

Modular Battery Charger series

24V_{DC}/48V_{DC}/110V_{DC}/220V_{DC}

1,68kW – 26,4kW

The MBC Modular Battery Charger series is built of high power density hot-swappable rectifier modules. Thanks to the modular design, not only system expansion is easier than before but allows to build N+X redundancy as well. The programmable parameters are providing high system flexibility, allowing setup modifications according to user changing requirements during the whole lifetime of the system. Building of systems with high load and battery capacity differences is not a problem anymore.



Features

- Up to 26,4kW output power
- Hot swap modular design with very low MTTR
- Supports N+X redundancy
- Exceptionally high efficiency, up to 97%
- Active current share between modules
- High input power factor (PF>0,99)

Application areas

- Industrial
- Telecom
- Railway
- IT
- Security



TECHNICAL SPECIFICATION

INPUT	Nominal input voltage	230V _{AC} single phase <i>Three phase is optional on some models</i>
	Input voltage range	120 – 290V _{AC}
	Input frequency	45 – 65Hz
	Power factor	>0,99
	Efficiency	Up to 97%
OUTPUT	DC voltage	24 / 48 / 110 / 220V _{DC}
	Voltage adjustment range	See table below
	DC current	Up to 770A
	Voltage regulation accuracy	±0,5%
	Current regulation accuracy	±1%
	Load sharing between modules	Active current share within ±3%
	Output power	Up to 26,4kW
BATTERIES	Protections	Overcurrent Short circuit Overvoltage
	Type	Lead acid
	Charge characteristics	DIN 41773 Constant I/U
	Charging current	Adjustable 0 – 100%
	Protection	Overvoltage Overcurrent Overtemperature Deep discharge
GENERAL	Temperature compensation	Adjustable (mV/cell/°C)
	Protection	Overtemperature
	Degree of protection	IP20
	Cooling	Forced
	Audible noise	<50dBA
	Operating temperature	-25°C ÷ +45°C
	Storage temperature	-40°C ÷ +70°C
	Relative humidity	< 97% non condensing
COMMS	Operating altitude	≤ 2000 m
	Port	RS232
	Display	LCD
STANDARDS	Dry contacts	3 relays
		EN 60335-2-29
		EN 60335-1
		EN 62233
		EN 55022
		EN 55024
		EN 61000-3-2
		EN 61000-3-3

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AVAILABLE MODELS

Model	Output				Height
	Nominal voltage [V]	Voltage range [V]	Current at nominal voltage [A]	Power [W]	
MBC-24V70A	24	21 – 28	70	1.680	2U
MBC-24V140A	24	21 – 28	140	3.360	2U
MBC-24V210A	24	21 – 28	210	5.040	2U
MBC-24V280A	24	21 – 28	280	6.720	4U
MBC-24V350A	24	21 – 28	350	8.400	4U
MBC-24V420A	24	21 – 28	420	10.080	4U
MBC-24V490A	24	21 – 28	490	11.760	4U
MBC-24V560A	24	21 – 28	560	13.440	6U
MBC-24V630A	24	21 – 28	630	15.120	6U
MBC-24V700A	24	21 – 28	700	16.800	6U
MBC-24V770A	24	21 – 28	770	18.480	6U
MBC-48V50A	48	42 – 59	50	2.400	2U
MBC-48V100A	48	42 – 59	100	4.800	2U
MBC-48V150A	48	42 – 59	150	7.200	2U
MBC-48V200A	48	42 – 59	200	9.600	4U
MBC-48V250A	48	42 – 59	250	12.000	4U
MBC-48V300A	48	42 – 59	300	14.400	4U
MBC-48V350A	48	42 – 59	350	16.800	4U
MBC-48V400A	48	42 – 59	400	19.200	6U
MBC-48V450A	48	42 – 59	450	21.600	6U
MBC-48V500A	48	42 – 59	500	24.000	6U
MBC-48V550A	48	42 – 59	550	26.400	6U
MBC-110V20A	110	95 – 150	20	2.200	2U
MBC-110V40A	110	95 – 150	40	4.400	2U
MBC-110V60A	110	95 – 150	60	6.600	2U
MBC-110V80A	110	95 – 150	80	8.800	4U
MBC-110V100A	110	95 – 150	100	11.000	4U
MBC-110V120A	110	95 – 150	120	13.200	4U
MBC-110V140A	110	95 – 150	140	15.400	4U
MBC-110V160A	110	95 – 150	160	17.600	6U
MBC-110V180A	110	95 – 150	180	19.800	6U
MBC-110V200A	110	95 – 150	200	22.000	6U
MBC-110V220A	110	95 – 150	220	24.200	6U
MBC-220V10A	220	190 – 300	10	2.200	2U
MBC-220V20A	220	190 – 300	20	4.400	2U
MBC-220V30A	220	190 – 300	30	6.600	2U
MBC-220V40A	220	190 – 300	40	8.800	4U
MBC-220V50A	220	190 – 300	50	11.000	4U
MBC-220V60A	220	190 – 300	60	13.200	4U
MBC-220V70A	220	190 – 300	70	15.400	4U
MBC-220V80A	220	190 – 300	80	17.600	6U
MBC-220V90A	220	190 – 300	90	19.800	6U
MBC-220V100A	220	190 – 300	100	22.000	6U
MBC-220V110A	220	190 – 300	110	24.200	6U

All details are subject to change without notice

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