TRANSFORMER COMPACT STATION 500SC / 630SC / 800SC / 1000SC / 1250SC / 1600SC





Reliable

- Inexpensive transport due to its light weight
- Significant savings in farm road construction

Simple

- Complete turnkey solution in concrete construction
- Ideally suited for the central inverters of the CP series

Extendable

- Medium-voltage switchgear for modular construction of PV farms
- Transformer for internal power to supply the inverter

TRANSFORMER COMPACT STATION 500SC / 630SC / 800SC / 1000SC / 1250SC / 1600SC

Compact for medium voltage

The Transformer Compact Station is the ideal link between SMA central inverters and the medium-voltage grid: it is a complete turnkey solution that offers all options, particularly for the Italian market – from the medium-voltage switchgear to the GSE meter. Despite its concrete construction, it is significantly smaller and lighter than previous solutions – which saves time and costs. In addition, the Transformer Compact Station 800SC and 1600SC feature as standard equipment an adjustable voltage tap that can be controlled easily with a rotary switch. This makes these devices the perfect partners for the central inverters of the CP-series.

TRANSFORMER COMPACT STATION 500SC / 630SC / 800SC / 1000SC / 1250SC / 1600SC

550 kVA 500 kVA 630 kVA 20 kV 1) 8 kV 22 kV 50 Hz 14.5 A 270 V 315 V 1 070 A 1 155 A 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 2 550 / 2 500 mm 100.4 / 98.4 inches -14.2 t RC switch-disconnector Iron core IP23D In unprotected outdoor environments O C +45 ° C I 5% 95% I 000 m 6 kVA 20 kV 1) 20 kV 1) 20 kV 1) 20 kV 1) 21 kV 22 kV 50 Hz 18 kV 22 kV 50 Hz 10 N 22 kV 50 Hz 10 N 25 N 2
SOO kVA
20 kV 1) 8 kV 22 kV 50 Hz 14.5 A 270 V 315 V 1 070 A 1 155 A 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 2 550 / 2 500 mm 100.4 / 98.4 inches -10.1 t 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches -10.1 t 3 280 / 2 550 / 2 500 mm 129.1 / 100.4 / 98.4 inches -14.2 t RC switch-disconnector Iron core IP23D ed outdoor environments 1° C +45 ° C 15% 95% 1 000 m 1 8 kV 22 kV 50 kV 1 8 kV 22 kV 50 Hz 18 kV 22 kV 50 Hz 1 1 18 kV 22 kV 50 Hz 1 1 1 1 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4
8 kV 22 kV 18 kV 22 kV 50 Hz 18.2 A 14.5 A 18.2 A 270 V 315 V - - 1 00.4 / 98.4 inches - - - - - 1 x LV / HRC switch-disconnector Iron core In unprotected outdoor enviro
50 Hz 14.5 A 18.2 A 270 V 315 V 1 070 A 315 S 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches -10.1 t 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches -14.2 t RC switch-disconnector Iron core IP23D ed outdoor environments 1 × LV / HRC switch-disconnector Iron core IP23D ed outdoor environments 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × C +45 ° C 15% 95% 1 000 m 1 000 m
14.5 A 270 V 315 V 1 070 A 1 155 A 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 2 2 550 / 2 500 mm 100.4 / 98.4 inches -9.8 t 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches -10.1 t 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches -14.2 t RC switch-disconnector Iron core IP23D ed outdoor environments 1 × LV / HRC switch-disconnector Iron core IP23D ed outdoor environments 1 × LV / HRC switch-disconnector Iron core IP23D ed outdoor environments 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core IP23D In unprotected outdoor environment 1 × LV / HRC switch-disconnector Iron core
270 V
1 070 A 1 155 A 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches
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1 070 A 1 155 A 2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches
2 380 / 2 550 / 2 500 mm 100.4 / 98.4 inches 93.7 / 100.4 / 98.4 inches 93.7 / 100.4 / 98.4 inches 100.4 / 98.4 inches 129.1 / 100.4 / 98.4 in
100,4 / 98,4 inches
100.4 / 98.4 inches
3 280 / 2 550 / 2 500 mm 3 280 / 2 550 / 2 500 mm 100.4 / 98.4 inches 129.1 / 100.4 / 98.4 inches -14.5 t
100.4 / 98.4 inches
~14.2 t
RC switch-disconnector Iron core IP23D ed outdoor environments 0 ° C +45 ° C 15% 95% 1 000 m 1 x LV / HRC switch-disconnector Iron core Iron core IP23D In unprotected outdoor environment 2 ° C +45 ° C 15% 95% 1 000 m
Iron core Iron core IP23D IP23D IP23D In unprotected outdoor environments 0 ° C +45 ° C -20 ° C +45 ° C 15% 95% 1 000 m 1 000 m
Iron core Iron core Iron core IP23D IP23D In unprotected outdoor environments 0 ° C +45 ° C -20 ° C +45 ° C 15% 95% 1 000 m 1 000 m
IP23D IP23D ed outdoor environments In unprotected outdoor environment 0 ° C +45 ° C -20 ° C +45 ° C 15% 95% 15% 95% 1 000 m 1 000 m
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ed outdoor environments In unprotected outdoor environment 0 ° C + 45 ° C -20 ° C + 45 ° C 15% 95% 15% 95% 1 000 m 1 000 m
0°C +45°C -20°C +45°C 15% 95% 15% 95% 1 000 m 1 000 m
0°C +45°C -20°C +45°C 15% 95% 15% 95% 1 000 m 1 000 m
15% 95% 15% 95% 1 000 m
1 000 m
6 kVA 6 kVA
O KVA
RE-T / C-C-T RE-T / C-C-T
·
C 62271-202 IEC 62271-202
RE-T / C-C-T c circuit breaker 7.5 m / 10 m / 15 m 0 0 C 62271-202

- 1) Other available voltage levels: 15 kV

- 2) Adjustable using an on-load tap-changer on the transformer
 3) Data may vary depending upon power class and options
 4) Cannot be combined with the medium-voltage switchgear option

Transformer Compact Station 800SC	Transformer Compact Station 1000SC	Transformer Compact Station 1250SC	Transformer Compact Station 1600SC
880 kVA	1 100 kVA	1 375 kVA	1 760 kVA
800 kVA	1 000 kVA	1 250 kVA	1 600 kVA
20 kV 1)	20 kV 1)	20 kV 1)	20 kV ¹⁾
18 kV 22 kV	18 kV 22 kV	18 kV 22 kV	18 kV 22 kV
50 Hz	50 Hz	50 Hz	50 Hz
23.1 A	28.9 A	36.4 A	46.2 A
360 V	270 V	315 V	360 V
351 V	-	-	351 V
342 V	-	-	342 V
333 V	_	_	333 V
324 V	_	_	324 V
315 V	_	_	315 V
1 283 A	2 x 1 070 A	2 x 1 155 A	2 x 1 283 A
1 200 / (2 X 1 0/ 0/ 1	2 X 1 100 X	2 X 1 200 X
2 380 / 2 550 / 2 500 mm	2 380/2 550/2 500 mm	2 380 / 2 550 / 2 500 mm	2 380 / 2 550 / 2 500 mm
93.7 / 100.4 / 98.4 inches	93.7/100.4/98.4 inches	93.7 / 100.4 / 98.4 inches	93.7 / 100.4 / 98.4 inches
~10.6 t	~11.9 t	~12.4 t	~13.0 t
3 280 / 2 550 / 2 500 mm	3 280 / 2 550 / 2 500 mm	3 280 / 2 550 / 2 500 mm	3 280 / 2 550 / 2 500 mm
129.1 / 100.4 / 98.4 inches	129.1 / 100.4 / 98.4 inches	129.1 / 100.4 / 98.4 inches	129.1 / 100.4 / 98.4 inches
~15.0 t	∽16.3 t	∽16.8 t	∽17.4 t
1 x LV / HRC switch-disconnector	2 x LV / HRC switch-disconnectors	2 x LV / HRC switch-disconnectors	2 x LV / HRC switch-disconnectors
Iron core	Iron core	Iron core	Iron core
non core	non core	non core	non core
IP23D	IP23D	IP23D	IP23D
In unprotected outdoor environments	In unprotected outdoor environments	In unprotected outdoor environments	In unprotected outdoor environments
-20 °C +45 °C	-20 °C +45 °C	-20 °C +45 °C	-20 °C +45 °C
15% 95%	15% 95%	15% 95%	15% 95%
1 000 m	1 000 m	1 000 m	1 000 m
6 kVA	6 kVA	6 kVA	6 kVA
RE-T / C-C-T	RE-T / C-C-T	RE-T / C-C-T	RE-T / C-C-T
1 x circuit breaker	2 circuit breakers	2 circuit breakers	2 circuit breakers
5 m ⁴⁾ / 7.5 m / 10 m / 15 m	5 m ⁴ / 7.5 m / 10 m / 15 m	5 m ⁴ / 7.5 m / 10 m / 15 m	5 m ⁴ / 7.5 m / 10 m / 15 m
0	0	0	0
0	0	0	0
0	0	0	0
IEC 62271-202	IEC 62271-202	IEC 62271-202	IEC 62271-202
TCS-800-SC-IT	TCS-1000-SC-IT	TCS-1250-SC-IT	TCS-1600-SC-IT

Communit

The Communit communication distributor is designed to house and wire together all communication components used in large-scale PV plants with SUNNY CENTRAL.

Medium-voltage switchgear

Using medium-voltage switchgear, several transformer stations can be connected in a string or a ring. This allows modular construction of large PV forms

Low-voltage switchgear

On demand, the standard LV / HRC fuse-switch-disconnectors can be replaced by circuit breakers.

Transformer for internal power supply

A transformer for internal power supplies the transformer station and the attached inverters directly from the medium voltage grid.

Use in a chemically aggressive environment

If desired, the Transformer Compact Station can be optimized for use in a chemically aggressive environment, such as for seaside installation.

GSE meter

On demand, the station can be equipped with a meter of the Gestore Servizi Elettrici and is thus perfectly adapted to the feed-in and remuneration as per Conto Energia.

