

CURRENT LIMIT RESISTOR (CLR)



Current limit resistor (CLR) will make the grounding relay and zero voltage meter operate due to the current which in a djusted primary neutral side current when fault. And it will be connected with 3ry side of GPT between terminal "a" and terminal "f" and then it restrains the 3ry harm once voltage and abnormal potential.

Specification

MODEL	1ry voltage of GPT(KV)	3ry voltage of GPT(KV)	Resistance value(Ω)	capacity
DCR-1	3.3	110	16	400W
DCR-2	3.3	190	50	
DCR-3	6.6	110	8	
DCR-4	6.6	190	25	
DCR-5	3.3, 6.6	110, 190	by order	

- Remark : 1. If max 3ry voltage of GPT is on CLR during 1 minute over, the CLR may be fired.
- 2. In case og low voltage G.P.T. Please adjust the value of CLR to 100~70% loading value of rating burden on GPT 3ry open terminal.

• How to calculate the resistor value (3300V, 6600V)

$$I_g = \frac{E_1}{\sqrt{3}} \times \frac{1}{N} \times \frac{9}{R}$$

$$E_1 = \frac{6,600V}{\sqrt{3}} \quad E_1 = \frac{190}{3} V$$

$$R=25(\Omega)$$

$$I_g = \frac{E_1}{\sqrt{3}} \times \frac{1}{N} \times \frac{9}{R}$$

$$E_1 = \frac{6,600V}{\sqrt{3}} \times \frac{1}{60} \times \frac{9}{25} = 0.38(A)$$

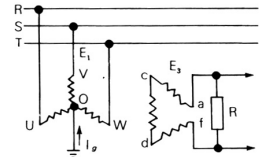
$$R = \frac{6,600V}{\sqrt{3}} \times \frac{1}{60} \times \frac{9}{0.38} = 25(\Omega)$$

I_g : Ground Fault Current

E₁ : GPT 1ry voltage

n : Voltage Ratio = Winding Ratio

R : Limiting Resister(Ω)



- Remark : In case of low voltage GPT, the above formula can not be used

Dimension

