



ARCS : DETECTION AND COUNTING

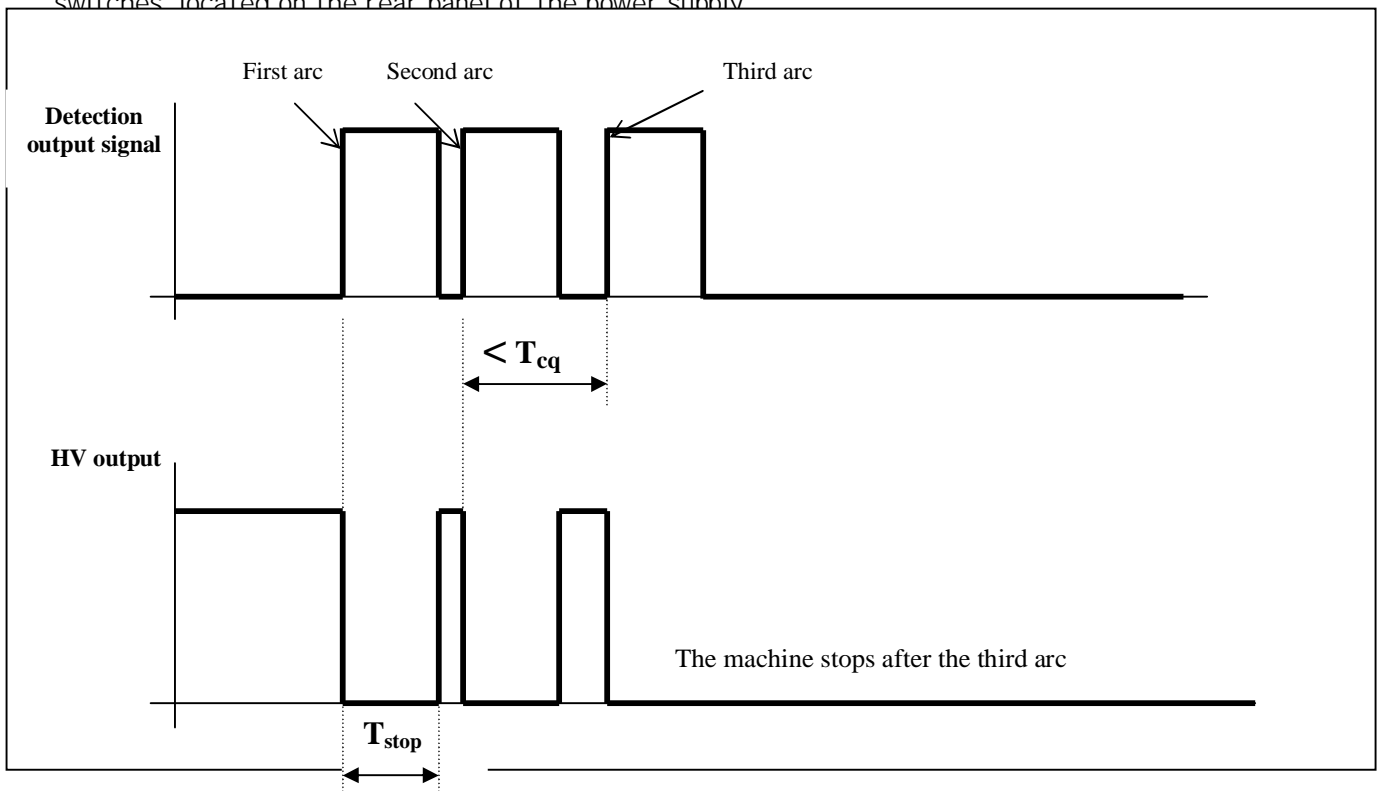
TECHNIX offer 2 options allowing detection and counting electrical arcs.

ARC DETECTION OPTION :

As soon as an arc is detected, an output signal is delivered and the power supply switches off during a stop time. This stop time (T_{stop}) can be factory set between 0.1s to 2s. Typically, T_{stop} is set to 500 ms.

ARC COUNTING OPTION :

Each detected arc generates the process described above and increments a counter. When a certain number of arcs are counted the power supply switches off and will restart only with a new switch-on procedure of the user. This number of arcs is programmable by the customer from 1 to 15 (in binary) with the use of 4 micro switches located on the rear panel of the power supply.



Example 1 : User sets the counter to 3
 The machine stops after a series of 3 successive arcs

Counting qualification :

If the time between 2 arcs is too long, the second one resets the counter.

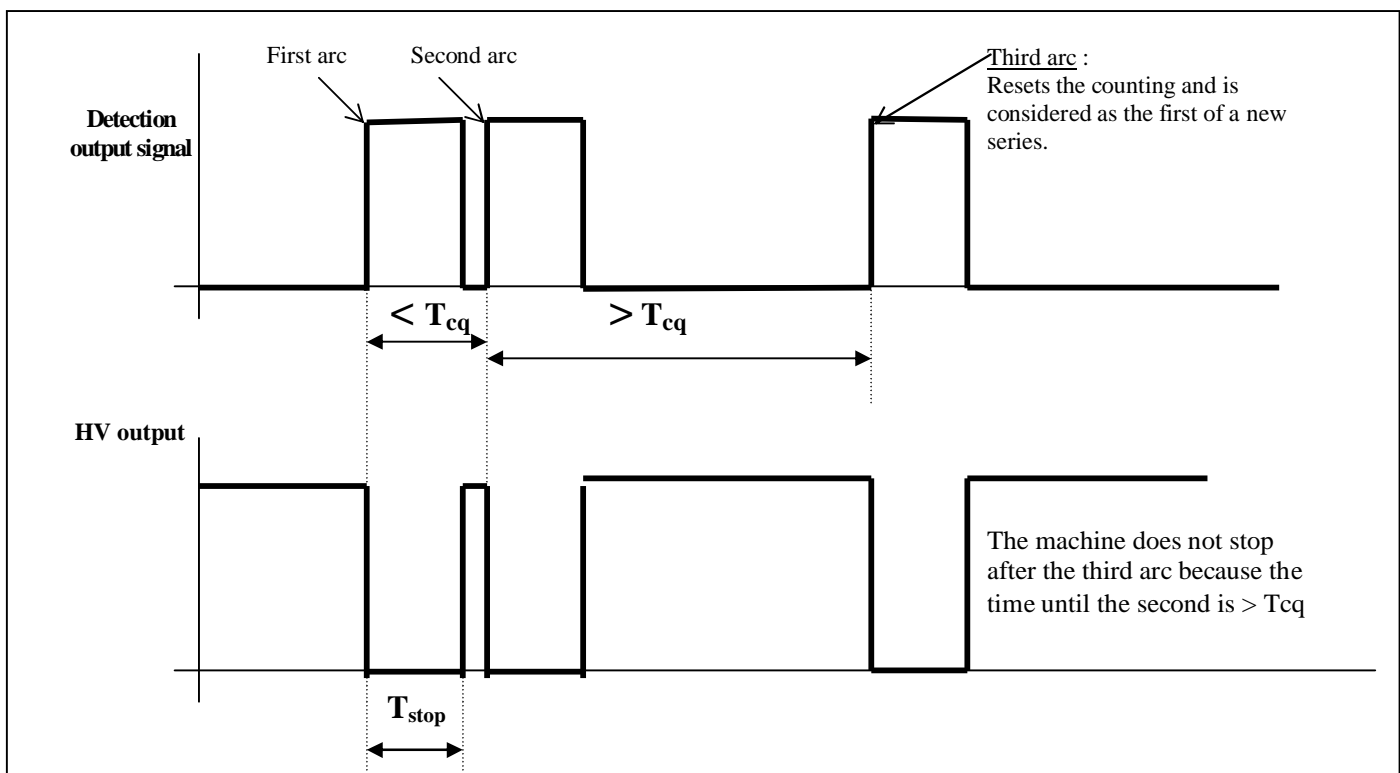
This time is called T_{cq} : Time for counting qualification.

Typically T_{cq} is 1.3 second , that means 0,8 s after the restart for a typical T_{stop} of 0.5 second.

If an arc occurs within 1.3 s after a previous one, it is counted.

The counter is reset if a new arc occurs 1.3 second or more after the previous one.

T_{cq} can be factory set between 1 and 6 seconds.



Example 2 : User sets the counter to 3.

The third arc occurs "late" after the second one.

Counting validation/inhibition :

An fifth switch is available for the user to validate or inhibit counting function.

This switch is also located on the rear panel of the power supply.

In I N H I B I T position, all the counting system is disable.