3. Installation site and position

- Locate the inverter in a dry location, free from vibrations and shocks to avoid damage or reduced lifespan.
- The ambient temperature should not exceed 104°F (40°C) to prevent overheating and reduce efficiency.
- The inverter should be installed in a well-ventilated area to prevent overheating.
- The inverter should be installed on a flat, level surface to ensure proper airflow and stability.
- Ensure that the inverter is easily accessible for maintenance and monitoring.

4. Power connection to the inverter

- Connect the DC input terminals to the PV array using suitable DC conductors.
- Connect the AC output terminals to the grid or a local power source using suitable AC conductors.
- Ensure that the connections are secure and tight to prevent voltage drops and potential safety hazards.

5. Electrical protection

- Install a fuse or circuit breaker in the AC circuit to protect against overcurrent.
- Ensure that the protection device is suitable for the inverter's nominal current and the connected equipment.
- Use a ground fault circuit interrupter (GFCI) for added safety in case of fault conditions.

6. Commissioning

- Start the inverter to check for any malfunctions or errors.
- Verify that the inverter is operating correctly and efficiently.
- Adjust the inverter's settings as required to optimize performance and efficiency.
Before proceeding with commissioning, make sure you have carried out all the operations and checks indicated in the previous sections. It is important to ensure that the inverter cover is correctly closed.

The inverter is powered ON by the voltage coming from the photosensitive generator: the presence of grid voltage signals IS NOT SUFFICIENT to allow the inverter to power up.

If any fixes are needed, they can be made using a wireless capable device such as a smartphone, tablet or laptop.

Start the Web server with the installation wizard and connect to the inverter from your computer. The inverter is then ready for commissioning.

The inverter is designed to control the rate at which output power is increased, either at startup, or after a temporary low power condition on the PV array (such as partial shading). The following ramp controls are provided on this inverter:

- **Volt/Watt settings (P(V))**: Under this mode, the level of active power exported by the inverter is a function of the operating grid voltage, also known as a Volt/Watt curve. This function is used to ensure the inverter's output power matches the active power demand of the load.
- **CEI Average VGrid Derating (only Italian grid standard)**: Sets, after a specific threshold, an active power derating based on the average of Vac over 10 minutes as per CEI 0-299-693. This function is used to ensure the inverter's output power matches the active power demand of the load.
- **Dynamic Volt/VAR control (Volt/VAr Settings: Q(V))**: Under this mode, the level of reactive power exported by the inverter is a function of the operating grid voltage, also known as a Volt/VAr curve. This function is used to ensure the inverter's output power matches the reactive power demand of the load.

### Voltage ride-through

The inverter is designed to support voltage and overvoltage events. The inverter is designed to continue operating normally, within the specified operating range. If overvoltage occurs, the inverter is designed to continue operating normally or to export to power a specified delay. Beyond this programmed delay, the inverter disconnects from the grid in the event of an abnormal voltage condition.

### Power control

The inverter provides several modes of operation for power control and are described below:

- **Constant power**: The inverter maintains a constant output power regardless of the operating grid voltage. This mode is useful for applications where the load is insensitive to changes in the grid voltage, such as in industrial settings.
- **NOM/Max (Current control)**: The inverter maintains a constant output power according to the grid voltage and the load characteristics. This mode is useful for applications where the load is sensitive to changes in the grid voltage, such as in residential settings.
- **CAE Average (only Italian grid standard)**: The inverter maintains a constant output power according to the grid voltage and the load characteristics. This mode is used in Italy only.

### Frequency ride-through

The inverter is designed to support frequency and overfrequency events. The inverter is designed to continue operating normally, within the specified operating range. If overfrequency occurs, the inverter is designed to continue operating normally or to export to power a specified delay. Beyond this programmed delay, the inverter disconnects from the grid in the event of an abnormal voltage condition.

### Voltage grid stabilizer

The inverter provides a voltage grid stabilizer function that is useful to support reactive loads and also assist in reliable operation of the utility grid in the event of abnormal grid conditions.

- **Voltage ride-through**: The inverter is designed to support voltage and overvoltage events. The inverter is designed to continue operating normally, within the specified operating range. If overvoltage occurs, the inverter is designed to continue operating normally or to export to power a specified delay. Beyond this programmed delay, the inverter disconnects from the grid in the event of an abnormal voltage condition.

### Active power control

The inverter provides several modes of operation for active power control and are described below:

- **Constant power**: The inverter maintains a constant output power regardless of the operating grid voltage. This mode is useful for applications where the load is insensitive to changes in the grid voltage, such as in industrial settings.
- **NOM/Max (Current control)**: The inverter maintains a constant output power according to the grid voltage and the load characteristics. This mode is useful for applications where the load is sensitive to changes in the grid voltage, such as in residential settings.
- **CAE Average (only Italian grid standard)**: The inverter maintains a constant output power according to the grid voltage and the load characteristics. This mode is used in Italy only.

### Frequency ride-through

The inverter is designed to support frequency and overfrequency events. The inverter is designed to continue operating normally, within the specified operating range. If overfrequency occurs, the inverter is designed to continue operating normally or to export to power a specified delay. Beyond this programmed delay, the inverter disconnects from the grid in the event of an abnormal voltage condition.

### Voltage grid stabilizer

The inverter provides a voltage grid stabilizer function that is useful to support reactive loads and also assist in reliable operation of the utility grid in the event of abnormal grid conditions.