

Power Factor Controller



The **HPR** controller is able to guarantee accurate measurements and processing of the main electrical parameters. The capacitor steps are self-configurable, minimizing initial configuration tasks.

PERFORMANCE DATA

90-550 Vac Rated voltage

Rated frequency 50 / 60 Hz self-determined

Power absorbed 5 VA

Capacitor Bank Adjustable

insertion time

Automatic (Best fit), LIFO, Control algorithm

Progressive, Combined filter

QUALITY AND TESTING

EC 61010-1; IEC 61006-2; IEC 61006-4: level B Regulations

IEC 61326-1; UL 61010.

European Low voltage: 2014/35/CE;

directives

TECHNICAL DATA

Main features - Automatic initialization

- Automatic bank detection and automatic disconnection of defective banks

- CT ratio programmable from 1 to 9600 (CT up to 48000/5 A or 9600/1 A)

- Current and voltage measurement with true effective value

- Measurement of THD% in current, up to the 19th odd harmonic

- Measure of the $\cos\!\varphi$ between voltage and current using the waveform of the fundamental

- Manual and Automatic operation mode

- Digital input: choice between target $\cos \phi 1$ and $\cos \phi 2$, external alarm / low current signaling

- Temperature sensor: internal NTC

- Alarm memory: Storage of the last ten alarms

- In manual each battery can be forced (ON / OFF), ON is used for a fixed compensation

- RS485 serial output with Modbus-RTU protocol

Alarms Voltage measurement out of tolerance, low / high current alarm <5mA e >6A, Target compensation not

achieved, Capacitor bank power loss below 75%, Threshold limits THDu and THDi exceeded, Max. Hours

of operation achieved, Insertions and maximum hours reached by each Bank

Displayed values Cosφ, VL-L, VL-N, I, Power Factor, Ambient temperature, THD% in voltage and current, maximum

> values (temperature, voltage, THD), powers (active, reactive and apparent), number of battery insertions. It can also provide useful maintenance warnings, such as the loss of power on the benches, the number

of insertions, the actual working time of the capacitor banks.

Display / LED The unit is equipped with a backlit LCD display, to ensure easy data reading in all environmental

conditions; Status of capacitor banks, MAN / AUT, line status IND / CAP

Functioning Automatic 4 quadrants / Manual.

Amperometric input 0.015 .. 6 A, absorbed power < 1 VA, CT ratio 1 .. 9600.

P.F. regulation From + 0,7 (inductive) to -0,7 (capacitive).

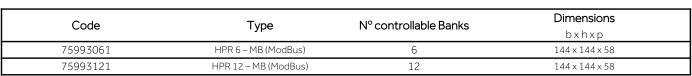
5 A / 250 Vac; 1 A / 400 Vac. Relay contacts

Degree of protection IP 41 (with cover IP 54) front; IP 20 back.

Operating temperature -20 / + 70 °C Storage temperature -40 / + 85 °C

CONFIGURATIONS

Table





Electromagnetic compatibility: 2014/30/CE.

COMAR