

## 한류 저항기 (Current Limit Resistor (CLR))



한류저항기는 선택 및 방향지락 계전기(SGR, DGR)를 동작시키는데 필요한 유효전류를 발생시키고 오픈델타 결선회로의 각 상 전압 중에 제3고조파 전압의 발생을 방지하며, 중성점 불안정 현상 등의 이상현상을 제어하는데 필요합니다.

The CLR makes the SGR and DGR operate by the current and it restrains the 3rd harmonic voltage in phase to phase voltage of open delta circuit. it needs to restrain the abnormal reposition of neutral point and unstable phenomena at neutral.

190V 25Ω at 6.6kV Limit time 1 min.  
110V 8Ω at 6.6kV Limit time 1 min.  
190V 50Ω at 3.3kV Limit time 1 min.  
110V 16Ω at 3.3kV Limit time 1 min.

- The equation of the resistor for current limiting.

$$R = \frac{E}{\sqrt{3}} \times \frac{9}{I_g \times n^2}$$

- The equation for the Zero phase Current.

$$I_g = \frac{E}{\sqrt{3}} \times \frac{9}{n^2 \times R}$$

- The equation for the Zero phase Voltage.

$$V_o = \frac{\frac{E}{\sqrt{3}} \times 3}{n}$$

ex) If the resistive current is 380mA at 6.6kV, 190V

$$R = \frac{E}{\sqrt{3}} \times \frac{9}{I_g \times n^2} = \frac{6600}{\sqrt{3}} \times \frac{9}{0.38 \times 60^2} = 25(\Omega)$$

If the resistive current is 380mA at 6.6kV, 110V

$$R = \frac{E}{\sqrt{3}} \times \frac{3}{I_g \times n^2} = \frac{6600}{\sqrt{3}} \times \frac{9}{0.38 \times 104^2} = 8(\Omega)$$

$V_o$  : Zero Phase Voltage

$I_g$  : Grounding fault Current

$R$  : Limit Resistor

$n$  : Turn ratio of EVT

- The above refer to KSCP-C-1008, page 434

- Weight : ≒ 1.5kg

### ■ 외형치수 (Dimension)

