STABL

Industrial Battery Storage by STABL

# Reliable. Safe. Efficient.

DATASHEET

# Inverter 100


## Next-generation inverters thanks to modular multi-level technology

- High revenues thanks to unidirectional overall efficiency of 97%
- Controllability of second-life batteries
- Maximum safety thanks to low voltage (max. 68 V) per module
- Fail Safe: Bypassing faulty modules for maximum uptime
- 24/7 monitoring down to the cellular level
- Intelligent multi-battery integration in a single power inverter

5 YEAR WARRANTY

DATASHEET

# STABL Inverter 100

Three-phase modular multi-level inverter for 230/400V grids

| | | |
|---|---|---|
| **General data** | | |
| Inverter components | x inverter modules & CMUs per phase, 1x inverter connection box | |
| **Output** | | |
| Output voltage AC 3ph (phase - phase/phase - neutral conductor) | 400 / 230 | V ac |
| AC rated power (at 400V phase-phase mains voltage) | 67.5 | kVA |
| AC frequency | 50 & 60 | Hz |
| AC rated current (continuous, bidirectional) | 97.8 (RMS) | A |
| $I''_k$ - initial symmetrical short-circuit current | 49 | A |
| $i_p$ - Surge short-circuit current | 320 | A |
| Supported networks - Three-phase | 3 / N / PE | |
| Reactive power (as a percentage of apparent power) | 0-100 | % |
| **Input** | | |
| DC input voltage per module (max.) (OCV) | 68 | V dc |
| DC input current (continuous, bidirectional) | 100 | A dc |
| DC short-circuit current | 120 | A dc |
| Maximum efficiency of the inverter | 99.4 | % |
| Own consumption | 10 | W |
| **Additional features** | | |
| Possible communication interfaces | RJ 45 / ModbusTCP | |
| Reverse polarity protection DC input | Yes | |
| Intelligent energy management | Communication via Modbus TCP | |
| Inverter commissioning | via VPN | |
| Inverter module-to-inverter module communication | RJ45 / ModbusTCP | |
| **Safety** | | |
| Max. fuse size | 100 (recommended: NH 00 AC 500V 100A gR) | A |
| Protection class | I | |
| Overvoltage category | III | |
| **Guidelines** | | |
| BattReg 2023/1542 | IEC 62619, IEC 63056 | |
| RoHs | IEC 63000 | |
| EMC | IEC 61000-6-2, IEC 61000-6-4 | |
| LVD | IEC 62477-1 | |
| Supported network requirements | VDE-AR-N 4105:2018-11, VDE-AR-N 4110:2023-09, VDE-AR-N 4120:2018-11, Tor producer Typ A:2022-04, Tor producer B and C | |
| **Mechanical specifications** | | |
| AC output (3ph at inverter connection box) | 25 | mm² |
| DC input on inverter module | 16 | mm² |
| Inverter module dimensions (HxWxD) | 285 x 111 x 49 | mm |
| Inverter connection box dimensions (HxWxD) | 550 x 480 x 270 | mm |
| Weight (24 inverter module configuration) | 333 | kg |
| Operating temperature range | +5 bis + 45 [1)] | °C |
| Cooling | Passive air cooling | |
| Noise emission | <60 | dB(A) |
| Protection class | IP 20 | |
| Mounting type | Rack system | |
| **Installation conditions** | | |
| Installation distance from the coast | > 5000 (optional: >1000) | m |
| Maximum installation height | 2000 above sea level (>2000 requires approval by STABL Energy) | m |
| Humidity range | 40 – 80 | % |

The data mentioned are subject to change. Please contact us for the latest information: sales@stabl.com.

[1)] High and low temperatures lead to a reduction in performance due to derating. This varies depending on the battery type.