

UPM315 – ELETTRICAL CONNECTIONS AND WIRING

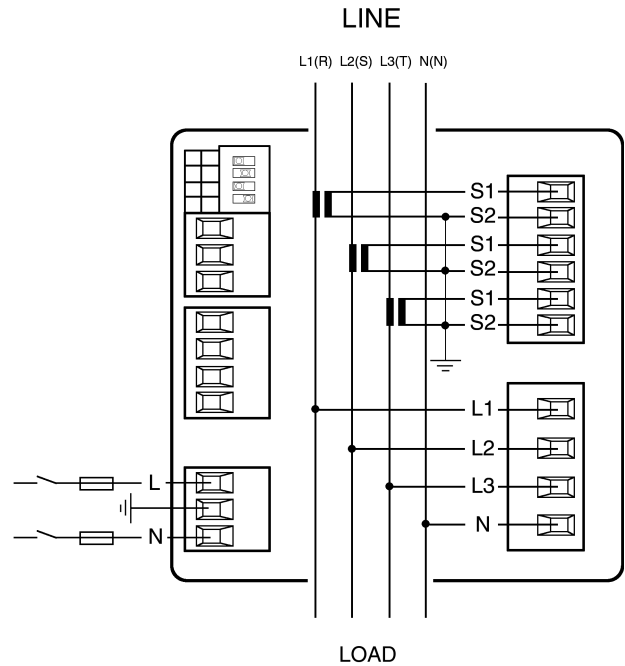
7.5 Voltage and Current Inputs

Connect the voltage inputs by means of the supplied 4-pin connector. For current inputs use the 6-pin connector, to be fastened with the provided screws. The following diagrams show some connection examples.

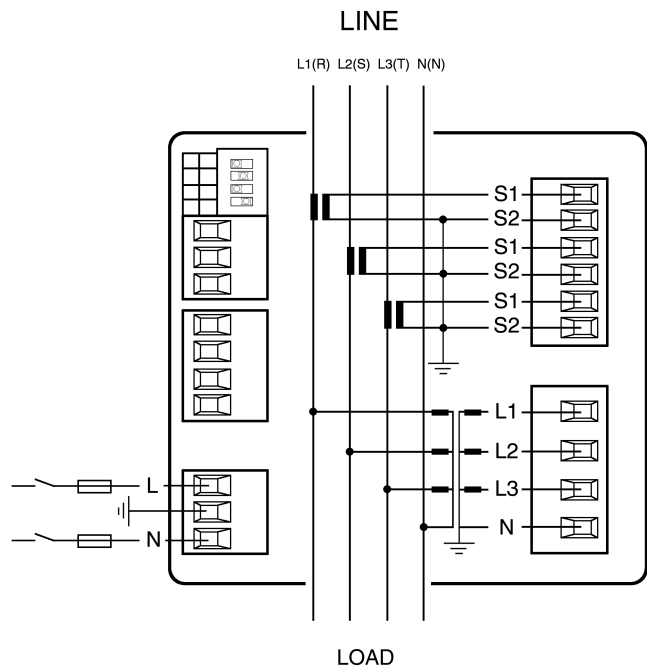


WARNING!
Before switching ON the power, check if:

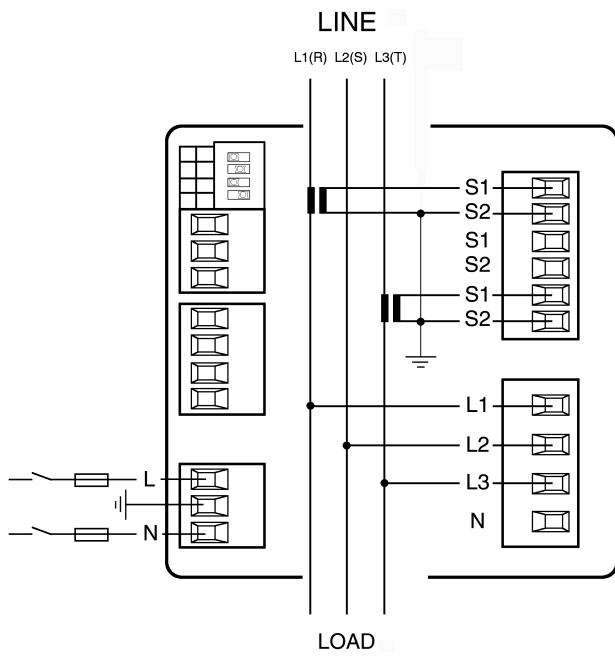
1. the 6-pin current connector is fastened with screws.
2. in case of bi-directional measurements, the connections are made respecting the polarities to obtain correct values.
3. the connections are made according to the diagrams in the following section, respecting the cyclic order of phases. Important: L1 of the voltage input = L1 of the current input.
4. input and output polarities are respected when voltage or current transformers are installed.
5. the amperometric signal connector is adequately fastened to avoid accidental disconnection.
6. in case of three-phase measurements, all parameters are shown only with the 3-phase, 4-wires, 3-CT wiring mode. In all other cases the parameters without sense will not be displayed. By wiring 3-wire,3-CT (without neutral) it is possible to connect the N terminal to the ground. In such a case it is possible to select the wiring 4-wire, 3CT displaying all parameters. It is recommended an efficient ground to reduce the measuring error. This suggestion cannot be applied for IT systems, which are not referred to the ground.



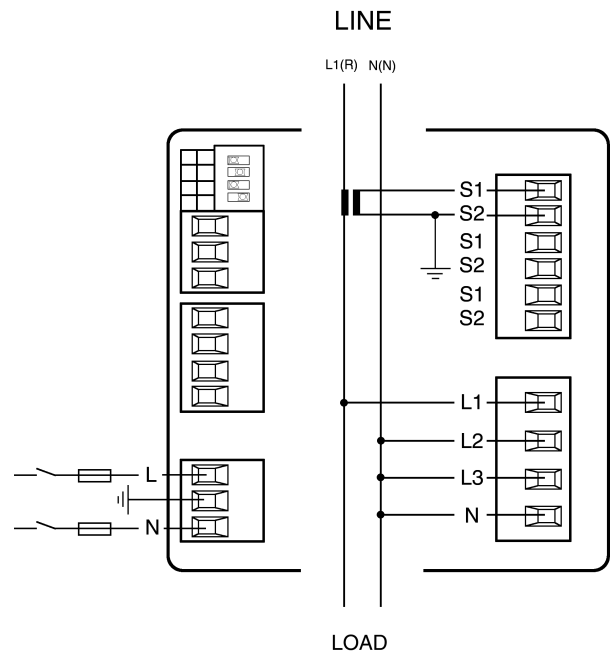
Pict. 1
3phases, 4wires, 3CTs up to 600V



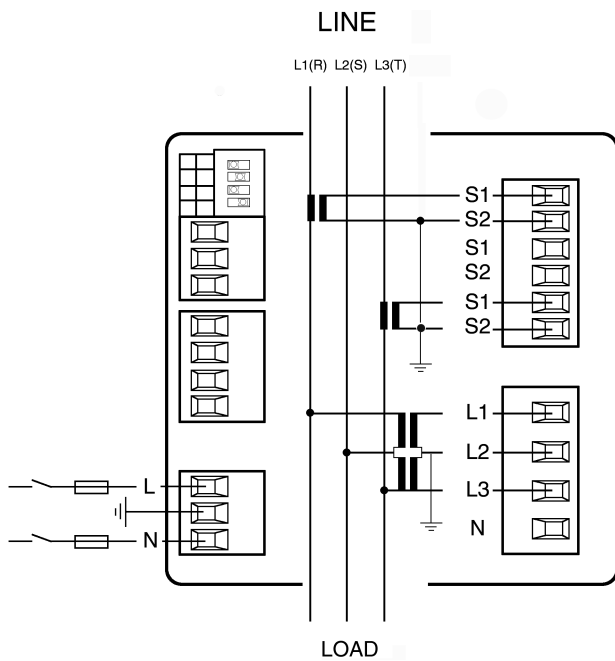
Pict. 2
3phases, 4wires, 3CTs above 600V



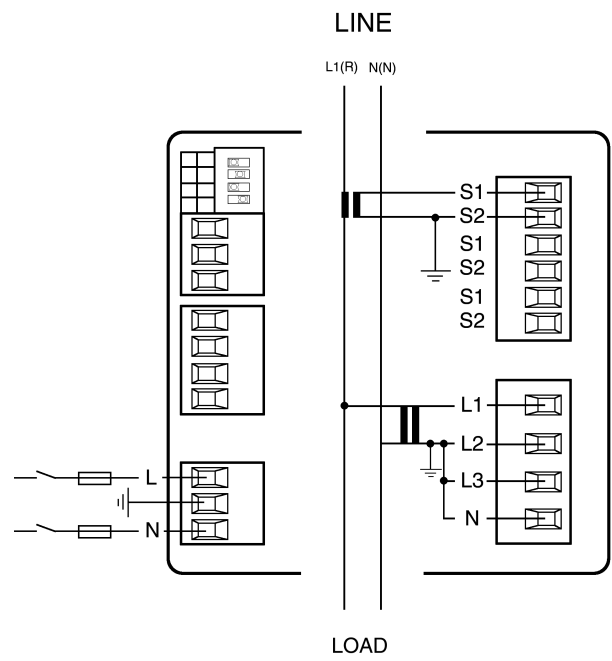
Pict. 3
3phases, 3wires, 2CTs up to 600V



Pict. 5
single phase up to 400V



Pict. 4
3phases, 3wires, 2CTs above 600V

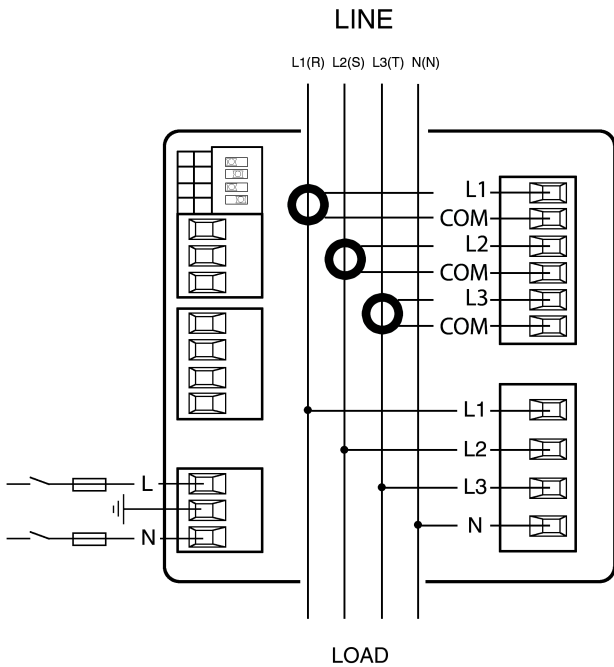


Pict. 6
single phase above 400V

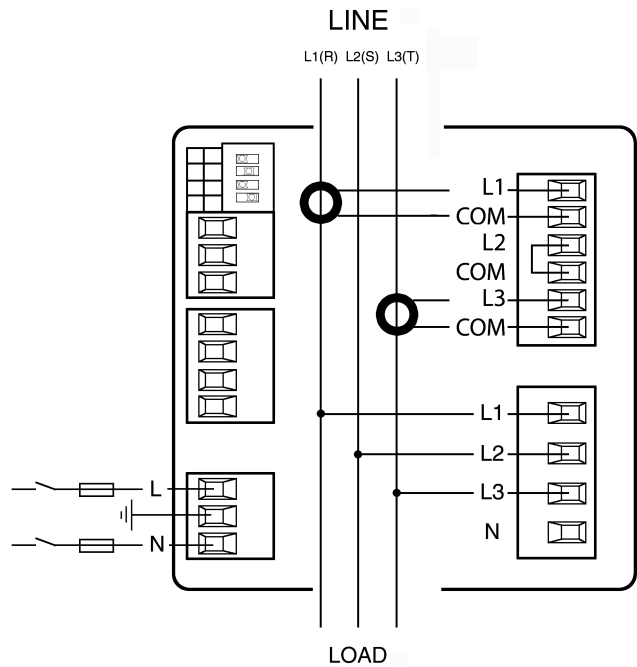
The following diagrams show some connection examples in case of Rogowski coils (option).



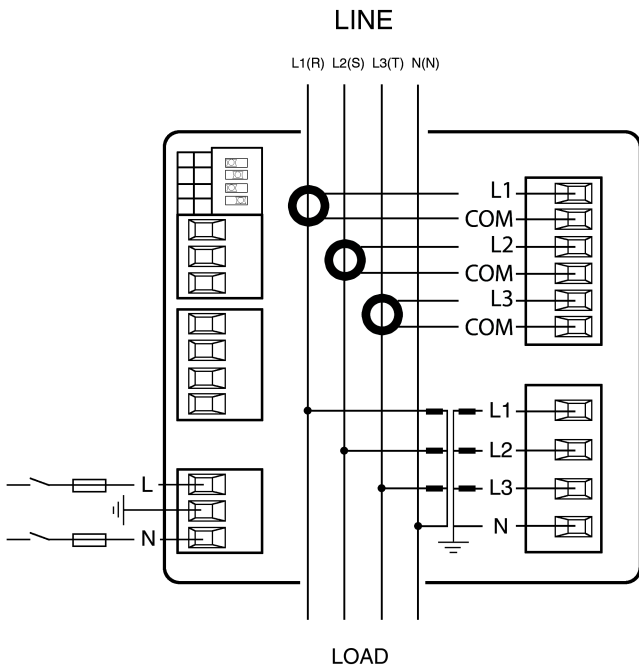
NOTE. In case of Rogowski coils, please check that **YELLOW** cable edge is connected to **S1 (signal)** and the **WHITE** cable edge is connected to **S2 (common)**.



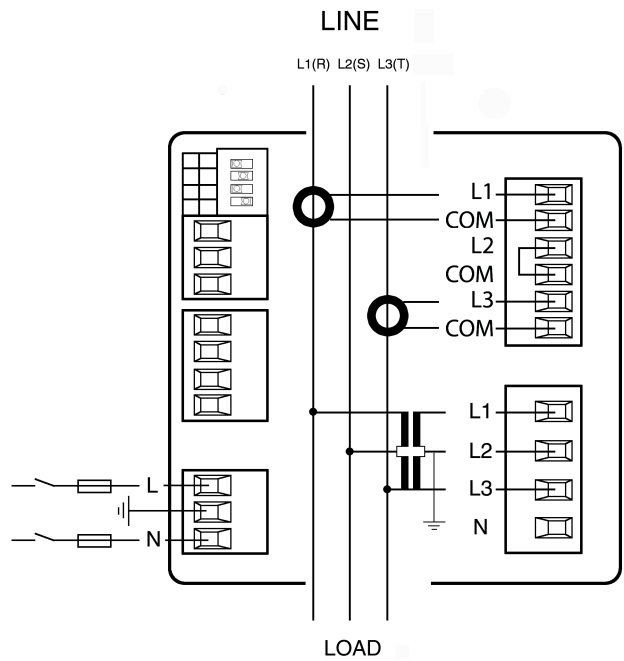
Pict. 1
3phases, 4wires, 3coils up to 600V



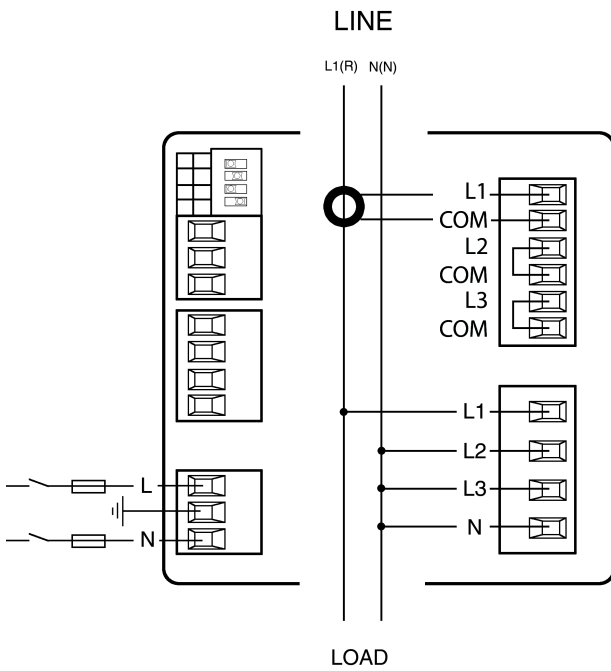
Pict. 3
3phases, 3wires, 2coils up to 600V



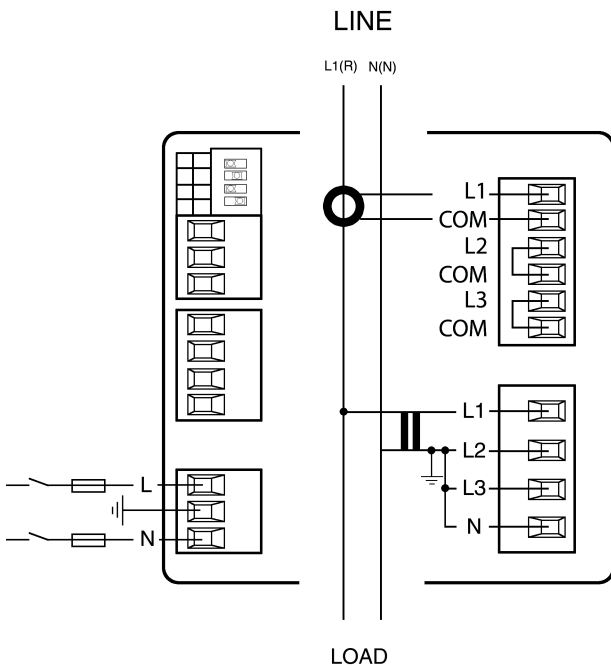
Pict. 2
3phases, 4wires, 3coils above 600V



Pict. 4
3phases, 3wires, 2coils above 600V



Pict. 5
single phase up to 400V



Pict. 6
single phase above 400V

7.5.1 Voltage Specifications

The phase and polarity of the AC input voltage are essential parameters for a proper instrument operation. The standard voltage specifications are listed below:

Input voltage	600(750) V _{AC} max L-L
Input impedance	> 1.3 MOhm
Burden	max 0.15 VA per phase

NOTE
The label on the meter defines the real configuration.

7.5.2 Current Specifications

The phase and polarity of the input current are essential parameters for a proper instrument operation. The standard current specifications are listed below:

Rated current (I_b):	1 / 5 A _{RMS} programmable
Min / max measurable current:	20 m A / 7 A _{RMS}
Maximum overload:	10 A _{RMS} continuous – 100 A _{RMS} for 1 sec.
Input impedance:	0.02 Ohm approximately
Burden:	max 0.5 VA per phase
Insulation voltage:	150 V _{AC} max between phases
Rogowski input: (optional)	200÷49995 A on request

NOTE
The label on the meter defines the real configuration.

NOTES:

- Extract from manual (11AUX315008)
- Subject to change without notice