

POWER FACTOR CONTROLLERS



BHARTIA CUTLER-HAMMER

BCH ELECTRIC LIMITED
we care for you

Power Factor Controller

RG-A/E Series (Economic Models)

General

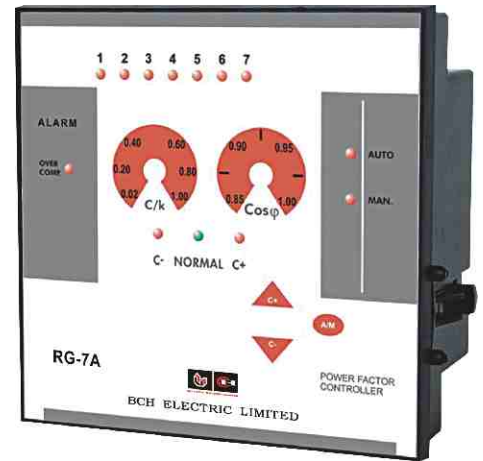
Power factor controllers are used to measure the power factor of the load and then control the capacitor banks of central reactive power compensation units.

The measured power factor is compared with the set values in order to provide system compensation.

RG-A/E series are microcontroller based digital equipments.

Features

- Economic models for balanced load compensation.
- Automatic / Manual mode selection with indicator light.
- C/k potentiometer to adjust capacitor step response.
- $\cos\phi$ potentiometer to adjust target $\cos\phi$ value.
- Over Voltage Alarm.
- Automatic disconnection of all capacitor steps in case of mains failure over 200 msec.
- Flush mounting with rear terminals.
- Non-flammable enclosure.
- IEC 61000-6-2, IEC 61000-6-4, IEC 61010-1



MODELS	RG-7A	RG-7E
SPECIFICATIONS		
Functions		
Capacitor Steps	7	7
$\cos\phi$ Setting	0.85< $\cos\phi$ <1 (inductive)	
C/k Setting	0.02-1.00	
Electrical Parameters		
Operating Voltage (Un)	230 VAC \pm 10%; 50/60 Hz	
Operating Current	50mA-5.5A (.../5A Current Transformer)	
Network Type	3-phase / 4-wire (Star) 3-phase / 3-wire (Delta) - optional	
Power Consumption	<2VA (Current Circuit)	
Time Delay Between Steps	<6VA-12VA (Voltage Circuit)	
Output Contact	3A, 750 VA	
Mechanical Parameters		
Enclosure	Non-flammable	
Equipment Protection	Double Insulation (□), Measurement Category III	
Ambient Operating Temperature	-5°C, +55°C	
Ambient Humidity	95%	
Degree of Protection	IP40 (front panel)	
Connection / Installation	Terminal / Flush-mounting with rear terminals	
Dimensions	144x144mm	96x96mm
Weight / each	1 kg	0.5 kg

Power Factor Controller

RG-T / RG3-T SERIES

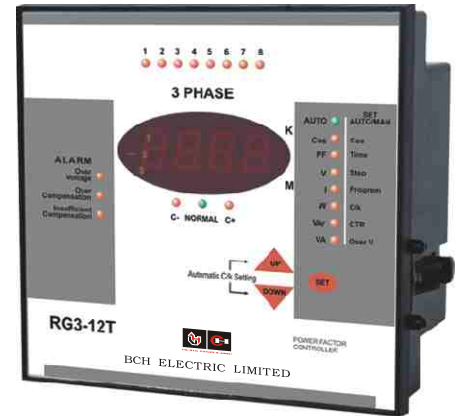
General

RG-T series are for compensation of balanced loads.

RG3-T series are ultimate solution for compensation of unbalanced loads. The compensation is realized by the reactive power of the system through 3 current transformers from 3 phases. This makes RG3-T series a unique solution for unbalanced load compensation.

Features

- Measurement of A, V, PF, Cos ϕ , ΣW , ΣVA , ΣVAr (W, VA, VAr for RG-3T).
- Automatic / Manual mode selection.
- C+ / NORMAL / C- condition lights.
- Automatic calculation of C/k value.
- Target cos ϕ adjustment.
- Insufficient Compensation Alarm.
- Over Compensation Alarm.
- Programmable Over Voltage Protection & Alarm for capacitors.
- Automatic disconnection of all capacitor steps in case of mains failure over 200 msec.
- Non-flammable enclosure.
- 5 different programs option.
- IEC 61000-6-2, IEC 61000-6-4, IEC 61010-1.



MODELS	RG-T	RG3-T
SPECIFICATIONS		
Electrical Parameters		
Operating Voltage (Un)	230 VAC \pm 10%; 50/60 Hz	
Operating Current	50mA-5.5A	
Capacitor Steps	5,6,8,12	8,12
Network Type	3-phase / 4-wire (Star) 3-phase / 3-wire (Delta) - optional	
Accuracy	1% \pm digit(V,I,cos ϕ); 2% \pm digit(W, VAr, VA)	
Current Transformer Ratio	5...10,000 / 5A	
Power Consumption	<2VA (Current Circuit) <3VA-10VA (Voltage Circuit)	
Cos ϕ Setting	0.85<cos ϕ <1 (inductive)	
C/k Setting	0.02-1.00	
Time Delay Between Steps	2-1800 sec. (for switch-on & switch off separately)	
Over Voltage Setting	240-275V AC	
Output Contact	3A, 750 VA	
Mechanical Parameters		
Equipment Protection	Double Insulation(\square), Measurement Category III	
Ambient Operating Temperature	-5 $^{\circ}$ C, + 55 $^{\circ}$ C	
Ambient Humidity	95%	
Degree of Protection	IP 40 (front panel)	
Connection / Installation	Terminal / Flush-mounting with rear terminals	
Dimensions	144x144mm, 96x96mm only for 6 steps RG-6T	
Packing Weight	0.6kg, 0.45-only for 6 steps RG-6T	

DESCRIPTION

RG-5T-	Power Factor Controller with 5 steps (144x144mm)
RG-6T-	Power Factor Controller with 6 steps (96x96mm)
RG-8T-	Power Factor Controller with 8 steps (144x144mm)
RG-12T-	Power Factor Controller with 12 steps (144x144mm)
RG-3-8T-	3-phase Power Factor Controller with 8 steps (144x144mm)
RG-3-12T-	3-phase Power Factor Controller with 12 steps (144x144mm)

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