



PFC

Components for Low-Voltage
Power Factor Correction



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PhaseCap[®], PhaseCap[®]HD



Power capacitors for low-voltage power factor correction¹⁾

Applications

- Power factor correction equipment (fixed and automatic)
- Tuned and detuned capacitor banks

Features

Voltage: 230, 400, 415, 440, 480, 525 V
Output: 5 to 60 kvar, 1/3 phase, 50/60 Hz
Life expectancy: up to 115 000/130 000 hours, depending on operation conditions

Customer benefits

Costs

- Reduction of component costs
- 50 % reduction of mounting and connection time
- Reduced costs due to long life expectancy (up to 115 000/130 000 hours)

Electrical

- High over-current loading (up to $1.5 \times I_n$)
- High inrush current withstand capability due to “wave cut” and heavy edge (up to $200 \times I_n$)

Safety

- Dry design, inert gas
- Touch-proof terminals (IP20)
- Minimized passive and active fire risk under IEC831 operation conditions

Environment

- No oil pollution



¹⁾ Products shown in this catalog reflect typical specifications. You are kindly requested to approve our product specifications or request our approval for your specifications before ordering.

Further information see Product Profile

■ [Power Factor Correction](#) (Ordering No. EPC:26012-7600)



WindCap®

Power capacitors for PFC in wind turbines and industrial applications¹⁾

Applications

- Wind turbine generator applications
- Industrial applications involving distorted networks
- For 690/800 V grids

Features

- Voltage: 690, 800 V
- Output: 5 to 33 kvar, 3 phase, 50/60 Hz
- Life expectancy: up to 130 000 hours, depending on operation conditions

Customer benefits

Costs

- Reduced life cycle costs thanks to long life expectancy (up to 130 000 hours)
- Reduced mounting and connection costs

Electrical

- Low losses
- High pulse current withstand capability (up to 300 x I_n)

Mechanical & maintenance

- Any mounting position, maintenance-free

Safety

- Dry design, inert gas
- Touch-proof terminals (IP20)
- Minimized passive and active fire risk under IEC831 operation conditions

Environment

- No oil pollution



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PhiCap™

Power capacitors for low-voltage power factor correction¹⁾

New: SIGUT™ terminal

Applications

- Fixed power factor correction
- Automatic power factor correction equipment

Features

Voltage: 230, 400, 415, 440, 480, 525
Output: 0.5 to 30 kvar, 1/3 phase, 50/60 Hz
Life expectancy: up to 100 000 hours,
depending on operation conditions

Customer benefits

Costs

- Very cost-effective design

Electrical

- Good inrush-current withstand capability due to heavy edge (up to 100 x I_n)
- Corona-free, high capacitance stability

Mechanical & maintenance

- Maintenance-free

Safety

- SH type
- Over-pressure tear-off fuse
- SIGUT™ block-type terminal IP20 for B32344 series



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Key components

for low-voltage power factor correction¹⁾

New: BR604

Application

- Low-voltage power factor correction equipment

1. Power Factor Controller BR604 and BR6000

Features

- Supply voltage: 230 VAC
(other voltages available upon request)
- Measurement voltage range:
30 to 300 VAC phase to neutral
(i.e. 50 to 525 V phase to phase)
- Fundamental frequency: 50 and 60 Hz
- Output stages: 4, 6 and 12 steps available



Customer benefits

- Very user friendly, plain language menu
- Display of large numbers of system parameters
- Alarm output
- Recall of many recorded system parameters
- Very intelligent control behavior

2. Anti-resonance filter circuit reactors

Features

- Voltage: 400 V*
- Output: 5 to 100 kvar, 50/60 Hz
- Detuning: 5.67%, 7%, 14%

* Other voltages upon request

Customer benefits

- High harmonic stress resistance
- Very low losses
- High linearity avoids “choke tilt”
- Low noise
- Long operating life expectancy
- With temperature protection (NC aux. contact)



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3. Capacitor contactors, with pre-loading resistors

Features

Voltage: 400 to 690 V
Output: 12.5 to 120 kvar, 50/60 Hz

Customer benefits

- Excellent damping of inrush current
- Improved power quality
- Reduction of voltage sags
- Increased mean operating life expectancy of the PFC equipment



Contact



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Literature

Product Profiles

- [Damping of Inrush Current](#)
(Application Note, English,
Ordering No. EPC:26008-7600)
- [Dynamic Progress](#)
(Application Note, German/English,
Reprint from EPCOS COMPONENTS 3/03)
- [Power Factor Controller BR6000](#)
(Product Profile, English, EPC:26010-7600)
- [Power Factor Correction](#)
(Product Profile, English, EPC:26012-7600)

ZVEI Study

- [Protecting the Climate through Power Factor Correction](#)

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