

# Prisma STORAGE

## Power Conversion System (PCS)

Prisma Storage is a modular power conversion system (PCS) designed to help you control and optimise your stored energy.

It is available as a standard pre-assembled cabinet (Power Conversion System, PCS) or as a Power Conversion Kit (PCK) for custom integration. This flexibility allows you to either deploy a ready-to-use solution or tailor the system to your specific installation needs.

#### Why energy storage?

- Maximise self-consumption from renewables
- · Shift loads and avoid peak demand charges
- Stabilise power supply in weak-grid or remote areas
- Access energy markets for new revenue streams
- Reduce energy costs and increase resilience

#### **Key advantages**

- Pre-assembled PCS or customisable PCK
- Compatible with all storage types: batteries, fuel cells, supercapacitors,...
- · Compact design for easy installation
- Single-phase, three-phase or mixed setup flexibility
- High efficiency for better battery management and longer lifespan
- Embedded supervision with Inview monitoring
- Scalable to match your growing energy needs

#### **Compatible Modular Power Converters**

Each Prisma Storage system can integrate up to six hot-swappable bidirectional modular power converters (MPC). The compatible module for this system is the PrismaBox 400 - 1DC/1AC - 750/400.



#### PrismaBox 400 - 1DC/1AC - 750/400.

AC1 In/Out Voltage (range)	3x400Vac or 3x480Vac (260-537Vac)
DC2 In/Out Voltage (range)	750Vdc (300-900Vdc)
Power	42,5kW or 50kW
Form Factor	2RU, 27kg





### **Technical specifications**

	250kW	500kW	1MW
Mechanical & Environmental Specifications			
Part Number	A00055-V01	A00057-V01	A00058-V01
Dimensions (WxDxH)	600x800x2100 mm	2200x800x2100 mm	2800x800x2100 mm
Total weight	+/- 370kg	+/- 750kg	+/- 1070kg
Ingress Protection		IP20	
Cooling type	Fan forced cooling		
RoHS / Material (casing)	Compliant / Sheet Steel Powder Coated		
Operating T° / Relative Humidity (RH) non-condensing	-20°C to 40°C, power de-rating from 40°C to 65°C / Max RH 95% for 96 hours per year		
Storage T° / Relative Humidity (RH) non-condensing	-40°C to 70°C / Max RH 95%		
Terminal type and size	RB012 - 185 mm²	Copper landing part for 2x240mm <sup>2</sup> per phase	Copper landing part 3x300 mm² per phase
Maintenance access	All replaceable parts are accessible from the front		
General Electrical Specifications (system-level electrica	l performance)		
Total Power	250kW	500kW	1MW
Number of power converters	Up to 6 PrismaBox	Up to 12 PrismaBox	Up to 24 PrismaBox
Monitoring & Control	7-inch touchscreen Inview X+		
Peak efficiency (AC-DC or DC-AC)	> 98.5% at 50% load & nominal voltage		
Overload capacity		150% for 15 seconds	
Configuration / Neutral	Thr	ee Phase DELTA or STAR / TN-S, TN-C,	тт
AC 1 In/Out			
Nominal voltage (Power)	3x400 - 3x480Vac (250kW)	3x400 - 3x480Vac (500kW)	3x400 - 3x480Vac (1MW)
Voltage range (Line-Line)	3x260Vac to 3x537Vac (derating 3x260 to 355Vac)		
Power factor / THDi	> 0.99 / < 3%		
Frequency (Synchronization range)	50Hz or 60Hz (45 to 65Hz)		
AC output voltage stability (Inverter mode)	±1% from 10% to 100% load		
Static / Dynamic voltage regulation (Inverter mode)	±1% between 10% and 100% load / <5% from 0 to 100% to 0 load impact (100 ms)		
DC 2 In/Out			
Nominal voltage (Power)	750Vdc (250kW)	750Vdc (500kW)	750Vdc (1MW)
Voltage range	300 – 900Vdc (power derating between 300 to 660Vdc)		
Reverse polarity protection	Yes		
Standard electrical compliance			
	IEC62477-1, IEC62109-1, IEC62109-2, UL1741		
Electrical safety standard	ILCC	12477-1, 16602109-1, 16602109-2, 061	741
Electrical safety standard EMC/EMI		000-6-X/ FCC Part 15 classA / IEC6100	
•	IEC610		00-4-X
EMC/EMI	IEC610	000-6-X/ FCC Part 15 classA / IEC6100	00-4-X
EMC/EMI Grid-Code (ongoing)	IEC610	000-6-X/ FCC Part 15 classA / IEC6100 0, VDE-AR-4105, AS4777, UL1741-SB, I	00-4-X
EMC/EMI Grid-Code (ongoing) Low voltage switch gear & control gear assemblies	IEC610	000-6-X/ FCC Part 15 classA / IEC6100 0, VDE-AR-4105, AS4777, UL1741-SB, I	00-4-X
EMC/EMI Grid-Code (ongoing) Low voltage switch gear & control gear assemblies Integrated Protections (optional)	IEC610 EN50549	000-6-X/ FCC Part 15 classA / IEC6100 0, VDE-AR-4105, AS4777, UL1741-SB, I IEC61439-2	00-4-X EEE1547
EMC/EMI Grid-Code (ongoing) Low voltage switch gear & control gear assemblies Integrated Protections (optional) AC side	IEC610 EN50549 Motorized MCCB 400A	000-6-X/ FCC Part 15 classA / IEC6100 0, VDE-AR-4105, AS4777, UL1741-SB, I IEC61439-2 Motorized MCCB 800A	DO-4-X EEE1547  Motorized MCCB 2000A

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