

MEDIUM VOLTAGE STATION FOR SUNNY TRIPOWER



MVS-600-STP-10 / MVS-660-STP-10 / MVS-1200-STP-10 / MVS-1800-STP-10



Flexible

- Worldwide solution for IEC markets
- Numerous customization options
- Rapid time to market

Reliable

- Rugged 10-foot container for easy transportation by road and sea
- Type tested
- 5-year factory warranty

Easy to Use

- Reduced design and delivery costs
- Optimized transformer cooling without an active fan

Cost-Optimized

- Two-in-one container system for even more efficient transportation
- Reduced transformer losses as per Ecodesign Directive

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Compact MV station for worldwide use with SMA string inverters

The MVS-STP enables quick and easy connection of decentralized PV systems with string inverters to medium-voltage grids around the world. The rugged 10-foot container contains an outdoor medium-voltage transformer that meets Ecodesign Directive requirements, medium-voltage switchgear and a low-voltage distribution panel for connecting STP 60 inverters.

Technical Data	MV Station 1200 for 20 Sunny Tripower 60 inverters	MV Station 1800 for 30 Sunny Tripower 60 inverters
MV Station input		
Rated power	1200 kVA	1800 kVA
Nominal voltage	400V	400V
Grid frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Max. input current at nominal voltage	1740 A	2610 A
MV Station output		
Nominal voltage	20 kV	20 kV
Optional nominal voltages	10 kV to 34.5 kV	10 kV to 34.5 kV
Transformer tap changer	-5.0 % / -2.5 % / 0 % / +2.5 % / +5.0 %	
Nominal current	34.6 A	52.0 A
No-load losses ¹⁾	0.914 kW	1.325 kW
Load losses ¹⁾	10.9 kW	16 kW
MV transformer efficiency		
Max. efficiency / European efficiency / CEC efficiency	99.5 % / 99.3 % / 99.3 %	99.5 % / 99.3 % / 99.3 %
Degree of protection		
Degree of protection in MV and LV room according to IEC 60529	IP23D	IP23D
Degree of protection according to IEC 60721-3-4 (4C1, 4S2 / 4C2, 4S2)	● / ○	● / ○
General data		
Dimensions (W / H / D) ²⁾	2991 mm / 2591 mm / 2438 mm	2991 mm / 2591 mm / 2438 mm
Weight ³⁾	<8 t	<9 t
Ambient temperature (-25 °C to 40 °C / -25 °C to 50 °C)	● / ○	● / ○
Max. permissible value for relative humidity (condensing)	0% to 95%	0% to 95%
Maximum operating altitude above MSL	2000m	2000m
Features		
Transformer with mineral oil / organic oil	● / ○	● / ○
Transformer vector group Dyn11 / YNyn0	● / ○	● / ○
Without / with oil containment	● / ○	● / ○
Without / with medium-voltage switchgear, 3 feeders (2 cable feeders with load-break switch, 1 transformer feeder with fuses or circuit breakers), medium-voltage switchgear with internal arc classification (IAC) A FL 20 kA 1 s	● / ○	● / ○
Application in unprotected outdoor environment / in chemically active environment	● / ○	● / ○
Without / with Inverter Manager	● / ○	● / ○
Without / with low-voltage circuit breaker	● / ○	● / ○
Without / with decoupling protection for the low-voltage circuit breaker with voltage and frequency monitoring (without automatic reconnection)	● / ○	● / ○
Enclosure color	RAL 7004	RAL 7004
Certificates and approvals	IEC 60076, IEC 61439-1, IEC 62271-200, IEC 62271-202, IEC 61936-1	IEC 60076, IEC 61439-1, IEC 62271-200, IEC 62271-202, IEC 61936-1
● Standard features ○ Optional		
Type designation	MVS-1200-STP-10	MVS-1800-STP-10

- 1) Loss category pursuant to Ecodesign Regulation
2) Transport dimensions
3) Maximum weight of the MV Station

SYSTEM DIAGRAM

