



Film Capacitors – Power Factor Correction

Key components

Series/Type: Power factor controller series BR6000–T, V5.0

Ordering code: B44066R6***E230 ... B44066R6***E231

Date: November 2009

Version: 1

Preliminary data
Charateristics

- Intelligent control
- Menu driven handling (plain language)
Dutch/English/French/German/Polish/Portuguese/
Russian/Czech/Spanish
- Self-optimizing control capability
- Large measuring voltage range
- Recall function of recorded values
- Four-quadrant operation (e.g. stand by generator)
- Powerful alarm output
- Control series editor (value perception selectable)
- 2nd expert mode
- Interface RS485 optional


Features

Display	<ul style="list-style-type: none"> - Large and multifunctional LCD (2 x 16 characters) - Graphic and alphanumeric - LCD illumination
System parameters displayed	<ul style="list-style-type: none"> - System voltage (V AC) - Reactive power (kvar) - Active power (kW) - Frequency - Apparent power (kVA) - Apparent current (A) - Temperature (°C / °F) - Real-time cos φ - Target cos φ - kvar value to target cos φ - display of values also as percentage
Alarm output	<ul style="list-style-type: none"> - Insufficient compensation - Overcompensation - Undercurrent - Overcurrent - Overtemperature - Threshold value programmable - Internal error storage - 2nd signal relay random - Triggering time programmable
Recall recorded values	<ul style="list-style-type: none"> - Maximum voltage, (V_{max}) - Maximum reactive power, Q (kvar) - Maximum active power, P (kW) - Maximum apparent power, S (kVA) - Maximum temperature (°C)
Dynamic PFC	<ul style="list-style-type: none"> - Direct triggering of thyristor modules series TSM

Preliminary data
Technical data

Weight	1 kg
Case	Panel-mounted instrument, 144 x 144 x 55 mm (cut out 138 x 138 mm)
Ambient conditions	
Over-voltage class	III
Pollution degree	2
Operating temperature	-20 ... 60 °C
Storage temperature	-20 ... 75 °C
Sensitivity to inference (industrial areas)	EN55082-2.1995
Spurious radiation (residential areas)	EN55011 10.1997
Safety guidelines	IEC61010-1:2001, EN61010-1:2001
Mounting position	Any
Humidity class	15 ... 95% without dew
Protection class	
Front plate	IP54 according to IEC60529
Rear side	IP20 according to IEC60529
Operation	
Supply voltage	110 ... 230 V AC, 50 and 60 Hz power lines
Target cos φ	0.3 inductive to 0.3 capacitive adjustable
Switching and discharge time range	20 ... 1000 ms
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 ... 525 V AC (L-N) or (L-L)
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 (sinusoidal)
Zero voltage release	< 15 ms

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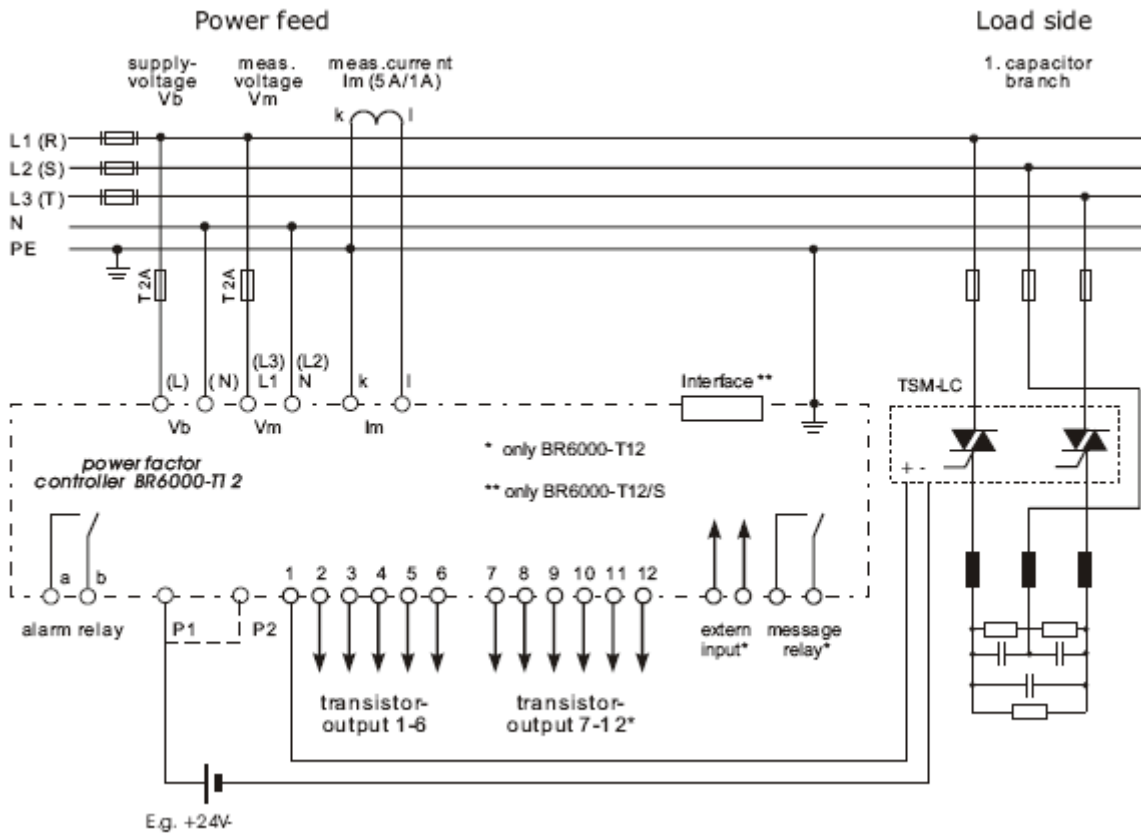
Switching outputs Transistor outputs - Number of outputs - Switching voltage/power	6 or 12 steps available 10 ... 24 V DC
Alarm relay Message relay	Potential-free contact (max. 250 V, 6 A) Potential-free contact (max. 250 V, 6 A) 2 complete sets of parameters programmable (activation of 2 nd parameter set via external input)
Interface	RS485 optional for 12-step controller

Ordering Codes

Type	Voltage 50/60 Hz V AC	Output		Alarm output	Switchover target cos φ 1/2	Inter- face	Ordering code
		Relay	Transistor				
BR6000-T06	110 ... 230	-	6	Yes	No	No	B44066R6106E230
BR6000-T12	110 ... 230	-	12	Yes	Yes	No	B44066R6112E230
BR6000-T12/S485	110 ... 230	-	12	Yes	Yes	RS485	B44066R6412E231

Preliminary data

Connection plan



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