

UPT210 – ELECTRICAL CONNECTIONS AND WIRING

7.3 VOLTAGE AND CURRENT INPUTS

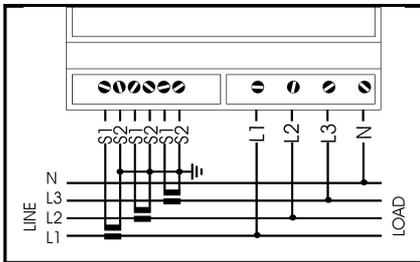
The basic instrument is provided with two selectable wiring modes (3.4.3 and 1phase). On request, it is also available the instrument provided with only 3.3.3 wiring mode (fixed).



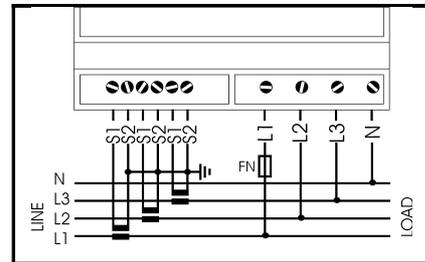
WARNING!
Check:

1. if the instrument must carry out bi-directional measurements to obtain correct measurements, the connections must respect the polarities
2. 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**)
3. be sure to respect input and output polarities when using current transformers (CT)
4. before disconnecting current input the load power supply is cut off. If this is not possible, the secondary CT must be short-circuited

WIRING DIAGRAM: 3 PHASES - 4 WIRES / 3 CURRENT TRANSFORMERS (3.4.3)

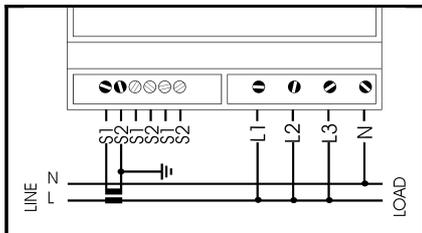


Pict. A: direct connection (3.4.3)

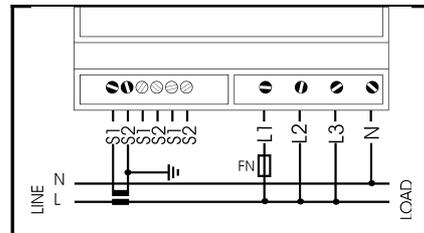


Pict. B: direct connection (3.4.3) *
with serial communication port

WIRING DIAGRAM: SINGLE PHASE (1ph)

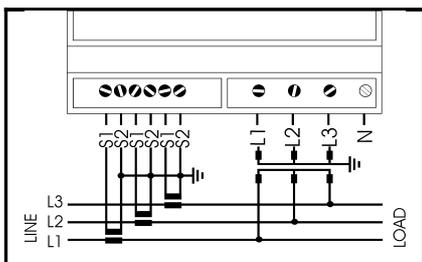


Pict. C: direct connection (1ph)

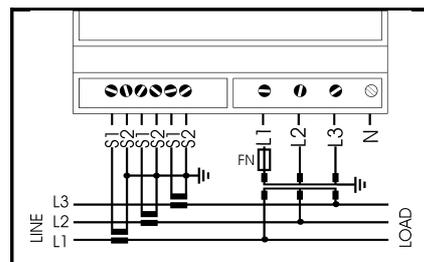


Pict. D: direct connection (1ph) *
with serial communication port

WIRING DIAGRAM: 3 PHASES - 3 WIRES / 3 CURRENT TRANSFORMERS (3.3.3) (on request)

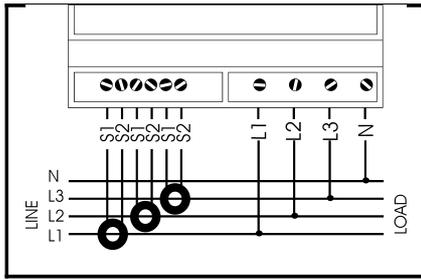


Pict. E: connection with VT (3.3.3)

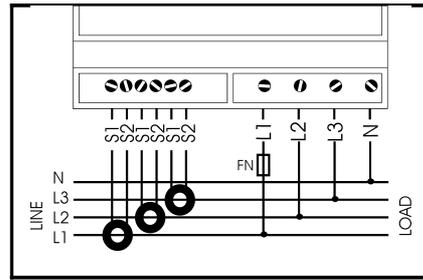


Pict. F: connection with VT (3.3.3) *
with serial communication port

WIRING DIAGRAM: 3 PHASES - 4 WIRES / 3 ROGOWSKI COILS (3.4.3) (on request)



Pict. G: direct connection (3.4.3)



Pict. H: direct connection (3.4.3) * with serial communication port



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).

* FN=100mA T type - only with serial communication port

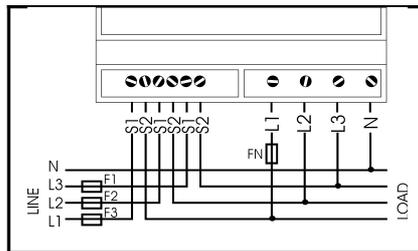
25A INSTRUMENT VERSION



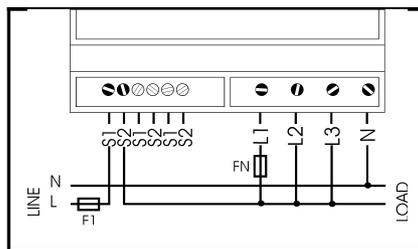
WARNING!

Every wiring diagram must be provided with fuses (F1, F2, F3, FN) or another similar protection as indicated in the picture. The F1/F2/F3 value will depend on the load. The FN value is 100mA and it is required only when the instrument is provided with serial port.

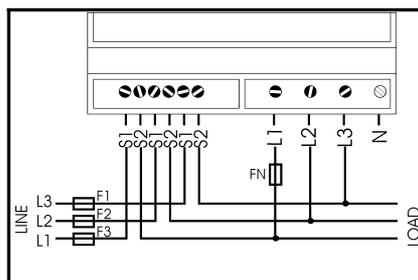
WIRING DIAGRAM: 3 PHASES - 4 WIRES / 3 CURRENT TRANSFORMERS (3.4.3)



WIRING DIAGRAM: SINGLE PHASE (1ph)



WIRING DIAGRAM: 3 PHASES - 3 WIRES / 3 CURRENT TRANSFORMERS (3.3.3) (on request)



7.3.1 Voltage specifications

The standard meter is designed for measurements on 230/400 V_{CA} 3-phase systems with neutral wire. Other voltages and configurations are available on request.

Input impedance > 1,3 MOhm

Burden max 0,15 VA per phase

7.3.2 Current specifications

The phase and polarity of the current input is an essential parameter for proper parameters indication. The standard current specifications are listed below:

Rated current (Ib) 1 / 5 A_{RMS} programmable

Min / Max measurable current 20 mA / 7 A_{RMS}

Maximum overload 10 A_{RMS} continuous - 100 A_{RMS} for 1 second

Input impedance 0,02 Ohm approximately

Burden max 0,5 VA per phase

Insulation voltage 480 V_{AC} max between phases

Rogowski coils input (optional) 200÷49995 A on request

NOTES:

- Extract from manual (1MAUXX210013)
- Subject to change without notice