TECLOMAN

1500V PCS-MV Substation

- TBVS-2500K-TH
- TBVS-2750K-TH
- TBVS-3150K-TH
- TBVS-3450K-TH
- TBVS-5000K-TH

Product Overview

The integrated energy storage converter and booster is a standardized energy storage, converter and booster AC substation system designed for large-scale or ultra-large-scale energy storage power plants. The system integrates energy storage converter, high and low voltage distribution equipment, step-up transformer and auxiliary power supply system. The prefabricated design meets the requirements of rapid on-site installation and delivery. Supporting 6~35kV grid access, it is suitable for various scenarios such as distributed energy storage power stations, independent energy storage power stations, industrial and commercial energy storage power stations, and off-grid energy storage power stations, etc., it aiso has the capacity to adapt to the extreme environments such as high temperatures high altitudes, and high salt fog.

- High degree of system integration, "change" and "rise" all-in-one.
- High conversion efficiency, ANPC three-level energy storage converter.
- High space utilization and rational layout.
- Practical features, PQ, VF, structure network multi-running mode.
- High safety performance, AC and DC multi-level protection.
- Good experience, easy to install, easy to commission,operate and maintain.

model	TBVS-2500K-TH	TBVS-2750K-TH	TBVS-3150K-TH	TBVS-3450K-TH	TBVS-5000K-TH
DC					
Max. Voltage			1500V		
Voltage Range	800 ~ 1500V	800 ~ 1500V	915 ~ 1500V	1000 ~ 1500V	1000 ~ 1500V
Max. Current	3500A	3858A	3864A	3872A	6000A
Grid Tied					
Rated Power	2500kW	2750kW	3150kW	3450kW	5000kW
Max. Capacity	2750kVA	3025kVA	3465kVA	3795kVA	6000kVA
Rated Voltage	550V	550V	630V	690V	690V
Voltage Range			-15% ~ 10%（Configurable）		
Frequency			50Hz / 60Hz		
Max. Output Current			3176A		5020A
Power Factor			-1 leading ~ 1 lagging		
THDI			＜3%（Rating）		
Off-grid					
Rated Voltage	550V	550V	630V	690V	690V
Max. Output Current			3176A		5020A
THDU			＜3%（linear load ）		
Frequency			50Hz / 60Hz		
Efficiency					
Max. Efficiency			99.03%		
Transformer Parameters					
Rated Capacity	2500kVA	2750kVA	3150kVA	3450kVA	5000kVA
Voltage Ratio	0.55 / (6~35) kV	0.55 / (6~35) kV	0.63 / (6~35) kV	0.69 / (6~35) kV	0.69 / (6~35) kV
Transformer Type			Dry change / Oil change		
Basic Parameters					
IP Level			IP54		
Operating Temperature			-35°C ~ 60°C（>50°C derating）		
Relative Humidity			≤95%RH，without condensation		
Cooling			Forced air		
Max. Altitude			4000m（＞2000m derating）		
Communication Interface			RS485 / Ethernet		
Cmmunication Protocol			Modbus-RTU / Modbus-TCP / IEC61850 / IEC104		

Tecloman Energy Storage **Add:**Muehldorfstrasse 8,81671 Munich, Germany/ Web: www.tecloman.com