Power Factor Controllers

Series/Type: BR6000-T

The following products presented in this data sheet are being withdrawn.

<table>
<thead>
<tr>
<th>Ordering Code</th>
<th>Substitute Product</th>
<th>Date of Withdrawal</th>
<th>Deadline Last Orders</th>
<th>Last Shipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>B44066R6312E231</td>
<td></td>
<td>2008-09-05</td>
<td></td>
<td>2008-12-31</td>
</tr>
</tbody>
</table>

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.
## Film capacitors – Power Factor Correction

### Accessories

**Power factor controller series BR6000–T**

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### Preliminary data

#### Technical Data

<table>
<thead>
<tr>
<th><strong>Weight</strong></th>
<th>1 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case</strong></td>
<td>Panel-mounted instrument, 144 × 144 × 55 mm (cut out 138 × 138 mm)</td>
</tr>
</tbody>
</table>

#### Ambient conditions

- **Over-voltage class**: III
- **Pollution degree**: 2
- **Operating temperature**: -10 °C ... +60 °C
- **Storage temperature**: -20 °C ... +75 °C
- **Sensitivity to inference (industrial areas)**: EN55082-2.1995
- **Spurious radiation (residential areas)**: EN55011 10.1997
- **Safety guidelines**: IEC 61010-1:2001, EN 61010-1:2001
- **Mounting position**: Any
- **Humidity class**: 15% ... 95% without dew

#### Protection class

- **Front plate**: IP54 to IEC60529
- **Rear side**: IP20 to IEC60529

#### Operation

- **Supply voltage**: 230 V AC, 50 and 60 Hz power lines
- **Target cos phi**: 0.8 ind. ... 0.8 cap.
- **Switching and discharge time range**: 20 ... 1000 milliseconds
- **Number of control series**: 20 series preset + control series editor for free programming
- **Control modes**:
  - Series switching (LIFO),
  - Circular switching (FIFO),
  - Self-optimized intelligent control mode

#### Measurement

- **Measurement voltage range**: 30 ... 300 V AC (L-N)
- **Fundamental frequency**: 50 and 60 Hz
- **Measurement current (CT)**: x/5 and x/1 Ampere possible
- **Minimum operating current**: 40 mA / 10 mA
- **Maximum current**: 5.3 A (sinusodial)
- **Zero voltage release**: < 15 ms

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FK PC PM PFC  
July 2007
## Preliminary data

### Switching outputs

<table>
<thead>
<tr>
<th>Transistor outputs</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Number of outputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Switching voltage/power</td>
<td>6 or 12 steps available</td>
<td>10 ... 24 V DC</td>
</tr>
</tbody>
</table>

### Alarm relay

Potential-free contact (max. 250 V, 6 A)

### Message relay

Potential-free contact (max. 250 V, 6 A)

2 complete sets of parameters programmable (activation of 2nd parameter set via external input)

### Interface optional for 12-step controller

- RS232: B44066R6312E231
- RS485: B44066R6412E231

## Ordering Codes

<table>
<thead>
<tr>
<th>Type</th>
<th>Voltage 50/60 Hz</th>
<th>Output</th>
<th>Alarm output</th>
<th>Switchover target cos phi 1/2</th>
<th>Interface</th>
<th>Ordering code</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR6000-T06</td>
<td>230</td>
<td>-</td>
<td>6</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BR6000-T12</td>
<td>230</td>
<td>-</td>
<td>12</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>BR6000-T12/S232</td>
<td>230</td>
<td>-</td>
<td>12</td>
<td>Yes</td>
<td>Yes</td>
<td>RS232</td>
</tr>
<tr>
<td>BR6000-T12/S485</td>
<td>230</td>
<td>-</td>
<td>12</td>
<td>Yes</td>
<td>Yes</td>
<td>RS485</td>
</tr>
</tbody>
</table>
Preliminary data

Connection plan

![Connection diagram](image-url)
Accessory for PFC-Controller BR6000-T

Adapter

Used to align the BR6000 to grids without neutral conductor. The input of the adapter is connected to the 3 phases of the grid; output connected to the measuring voltage input of the controller.

⚠️ The voltage at the measuring input must not exceed 525 V. At output “1/2 L1” half measuring voltage L-N is disposable.

Technical Data

<table>
<thead>
<tr>
<th>Design</th>
<th>Compact form; all connections as screw type clamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>Snap on top hat rail</td>
</tr>
<tr>
<td>Input voltage</td>
<td>Grid without neutral max. 3 × 525 V</td>
</tr>
<tr>
<td>Output voltage 1</td>
<td>L1-N</td>
</tr>
<tr>
<td>Output voltage 2</td>
<td>½ L1-N (when using this output, a U-transformer ratio of 2 has to be programmed at the BR6000)</td>
</tr>
<tr>
<td>Protection</td>
<td>Necessary external accord. cable cross section</td>
</tr>
<tr>
<td>Max. ambient temperature</td>
<td>–20 ... +55 °C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>76 × 45 × 110 mm (h × w × d)</td>
</tr>
<tr>
<td>Ordering code</td>
<td>B44066R9999E230</td>
</tr>
</tbody>
</table>

⚠️ Please read caution information about PFC capacitors and cautions as well as installation and maintenance instructions in the actual version of the Product Profile Power Factor Correction to ensure optimum performance and prevent products from failing, and in worst case, bursting and fire, etc. The actual Product Profile is available at www.epcos.com/publications.

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