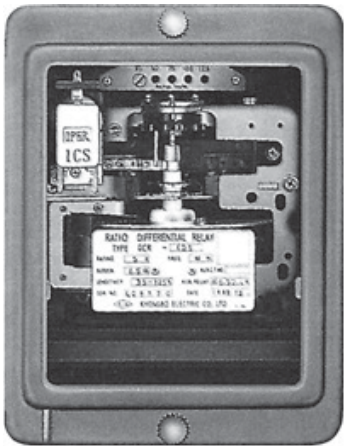


TOYO

誘導型
變壓器用比率差動繼電器
Ratio Differential Relay (87T)

- TYPE TDR-C5 (固定型 : Fixed Type)
- TYPE TDR-CD5 (抽出型 : Drawout Type)

The relay is an induction disk type with three electromagnets. One of the electromagnets is the operating element and the other are two restraint elements. The operating coil is connected to the neutral point of the restraint coils. The operating element produce operating torque which rotates the disk in such direction as to close main contact while the restraint elements produce the restraining torques which rotate the disk in such direction as to open main contact. Normally, the secondary current of the current transformer in the relay are in balance and no current flows in the operating coil. As a result, main contact are kept open by the to torque of the current flowing through the restraint coils. In case of an internal fault, the balance is broken and a differential current flow in to the operating Coil. If the differential current flows over a certain level, the torque of operating coil exceeds that of the restraint coil, and then the main contact closes and relay operates. In case of an external fault, the torque of the restraint coils in such direction as to open the main contact increases in proportion to the fault current, but a small differential current resulting from difference of the excitation characteristics between two current transformers, flows only into operating coil, Therefore the main contact remains open.



SPECIFICATION

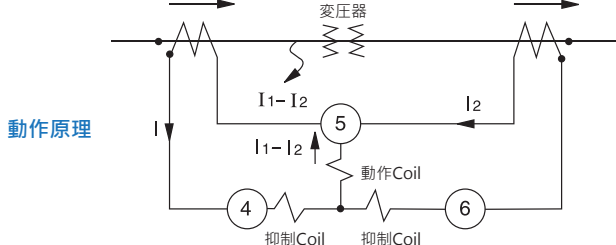
Type	Tap	Rating Current	ICS Unit(DC)	Figure	Weight(kg)
TDR - C5	35, 50, 75, 100, 125(%)	5A	1.0A	Non - drawout	≒3.6
TDR - CD5			0.5 / 2.0A	Drawout	≒4.4

Tap Range(%)	Rating(A)	Tap(%)	Tap Value Burden(VA)	Rating Burden(VA)	Restraint 5A Burden(VA)	Restraint 10A Burden(VA)
35 / 125	5	35	1.2	6.5	0.6	1.9
		50	1.4	3.8		
		75	1.8	3.0		
		100	2.1	2.8		
		125	2.6	2.5		

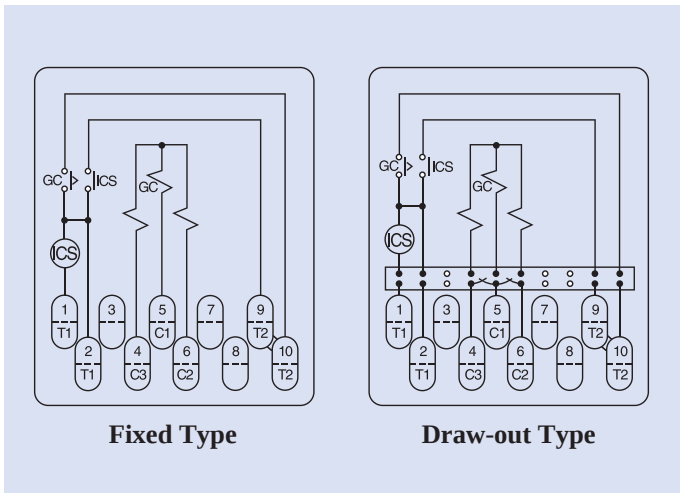
Frequency: Standard 60Hz (option: 50Hz)

OPERATING VALUE SETTING

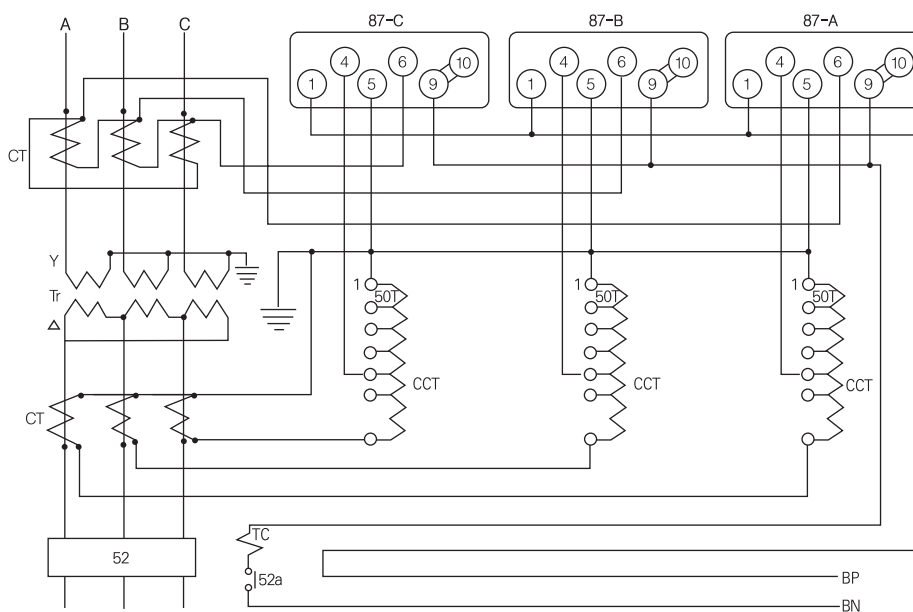
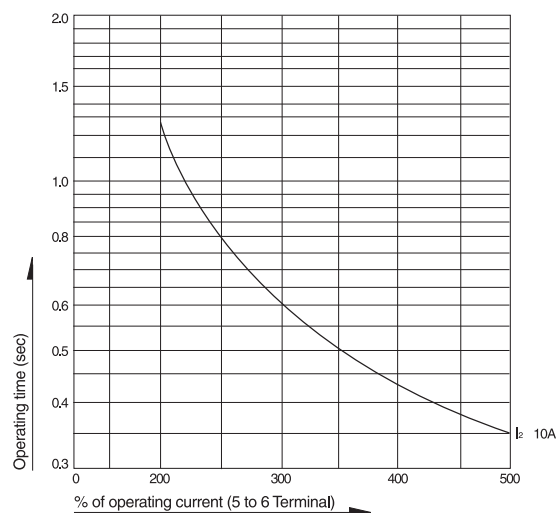
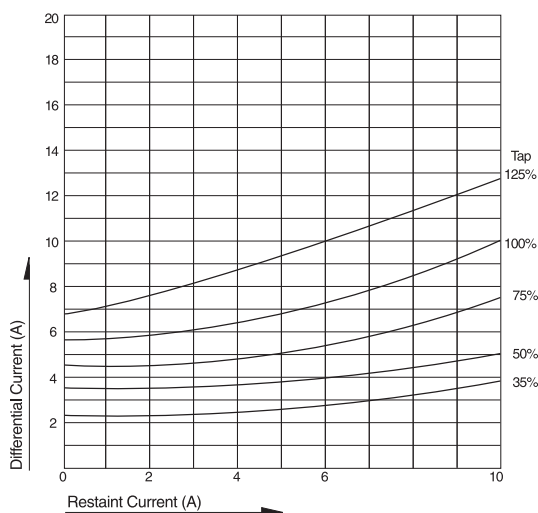
When setting the operating current of the relay, you can change the value by first inserting the spare screw (beside the ICS unit) into the expected current value, and then remove the original screw after setting is done. In the case of draw-out type relay, set the current value while the relay is being drawn out.



INTERNAL WIRING DIAGRAM

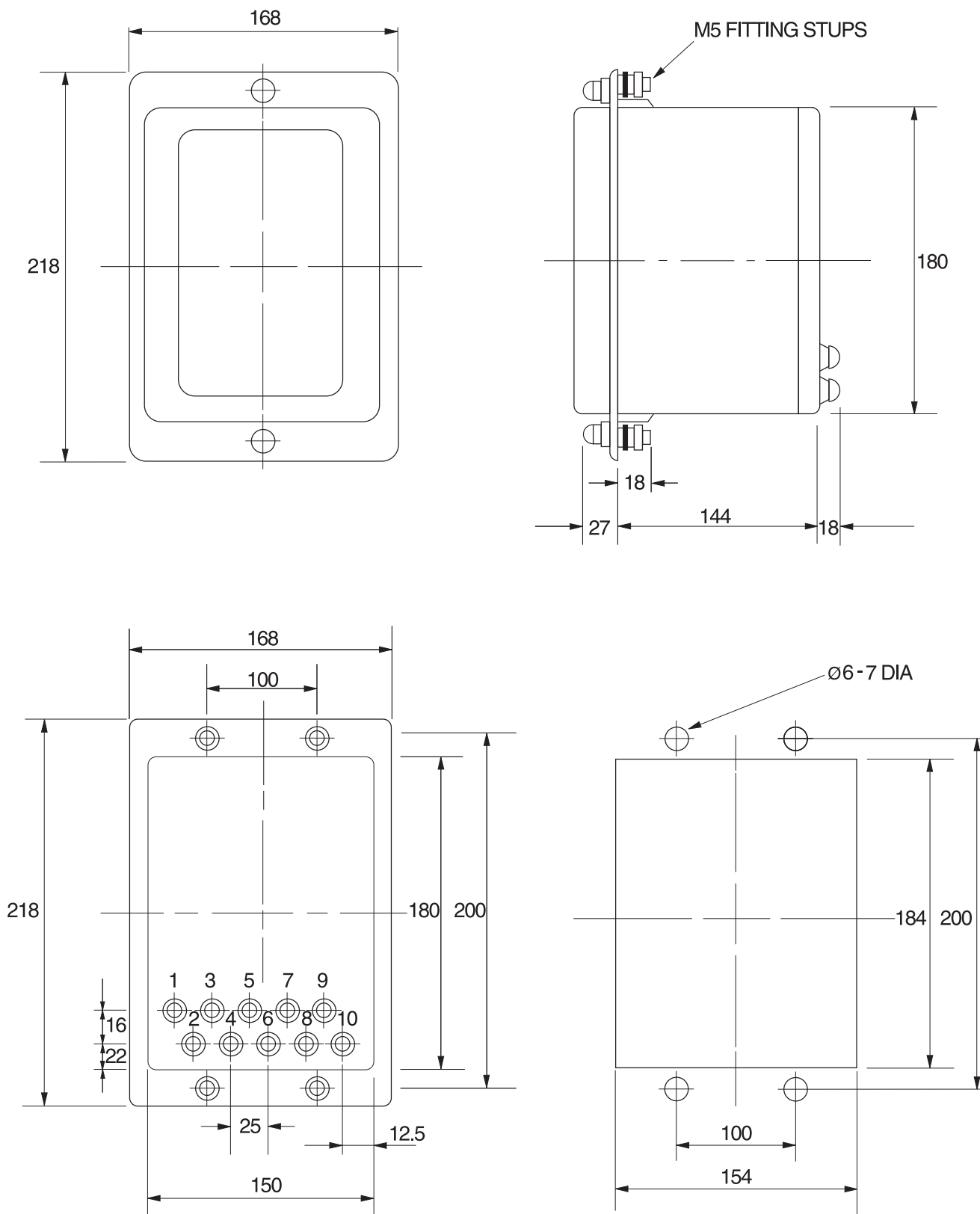


TIME CURRENT CHARACTERISTIC & EXTERNAL WIRING DIAGRAM



変圧器結線(1次-2次)	Y - Y	Δ - Δ	Δ - Y
変流器結線(1次-2次)	Δ - Δ	Y - Y	Y - Δ
回路図			

■ DIMENSION

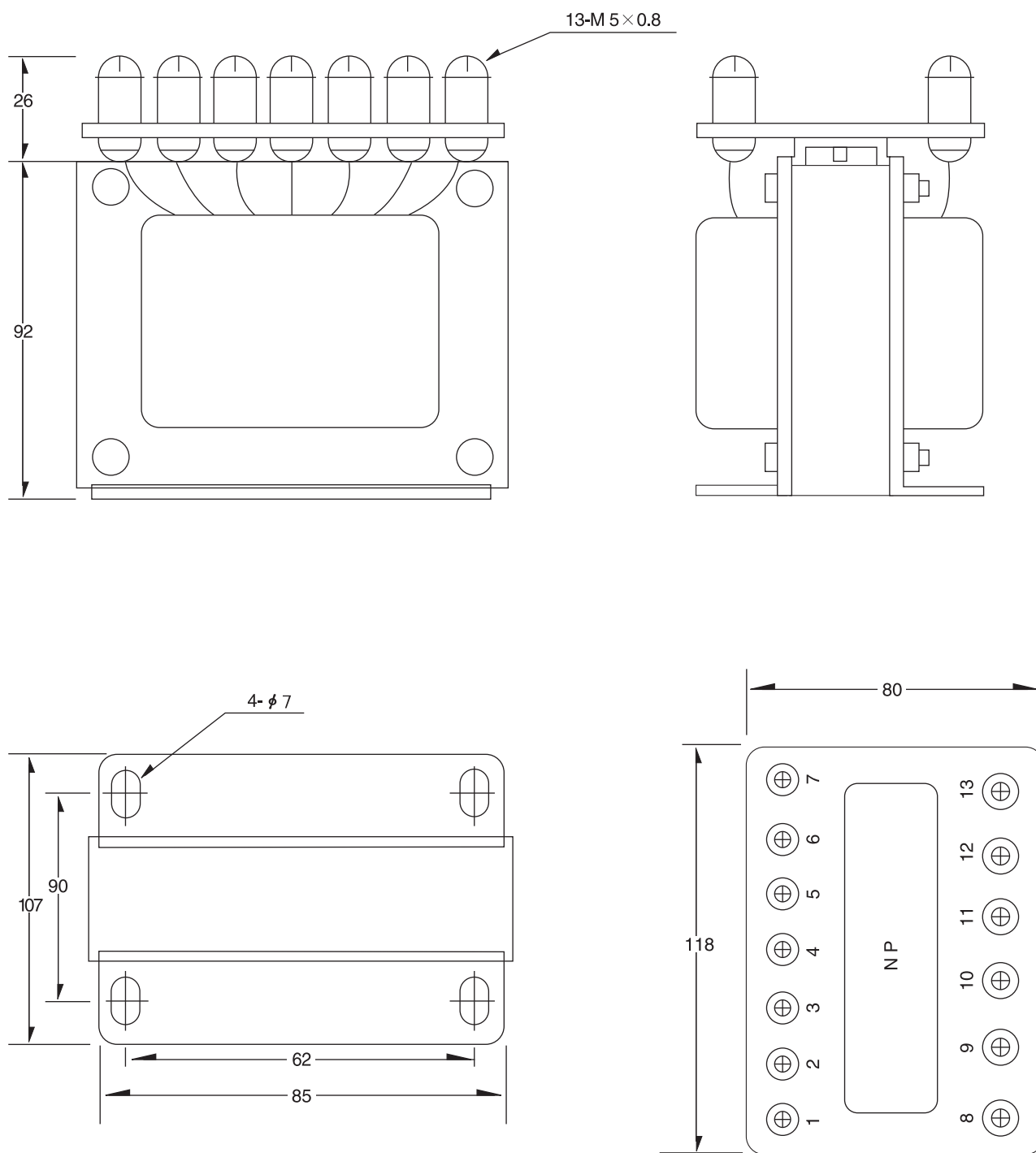


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■ DIMENSION for Compensating Current Transformer CCT-5 (mm)



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