

ME24_03 - System Power Factor Correction with Synchronous Motors

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Abstract - Capacitor banks are notorious of power quality concerns. They could introduce resonance incidents under certain network conditions, especially for harmonic-polluted grids.

Synchronous motors can adjust the displacement power factor in nature, contributing positively toward the overall power factor status. A case study of a network encompassing synchronous motors that maintain the desired power factor.

The synchronous motors are prone to be out of service for different reasons, impacting the power factor badly. The case study elaborates on the contribution of synchronous motors toward maintaining the desired power factor value provided that they are designed properly.