

EPCOS Product Brief 2013

Power Factor Correction

Power Factor Controller BR7000, BR7000-T

The power factor controller BR7000 is a follow-up development of the well-proven BR6000 series, offering a broad range of new characteristics and benefits. It can be used as a PF controller as well as a grid measuring device. As a supplement to the version for conventional power factor correction, e.g. for applications with slowly moving loads, the new series BR7000-T for dynamic PFC has been added to the portfolio. The basic version BR7000 features 15 relay outputs for the steps and 3 message/alarm relays. They are able to switch electro-mechanical capacitor contactors where slowly moving loads need to be handled. The dynamic version BR7000-T is equipped with 15 transistor outputs, capable to trigger electronic switching devices (e.g. of the TSM-series from EPCOS) with

very short reaction times for rapidly changing loads. Both versions are available also with OLED display for better readability with poor illumination.

The outputs of both types are programmable for different applications, e.g.

- 15 conventional steps, each for one three-phase capacitor.
- 15 steps for single-phase capacitors. Each output switch a single-phase capacitor to N, usually 5 per phase. Balancing of the grid is possible.
- Mixed operation, e.g. 6 single-phase capacitors (2 per phase) for balancing plus 9 steps for conventional compensation (three-phase capacitors).

The connection to a USB port of a PC via USB adapter (Interface RS485) offers further benefits with the software BR7000-SOFT.

PQS



Power Factor Correction PF Controller BR7000, BR7000-T



Features and benefits

- Three-phase measuring and controlling
- Operating voltage range: 110 ... 230 V AC
Enlarged measuring voltage range:
3 • 30 ... 440 V AC (L-N) /
3 • 50 ... 760 V AC (L-L)
- Measuring current: 3 • X:1A / X:5A
- LCD full graphic display: 128 x 64 dots, 8 lines,
HD-version with OLED display
- Self explanatory menu navigation in five languages:
EN/ES/ GER/RU/TR
- HELP button for interactive help text
- 15 switching outputs (relay or transistor)
- Three additional alarm/message relays
- Two isolated interfaces
- Detailed error messages with time stamp
- Automatic initialization/test run
- Automatic and manual operation, service operation,
expert mode
- Three-phase and single-phase controlling, mixed mode
possible
- Display and storage of maximum values, switching
operations and operating time
- Display of date and time
- Time-controlled functions possible by internal timer
- Oscilloscope mode for graphical display
- Quick programming

- Panel-mounted instrument
- Dimensions: 144 x 144 x 60 mm
- Three-phase measuring and display of following grid
parameters: voltage, current, frequency, energy, real
power, reactive power, apparent power, power factor,
missing reactive power, harmonic of voltage and current
(up to 31st), THD-V, THD-I, temperature

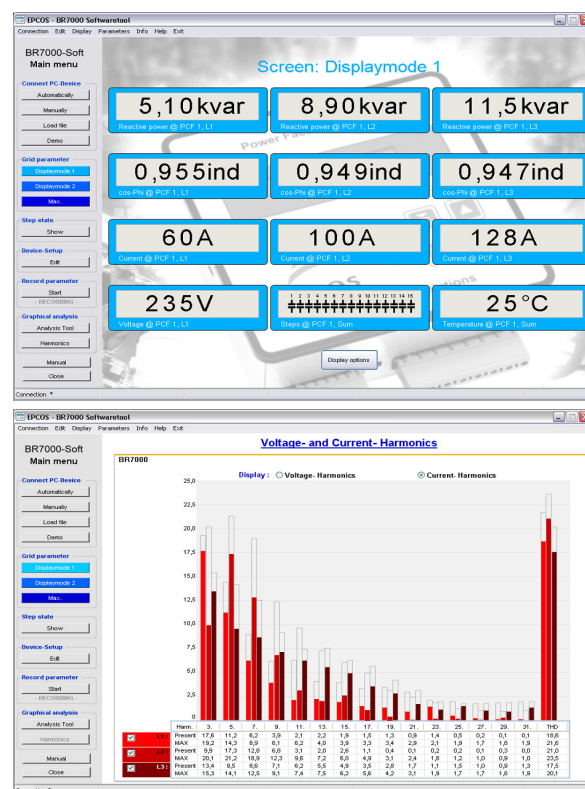
Ordering code

BR7000:	B44066R7415E230
BR7000-HD:	B44066R7515E230 (OLED display)
BR7000-T:	B44066R7615E230
BR7000-T/HD:	B44066R7715E230 (OLED display)

Accessories BR7000-SOFT for BR7000 and BR7000-T

The program allows a convenient visualization of grid parameters, analysis of recorded values and the graphical evaluation of all data received. Administration of several PF controllers is another benefit.

- Connection to RS485 bus
- Administration of several PF controllers possible
- Convenient analysis of recorded values
- Direct connection to USB port of PC via USB adapter
- CD-ROM included in the delivery



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