

## EPCOS Product Brief 2011

# Power Factor Correction

## PF Controller BR6000-HD for Power Quality Solutions

The PF controller BR6000-HD is the add-on-development of the well-known BR6000 series. The main feature of this type is the brand new OLED display, especially suited for very low or very high ambient temperature conditions: operating and storage temperature  $-40$  to  $+80$  °C.

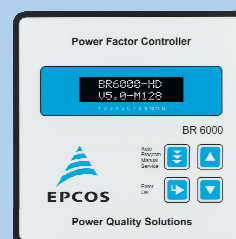
The new controller has been tested under harshest conditions and shows an excellent EMC behavior that makes it suitable for industrial applications with high electromagnetic interferences.

The OLED character display (white letters on black background) allows an optimum readability with high contrast (2000:1). It is visible and readable in darkness, from a large distance, and from all angles.

Of course, all features and characteristics of the BR6000-series are available with the new type:

- Menu-driven handling, plain language: CZ/DE/EN//ES/FR/NL/PL/PT/RU/TR
- Self-optimizing control capability
- Automatic initialization
- Test run possible
- Large voltage measuring range
- Recall function for recorded values
- Four-quadrant operation (e.g. standby generator)
- Powerful alarm output
- Second parameter set
- 13 steps possible with version /S
- Control series editor
- Detailed expert modes

# PQS



# Controller BR6000-HD



## Features and benefits

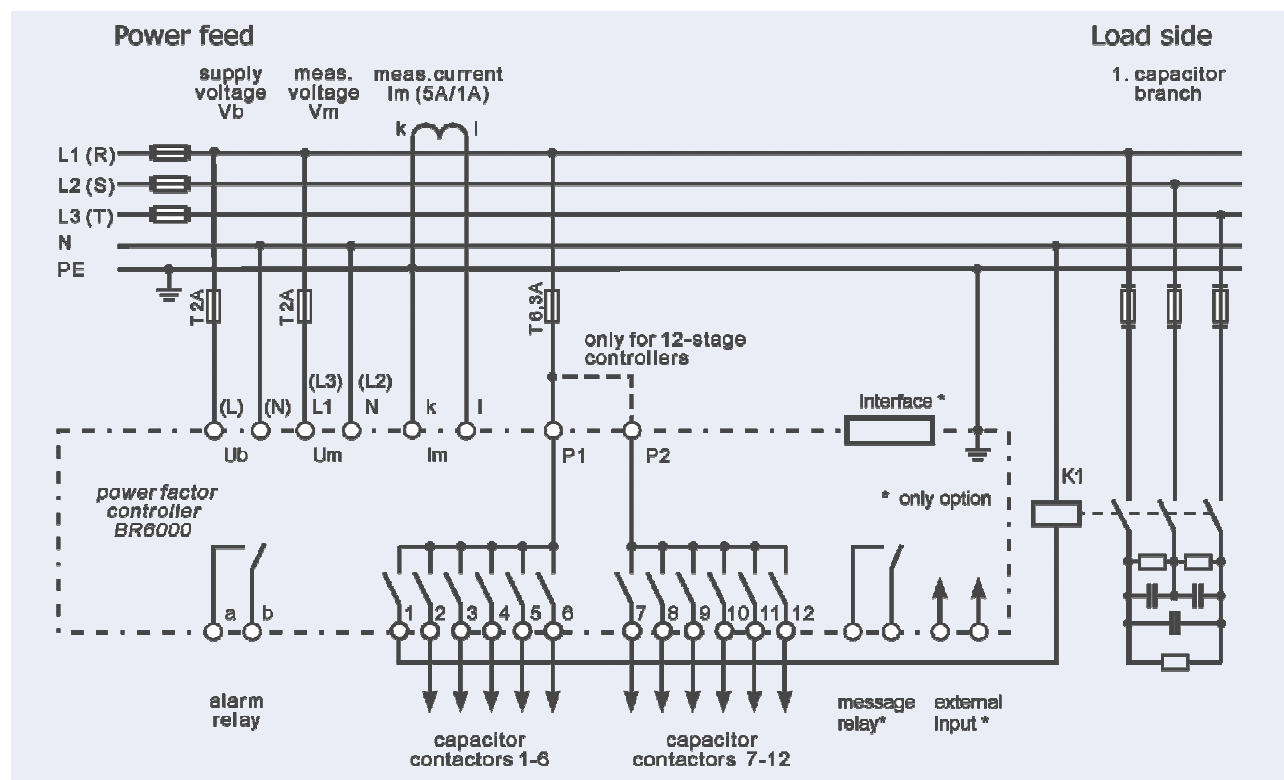
- Large number of system parameters displayed:
  - System voltage (V AC)
  - Reactive power (kvar)
  - Active power (kW)
  - Frequency (Hz)
  - Apparent power (kVA)
  - Apparent current (A)
  - Temperature (°C)
  - Real-time  $\cos \varphi$
  - Target  $\cos \varphi$
  - kvar value to target  $\cos \varphi$
  - Harmonics (3<sup>rd</sup> ... 19<sup>th</sup>)  
V (%), I (%)
  - Extended range of supply voltage  
110 ... 230 V AC,  $\pm 15\%$
- Extended range of measuring voltage  
30 ... 525 V AC (L-L / L-N)
- Direct connection to 230 V AC (L-N) possible
- Direct connection to 400 V AC (L-L), e.g. in grids without neutral – no additional adapter required
- Extended range of operating temperature  
–40 ... +80 °C

## Software extensions

- External current measurement via MMI6000.  
The menu point in Expert Mode 1 allows a remote current measurement to be realized with the MMI6000 connected via the RS485 interface. This is a benefit in the event of long distances between the current transformer and PF controller, as current signals cannot normally be transferred over long lines.
- The reference values for under- and overvoltage warning/disconnection can be freely programmed.
- Extension of interface  
The BR6000-HD with the optional RS485 interface features an additional RJ45 hardware port. This system interface allows connecting accessories.
- Compatible to BR-SOFT V5.0 for the Windows operating system
- Simultaneous connection of several BR6000-HD/S485 with a PC
- Comfortable visualization, display and recording of all grid parameters by using a PC
- Further processing of recorded data (export as Excel file)
- Graphical analysis and evaluation of data directly in the program,
  - read-out and editing,
  - recording and read-in of all BR6000-HD parameters
- Comfortable online operation of the BR6000-HD by PC

# Controller BR6000-HD

## Connection diagram



Ordering codes							
Type	Voltage 50/60Hz	Output Relay	Transistor	Alarm output	Switchover 2 <sup>nd</sup> parameter set	Inter- face *	Ordering code
BR6000-HD6	110 ... 230	6	–	Yes	No	No	B44066R6506E230
BR6000-HD12	110 ... 230	12	–	Yes	No	No	B44066R6512E230

\*For ordering codes of BR6000-HD with interface, please contact your local EPCOS sales office.

**Important information:** Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products. We expressly point out that these statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. This publication is only a brief product survey which may be changed from time to time. Our products are described in detail in our data sheets. The Important notes ([www.epcos.com/ImportantNotes](http://www.epcos.com/ImportantNotes)) and the product-specific Cautions and warnings must be observed. All relevant information is available through our sales offices.