

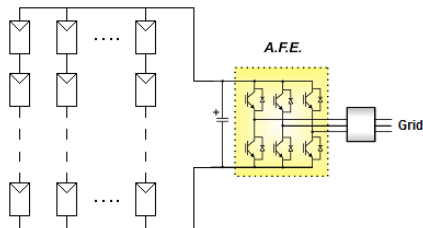


OPDE
SOLAR

AFE on PV

Energy Conversion

- ▶ Photovoltaic inverter for 3-phase applications
- ▶ Based on AFE technology
- ▶ Single MPPT
- ▶ Transformerless (external LV/LV or LV/MV transformer mandatory)
- ▶ Cabinet format



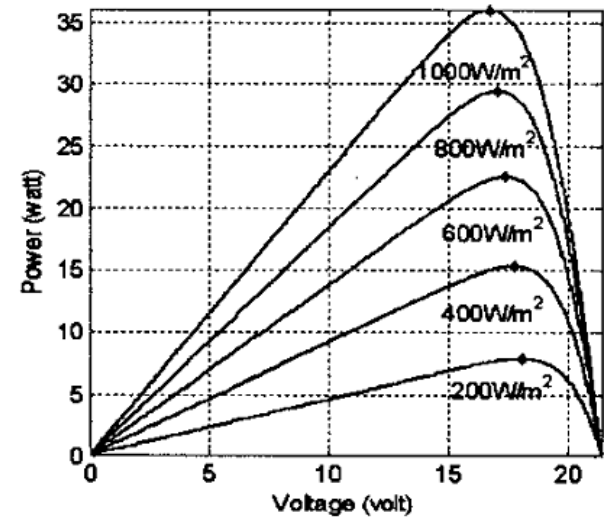
OPDE
AFE



Photovoltaic Energy

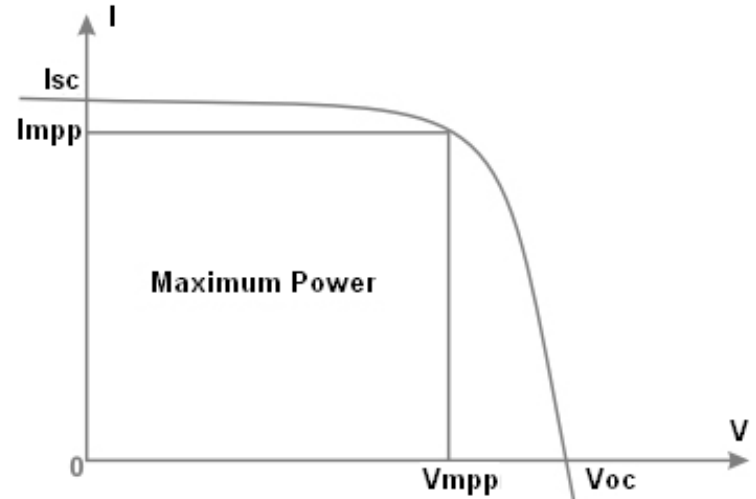
Multi loop controls:

- ▶ inner loop to control output current in synchronization with the grid voltage
- ▶ outer loop used for dc link voltage control for MPPT

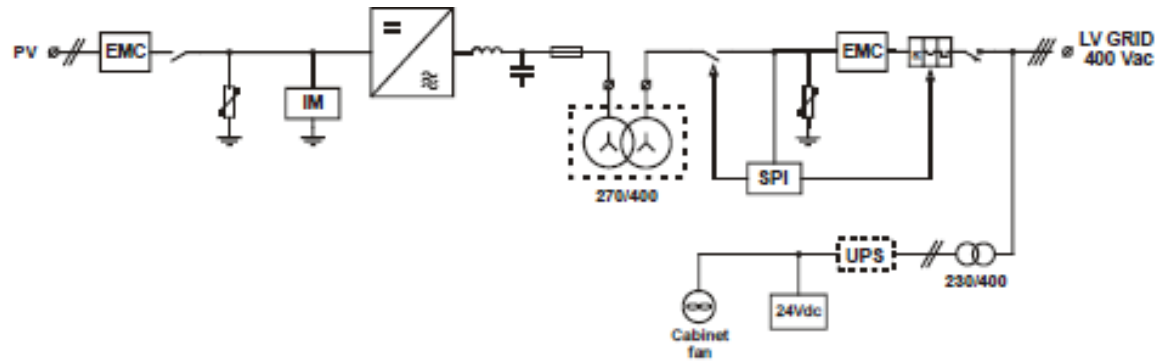


Photovoltaic Energy

The Maximum Power Point (MPP) of PV arrays depends on insolation and temperature



Block Diagram

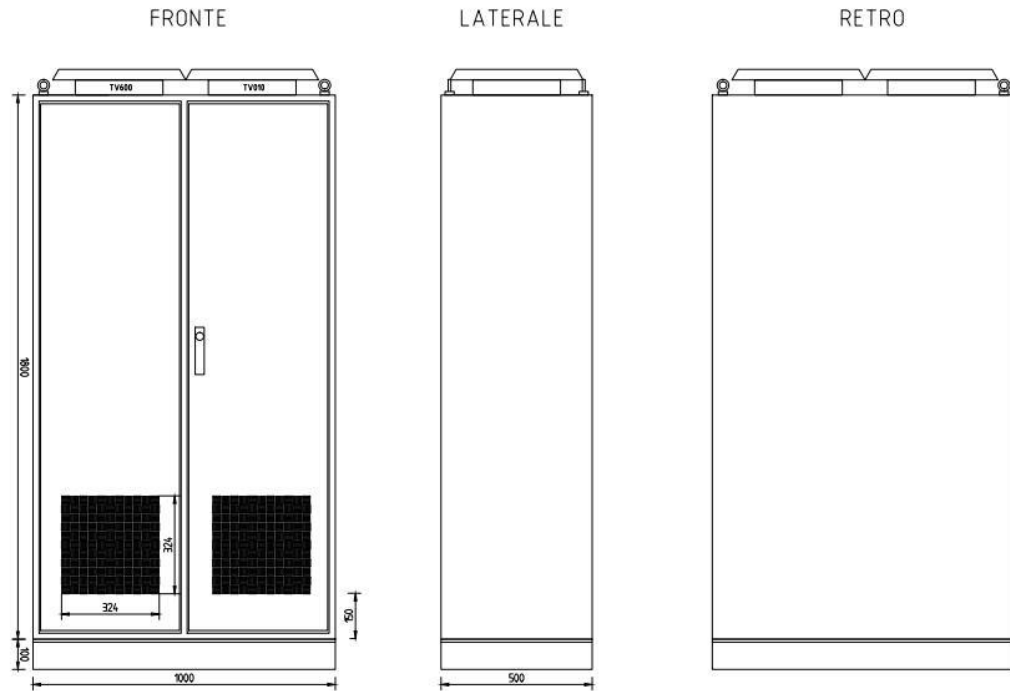


- ▶ External LV/LV transformer 270Vac/400Vac (mandatory)
- ▶ Interface protection according to the standard CEI 021
 - ▶ EMC filter on grid side (optional on PV side)
 - ▶ Surge protection device on PV side
 - ▶ Adjustable power factor
 - ▶ Insulation monitoring

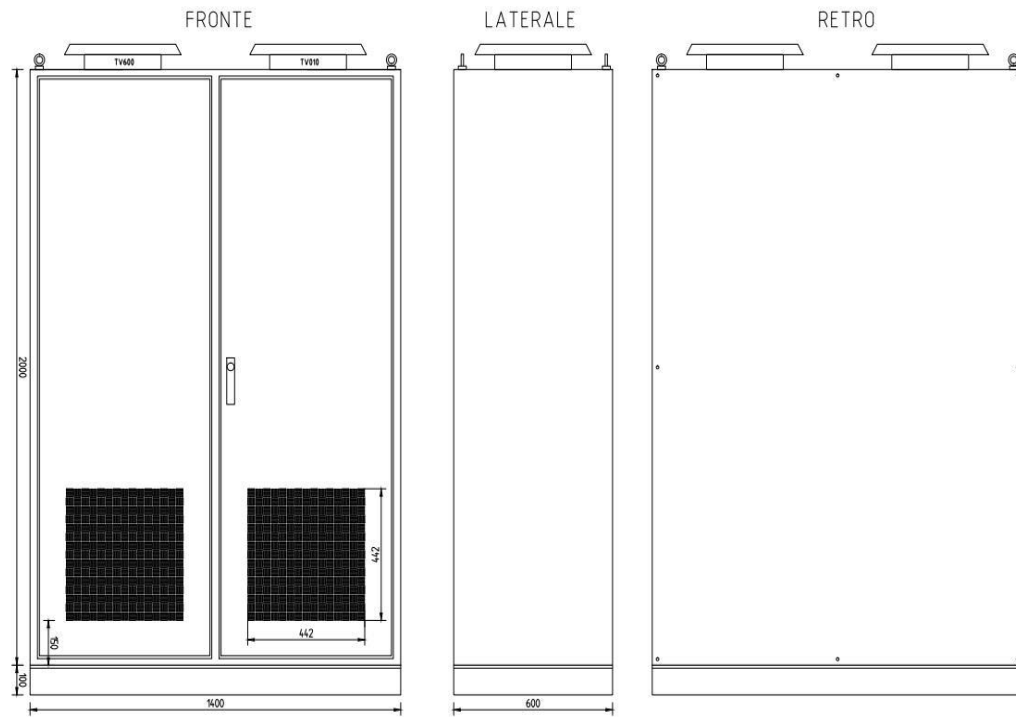
Technical Data

MODEL		OPDE SOLAR 40	OPDE SOLAR 60	OPDE SOLAR 80	OPDE SOLAR 100	OPDE SOLAR 130
Input (DC)						
Max. input voltage	V d.c.			880		
MPP range	V d.c.			460÷880		
Max. input current	A d.c.	82	114	157	202	257
Max. PV shortcircuit current (Isc PV)	A d.c.	82	114	157	202	257
Max. recommended PV power	kW	42	58	80	102	130
Nominal input power MPPT trackers	kW	38	52	72 1	93	119
Output (AC)						
Nominal output voltage	V a.c.			400 +10%/-15%		
Max. output current	A a.c.	52	72	100	128	163
Nominal output power	kW	32	45	61,5	80	102

Size A
40,60,80



Size B
100,130



South Korea Solar Plant

📍 Jeju Island, South Korea

Features

2,1 MW Solar Power Plant

100 kW and 250kW Cabinets equipped with our
OPDE Solar

In compliance with the requirements of
PV 502 South Korean Grid Code



Solar Cabinet for Chinese Market

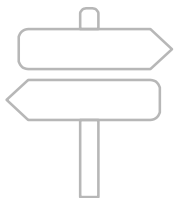
📍 China

Features

250kW Cabinet

In compliance with the requirements of
CQC (CNCA/CTS0006:201
O;CNCA/CTS0004:2009A)





FIND US



HQ

Via dell'Oreficeria, 41
36100 - Vicenza
Italy



TDE & HPB Motion Control

Room 201, Building C, No.25,
Tian Ling Rd, Wu Zhong
Economic Development Zone
215168 - SuZhou City
China



CNC Application Department

Viale Fulvio Testi, 128
20092 - Cinisello Balsamo
Italy



CNC Division

Via di Pratignone, 15/5
50019 - Sesto
Fiorentino
Italy



FIND US



+39 0444 343555



info@bdfdigital.it



www.bdfdigital.it
www.tdemacno.it