

Reactive Power Controller

Reactive Power Controller Relay (RKR-XXX)

Application and Operation Principles

GT type reactive power control relays are designed in conformity with the automated systems and do not contain any adjustment button on its panel.

Operating system is based on $\cos \phi$ value of which is in between 0.95 and 1.

It switches on capacitor if $\cos \phi$ value is less than the value of 0.95 however it switches off the capacitor if $\cos \phi$ value is greater than of 1.

Time delay is 14 sec. for switching on capacitor and 5 sec. for switching off capacitor.

Selection of capacitor must be followed from the minimum values of 1-1.5 Kvar to the multiple values of 1-2-4-8-16

In no load or minimum load conditions where $\cos \phi$ value is not in between 0.95 and 1, 1st step capacitor will work like a joker capacitor in a way to switch on and off capacitor within the defined time delay duration. Hence, 1st capacitor should be in the minimum values.

On the front panel: $\cos \phi$ value indicator, Stepping light, Normal, Inductive and capacitive LED's are displayed.

"Error Warning" in text is displayed in case of current and/or voltage signals can not reach at the unit.

Other Capacitor Conditions : 1-1-1-1-1
1-2-2-2-2
1-2-4-4-4
1-2-4-8-16

Order Informations

Step Type	1	2	3	4	5	6	7	8	9	10	11	12	13
RRK-3GT	1-1.5kVAr	2.5kVAr	5kVAr	-	-	-	-	-	-	-	-	-	-
RRK-5GT	1-1.5kVAr	2.5kVAr	5kVAr	10kVAr	20kVAr	-	-	-	-	-	-	-	-
RRK-7GT	1-1.5kVAr	2.5kVAr	5kVAr	10kVAr	20kVAr	40kVAr	80kVAr	-	-	-	-	-	-
RRK-9GT	1-1.5kVAr	2.5kVAr	5kVAr	10kVAr	20kVAr	40kVAr	80kVAr	80kVAr	80kVAr	80kVAr	-	-	-
RRK-11GT	1-1.5kVAr	2.5kVAr	5kVAr	10kVAr	20kVAr	40kVAr	80kVAr	80kVAr	80kVAr	80kVAr	80kVAr	80kVAr	-
RRK-13GT	1-1.5kVAr	2.5kVAr	5kVAr	10kVAr	20kVAr	40kVAr	80kVAr	80kVAr	80kVAr	80kVAr	80kVAr	80kVAr	80kVAr