

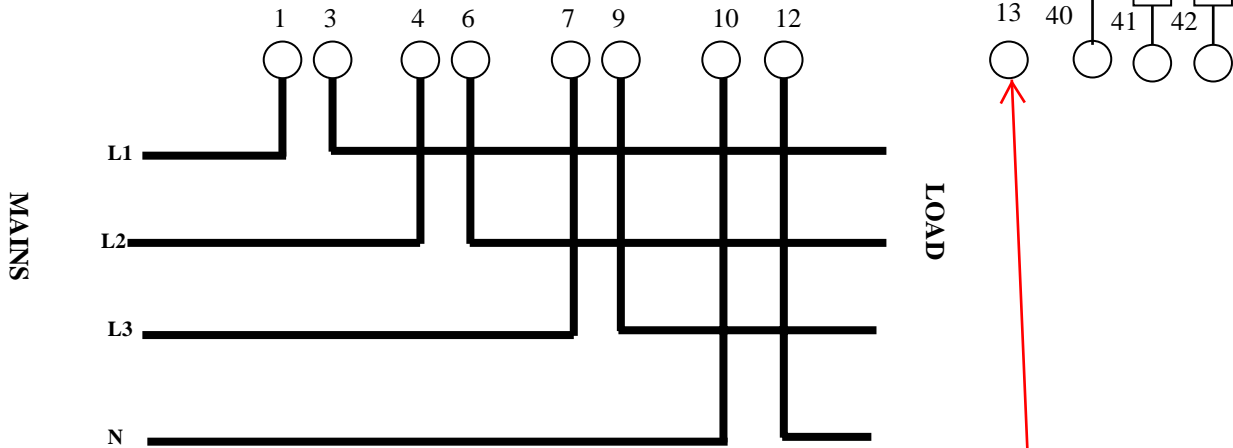


# Stephen P. Wales Ltd

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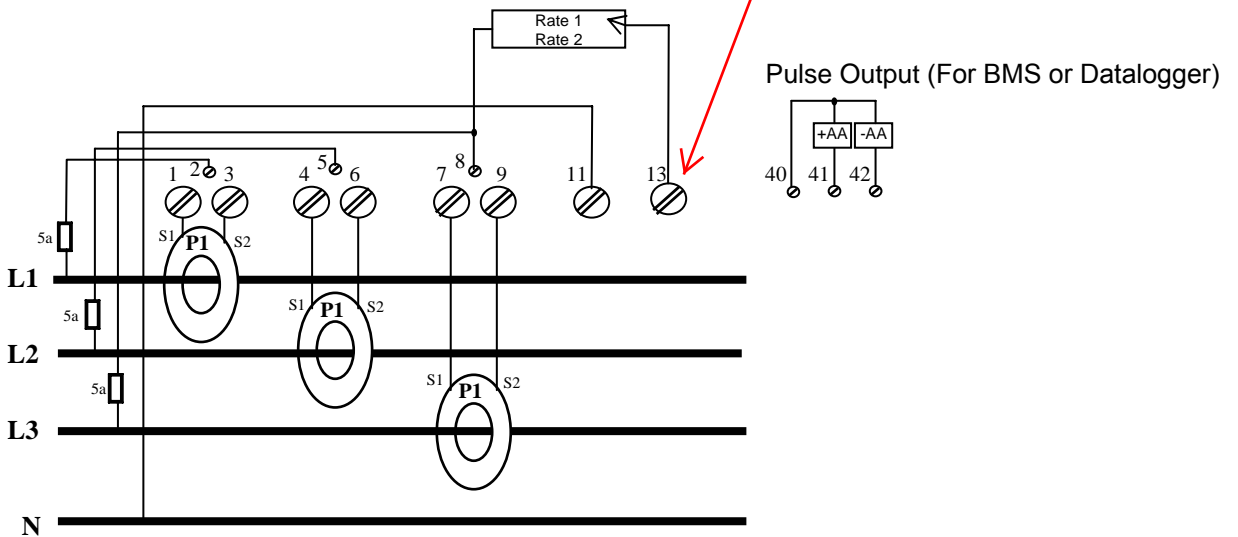
## TPN100 & TPNCT-MT171

### Connection for 1-20(120) AMP Version



Apply a switched neutral for day/night tariff if required - otherwise leave unconnected

### Connection for 0,1-5(6) AMP version



1. Please ensure all CTs are installed as per wiring diagram. NB., Correct polarity of CTs is ESSENTIAL ie., (P1-Mains) & (P2-Load)
2. Check all S1 & S2 Connections are correct as per wiring diagram otherwise problems will result with the register displays.
3. For health & safety reasons it should be noted that if a Current Transformer is operated with the secondary (S1 & S2) open circuited, DANGEROUS voltages may be generated at the secondary terminals or leads.

## Inputs

The meter is equipped with one (two-rate meters) or two (3- and 4-rate meters) tariff inputs that are used for external tariff changeover with a phase voltage.

## Outputs

The meter is equipped with one or two impulse outputs. Two impulse outputs are used in case of bi-directional energy flow (an output for each energy flow direction).

Outputs can be an S0 (DIN 43864) or opto-MOS relay type.



Fig. 7 – Meter constituent parts

1. An LCD
2. Meter technical data
3. A legend of data identification codes
4. A meter cover sealing screw
5. A terminal cover sealing screw
6. An IR optical port
7. A Scroll key
8. An impulse LED

## Meter connection procedure

1. Wire as above
2. Check connection indication:
  - LED is constant - just low current that's all
  - LED is blinks proportional to the current
3. Check connection – see LCD indications:
  - Presence of all three phases - ▼ is lit at 5th position
  - Failure of at least one phase - ▼ is not lit at 5th place
  - Reversed phase sequence - ▼ is blinking at the 5th place

## Def V Ya g

1. If there is no reading in data 0 and the LED is blinking check data 5 if there's a reading there is a CT polarity problem-  
CTs have two physical sides - P1 & P2  
P1 should always face your mains  
P2 should always face your load.

