



4 - 6.7 kW Modular Charging System

MOOV^{base}

Highly efficient charging for industrial applications including AGVs and electric vehicles

- Worldwide Single-phase AC
- Lithium Ion Ready
- AGV/AMR Integratable
- IoT / Industry 4.0 / Logistics 4.0 Ready



Industrial



Battery
Charging



Logistics



4 - 6.7 kW Modular Charging System



AGV/AMR optimized

- Designed for fast and frequent charging of lithium batteries in 24/7 operations
- Protection features for auto-docking vehicles
- Recovery mode for over-discharged AGVs

Ethernet Communication Supports

- Warehouse/Fleet Management system
- Site installer / maintainer
- AGV via facility Wi-Fi
- Energy Manager performing AC Peak Shaving

Versatile Charger

- Worldwide single-phase AC inputs
- Modular Solution for output power levels 1 kW – 6.75 kW
- Models for 24 V, 36 V and 48 V batteries
- Lithium Ion Ready
- Suitable for conventional connectors and for charging contacts

Specification

AC Input	3 bay	5 bay
AC input rated voltage	100 - 240 V _{AC} 1-phase	200 - 240 V _{AC} 1-phase
Power factor (100% load)	0.98 - 0.99	
Efficiency (50%-100% load)	≥ 91%	

Charger Output	3 bay	5 bay
Battery types	<ul style="list-style-type: none"> - Lithium Ion (LFP, LNMC, LTO) - Lead acid (Wet / AGM / GEL) 	
Charge control	<ul style="list-style-type: none"> - CC/CV charging - Ethernet control of multi-stage profiles - Deep discharge recovery 	
DC connector	SBE160	SBE320
DC cables	Range of accessories available	

Mechanical Design	3 bay	5 bay
Dimensions (L x W x H)	290 x 290 x 402 mm (11.4 x 11.4 x 15.8 in)	384 x 290 x 402 mm (15.1 x 11.4 x 15.8 in)
Weight	16.2 kg (35.7 lb)	24.1 kg (53.1 lb)
Cooling	Internal fans	
Communication connector	RJ45	

Reliability	
Protections	Electrical, Thermal, Communications, and Software Protections DC Interlock
Serviceability	Replaceable Power Modules, Fans, and Air Filter

Environmental Conditions	
Operating temperature	-10 °C to +55 °C (14 °F to +131 °F)
Relative humidity	5% to 85%, non-condensing
Maximum operating altitude	3,000 m (9,842 ft)
Protection degree	IP20 / NEMA1

Approvals and Compliance	
Safety certifications and approvals for	North America and Europe

3 Bay Variant Summary

Configuration	Input Voltage Range (V _{AC})	Nominal Output (V _{DC})	Output Range (V _{DC})	Output Max Current (A)	Max Power (W)	
					120 V _{AC}	230 V _{AC}
24V 3B1M	90 - 265	24	9 - 35	45	1200	1350
24V 3B2M	90 - 265	24	9 - 35	90	2400	2700
24V 3B3M	90 - 265	24	9 - 35	135	3600	4050
48V 3B1M	90 - 265	36 / 48	12 - 70	26	1200	1350
48V 3B2M	90 - 265	36 / 48	12 - 70	52	2400	2700
48V 3B3M	90 - 265	36 / 48	12 - 70	78	3600	4050

5 Bay Variant Summary

Configuration	Input Voltage Range (V _{AC})	Nominal Output (V _{DC})	Output Range (V _{DC})	Output Max Current (A)	Max Power (W)
24V 5B4M	180 - 265	24	9 - 35	180	5400
24V 5B5M	180 - 265	24	9 - 35	225	6750
48V 5B4M	180 - 265	36 / 48	12 - 70	104	5400
48V 5B5M	180 - 265	36 / 48	12 - 70	130	6750



More information

Delta Energy Systems (Germany) GmbH

Tscheulinstrasse 21, 79331 Teningen

E-mail: IEV.sales@deltaww.com

www.deltaww.com