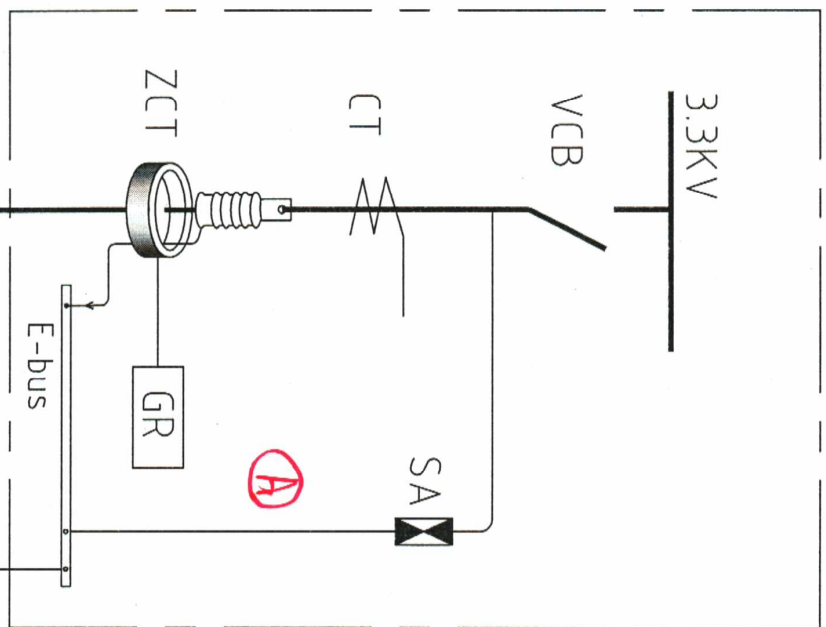
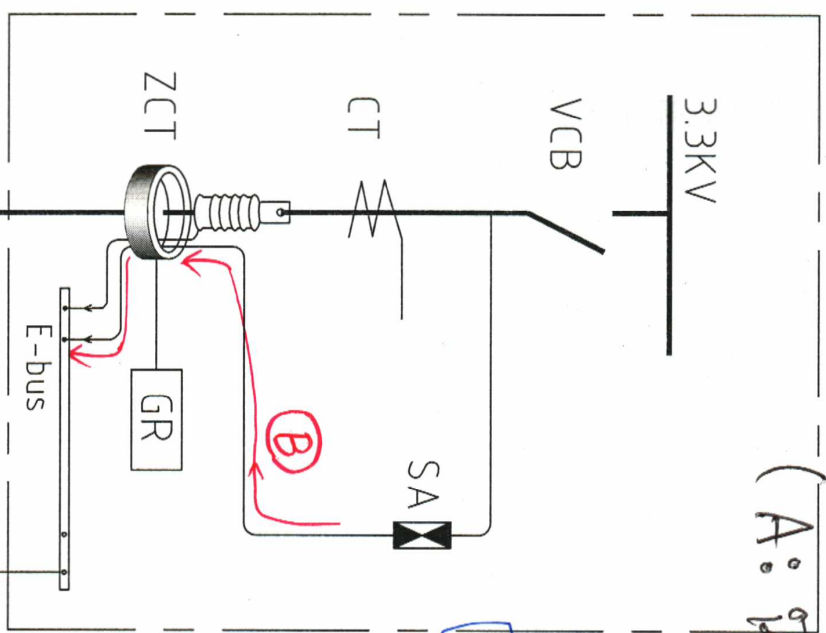


Q: SA 접지를 ZCT 통과시켜 지그리 할때 흐름은? (A: 보라)



GR: 지락선류 이외의 인출전류
화재발생 불거짐

증가시키는 회로 100mA / 0.05Sec ~
(59ms 이상 지연이 없음)



SA 불거짐

1. 개폐 장치 등 이상전압으로 부러지기 보임
2. VCB 등에서 발생 하는 개폐 장치, 순간과를 전압, 선로에서 발생 하는 이상전압 보임
3. BIL이 낮은 기기 보임

SA 접지를 ZCT 통과시켜 지그리
(SA 이상유무를 검출하는 목적)

증가하여 지그리 하여도 GR 증가
시간에 의해서 불거져도 화재발생

SA 불거짐

MOV는 1000V 전압을 견디고
MOV는 1000V 전압을 견디고

2013 7 / 11

2013 7 / 11

The PDV-65 design satisfies the IEC 60099-4 5kA requirements. Table 15 specifies the electrical characteristics while Table 16 specifies the dimensions, weights, clearances and insulation characteristics of the arrester only configuration.

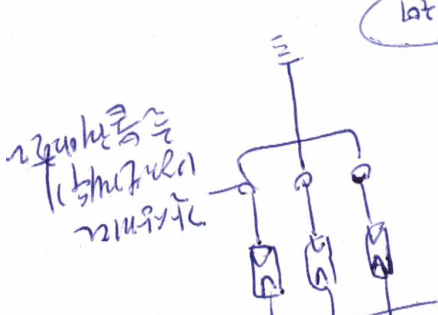
Voltage Rated U_n	U_c Continuous Operating Voltage	Catalog Number	0.5μs Steep Front	8/20 μs Lightning Surge	Residual Voltage U_{res} (kV)	Switching Surge 60/100

U_r	U_c	Catalog Number	0.5μs Front Step	Residual Voltage U_{res} (kV)
kV	kV		10kA	
Rated Voltage	Operating Voltage		1.5 kA	
			3 kA	
			5 kA	
			10 kA	
			20 kA	
			40 kA	
			8/20 μs Lightning Surge	
			60/100	
			Switching Surge	

U_r Rated Voltage	U_c Continuous Operating Voltage	kV	Catalog Number	Height Y	Creepage Distance	Recommended Clearances	Weight	Insulation Withstand (kV)	Power Frequency Withstand
				mm	mm	mm	mm		
36			214003	140	391	127	76	1.6	14.3
30			214005	140	391	137	86	1.6	28.6
27			214008	140	391	152	102	1.6	39.0
24			214009	140	391	157	107	1.6	40.95
21			214010	140	391	191	140	3.0	57.2
18			214013	216	647	216	165	3.0	63.7
15			214015	216	647	241	191	3.0	74.1
12			214017	216	647	254	203	3.0	80.6
10			214020	277	782	305	254	4.5	100.1
9			214022	354	1038	330	279	4.5	113.75
6			214024	354	1038	356	305	4.5	124.15
36			214029	430	1295	419	368	6.0	156.0

SEPTEMBER 2007

18.12.25 KA 22.32.17



→ 24K180이서 180인 값을 60이 되니까
50.2KV 이므로 제1가항식/2가 된다

[illegible]

INSULATION WITHSTAND CHARACTERISTICS

25msec 2kV 2m 5
12-10V (discharge Voltage)

Housing Insulation Withstand Voltages, Ur-3-36 kV, UNS and UHS, IN = 5 & 10 KA Class 1

TABLE 5

→ 12-14 (discharge voltage)

	9.9
(7.4)	5.5
	9.9

45 msolca

Cooper

done /
20/12/20

한글서체

X 10000
01000000

10075
SA/S

235-35

TABLE 5a
Insulation Withstand Characteristics of Optional Insulated Mounting Bracket

Insulated Mounting Bracket	Bracket Mounting Length Center-to-Center (mm)	Leakage Distance (mm)	Strike (mm)	Power Frequency Voltage Withstand (60 sec, Wet, kV)	1.2/50μs Impulse (kV Crest)
Standard For Ur = 3 – 10 kV	105	150	71	36	70
Standard For Ur = 12 – 36 kV	127	226	99	48	80

DIMENSIONS AND CLEARANCES

Table 6. Outline drawings for common options are shown. Dimensions (shown in mm) for these arrangements are listed in

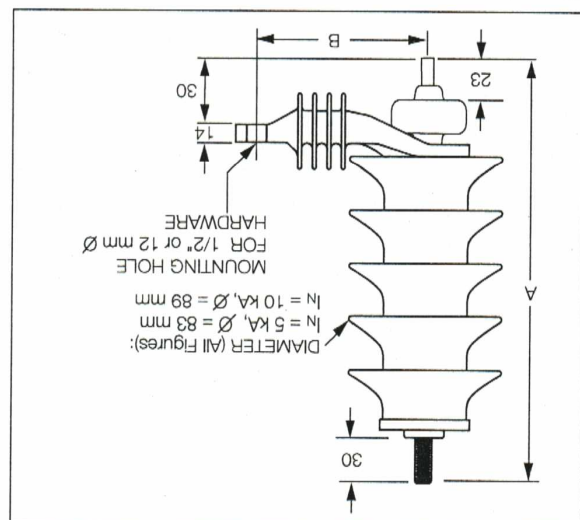


Figure 4. UltraSIL polymer-housed Varistar surge arrester—with optional insulated mounting bracket, and disconnect.

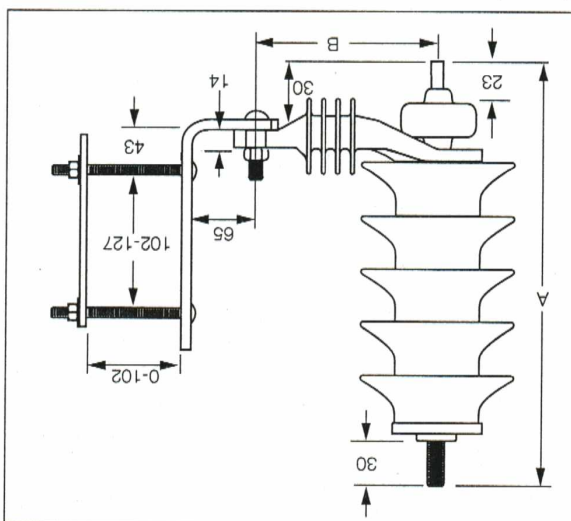


Figure 5.
UltrasIL polymer-housed Varistar surge arrester as in Figure 4 with NEMA® crossarm hanger, see Figure 9.

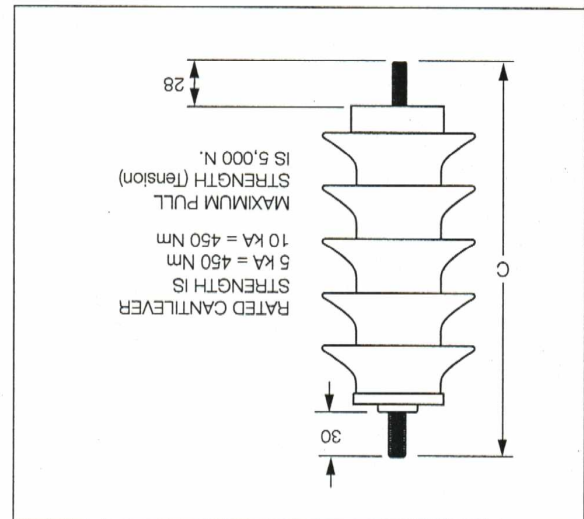


Figure 6. UltraSIL p-disconnected may be hazardous (potential)

UltraSIL polymer-housed Varistar surge arrester without disconnect, for base or cable riser mounting (arrester may be horizontal or vertical with either end at line potential).

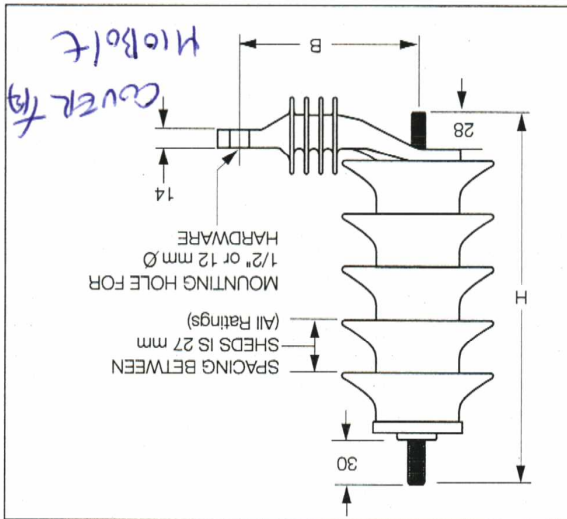


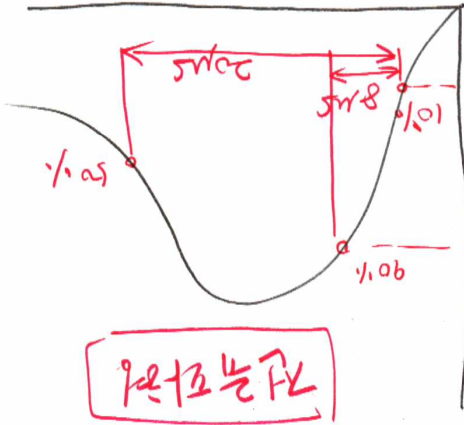
Figure 7.

ULTRASIL polymer-housed Varistar surge arrester-with optional disconnect mounting bracket (no disconnect).

[illegible]

4/10 MS
8/20 MS
10/350 MS
10/1000 MS

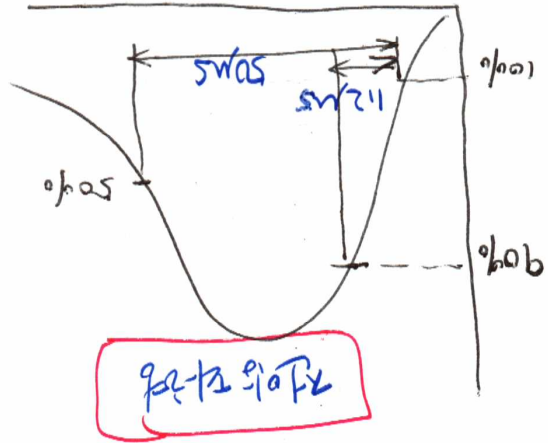
$$I = C \cdot \frac{dV}{dt}$$



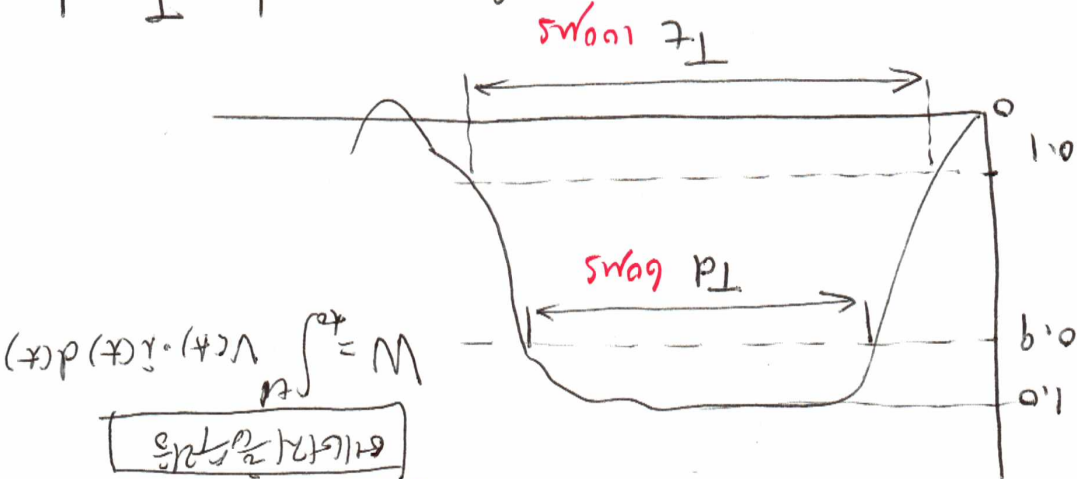
$$V = 300 \times 10^{-3} \times \frac{50 \times 10^{-6}}{3} = 18000 \text{ V}$$

$$L = 300 \text{ mH} \quad dI = 1A \rightarrow 4A3 \text{ V} \text{ at } 50 \times 10^{-6} \text{ s}$$

$$V = L \cdot \frac{dI}{dt} \quad [1.2/50 \text{ MS}] \quad [10/700 \text{ MS}]$$



T_d : Duration of peak of a rectangular Impulse.
 T_t : Total duration of a rectangular Impulse.



$$W = \int_{t_0}^{t_f} V(t) \cdot I(t) dt$$

Energy absorption of MOV
 (Metal Oxide Varistor)