

New generation of CIRCUTOR capacitor banks

Capacitor banks, **plus** range

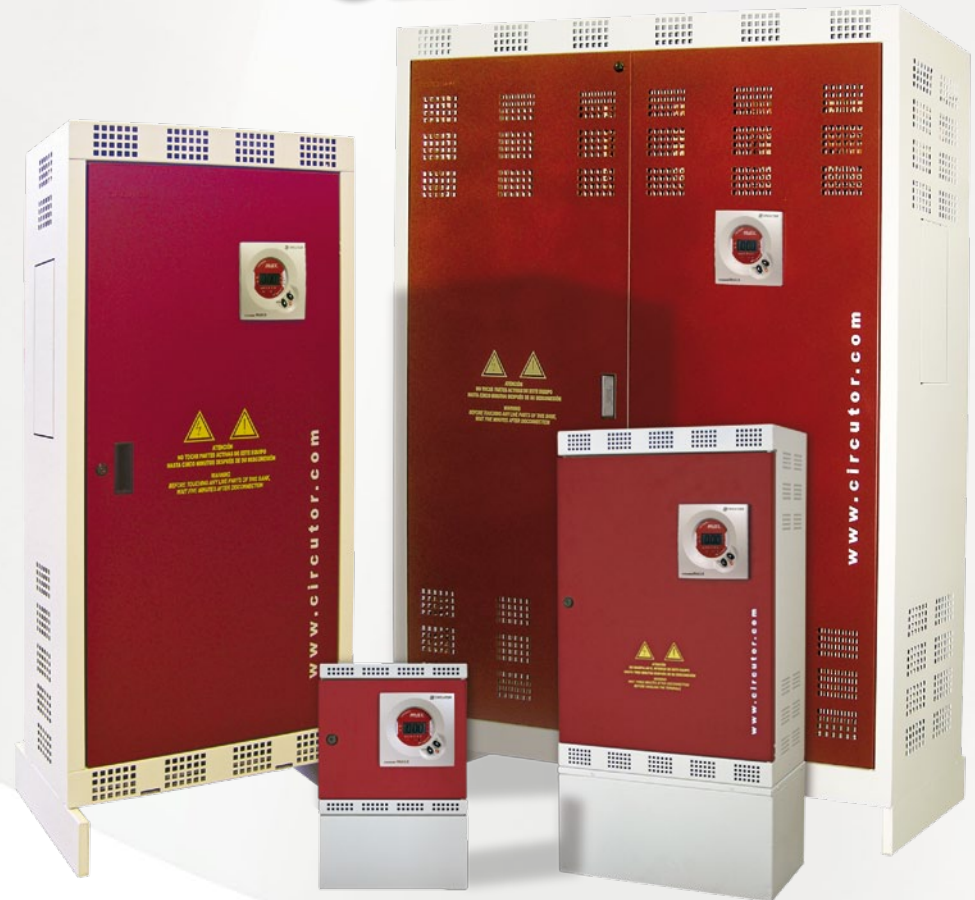


Intelligent capacitor banks

- ✓ Three-phase measurement
- ✓ Built-in network analyzer

CIRCUTOR
Technology for energy efficiency

Capacitor banks, STD **max** range



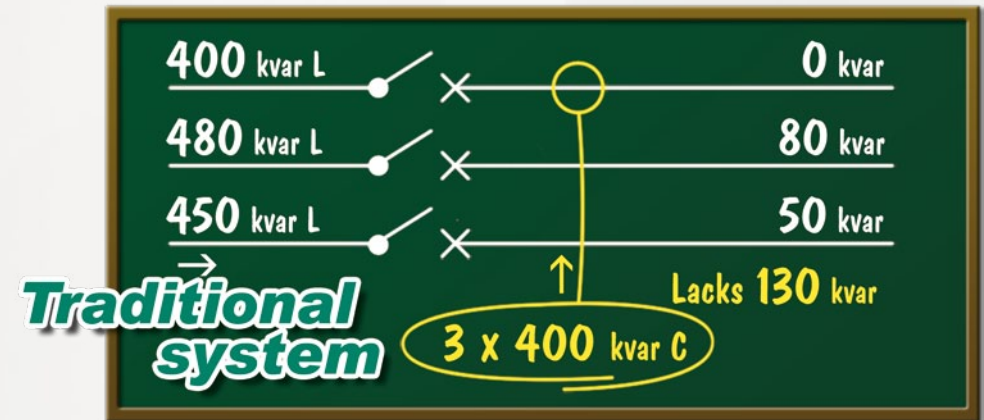
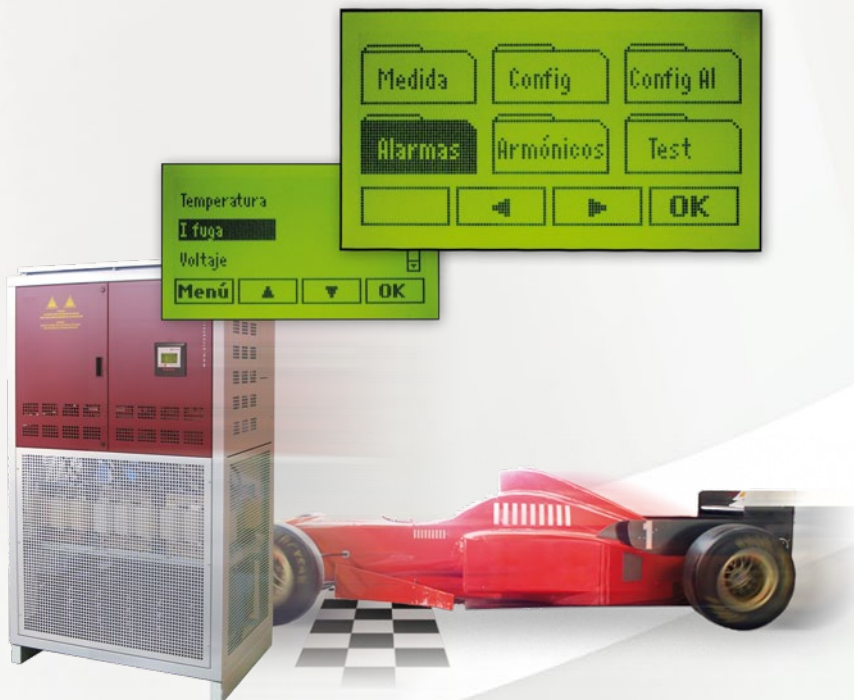
- ✓ The quality at the best price
- ✓ More than 300 units for immediate delivery

“plus” is more
a wide range of new features

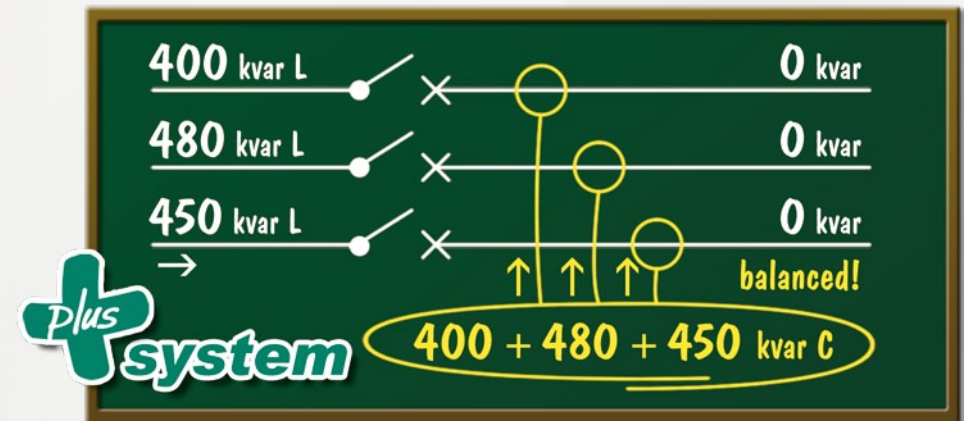
Intelligent capacitor banks

Series **plus** capacitor banks are a new concept in Power Factor Correction:

- ✓ They measure on the three phases and accurately compensate the total reactive energy
- ✓ They compensate reactive energy using individual phase control in real time and in addition to correcting the total reactive to zero; they also achieve a balance of active power between phases
- ✓ Plug and Play, start up at the touch of a key.



Installation demand: 1330 kvar // Capacitor bank input: 1200 kvar



Installation demand: 1330 kvar // Capacitor bank input: 1330 kvar

plus

Safety



Series **plus** capacitor banks are the safest on the market:

⚠ 4 levels of protection on their capacitors, which ensure continuous service

📡 Harmonic protection, with anti-resonance system

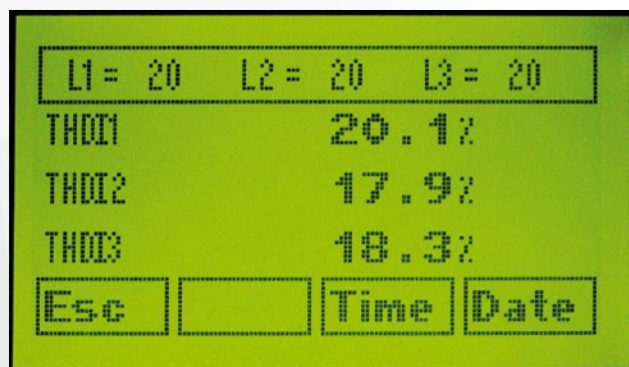
⚡ Individual step leakage current protection

🌡 Overheating protection

🔌 Individual step fuse protection



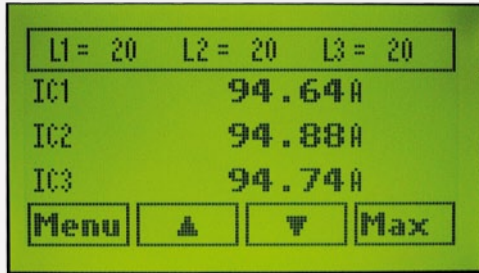
Measures individual step leakage current in real time. Only damaged capacitors are disconnected.



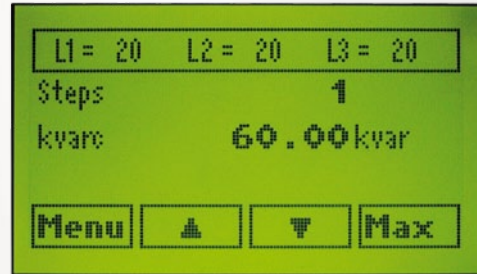
Supervision



Series **plus** system carries out a complete check on the status of the network and a self-check on the status of the capacitor bank, managing, among other things, the lack of compensation, loss of capacity, leakage, etc.



Capacitor bank current



Connected power

The TEST function enables preventive maintenance of each capacitor step as well as the display of their capacitance. Totally configurable alarms permit the supervision and management of all the electrical parameters of the installation.



Alarms: temperature, harmonics, overvoltage, undervoltage, leaks, etc.



Communications



Series **plus** capacitor banks are fitted with RS-485 communication to display a large amount of information available.



- ▲ The communication system enables the remote control, supervision and preventive maintenance both of the capacitor bank and the network
- ▲ RS-485 communications (Modbus protocol)
- ▲ SCADA software allows the display on a PC of several parameters and alarms (cos φ, leakage levels, general status of the capacitor bank, etc.) of the electric parameters of the network.

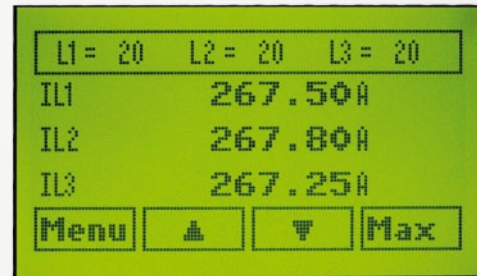
Measurement



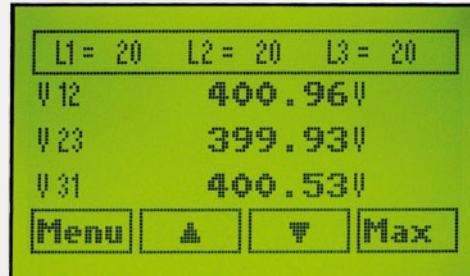
Series **plus** capacitor banks include a three-phase network analyzer, enabling instantaneous display of all the network electrical parameters (voltage, current, active power, reactive power, energies, harmonics, etc.).



cos φ and PF measurement



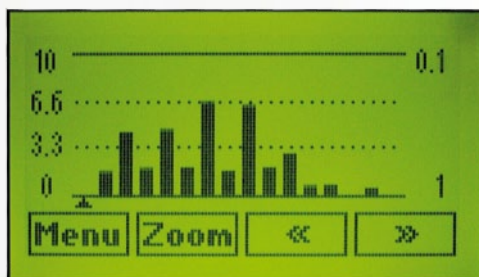
Phase current



Voltage measurement



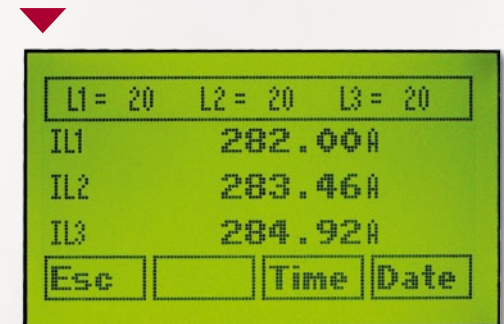
Power measurement



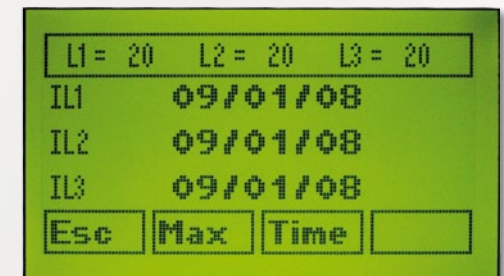
Harmonic measurement



Energy measurement



Registered I_{max}



Date of register



Time of register

Now standard range is *max*

STD capacitor banks new range with *max* power factor correction system

New features of computer *max*

The new range of STD capacitor bank with *max* compensation system retains de combination of high technology and robust offering *max*imum performance at the best price.

Installation and programming feature selection phase, eliminating the difficulty of installing the transformer in a specific phase.

Phase selection function



Built-in alarms displays:

- ▲ Compensation failure
- ▲ Over-compensation
- ▲ Over-current
- ▲ C.T. not connected or open
- ▲ Line current below measurable value

Accuracy at your reach

Network analyzer

computer *max* shows by display: $\cos \phi$, voltage, current, THD(I) and, besides, records in memory maximum values for voltage and current.



Voltage measurement



Current measurement



THDI measurement



Current maximum value



Voltage maximum value

computer *max* allows viewing in display the variation of $\cos \phi$, line current and THD(I), when manually connecting or disconnecting capacitor steps.

FCP system characteristic from **CIRCUTOR**.

A stock of more than 300 capacitor banks at your full disposal

Avoid reactive energy penalties immediately

CIRCUTOR has a stock of more than 300 capacitor banks available for immediate delivery.

 **CIRCUTOR** guarantee

- ✓ **More than 300 units for immediate delivery**
- ✓ **The most extensive and competitive range on the market**
- ✓ **Optimized, robust and easy to install**
- ✓ **User-friendly and intuitive programming systems**
- ✓ **Custom adaptability**



The quality at the best price

35 years leading reactive energy compensation



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