

explain the charging and discharging processes.

The capacitor C1 is charging until the breakdown voltage. If the breakdown voltage is reached, the gap will close and current will flow through C2, R1 and R2. So C1 is discharging and C2 is charging at this time. The gap will open, if the voltage dropped under the breakdown voltage value.

Which type of single-stage impulse generator circuit is implemented?

We use the type b.

- How is the impulse generator adjusted to obtain a higher impulse?

The gap length has to be larger to obtain a higher impulse

- Identify from the setup the type of lightning impulse: positive or negative? Why?

It is a negative impulse because the diodes are reverse biased