

Tmax PV: Photovoltaic range T Generation



The average generating capacity of photovoltaic installations is increasing every day, in all parts of the world. When it comes to large photovoltaic production installations (over 200 kWp), the power installed has continued to increase at an incredible pace and at a higher rate than that of small and medium-sized installations.

When the power generated by a photovoltaic production system exceeds a certain level and use of a low voltage switch is required, **Tmax PV** molded case switches are a perfect solution.

Tmax PV is the latest T Generation product: **from 0 to 1600 A , up to 1100 VDC.**

Tmax PV is IEC 60947-3 certified.

Tmax PV includes 6 different sizes: from the compact T1 (which can be mounted on a DIN rail) to the high-performance T7, available in the two versions, toggle and stored energy.

Available sizes

MCS	Thermal current	Service current (category DC22B)	Rated voltage
T1D	160	160	1100 V DC
T3D	250	200	1100 V DC
T4D	250	250	1100 V DC
T5D	630	500	1100 V DC
T6D	800	800	1100 V DC
T7D	1600	1600	1100 V DC
T7D - M	1600	1600	1100 V DC

Tmax PV reaches a rated insulation voltage **up to 1150 VDC.**

Tmax PV includes all the advantages of the T Generation:

- Excellent performance in compact dimensions
- Vast and complete range of accessories for all requirements
- Complete remote control

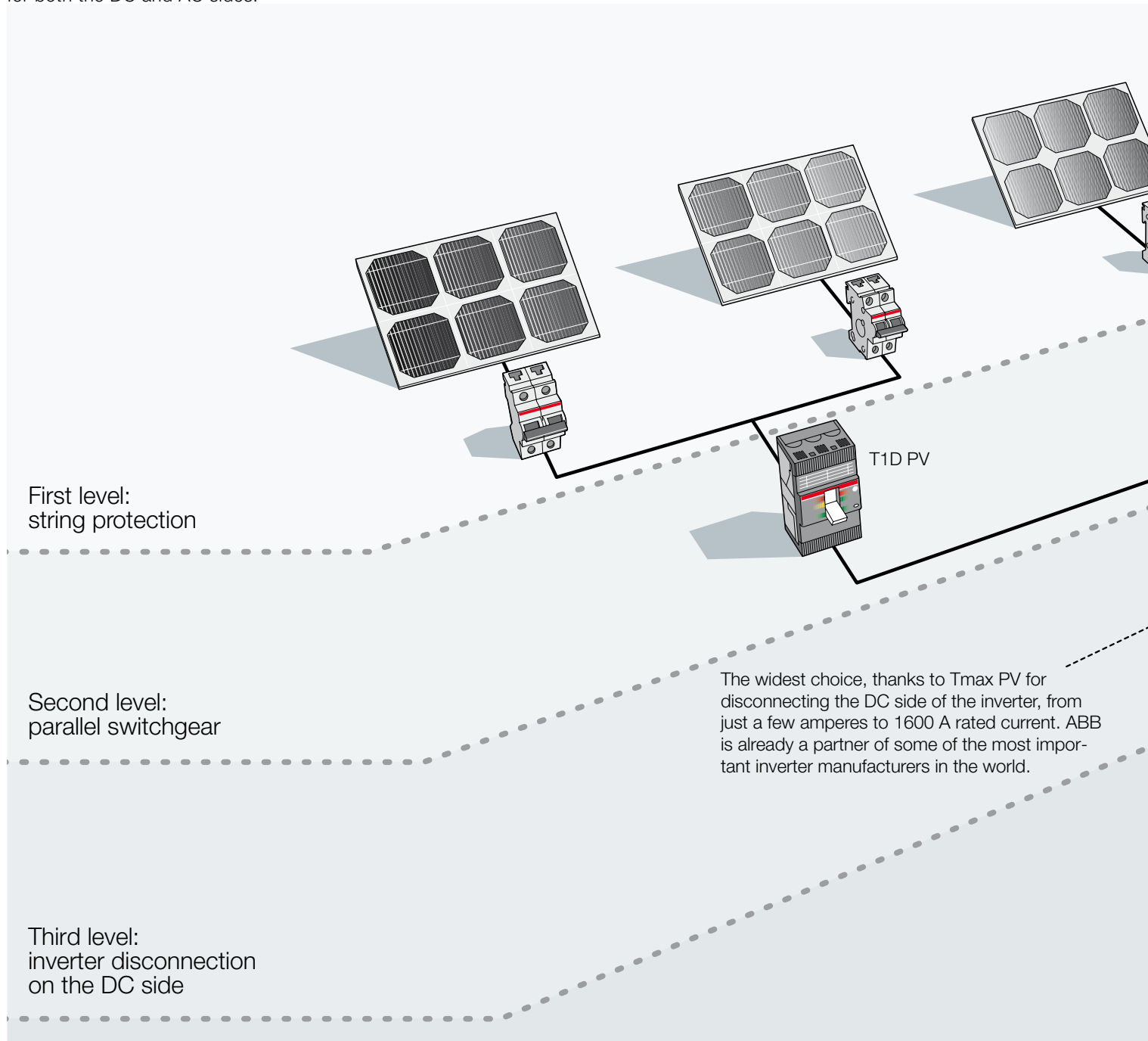
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Tmax PV operating devices are the first molded case switches available on the market for such high DC voltages. They are the ideal answer to every disconnecting requirement for all types of photovoltaic installations.

Tmax PV molded case switches can be used in both parallel switchgears and inverter switchgears.

When used in inverter switchgears, **Tmax PV** makes it absolutely simple to coordinate the direct current side and the alternate current side: the same circuit breaker can be used for both the DC and AC sides.

Moreover, **Tmax PV** equipment, which is IEC 60947-3 certified, can be used for mixed resistive-inductive loads in all low voltage installations up to 1100 VDC and 1600 A rated current.



The widest choice, thanks to Tmax PV for disconnecting the DC side of the inverter, from just a few amperes to 1600 A rated current. ABB is already a partner of some of the most important inverter manufacturers in the world.

Examples of other applications in which **Tmax PV** switches can be efficiently used:

- **Electric traction**

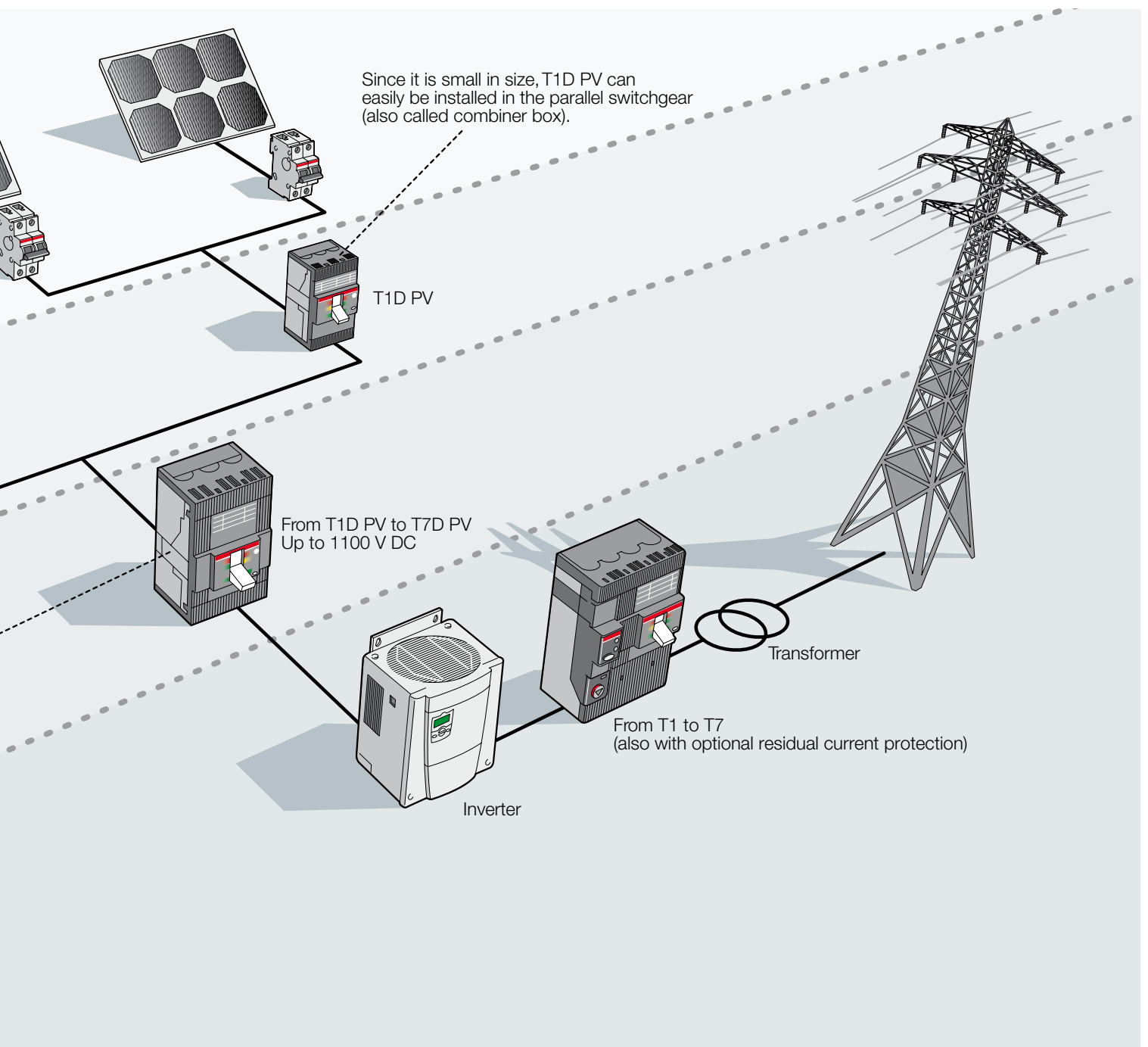
Public urban transport vehicles (trolley-buses, streetcars, subway trains) often run on DC power at 600 to 1000 V voltage ratings

- **UPS applications**

Use of uninterruptible power suppliers is becoming more and more widespread in various types of installations: hospitals, servers, data centers and others

- **Special industrial applications**

Such as electric arc furnaces, electric welding systems, metal refining plants (aluminium, zinc and others)



The part numbers for TMAX PV are listed in the table below:

Part number	Description	Version/ Poles
1SDA066881R1	T1D 160 PV 4p F FC Cu 1100 VDC	Fixed / 4p
1SDA066882R1	T3D 200 PV 4p F FC Cu 1100 VDC	Fixed / 4p
1SDA066883R1	T4D 250 PV 4p F FC Cu 1100 VDC	Fixed / 4p
1SDA066884R1	T5D 500 PV 4p F FC Cu 1100 VDC	Fixed / 4p
1SDA066885R1	T6D 800 PV 4p F FC CuAl 1100 VDC	Fixed / 4p
1SDA066886R1	T7D 1600 PV 4p F FC CuAl 1100 VDC	Fixed / 4p
1SDA066887R1	T7D1600 PV 4p F FC CuAl M 1100 VDC	Fixed / 4p

The Tmax PV line is supplied standard with the following accessories:

Frame size	Insulating plates	FCCu Terminal clamps	FCCuAL Terminal clamps	Phase barriers	High terminal covers
T1 PV	■	■			
T3 PV	■	■			
T4 PV	■	■		■	
T5 PV	■	■			■
T6 PV	■		■		■
T7 PV	■		■		■
T7M PV	■		■		■