

MANUAL VER 1.0.0

CURRENT TRANSFORMER

LIGHTSTAR

[주]광성계측기

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TEL +82-51-723-3000 FAX +82-505-115-3010 Warranty period 24 Months from the date of shipment or 12 months from the date of installation, which is longer.

1. Application Range

This manual is applicable to Cable Type Current Transformer(KBJ,KBD) and Busbar Type Current Transformer(KBM,KBF)

2. Specification

2.1 Geneal

| Overcurrent strength | Maximum Voltage | Withstand Voltage | Frequency | Operation temperature | Operating humidity |
|----------------------|-----------------|-------------------|-----------|-----------------------|--------------------|
| 40HH | 1.2kV | 4.0kV 1min | 50/60Hz | -20°C~50°C | 85% Less than |

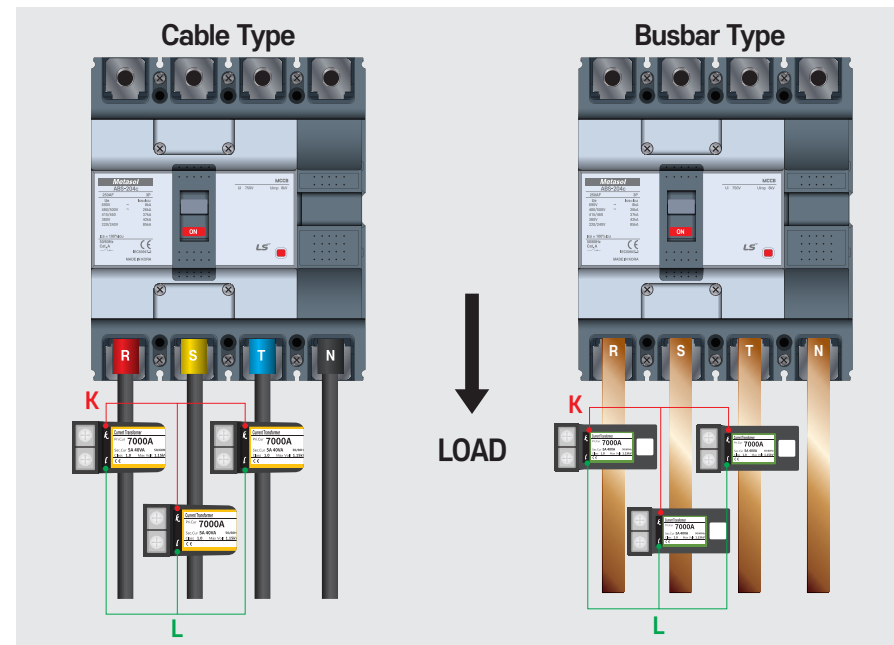
2.2 Torque limit

| Type | M4 | M5 |
|----------------------|----------------|-----------------|
| Busbar fixing bolt | 5~7kgf·cm | 7~10kgf·cm |
| 2ndary terminal bolt | 9.8~13.5kgf·cm | 28.4~37.2kgf·cm |

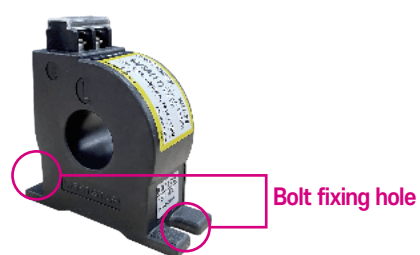
※ Excess torque may cause bending and distortion.

3. Installation method

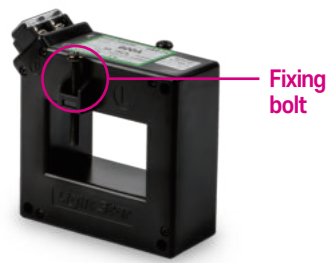
3.1 Single phase current transformer



- 1) Install 'K' side to the circuit breaker, and 'C' side to the load
- 2) How to fix the current transformer

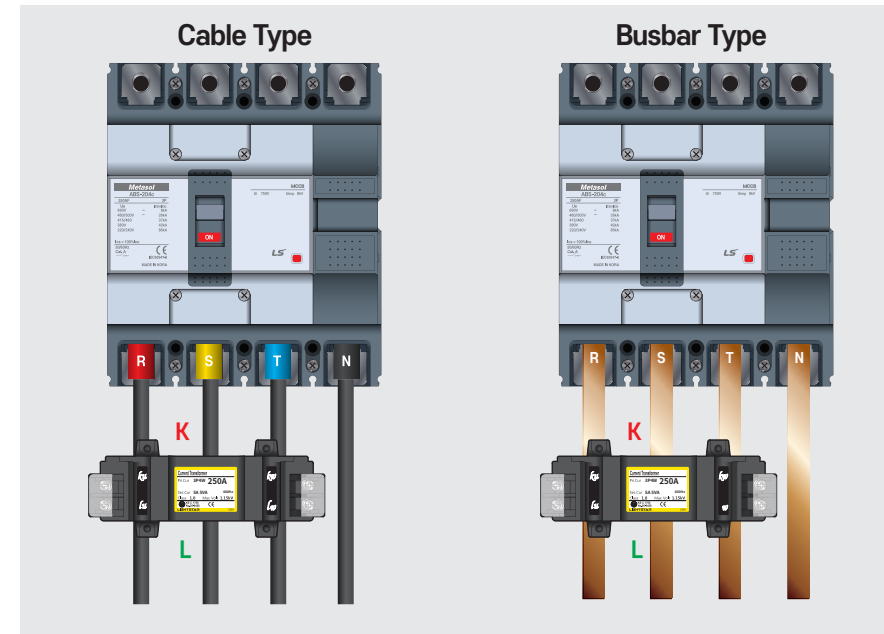


Cable Type : Use a separated bolt to bolt fixing hole.



Busbar Type : Use existing fixing bolts installed at current transformer.

3.2 3Phase Current Transformer

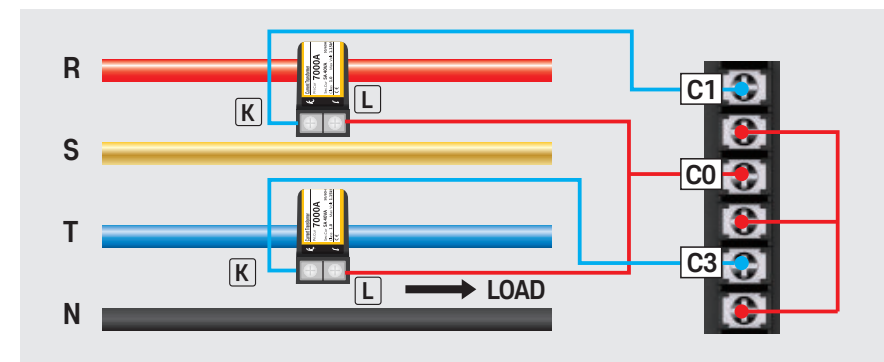


- 1) Please select current transformer that meets the circuit breaker dimension.
- 2) Install 'K' side to the circuit breaker, and 'C' side to the load.
- 3)How to fix the current transformer.
 - Cable Type : Use a separated bolt to bolt fixing hole.
 - Busbar Type : Use existing fixing bolts installed at current transformer.

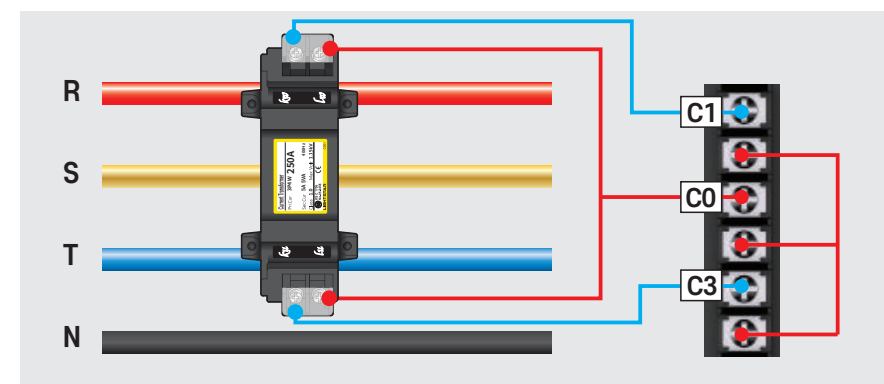
4. Connection Diagram

4.1 3P3W

1) Single Phase CT

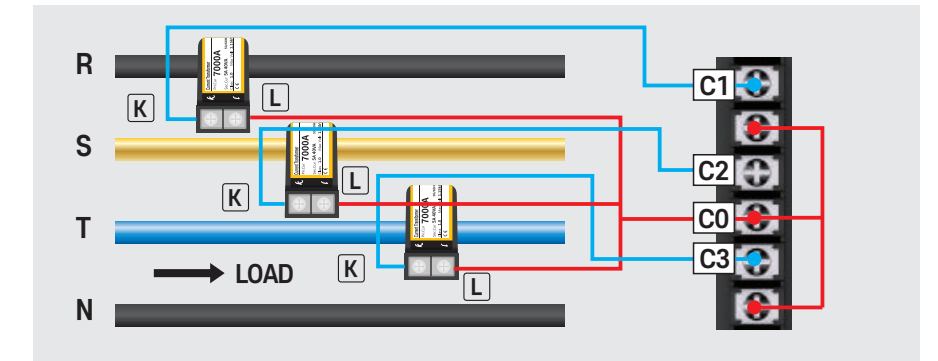


2) 3Phase CT

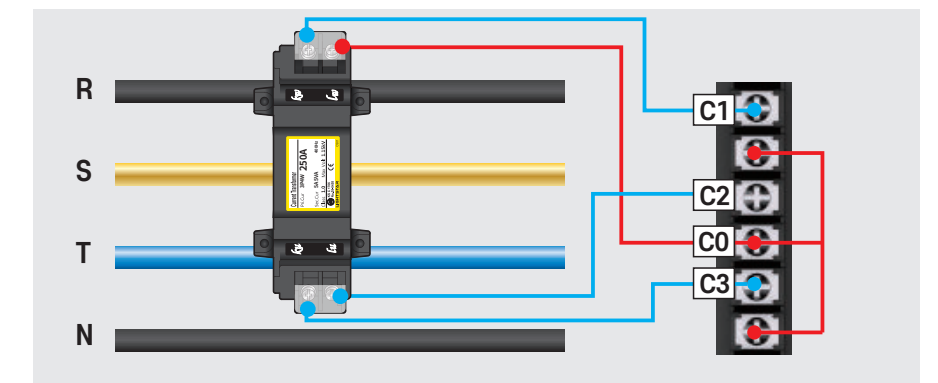


4.2 3P4W

1) Single Phase CT



2) 3Phase CT



5. Caution

- 5.1 Do not open the second terminal after installing the current transformer. If you do not connect the transformer to the instrument after installation, leave the second terminal in the com state.
- 5.2 If need grounding, it must be separated from voltage transformer, and terminal "L" may be grounded.
- 5.3 Do not remove the terminal protection cover.
- 5.4 Be sure to connect cable and terminal tightly.
- 5.5 If the ammeter connected to the current transformer display a current value of "0" or if the power/power value is abnormal, check as follows:
 - 1)COM the current transformer secondary terminals (K, L) to the line.
 - 2)Measure the primary current value with a portable test.
 - 3)Measure secondary current value with portable tester.
 - 4)Judgement: If the secondary current value is measured according to the CT ratio, it is normal.
- 5.6 If there is no abnormality in the current transformer but the power/power amount value is abnormal, the secondary connection is defective. (Be aware of CT direction with "K" and "L")
- 5.7 If want to measure less than 30A, need to select a transformer over 30A and use it by increasing the number of penetrations.

ex) In case of CT 20/5A CT

