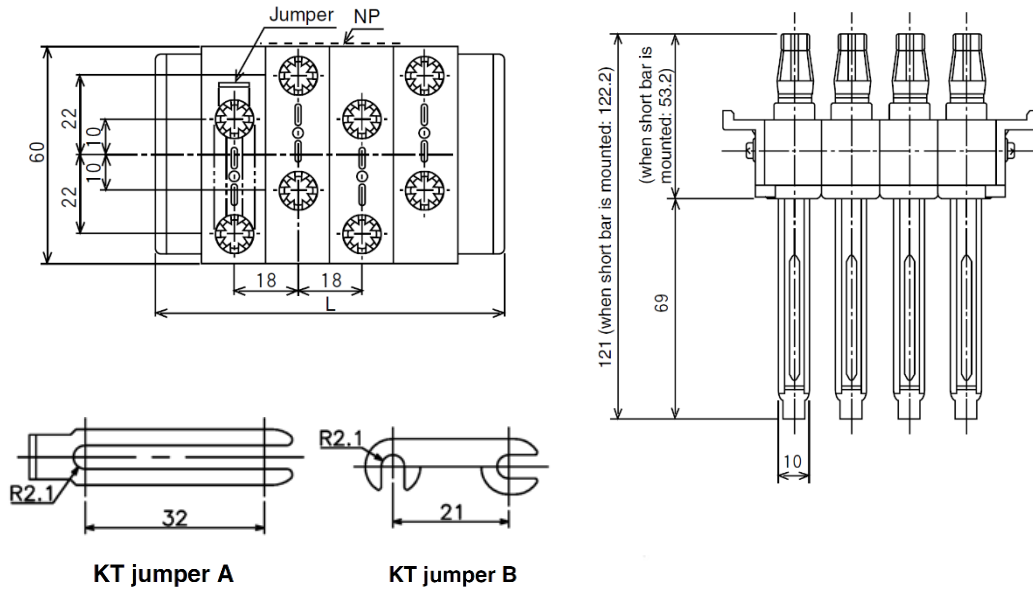


PLUG TYPE TEST TERMINLS

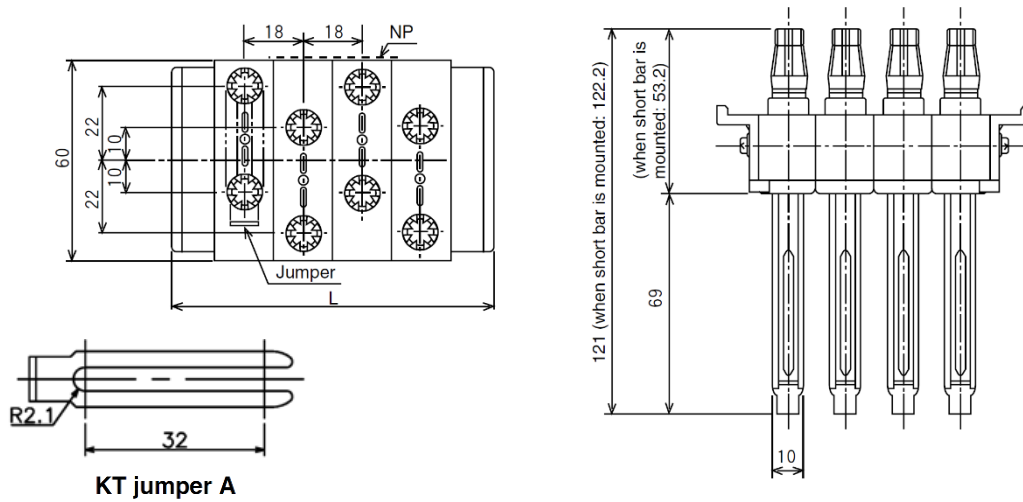
SERVICE MANUAL

Dimensions

Current use



Voltage use



Working Circuit	Type Number	Poles	L	Short bar	
				KT jumper A	KT jumper B
Current	KTP-A2	2	38	2	1
Voltage	KTP-V2				—
Current	KTP-A3	3	56	3	2
Voltage	KTP-V3				—
Current	KTP-A4	4	74	4	3
Voltage	KTP-V4				—
Current	KTP-A6	6	110	6	5
Voltage	KTP-V6				—

How To Use

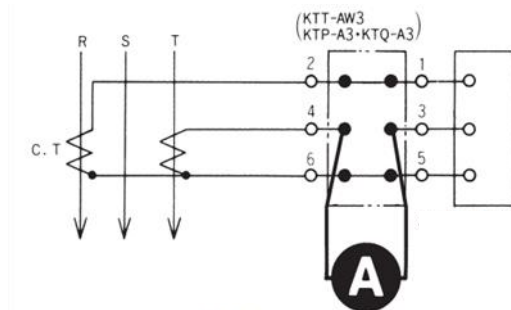
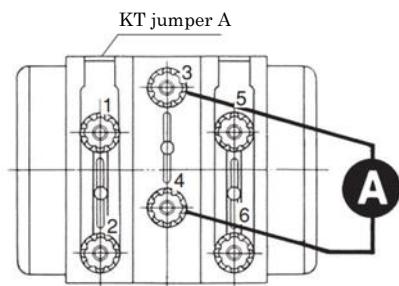
(1) Prior To Testing

- 1) Since it is dangerous to open the converter circuit, great care should be taken not to leave unconnected the short-circuit pieces and connecting lead cord(s) in the insertion plug.
- 2) Since it is dangerous to short-circuit the second circuit of the potential transformer, great care should be taken to prevent inter-short-circuiting.
- 3) Always lock the relays concerned before inserting the plug.
- 4) Test only after definitely confirming that the instructions written on the instruction plate have been observed.

(2) How To Measure The Current And Voltage In Actual Loading Circuits

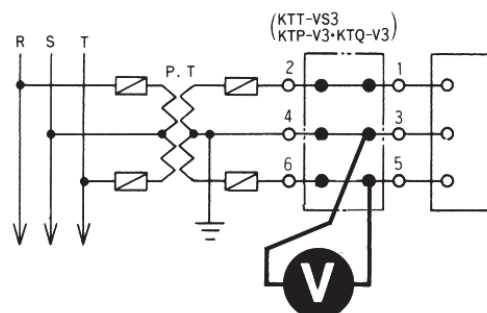
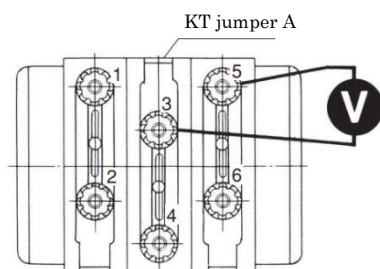
1) Current Measurement

- a) Connect a galvanometer with a terminal on the side (lower side) of the converter and with a terminal on the loading side (upper side), the terminals belonging to one phase which is measured by using the plug used for the purpose of current testing.
- b) With short-circuit pieces A, short-circuit each of the other phases not being measured.
- c) When the connection is completed, confirm that the relays are locked and then insert the plug to measure the current. It should also be observed that when the plug is pulled out everything else should remain connected.



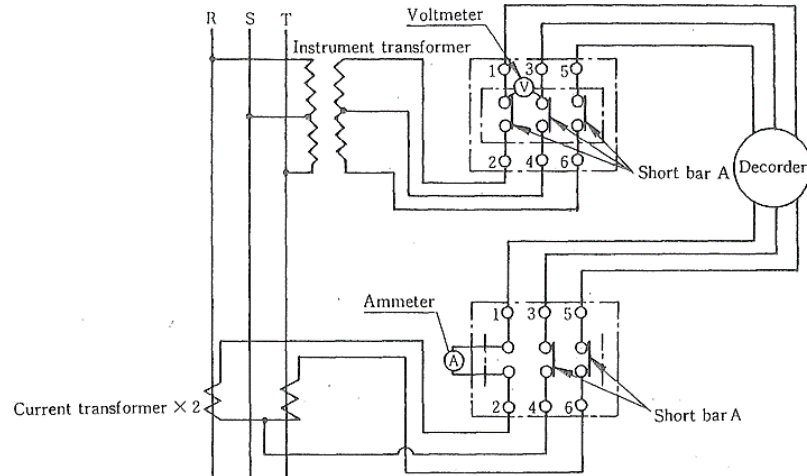
2) Voltage Measurement

- a) Connect the voltmeter with terminals on the loading side (upper side) which belong to different phases the voltage between which is measured by using the plug for the purpose of voltage testing.
- b) With a short-circuit piece A, short-circuit each and every phase.
- c) When the connection is completed, confirm that the relays are locked and then insert the plug to measure the voltage. It should also be observed that when the plug is pulled out everything else should remain connected.



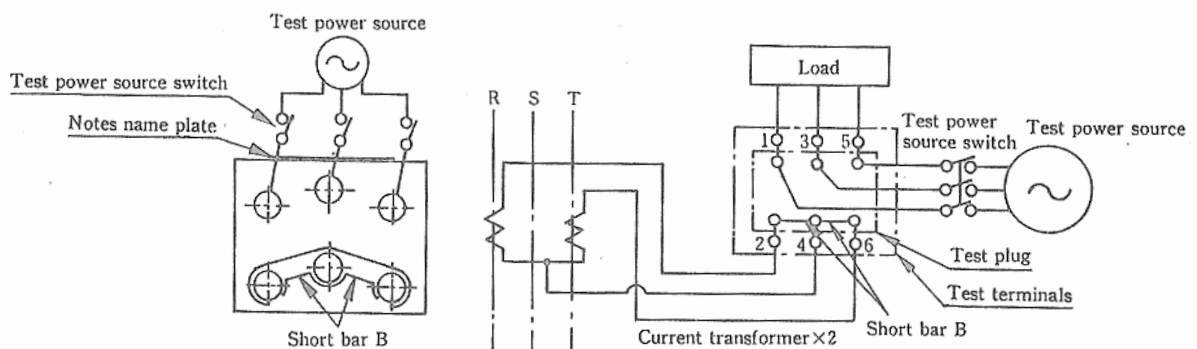
3) Measurement of electric power, dynamic coefficient etc., with compound instruments

How to connect plugs used for the purpose of current and voltage testing is show in the figure below.



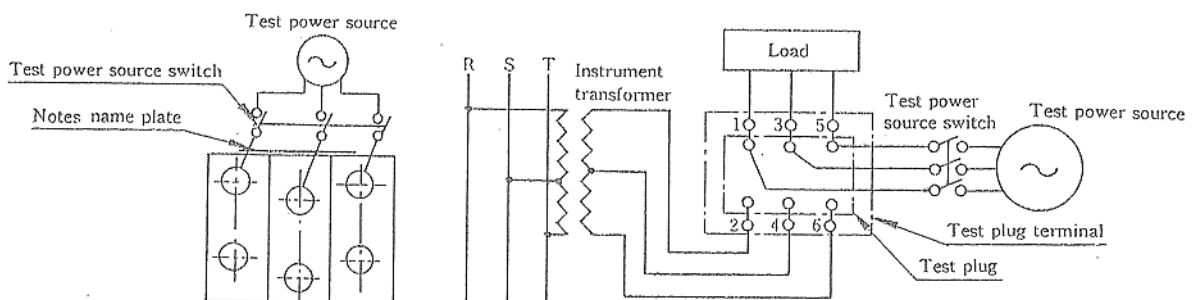
(3) How To Correct And Test Instruments, Relays Etc., By Supplying A Separate Power Source For Testing Purposes

- 1) In the case where a power source for testing purposes is supplied for a current circuit.
 - a) Connect the power source for testing purposes with terminals on the loading side (upper side) by using a plug for the use of current testing. It should be observed that in this case you should leave switches, which are required to be set for the power source for testing purposes, off.
 - b) With short-circuit pieces B, short-circuit terminals on the side of the converter (lower side).
 - c) When the connection is completed, confirm that relays are locked and that the switches for the power source for testing purposes are off. Then, insert the plug. After the insertion is completed, turn on the switches for the power source for testing purposes and carry out the correction and testing of instruments, relays and so forth. It should also be observed that before the plug is pulled out the switches for the power source for testing purposes should be turned off.



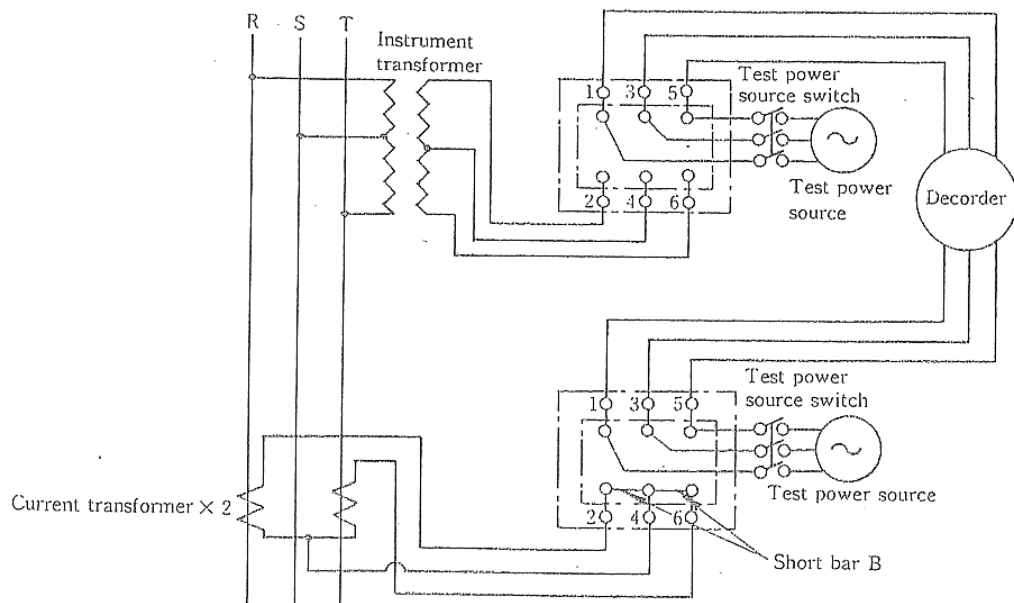
2) In the case where a power source for testing purposes is supplied for a voltage circuit

- a) Connect the power source for testing purposes with terminals on the loading side (upper side) by using a plug for the purpose of voltage testing. It should be observed that in this case, you should leave switches, which are required to be set for the power source for testing purposes, off.
- b) Terminals on the side (lower side) of the transformer for the use of instruments should be kept unconnected.
- c) After the connection is completed, confirm that the relays are locked and that the switches for the power source for testing purposes are off. Then, insert the plug. After the insertion is completed, turn on the switches for the power source for testing purposes and carry out the correction and testing of instruments, relays and so forth. It should be observed that when you pull out the plug, the switches for the power source for testing purposes should be turned off.



3) Measurement of electric power, dynamic coefficient etc., with compound instruments

How to connect plugs used for the purpose of current and voltage testing is shown in the figure below.





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