output must be short circuited to ground. For realizing this short circuit, a strap is delivered with the generator. In the case neither Ampere meter nor strap is connected, protection is limited up to 24 V.

2- For making the description of this option as clear as possible, we represented a fixed polarity generator. It can also be used with reversible polarity or Floating Outputs options.

3- With this option, the generator can be controlled only in Local Mode. If the generator must be Remote controlled, ISOREMOTE option is mandatory.

As an example, following sketch represents the rear panel of a fixed polarity power supply equipped with ZERO FLOATING option with its strap.



HV CABLE



STRAP