



## EEI SOLAR INVERTER STATE OF THE ART IN TECHNOLOGY

Sun is an infinite, clean and free source of energy. EEI is aware of the growing importance of photovoltaic energy in the worldwide energy scenario. From its strong experience in electronic power conversion systems, EEI manufactures and installs photovoltaic converters where high reliability and low maintenance levels are mandatory.

8YF500QNAFxx series inverters are specifically designed for large ground-based PV power plants: EEI took special care in the design and manufacturing of this photovoltaic inverter, to make it particularly suitable for harsh environmental conditions typical of large photovoltaic ground-based installations.

### Main inverter parameters

- Output power 500kW at 320V
- Frontal accessibility through doors fitted with lock and key
- Modular internal design for easy maintenance
- Power circuit with IGBT, film capacitors and low inductance connections.
- 6 input fuses and surge suppressor on DC side
- High reliability, system designed for harsh environmental conditions
- Microcontroller and DSP software for the digital management of all control parameters, alarms, diagnostics and I/O
- Embedded datalogger: a touch-screen display provides functioning data through TCP / MODBUS protocol
- Compliant to major international grid codes for Output Energy Quality
- 5 years warranty



# RENEWABLE ENERGY

| 8YF500QNAFXX                     |                              |
|----------------------------------|------------------------------|
| <b>AC OUTPUT PARAMETERS</b>      |                              |
| Rated AC power                   | 500 kW                       |
| Rated voltage ( $\pm 10\%$ )     | 320 V                        |
| Rated frequency ( $\pm 1\%$ )    | 50 Hz                        |
| Nominal current                  | 950 A                        |
| Power factor                     | 0,95 leading to 0,95 lagging |
| Grid type                        | 3P TI                        |
| THD(I)                           | < 3 %                        |
| <b>DC INPUT PARAMETERS</b>       |                              |
| DC input                         | 6                            |
| Number of MPPT                   | 1                            |
| Maximum input power              | 500 kW                       |
| MPPT input voltage range         | 450÷850 V                    |
| DC voltage: rated/maximum        | 450 / 1000 V                 |
| DC current: rated                | 1100 A (6 x 185 A)           |
| Surge suppressors                | Included                     |
| DC fuses                         | Included                     |
| <b>EFFICIENCY</b>                |                              |
| Maximum                          | 97,9%                        |
| European efficiency              | 97,4%                        |
| <b>WEIGHT AND DIMENSIONS</b>     |                              |
| L / H / D                        | 1810 / 2310 / 800 mm         |
| Weight                           | 1900 kg                      |
| <b>AUXILIARY GRID</b>            |                              |
| Ventilation aux                  | 400 V - 1,7 A - 3F           |
| UPS aux grid                     | 230 V - 0,65 A - 1F          |
| <b>AUXILIARY UPS CONSUMPTION</b> |                              |
| Stand-by                         | 130 W                        |
| In operation                     | 230 W                        |
| <b>ENVIRONMENTAL CONDITION</b>   |                              |
| Operative temperature range      | -5°C / +50°C                 |
| Storage temperature range        | -10°C / +50°C                |

\*Without aux power supply - Vin 550 Vdc

**Available as an option**

- Version for module with grounded pole
- Containerized solution with LV panel, transformer and MV switchgear

