

# Power Factor Correction

Boost efficiency and lower operating costs

Improving power factor means improving profits.

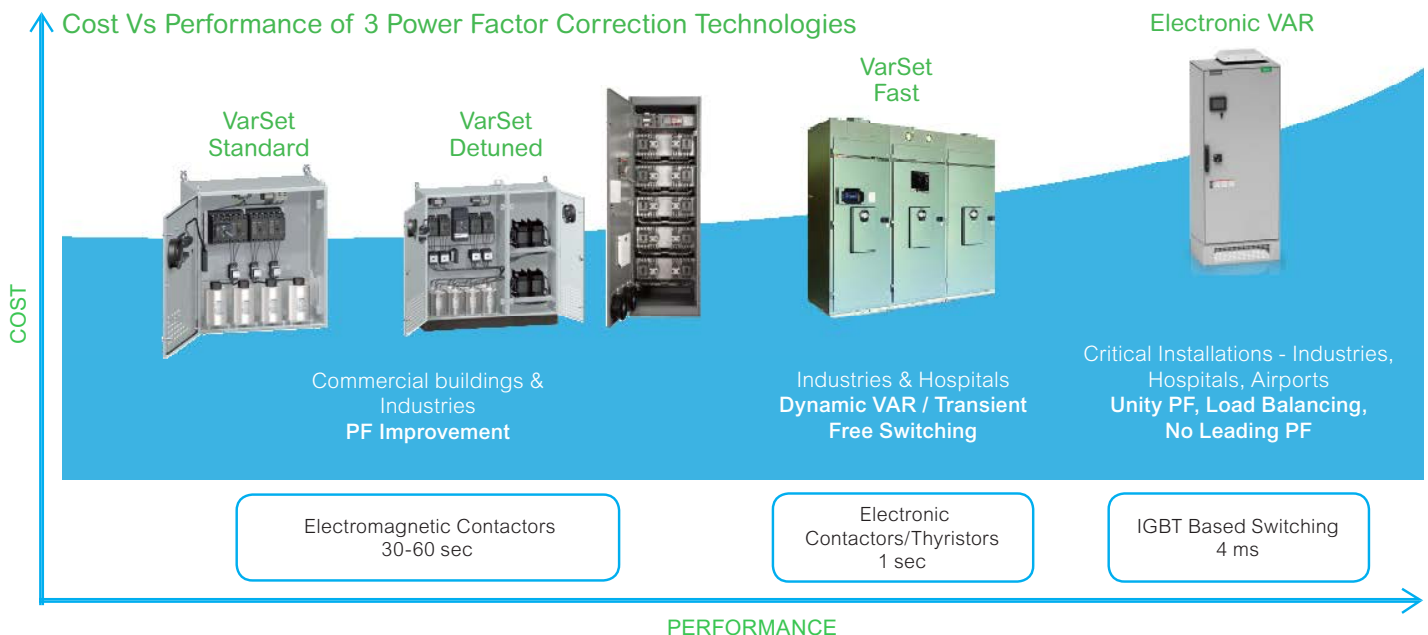
Power factor is the ratio of real power to apparent power. Poor power factor can cause a list of costly side effects. Hidden utility charges and penalties, capacity issues, overheating equipment and reduced efficiency are just a few. Power factor correction (PFC) helps lower operating and capital costs, optimize power and capacity and can provide a quick return on investment.

Schneider Electric has a complete range of fully tested and certified PFC products for your particular application, whether it is a greenfield or a brownfield project.



High quality power = higher productivity

- Reduce capital expenses by up to 30%.\*
- Reduce reactive energy billing penalties and lower operating expenses by up to 10%.\*
- Reduce energy losses by up to 30%.\*
- Improve power system and equipment reliability by up to 18%.\*



## VarSet Standard Capacitor Banks

VarSet Standard is a range of high quality, wall mounted automatic capacitor banks. Designed for easy installation, it has a small footprint and helps reduce utility bills, maximizes power conditioning and reliability, while saving valuable space. This range is available from 75 kVAR to 300 kVAR at 480V.

### Features

- Compact, wall mounted capacitor banks
- Suitable for low harmonic levels
- Top cable connections
- Mounting brackets for easy wall mounting
- VarPlus Logic PF Controller for easy programming and commissioning
- Modbus communication protocol for integration with building management and energy monitoring systems
- Multiple stage architecture
- Capacitor-switching duty contactors

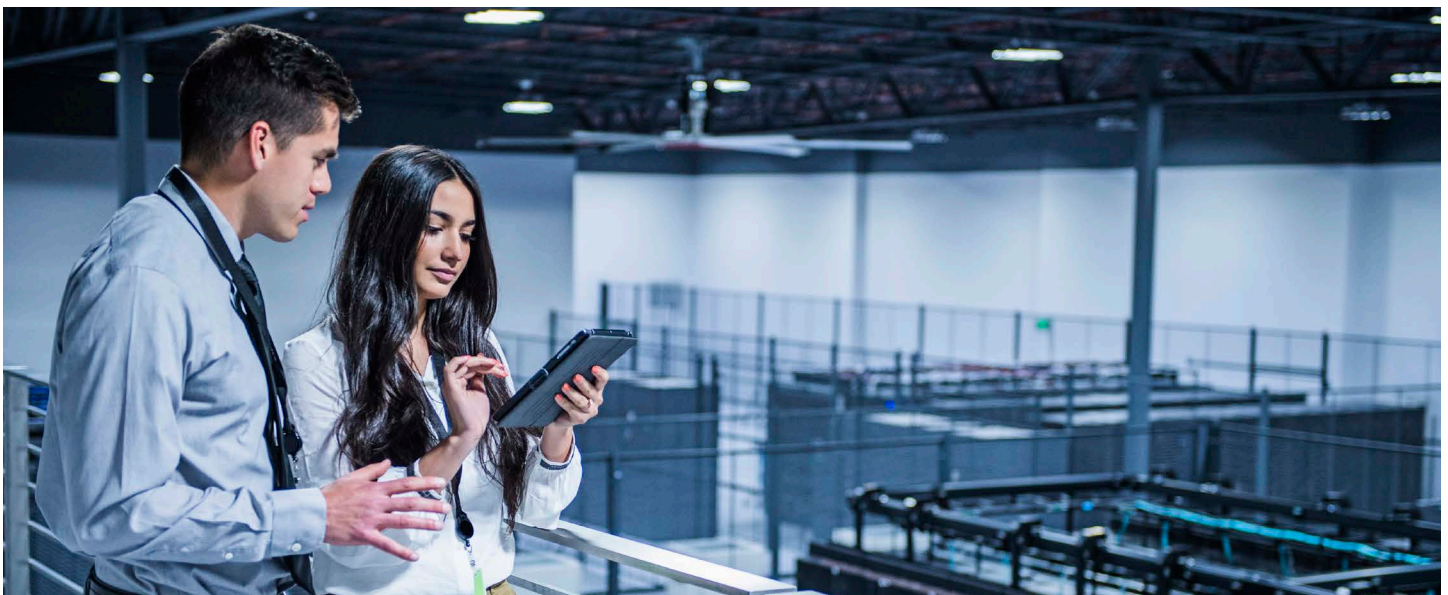


## VarSet Detuned Capacitor Banks

The VarSet Detuned automatic capacitor banks provide power factor correction in electrical distribution networks with moderate levels of harmonic content. The series capacitor and reactor combination is tuned below the first dominant harmonic order (usually the 5th). This prevents resonance and harmonic amplification. This range is available from 75 kVAR to 800 kVAR.

### Features

- Overheating protection and alarm for detuned reactors
- Step protection with circuit breaker to ensure stage overload protection
- VarPlus Logic PF Controller for easy programming and commissioning
- Modbus communication protocol for integration with building management and energy monitoring systems



## VarSet Fast Capacitor Banks

VarSet Fast capacitor banks are suitable for applications with dynamic load variation or for electronic loads that are sensitive to transient over voltages. This range is available from 450 kVAR to 1200 kVAR.

### Features

- Transient-free switching of capacitor steps within 1 second
- Electronic switching elements yield an unlimited number of switching operations
- VarPlus Logic PF Controller for easy programming and commissioning
- Modbus communication protocol for integration with building management and energy monitoring systems
- The thyristors in the switching module are rated to 200 Amps RMS nominal current (up to 600V per phase) and 2400 PIV
- The air flow through the heat sink of the thyristor module is external to the capacitor bank and does not add to the temperature rise internal to the capacitor bank

Refer to the VarSet catalog for standard part numbers. Other ratings and special options are available upon request.



## AccuSine PFV+ Electronic VAR Control

AccuSine™ PFV+ provides a simple and effective way to reduce process related voltage fluctuations. AccuSine PFV+ works to eliminate leading or lagging power factor, reduce voltage fluctuations, enhance equipment operating life, and improve system power capacity. This range is available from 50 to 250 kVAR at 480V.

### Features

- Real-time dynamic current injection for harmonic cancellation and VAR compensation (lead or lag power factor)
- Response to load fluctuations within 2 cycles for harmonics, 1/4 cycle PF or mains balancing
- UL Type 1, UL Type 2, UL Type 12
- Seismic rated per ICC
- Power electronics IGBT; 3 level inverter
- Easy-to-use touch screen interface

For more details and part numbers, please refer to the product catalog. Visit [www.schneider-electric.us/powerquality](http://www.schneider-electric.us/powerquality)

\*Performance reflects actual customer experience, your results may vary depending on your environment.



Life Is On



Learn more at  
[www.schneider-electric.us/powerandenergy](http://www.schneider-electric.us/powerandenergy)

**Schneider Electric**

6700 Tower Circle  
Suite 700  
Franklin, TN 37067  
1-888-797-6468