

INDRIVETEC AG

"bricks up" flexible energy storage systems

INNOVATION "BRICK" FlexConvert-PCS-1500

Technical data

AC connection on-grid and off-grid	FC720-ML	FC1440-ML	FC2160-ML	FC2880-ML
Nominal AC Power	650 kW	1300 kW	1950 kW	2600 kW
Rated apparent power	720 kVA	1440 kVA	2160 kVA	2880 kVA
Grid Support	L/HVRT, L/HFRT, active & reactive power control and power ramp rate control			
Power factor cos (φ)	$\pm 0 - 1.0$ (four-quadrant operation)			
AC nominal operating voltage	690 V			
Minimum AC voltage	620 V			
Maximal AC voltage	800 V			
AC nominal operating current	550 A	1100 A	1650 A	2200 A
Maximal AC current	600 A	1200 A	1800 A	2400 A
Grid frequency	50 Hz/60 Hz			
Grid structure	IT, other upon request			
Maximum THD I_{AC} current	< 3 % at nominal power (on-grid)			
Maximum THD U_{AC} voltage	< 3 % at linear load (off-grid)			
DC voltage component	< 0.5 % Un linear balance load (off-grid)			
Unbalance load capacity	100 % (off-grid)			
Max. efficiency	98.6 %			
External auxiliary power supply	3 x 400 VAC 1 x 230 VAC 50/60 Hz (DC supply from energy storage on request)			
DC connection				
Maximal DC power	700 kW	1400 kW	2100 kW	2800 kW
Number of battery inputs	1	1	1	1
Maximal DC current	700 A	1400 A	2100 A	2800 A
Minimum DC voltage	1000 V			
Maximal DC voltage	1500 V			
Protection				
DC input protection	Disconnecter + fuses + contactors + active monitoring			
AC output protection	Disconnecter + fuses + contactors + active monitoring			
Overvoltage protection	DC Type II and AC Type II			
Grid monitoring	Yes			
Insulation monitoring	Yes			
General data				
Dimensions (W x D x H)	1600 x 800 x 2000 mm	2200 x 800 x 2000 mm	3000 x 800 x 2000 mm	3600 x 800 x 2000 mm
Weight	1400 kg	2100 kg	2800 kg	3300 kg
Ambient temperature	-25... +45°C (extended range upon request)			
Humidity	95 % indoor noncondensing, 100 % outdoor			
Enclosure type	IP54 indoor, IP55 outdoor (according EN60529)			
Cooling	Fully closed cabinet with liquid cooling (no additional air condition required)			
CE conformity / EMC	CE, others and UL/UR, CSA upon request			
Applicable standards	EN61000-6-2, EN61000-6-4, EN62477-1, IEC62103			
Communication interfaces	Profibus, CAN, Modbus RTU, Modbus TCP, Profinet, IEC61850, other upon request			

Technical data are subject to change, even for reasons on country-specific deviations.
Indrivetec assumes no liability for errors and omissions.

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INNOVATION "BRICK" FlexConvert-PCS-1500

FlexConvert-PCS-1500

the flexible and versatile power conversion system for high voltage battery system

System advantages

Multi-level topology for maximum efficiencies and low harmonics

Compatible with high voltage battery system

Bidirectional power conversion system with full four-quadrant operation

Battery charge and discharge management

Reliable power supply and energy storage for a large range of on-grid and off-grid applications.

Black start and island grid / grid forming function

Compact and energy-efficient cooling concept, smallest unit volume and lowest weight per kW

Frequency and voltage regulation and reactive power control

Inertia control and short circuit power control

Power capability table FlexConvert

Nom. AC voltage VAC	Min. DC voltage VDC	Max. DC voltage VDC	Rated active power at cos phi: 0,9			
			FC720-ML	FC1440-ML	FC2160-ML	FC2880-ML
600	975	1500	575 kW	1150 kW	1725 kW	2300 kW
630	1025	1500	600 kW	1200 kW	1800 kW	2400 kW
660	1075	1500	630 kW	1260 kW	1890 kW	2520 kW
690	1120	1500	650 kW	1300 kW	1950 kW	2600 kW
750	1220	1500	720 kW	1440 kW	2160 kW	2880 kW
800	1300	1500	760 kW	1520 kW	2280 kW	3040 kW

