

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

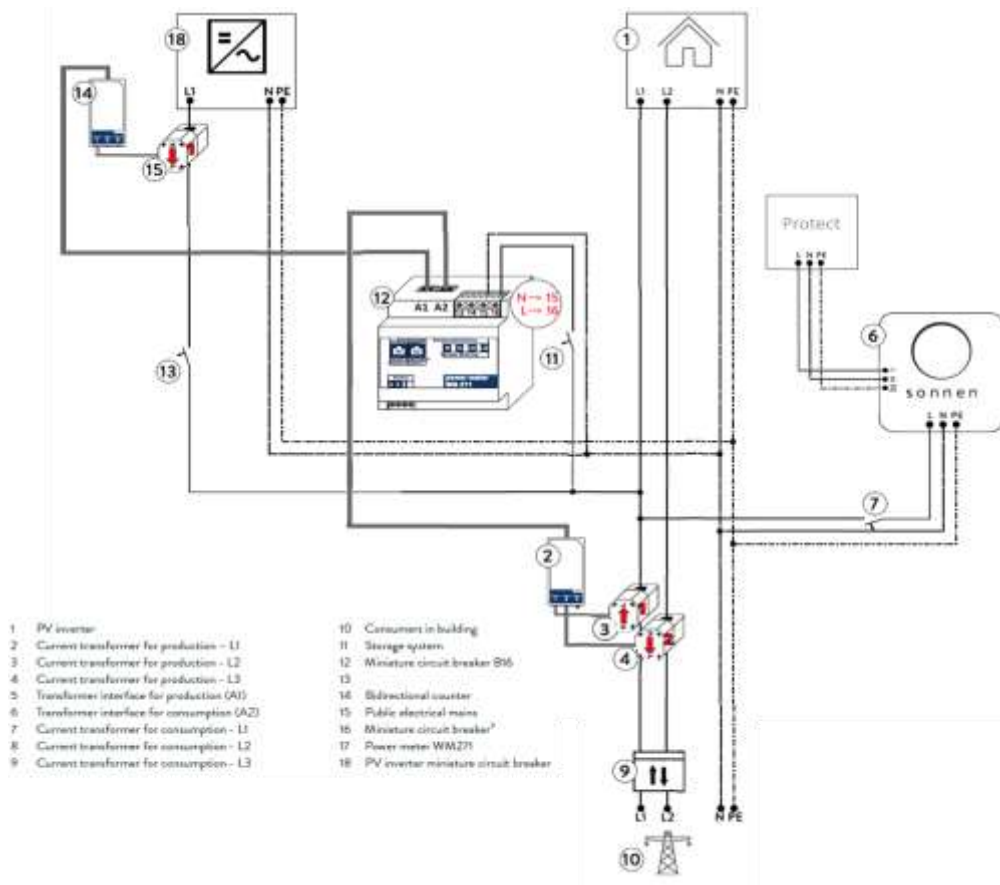
This tech note describes how to install and configure the following single sonnen products onto a dual split phase as well as a 3-Ph installation;

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

The systems can be setup in either Setup 1 or Setup 4, for further information on either of these configurations please refer to tech notes TN016 and TN016.1

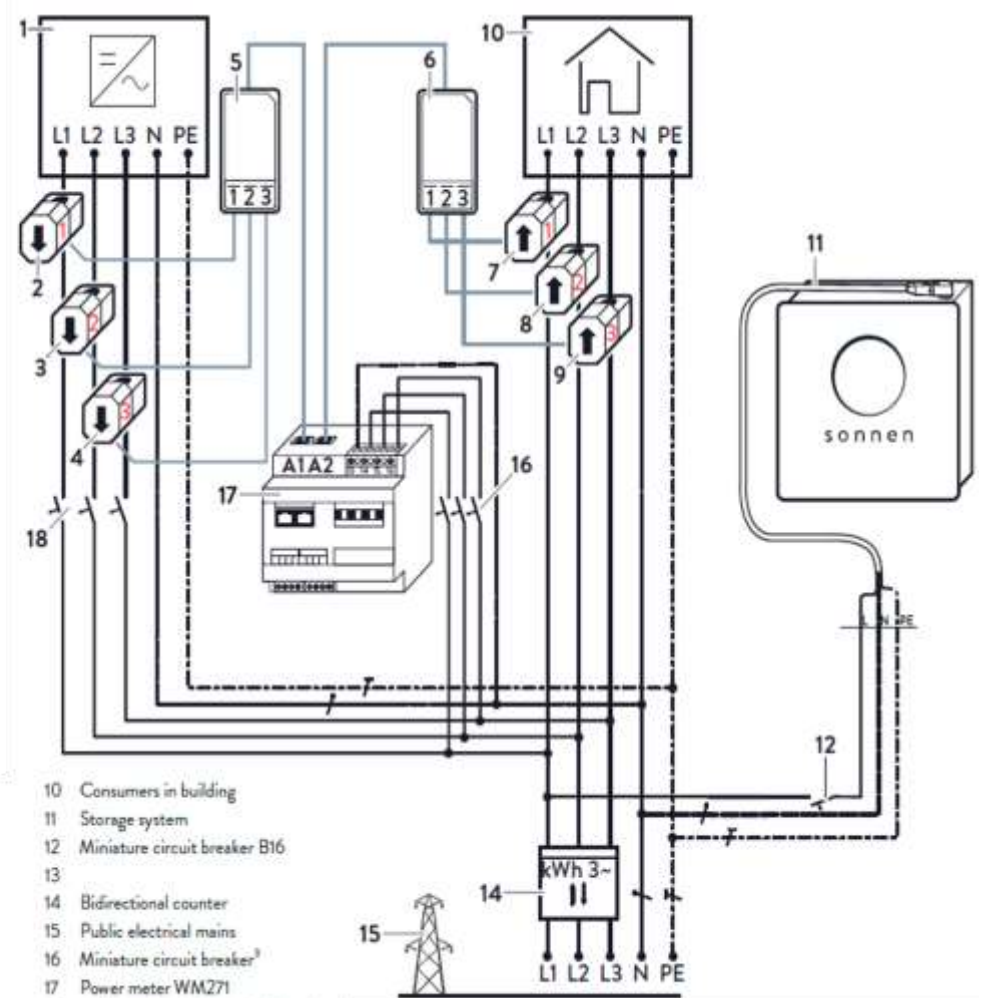
Dual Split Phase

- The system needs to be installed in Setup 4 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 (purchased separately from sonnen AU).
- 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 Setup 1 or Setup 4 (illustration shown as setup 1)
- 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 ⁹ |
| 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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