

Surge arrester:

Device designed to limit transient overvoltages and run-off lightning currents. It consists of at least one non-linear component. It must comply with European standard EN 61643-11.

1.2/50 wave:

Standardized overvoltage waveform created on networks and which adds to the network's voltage.

8/20 wave:

Current waveform which passes through equipment when subjected to an overvoltage.

Type 2 surge arrester:

Surge arrester designed to run-off energy caused by an overvoltage comparable to that of an indirect lightning strike or an operating overvoltage. It has successfully passed testing to the standard with the 8/20 wave (class II test).

U_p :

Voltage protection level / Let through voltage

Parameter characterising surge arrester operation by the level of voltage limitation between its terminals and which is selected from the list of preferred values in the standard. This value is greater than the highest value obtained during voltage limitation measurements (at I_n).

I_n :

Nominal discharge current.

Peak current value of an 8/20 waveform (15 times) flowing in the surge arrester. It is used to determine the U_p value of the surge arrester.

I_{max} :

Maximum discharge current for class II testing.

Peak current value of an 8/20 waveform flowing in the surge arrester with an amplitude complying with the class II operating test sequence.

14 I_{max} is greater than I_n .

U_n :

Nominal AC voltage of the network : nominal voltage between phase and neutral (AC rms value).



Type 2 Surge Arresters
 I_{max} : current wave