

The portable phantom source PPS is a portable source of single-phase signals for checking tests and adjustment of all types of electricity meters. This source can supply electricity meter for data reading, adjustment and programming. Along with the working standard WS can be checked precision of meters at place of installation spot.

The source is being delivered in the high-protected portable case.

### Highlights

- Rough and fine smooth current adjustment;
- Output current indication;
- Galvanic isolation of voltage and current outputs;
- Zero values of the output voltage and current with the first switch-on;
- Voltage outputs U and  $U_{1/2}$  create galvanically isolated line voltage;
- Adjustable phase shift without the change of current amplitude;
- Temperature and current protection of the power stages;
- Single phase power supply.

### Technical data

| Voltage source             |  |
|----------------------------|--|
| Output voltage (RMS value) | 230 (220, 240) V / 120 V according to the line voltage           |
| Output power               | 80 W   |
| Stability                  | according to the line voltage                                    |
| Distortion factor          | according to the line voltage                                    |
| Accuracy                   | according to the line voltage                                    |
| Current source             |  |
| Output current (RMS value) | max. 120 A depends of the load type (see maximum currents table) |
| Current ranges             | 2 A, 20 A, 120 A   |
| Output power               | 80 W   |
| Resolution                 | 1 mA for 2 A range   |
|                            | 10 mA for 20 A range   |
|                            | 100 mA for 120 A range   |
| Stability                  | according to the line voltage                                    |
| Distortion factor          | according to the line voltage                                    |
| Adjustment                 | smooth – rough and fine  |
| Phase Angle                |  |
| Values                     | -90°, -60°, -30°, 0°, +30°, +60°, +90°, +180°                    |
| Setting accuracy           | 2°   |
| Dimensions                 | 410 x 350 x 175 mm   |
| Weight                     | 12,3 kg  |



Portable phantom source **PPS 111**



Testing equipment arrangement **STE 1111**

### Maximum currents according to the load type

| Single-phase electricity meter |       |         | Three-phase electricity meter |       |
|--------------------------------|-------|---------|-------------------------------|-------|
| 1xS                            | 1xT   | 1x(S+T) | 3xS                           | 3xT   |
| 100 A                          | 120 A | 80 A    | 80 A                          | 100 A |

Meter current sensor: **S** – shunt, **T** – CT transformer.

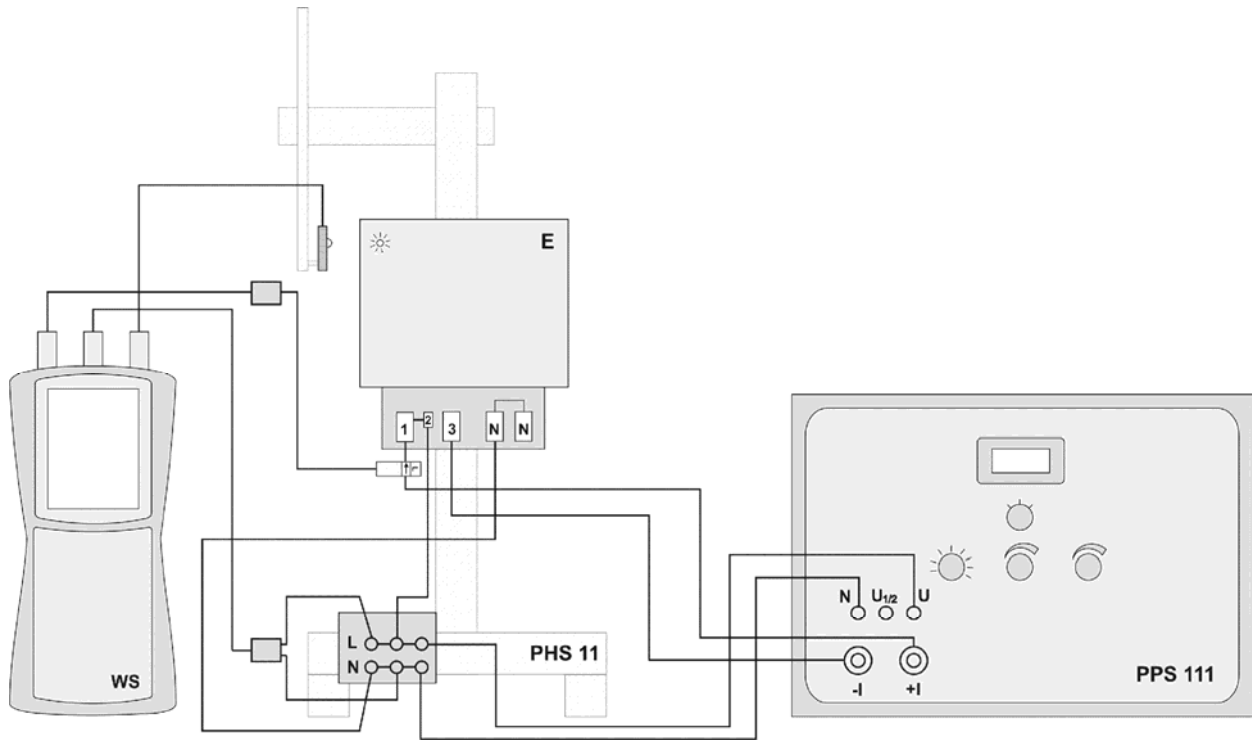
These maximum currents could be obtained only with current wires screwed to the meter terminals. Maximum currents are less by 25 % in a case of quick connection fixing system application.

### Device marking

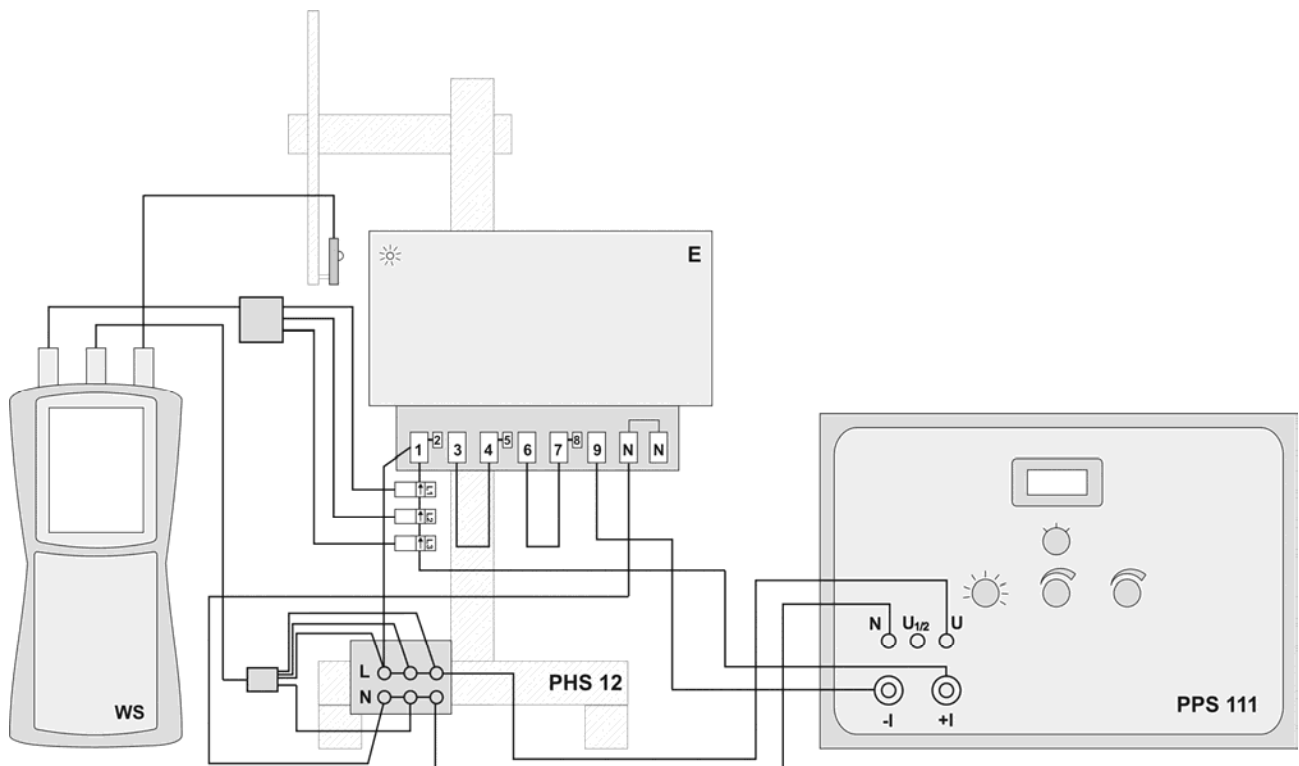
**PPS x<sub>1</sub> x<sub>2</sub> x<sub>3</sub>**

- x<sub>1</sub>** – Innovation series
- x<sub>2</sub>** – 1 - single-phase source
- x<sub>3</sub>** – 1 - source output 80 W

## Connection diagrams



*Measurement of the single-phase meters*



*Measurement of three-phase meters using single-phase source*