



3-Level (ANPC) Topology
Efficiency Up to 99%



<30 ms Full Load Charging/
Discharging Transition Time



Off-grid V/f Operation,
Black Start Modes



Grid Following/Forming
LVRT/HVRT Compliant



Constant V/I/P Controlled
Charging/Discharging



4-Quadrant Operation in
Active/Reactive Power



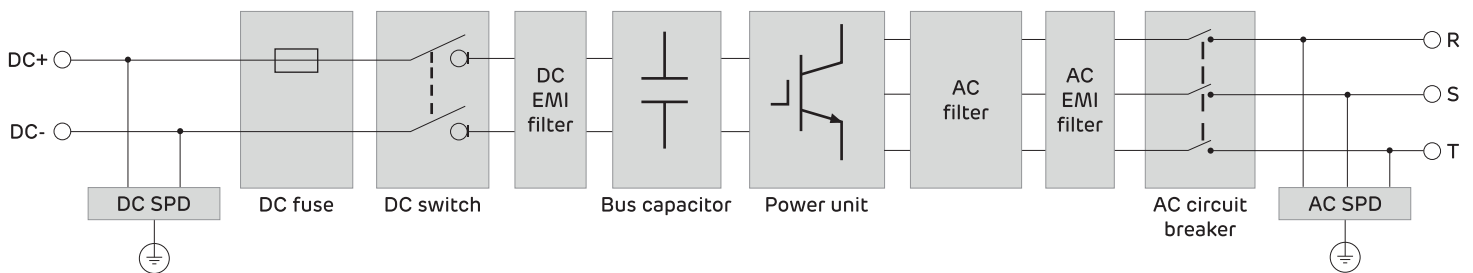
IEC 61850, Modbus and
CAN Communication



Hybrid Cooling and Advanced
Thermal Management



Topology



Wattox MPCS-1725-S

Technical Specifications

DC Side

Maximum DC Voltage	1500 V
Operating DC Voltage Range	1000 – 1500 V
Maximum DC Current	1807 A
Number of DC Input Channels	1

AC Side (Grid-Connected)

Rated Power	1725 kW @ 45°C
Maximum Output Power	1898 kW @ 35°C
Rated Grid Voltage	690 V
Grid Voltage Range	621 – 759 V (Standard)
Rated Grid Frequency	50 / 60 Hz
Current THD	<3% (at rated power)
Reactive Power Range	-1.05 (capacitive) ~ +1.05 (inductive)
Power Factor	-1 (leading) ~ +1 (lagging)
AC Connection Type	3-phase, 3-wire

AC Side (Off-Grid)

Rated AC Voltage	690 V
Rated Output Frequency	50 / 60 Hz
Voltage Variation	<1% (linearly balanced load)
Voltage THD	<3% (linear load)

General

Dimensions (W×D×H)	1080 x 870 x 2175 mm
Weight	<1200 kg
Maximum Efficiency	99%
Cooling Method	Air-liquid cooling
Operating Ambient Temperature	-40°C ~ +60°C (derating>45°C)
Relative Humidity	0% – 100% (non-condensing)
Cable Entry Direction	DC cable from front bottom, AC cable from rear bottom
Max.Operating Altitude	3000 m (derating above 2000 m)
Protection Class	IP65

Communication

Interfaces	RS485, CAN, Ethernet
Protocols	Modbus-RTU/CAN 2.0B (Optional: Modbus-TCP, IEC 61850, EtherCAT)

Standards Compliance

Certificates	EN-55011, IEC-61000-6-2/4, EN62477-1, EN-50549-2/10
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