

Controllix Corporation

Low Voltage Automatic Capacitor Banks



Low Voltage Capacitor Banks provide a cost-effective, easy-to-use and reliable solution for power factor correction.

Controllix Low Voltage Capacitor Banks are a more efficient alternative to individual motor capacitors, especially in large industrial facilities. Controllix units are designed to provide power factor correction with a single installation on the main plant bus. The units are ideal for applications where plant loading is constantly changing, resulting in the need for varying amounts of reactive power. The solid state reactive power VAR controller reacts to a signal from a single remote current transformer, measures plant power factor and adjusts to system load requirements in selected kVAR steps in order to maintain the desired target power factor.



Leading in Power Quality for Over 40 Years

Low Voltage Power Factor Correction Systems (Automatic)



Low Voltage Power Factor Correction Systems are designed to provide reactive current from a single location in a distribution network. As all motors in a plant are seldom running at the same time, Controllix capacitor banks automatically maintain the desired power factor, adjusting to system load requirements in selected kVAR steps.

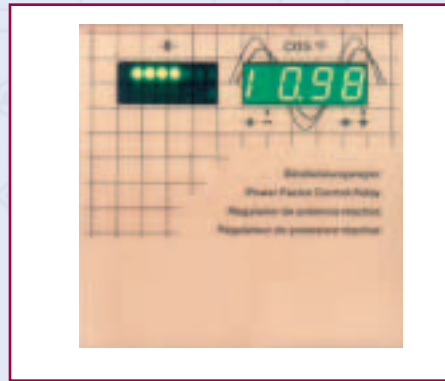
Safe, Compact Design: Enclosures are fully-welded (not bolted) NEMA 1, 3R or 4X units of galvanized or stainless steel construction that allow integration into indoor, outdoor or unusual physical settings. The compact overall dimensions, top or bottom cable entry access and lifting eyes permit efficient handling and installation. Small footprint saves valuable space. Standard finish is ANSI Gray. Other colors available upon request.

Modular Chassis: Sub-systems contain capacitors, reactors (when necessary), contactors, fuses and bus bar. Use of modular design allows for ease of future expansion as well as maintenance in the field.



Capacitors: Underwriters Laboratories (UL) listed low-loss (0.5 Watts per kVAR) capacitors are used. Capacitors are equipped with discharge resistors to drain residual voltage within one minute of de-energizing. The dielectric is biodegradable, environmentally friendly and non-toxic. Includes built-in pressure interrupter protecting capacitor from case rupture. An extended warranty is available on individual capacitor cells.

Controls: A programmable solid state electronic VAR controller is used that indicates the reactive load and provides a digital display of the facility's power factor. The microprocessor-based device provides accurate and reliable measurements and is programmable up to 12 steps. The controller automatically self adjusts to any capacitor step value, indicates and eliminates defective capacitor steps and provides a visual display of harmonic overload alarm. Indicating lights show the number of steps that have been energized.



Switching Devices: Heavy duty contactors are specifically rated for capacitor switching to ensure long life and trouble free performance.

Access Door: The tamperproof front door has 3 point latching handles and stainless steel hinges. Optional circuit breaker with door interlock available.

Capacitor Fuses: Each capacitor stage is equipped with a properly selected 200kAIC current limiting fuse with a blown fuse indicator on the door.

Inrush Reactors: Are provided on each stage to limit the frequency and magnitude of inrush current during switching, reducing wear and tear from transients.



Alarm Contacts: Detect the over or under compensation related to the selected target power factor.

ADDITIONAL ADVANTAGES:

- Complete, assembled systems are CSA certified to meet UL requirements.
- Ease of installation and start-up
- Removable lifting lugs, eyes, non-corrosive hardware
- Controllix commitment to engineering, manufacturing, customer service and after-sales support

OPTIONS:

- Remotely mounted current transformer required and is available as an option.
- Available in indoor (NEMA 1), outdoor (NEMA 3R) and NEMA 4X enclosures.
- Integration with other switchgear or motor starter components, including fixed individual at load capacitors
- Top or bottom entry
- Remote alarm relay contacts

AVAILABLE RATINGS:

240 Volts 50 - 300 kVAR
480 Volts 50 - 600 kVAR
600 Volts 50 - 600 kVAR

DIMENSIONS:

Units with six (6) or less steps:

46"Width x 36"Depth x 54"Height
117cmWidth x 92cmDepth x 137cmHeight

Units with more than six (6) steps:

46"Width x 36"Depth x 72"Height
117cmWidth x 92cmDepth x 183cmHeight

Banks for larger applications can be cost-effectively engineered using multiple enclosures.



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21415 Alexander Road • Walton Hills, Ohio 44146 • U.S.A.

Tel.: +440.232.8757 • Fax: +440.232.1893

Email: sales@controllix.com