

TN031 – Sonnen – Single Phase sonnenBatterie installation on 2Ph & 3Ph Supplies

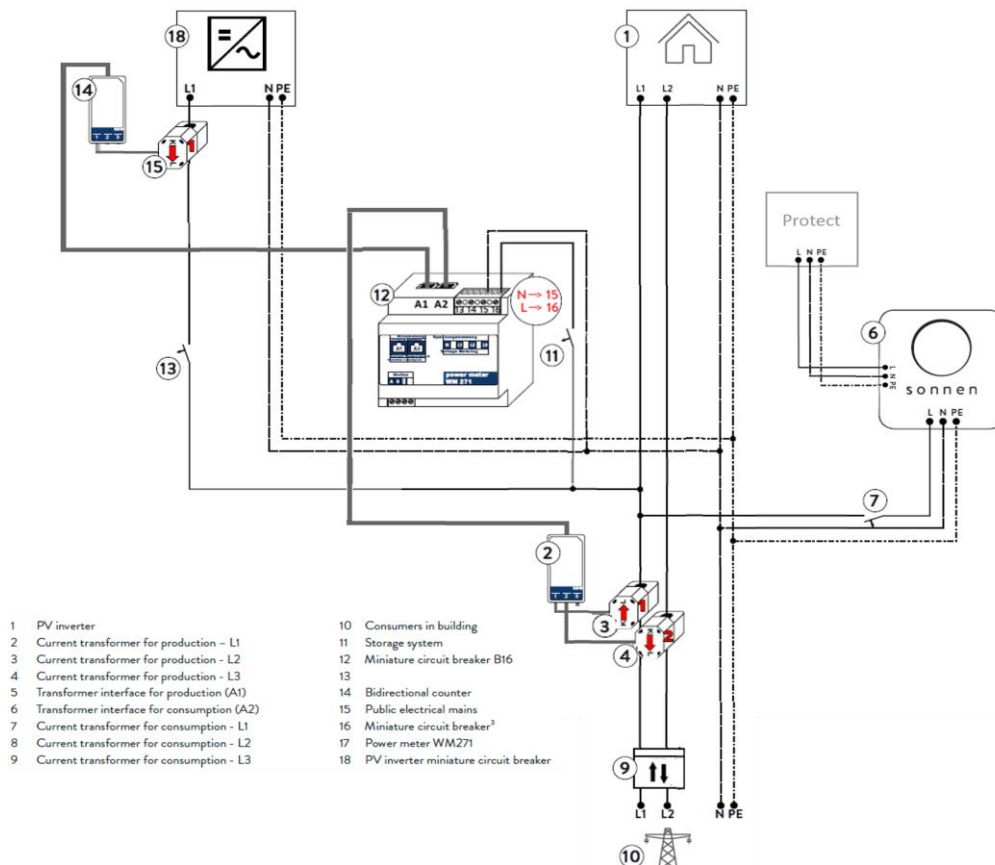
This tech note describes how to install and configure the following single sonnen products onto a dual split phase as well as a 3-Ph installation:

- sonnenBatterie eco 8.2
- sonnenBatterie eco 9.43
- sonnenBatterie Hybrid eco 9.53

The systems can be setup in either Consumption Measurement or Grid Measurement, for further information on either of these configurations please refer to tech notes TN016 and TN016.1

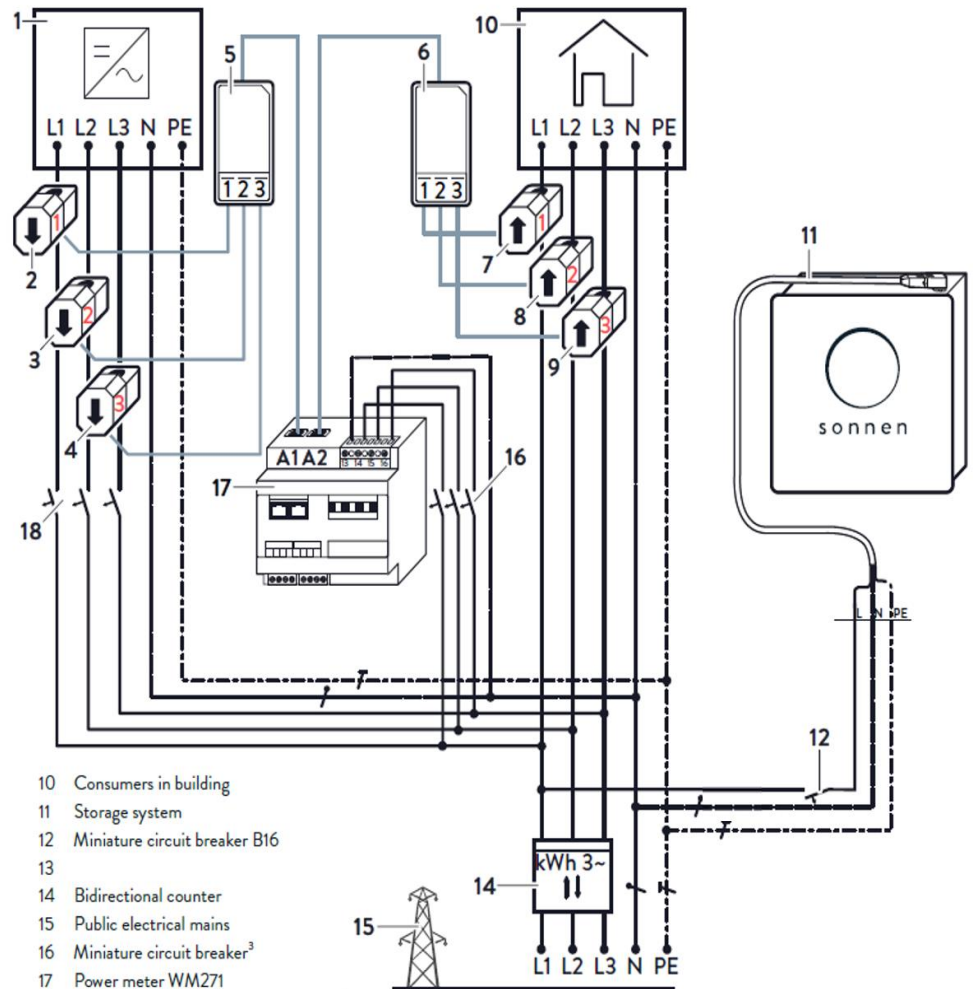
Dual Split Phase

- The system needs to be installed in Grid-Measurement only.
- Ensure that the meter is an XO1 type (small Modbus jumper installed in the second modus terminal) or if a previous device then Easy-Connect will need to be turned off / re-programmed using an LCD screen.
- The voltage reference connections must be as follows (standard single-phase connection setup)
 - o N 15
 - o L1 16
- The CT direction needs to be very carefully adhered to. CT 1 is to be placed onto the phase used for the voltage reference (L1), with CT 2 monitoring the remaining phase, however CT 2 needs to be installed facing the grid.



Three Phase

- The system can be installed in either Consumption Measurement or Grid Measurement (illustration shown as Consumption Measurement)
- The voltage reference connections must be as follows
 - o N 13
 - o L1 14
 - o L2 15
 - o L3 16
- The meter must be re-programmed using an LCD screen (purchased separately from sonnen AU). The setting [SYS 3P 2.3P] must be selected.



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|--|---|
| 1 PV inverter | 10 Consumers in building |
| 2 Current transformer for production - L1 | 11 Storage system |
| 3 Current transformer for production - L2 | 12 Miniature circuit breaker B16 |
| 4 Current transformer for production - L3 | 13 |
| 5 Transformer interface for production (A1) | 14 Bidirectional counter |
| 6 Transformer interface for consumption (A2) | 15 Public electrical mains |
| 7 Current transformer for consumption - L1 | 16 Miniature circuit breaker ³ |
| 8 Current transformer for consumption - L2 | 17 Power meter WM271 |
| 9 Current transformer for consumption - L3 | 18 PV inverter miniature circuit breaker |

Yours faithfully,

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