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## TRANSFORMER SERIES OMEGA Single and 3 Phase RJ12 Current Transformers

### Operating Manual - Issue 1.0

The Single and three-phase current transformer range is for use with the AP15-3DL, AP35 and ND20CT meters which combines single and three traditional current transformers in one moulded case with a RJ12 connection for simple and easy error free installation.

**SUBJECT TO CHANGE WITHOUT NOTICE**

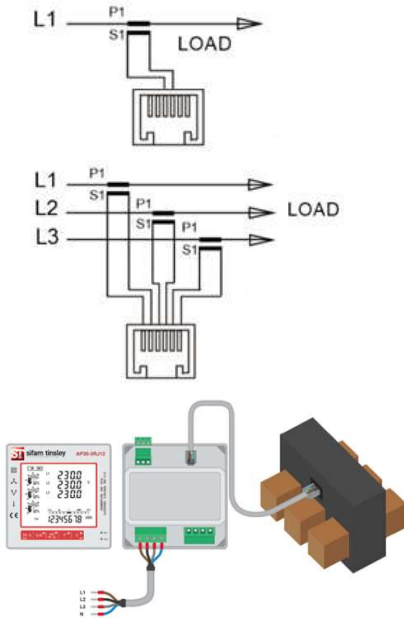
This manual supersedes all previous versions – please keep for future reference



**Features**

- Low voltage Current Transformer
- Omega 3 Phase
- RJ12 Plug in Connection
- 100mA Secondary
- Simple, Error Free Connection
- Multiple Sizes Available
- Fast and convenient way to connect current transformers via RJ12

**Wiring Diagram**



This product was developed and manufactured in accordance with applicable regulations (IEC61010, IEC61869) and meets the requirements of the low voltage guideline 2014/35/EU.

**Environmental Instruction**

When the product has reached its 'end of life', it must be recycled. Pass it to an electrical waste disposal. Do not dispose as unsorted municipal waste!

**Contact Us**

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**Indication**

Before initial operation we ask to you pay full attention to these assembling instructions in order to guarantee the reliability and to ensure the performance of the device.

**Functional Description**

Current transformers of the model range Omega RJ12 comprise of inductive three single conductor-current transformers operating according to the transformer principle. Due to the applicable measuring principle, current transformers of this type may only be installed in alternating current (AC) networks.

**Safety Instructions**



In order to avoid personal and material damage during the following assembly steps must be performed only by suitable authorised, qualified and trained personnel.



If the secondary circuit is operated without a burden/load (open) high voltages may appear. These voltage values are dangerous for personnel as well as for the functional reliability of the current transformer. **It is forbidden to operate the current transformer without a complete secondary circuit (open)!**

**Technical Parameters**

Primary current	60A to 630A
Secondary current	100mA
Accuracy class	0.5, 1
Rated frequency	50Hz or 60Hz
Rated continuous thermal current (standard)	1,2 x in
Rated short time thermal current I <sub>th</sub>	60 x in, 1 s (Max 40kA)
Rated isolation level	0.72/3 kV
Place of installation	Indoor
Altitude	up to 2000 m
Degree of protection	IP20
Degree of pollution	2
Ambient temperature	-5°C to + 65°C (0-95% relative humidity, non-condensing!)
Storage temperature	-25°C to + 70°C
Applied standards	IEC 60044-1 / IEC 61869-1: Performance IEC - 61010 - 2 : Safety

**Assembly**

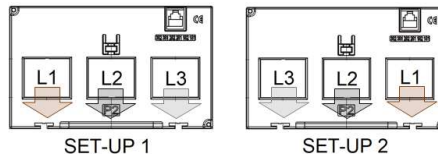
1. Ensure a safe work environment during assembly, maintenance and inspection operations. If necessary, interrupt the current supply of the primary conductor and take precautions against unintentional switching.

2 (i) For Window type CT: Bar or cable primary insert through primary cable or bus bar & fix it using mounting screw assembly.

P1: Direction of power supply

P2: Direction of power source

3. Set-up 1, L1, L2, L3 (Straight RJ12 Lead connection supplied as standard, lead length 1.5Metres)  
Set-up 2, L3, L2, L1 (Reversed RJ12 Lead, optional extra Part Number RJ12CABLE-ICB)



Note:- Please contact supplier for other optional cables and other available lead lengths.

4. Check whether the current transformer is assembled correctly and the secondary RJ12 lead is connected properly with the warning label at the CT end.

5. Connect RJ12 secondary lead to the current transformer and with the measuring device (energy meter). Pay attention to the installation guide of the measuring device.

6. Check whether the current transformer is assembled correctly and the secondary RJ12 lead is connected properly with the warning label at the CT end.