



RACK HIGH VOLTAGE 5K3-XP



RACK 4U HIGH VOLTAGE **5K3XP**

SINGLE MODULE HV



Basic Parameters	5K3 RACK HV MODULE FOR INDOOR USE ONLY
Module Capacity kWh	5,3
Single Module Nominal Voltage (Vdc)	51.2
Application	High Voltage Application
Modules Expandibility	HV Mode: Max 16 Modules in Series with Single HV Box = One HV Cluster Max 10 HV Clusters composed by maximum 16 modules in serial connection each
Voltage Range (Vdc)	47,5-58,4 BMS dynamically adjusts the operating values
Capacity (Ah)	105
Usable Capacity (Ah)	100
Dimension (mm)	550 x 430 x 155
Weight (kg)	57,3
Charge / Discharge Current (A)	100 (150 30sec)
Peak Discharge Current	200 Peak 5 s
Depth of Discharge	Up to 100%
Communication Port	RS485, CAN, 232, Wi-Fi
Modules in serial Connection	Up to 16 pcs (934Vdc Max String Voltage)
Discharge Temperature (°C)**	-20 ~ +60
Charge Temperature (°C)**	-10 ~ +55
Shelf Temperature (°C)**	-10 ~ +45
Humidity (%)	5 ~ 95
Altitude (m)	< 3000
Design life	15 Years (25°C)
Expected Life Cycles EOL 80%	> 7000 (25°C)
Standards	IEC62619 UL1973 CE IEC 61000 UN38.3
Features	Auto balancing BMS, 16 channels equalizer, Module local monitoring,
Protections	Fuse: 200A / 1000Vdc Four protection logics for HV Box, Real time balancing, Adaptive charge/discharge CAN logic, Three step adaptive charging logic, 2xDI/DO programmable ports, Mobile APP for monitoring, control, debugging, firmware update and historical information.
Notes	*- Module net usable energy is managed by the BMS control logic to 100Ah **-See Warranty Terms and the Standard Test Conditions "STC" and the operative temperature All data subject to the change without prior notice, no part of this document can be copied or reproduced without writtent permission of WeCo 5K3 -XP Is designed to operate with rack support and indoor

HV BOX SAFETY CONTROLLER



Basic Parameters	HIGH VOLTAGE CONTROLLER
Application	String Safety Device
Operative Voltage	150-1000Vdc
Standard Charge Discharge Current	100A
Max Charging Current	150A 30 sec
Max Discharging Current	150A 10 sec
Manual Breaker capacity	125A (Peak 250 30sec)
Contactor Capacity	150A (Peak 250 30sec)
Pre-charge circuit	150 Ohm / 4 Sec (Contactor Max Current 50A)
Insulation Monitor	YES
Fan Controller + power supply	YES
Max numbers of modules per string	17/1000Vdc
Connector Type	WeCo PLUGS 200A fast connection
Ingress Protection	IP20
Communication Port	RS485, CAN, 232, Wi-Fi, Bluetooth
BMU Discharge Temperature (°C)**	-20 ~ +60
BMU Charge Temperature (°C)**	-10 ~ +55
Shelf Temperature (°C)**	-10 ~ +45
Humidity (%)	5 ~ 95 No condensation
Altitude (m)	< 3000
Design life	10 Years (25°C)
Standards	IEC62619 UL1973 CE IEC 61000 UN38.3
Features	Auto balancing BMS, 16 channels equalizer, Module local monitoring,
Protections with HV BOX	HV BOX is equipped with 125A Breaker +150A contactor + 200A/1000Vdc Fuse Four protection logics for HV Box, Real-time balancing, Adaptive charge/discharge CAN logic, Three steps adaptive charging logic, 2xDI/DO programmable ports, Mobile APP for monitoring, control, debugging, and firmware update and historical information. Precharge circuit 150Ohm / 4 seconds

CONFIGURATIONS



Battery Module	4	5	6	7	8	8+8
Battery System Capacity (kWh)	20,8	26	31,2	36,4	41,6	83,2
Recomended Voltage (V)	min 200 max 232	min 250 max 290	min 300 max 348	min 350 max 406	min 400 max 464	min 800 max 928
Cabinet Type B (Outdoor+Cooling)	9 RACK					18 RACK
Cabinet Weight Type B (Empty)	210kg					290kg
Modules Weight (Kg)	229,2 *	286,5	343,8	401,1	458,4	2x458,4

A/C COOLED
STAND ALONE CABINET
IP 56 / 4U SLOTS



Tower HV Modules	Min Voltage (SOC 0%)	Max Voltage	Capacity
4	190	233,6	20,8
5	237,5	292	26
6	285	350,4	31,2
7	332,5	408,8	36,4
8	380	467,2	41,6
9	427,5	525,6	46,8
10	475	584	52
11	522,5	642,4	57,2
12	570	700,8	62,4
13	617,5	759,2	67,6
14	665	817,6	72,8
15	712,5	876	78
16	760	934,4	83,2
17	807,5	992,8	88,4



CERTIFICATIONS

