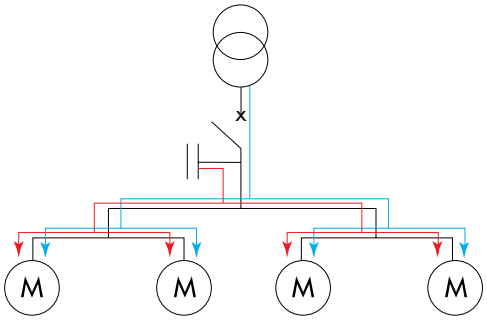
VIII - DIFFERENT POSSIBLE CAPACITOR BANK INSTALLATIONS

In an L.V. electrical installation, capacitor banks can be installed at 3 different levels:

1) GLOBAL INSTALLATION



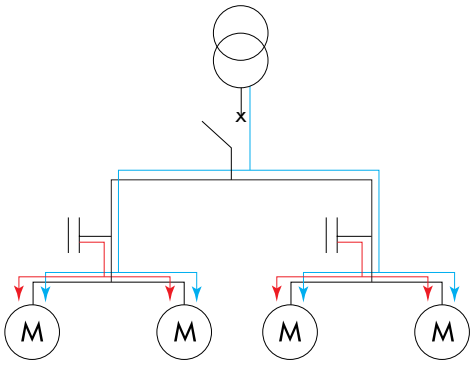
Advantages:

- No reactive energy bill.
- Represents the most economical solution since all the power is concentrated at one point and the expansion coefficient makes it possible to optimise banks.
- Relieves the transformer.

Remark:

- The losses in the cables (RI^2) are not reduced.

2) SECTOR INSTALLATION



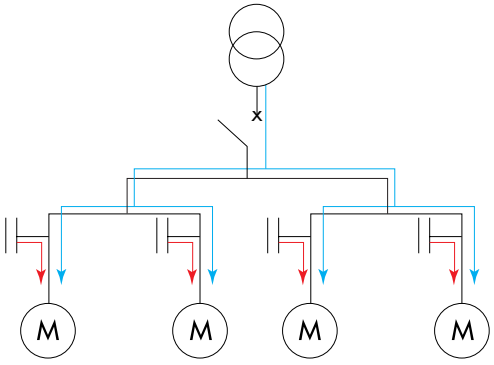
Advantages:

- No reactive energy bill.
- Relieves most of the line feeders and reduces Joule's heat losses (RI^2) in these feeders.
- Incorporates the expansion of each sector.
- Relieves the transformer.
- Remains economical.

Remark:

- Solution generally used for a very large plant network.

3) INDIVIDUAL INSTALLATION



Advantages:

- No reactive energy bill.
- From a technical point of view, the ideal solution since the reactive energy is produced in the same place as where it is consumed; therefore, the Joule's heat losses (RI^2) are reduced in all the lines.
- Relieves the transformer.

Remark:

- Most costly solution given:
  - . The high number of installations,
  - . The non-incorporation of the expansion coefficient.