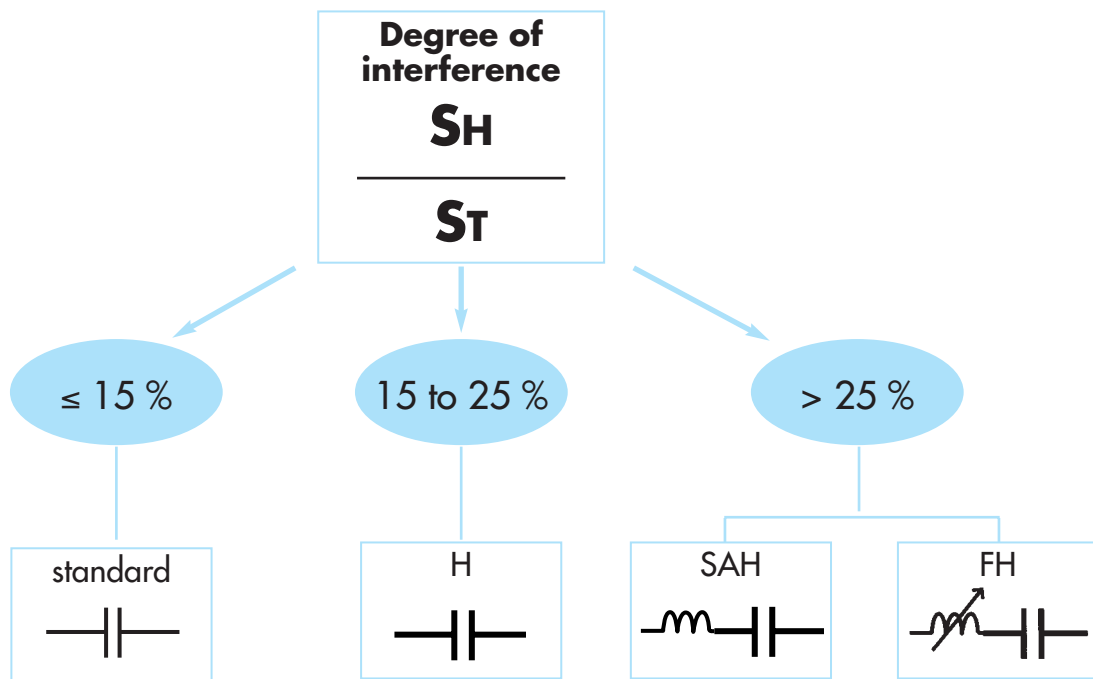


## Selecting the capacitor type

Reactive energy compensation means that the capacitor must be adapted to the intrinsic characteristics of the corresponding mains network (voltage, frequency,  $\cos \varphi$ , etc.). However, the increasing presence of harmonics in the mains supply means that the capacitor must also be adapted to the degree of interference and the final performance desired by the customer.

Depending on the degree of interference or harmonics, four "types" of capacitor are available:


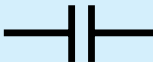
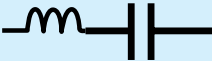
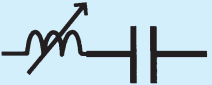
- **standard type**
- **H type**
- **SAH type (anti-harmonic reactors)**
- **FH type (harmonic filters)**



**SH** (kVA) is the weighted total power of the harmonic generators present at the transformer secondary.

**ST** (kVA) is the power rating of the H.V./L.V. transformer

## Final performance

Type	Symbol	Reactive compensation	Harmonic protection of capacitor	Mains interference control
Standard		yes	yes → 15 %	no
H		yes	yes → 25 %	no
SAH		yes	yes → 100 %	yes – partial
FH		yes	yes → 100 %	yes – total

FH type capacitors generally require measurements to be taken on site in order to obtain a precise definition of the ranking and amplitudes of harmonic currents.

**This service is performed by ALPES TECHNOLOGIES.**

For more detailed information please consult our GENERAL INFORMATION brochure