

Switchover compact  
backup system and island mode

toscano

COMBI-MAX / COMBI-PRO-MAX



According to forthcoming ITCs 40/53

vigivolt

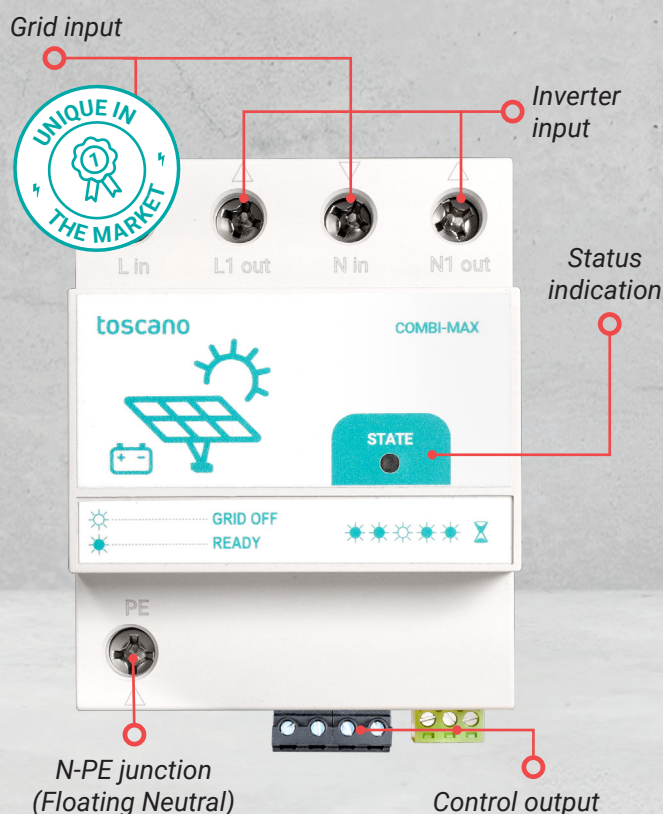


# COMBI-MAX

COMBI-MAX is a device that protects people and the installation facing an absence of mains voltage, in photovoltaic installations where operation in Backup mode is required.

Its operation in **island mode** disconnects the inverter from the mains and only allows power to be supplied to loads operating in a separate mode, **total Backup** or **Backup critical loads**.

Reclosing to the grid will occur only after the mains voltage remains within normal range for at least three minutes.



All our equipment is 100% tested and certified by external lab

## COMBI-MAX characteristics



### Double control output

Backup mode order and confirmation



### Compatible

- Fronius GEN24
  - Huawei SUN2000
- \* Other inverters on request.

## Common characteristics



### Activation Backup mode

Output activation backup mode (total/critical loads) to inverter



### Union Neutral - Earth

Prevents floating neutral as indicated by ITC-BT-08



### Island operation

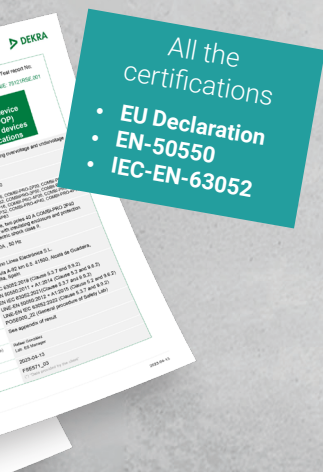
Disconnects the self-consumption installation from the mains



# COMBI-PRO-MAX

COMBI-PRO-MAX has the same features and functionalities as COMBI-MAX but with the difference that it integrates an **IGA of up to 63 A** (see ratings) and a **permanent surge protector with automatic reconnection**.

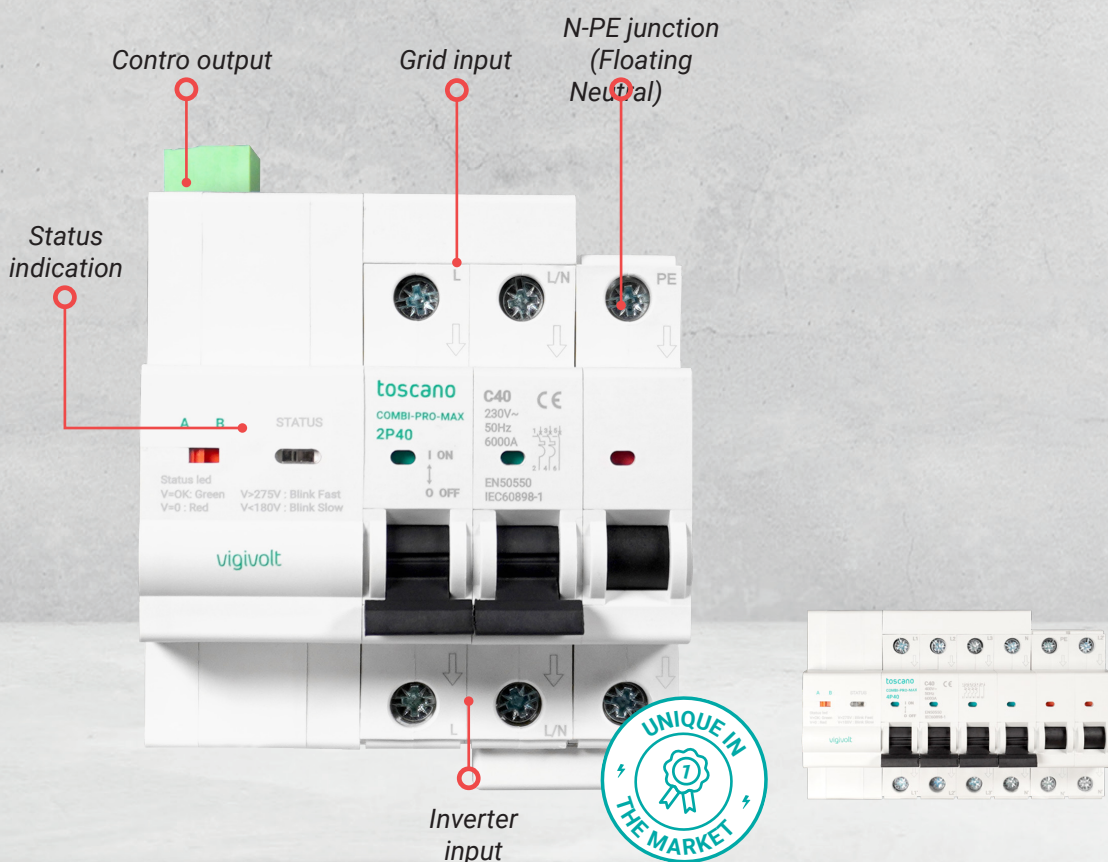
Thanks to these features we avoid placing a surge protector upstream of the equipment and eliminate an element in the switchboard. It is the perfect equipment to place at the **head of the general switchboard** of a home with a photovoltaic self-consumption installation.



All the certifications

- EU Declaration
- EN-50550
- IEC-EN-63052

tested in our facilities and laboratories.



Available in three-phase

## COMBI-PRO-MAX characteristics

**IGA** **Circuit breaker**  
Magneto-thermal protection

**Overvoltage**  
Integrated permanent protection according to UNE-63052/50550

**Compatible**

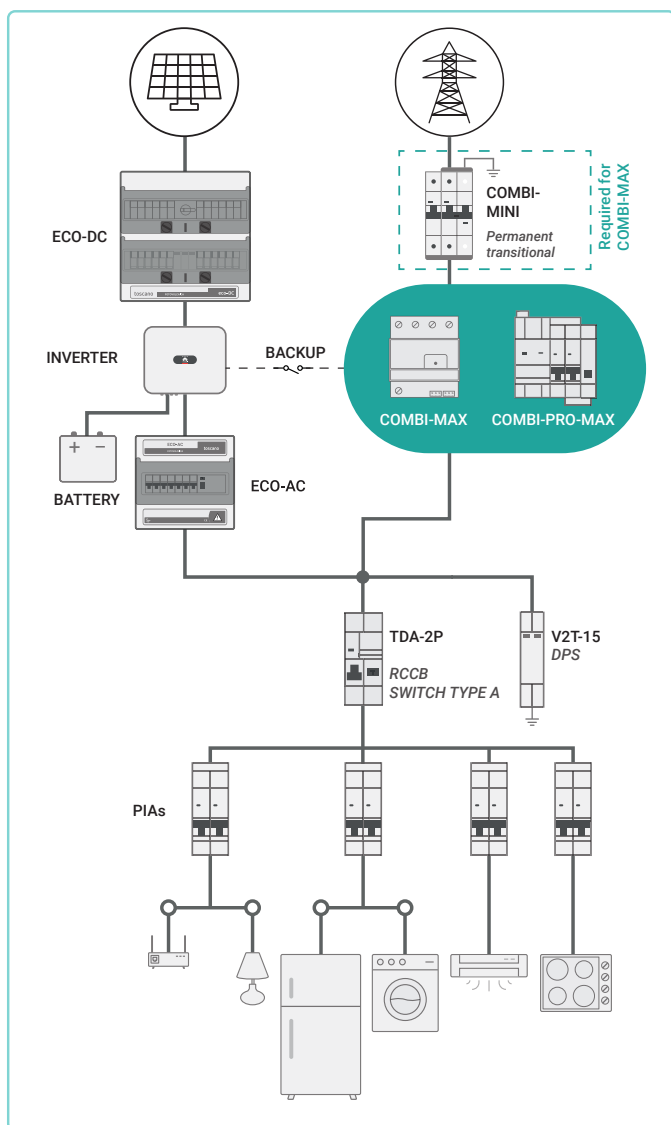
- Huawei SUN2000
- \* Other inverters on request.

**Timing**  
Disconnection and connection of line in island/backup mode

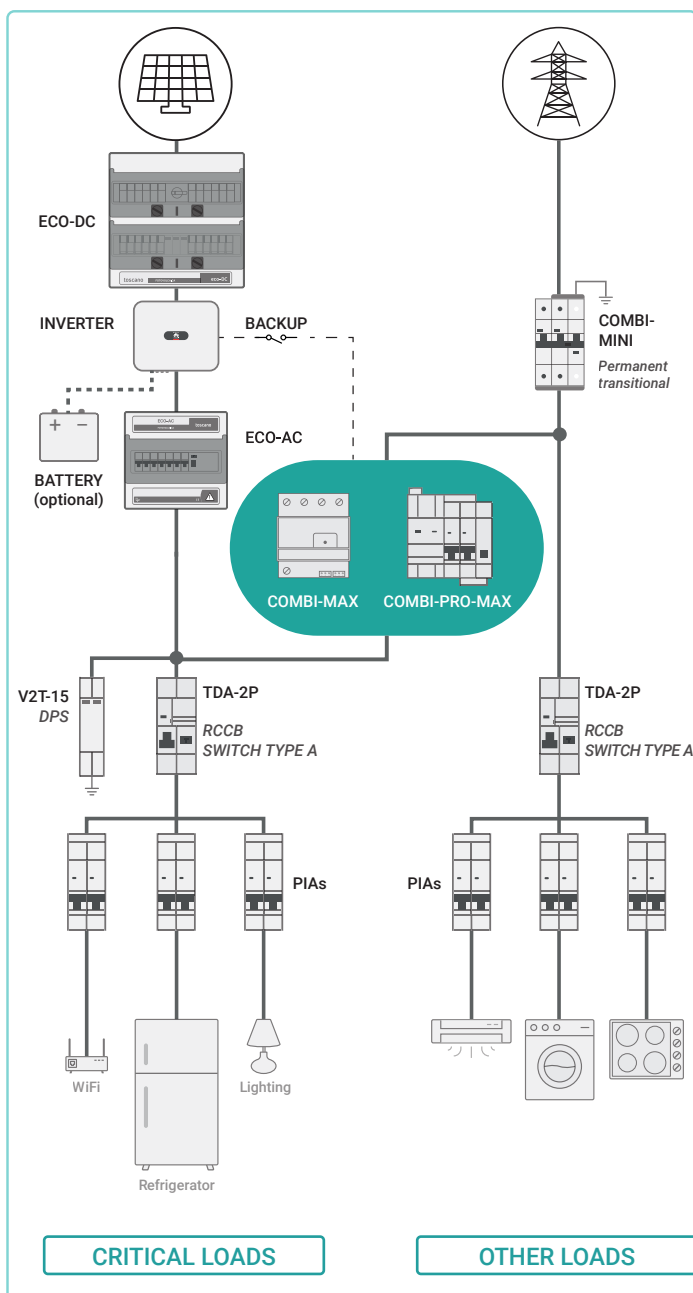
**Automatic reclosing**  
Self-resetting permanent surge protection according to **EN-50550/IEC-63052**

**No meter required**  
The team itself constantly monitors the tension

# TOTAL BACKUP



# BACKUP CRITICAL LOADS



## HOW DOES IT WORK?

- 1 Service anomaly**  
 Detects a service anomaly in the main power grid.
- 2 Disconnection from the grid**  
 Disconnects the installation from the mains electricity. **ISLAND MODE.**
- 3 Backup mode**  
 Activates the **BACKUP MODE** of the inverter, making it supply all power to the installation.
- 4 Reconnection to the grid**  
 When the mains supply is within normal values, automatically disables the **BACKUP MODE** of the inverter and reconnects the installation to the mains.

## Models

| Codes    | References         | Intensity |
|----------|--------------------|-----------|
| 10004921 | COMBI-PRO-MAX-2P25 | 2 x 25A   |
| 10004922 | COMBI-PRO-MAX-2P32 | 2 x 32A   |
| 10004923 | COMBI-PRO-MAX-2P40 | 2 x 40A   |
| 10004943 | COMBI-PRO-MAX-4P25 | 4 x 25A   |
| 10004944 | COMBI-PRO-MAX-4P32 | 4 x 32A   |
| 10004945 | COMBI-PRO-MAX-4P40 | 4 x 40A   |

\* Other intensities on request.

| Codes    | References | Intensity |
|----------|------------|-----------|
| 10005140 | COMBI-MAX  | 2 x 50A   |

\*Preview version: We reserve the right to modify this information without notice.