

MG Master HV

- Technical specifications -

MGMHV800300 and MGMHV800500

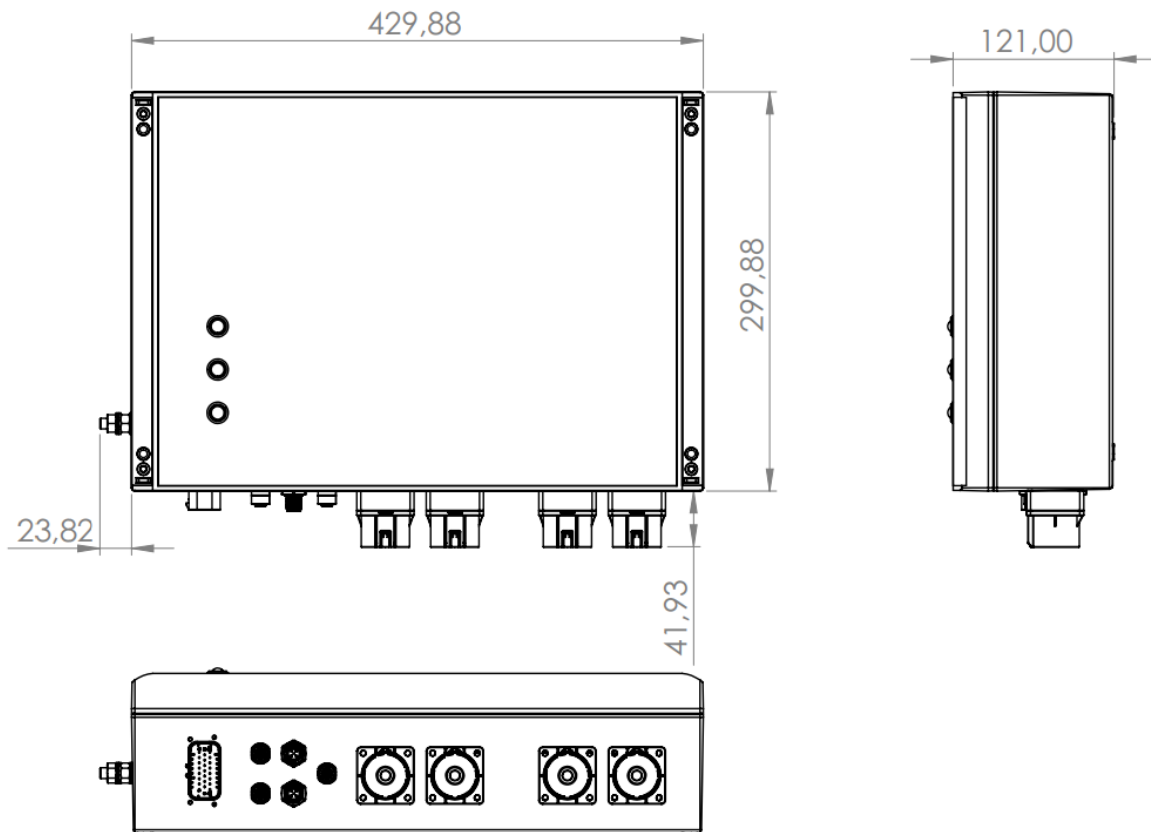


Technical specifications

	MG Master HV 900V - 300 MGMHV800300	MG Master HV 900V - 500 MGMHV800500
Supply voltage	24 VDC (18 VDC to 32 VDC)	24 VDC (18 VDC to 32 VDC)
Supply current	2,5 A	2,5 A
Maximum HV voltage	900 VDC	900 VDC
Maximum HV current continuous	300 A	500 A
Weight	9,9 kg	9,9 kg
Dimensions (lxwxh)	430x329x121 mm	430x329x121 mm
Features		
Fuse	No, external fuse need to be added	No, external fuse need to be added
Integrated main contactors	2x contactor (in positive and negative HV line)	2x contactor (in positive and negative HV line)
Integrated pre-charge circuit	Yes	Yes
Event logging	Internal event logging memory	Internal event logging memory
Input/Output		
Emergency switch connection	Yes	Yes
Allow-to-charge (relay output)	Max. 30 VDC fused 1,5 A	Max. 30 VDC fused 1,5 A
Allow-to-discharge (relay output)	Max. 30 VDC fused 1,5 A	Max. 30 VDC fused 1,5 A
Programmable output (relay output)	Max. 30 VDC fused 1,5 A	Max. 30 VDC fused 1,5 A
Digital input 1	24 VDC, 5 mA	24 VDC, 5 mA
Digital input 2	24 VDC, 5 mA	24 VDC, 5 mA
Digital input 3	24 VDC, 5 mA	24 VDC, 5 mA
Environmental		
Operating temp. charge	-20 to +50 °C	-20 to +50 °C
Humidity	Max. 95% (non-condensing)	Max. 95% (non-condensing)
IP-Protection class	IP 65	IP 65
Connections		
Power connections	Amphenol PowerLok 300 series	Amphenol PowerLok 500 series
CAN-Bus connection (batteries)	2x M12	2x M12
CAN-Bus connection (aux.)	2x M12	2x M12
Diagnostic port (CAN-Bus)	1x M12	1x M12
Standards		
EMC: Emission	CISPR 16-2-1:2014, CISPR 16-2-3+A1+A2:2010	
EMC: Immunity	IEC 60533:2015, IEC 61000-4-2:2008, IEC 61000-4-3+A1+A2, IEC 61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013	
Approvals	DNV-GL, Lloyds in progress, IEC-EN62619	

Dimensions

Dimensions in mm.



Ordering information

There are two models of the MG Master HV. The **MGMHV800500** and **MGMHV800300**.

	MGMHV800300	MGMHV800500
Connector series	Amphenol PowerLok® 300-Series	Amphenol PowerLok® 500-Series Or Amphenol PowerLok® 500 GEN2
Maximum current	300 A ¹	500 A ¹

¹ Maximum current is depending on the cross section of the connected battery cables.

The differences between the two models are the power connectors. The table below shows an overview of the connector types in relation with the models and the maximum current.

MGMHV800500 – power connectors		
Brand	Amphenol PowerLok®	
Series	500 series	
	Positive terminal (orange)	Negative terminal (black)
Receptacle types (mounted on MG Master HV)	PL00X-501-10-M10 Or PL00X-501-10-M10-2	PL00Y-501-10-M10 Or PL00X-501-10-M10-2
Plug types <ul style="list-style-type: none"> - HVIL type required. - Use only straight versions. - Over-molded cable assembly only. 	Over-molded cable assembly: PL10X-501-120: 350A PL10X-501-135: 400A PL10X-501-150: 500A Plug connector (GEN2 only): PL18X-501-70-2-5: 250A PL18X-501-95-2-5: 300A PL18X-501-120-2-5: 400A	Over-molded cable assembly: PL10Y-501-120: 350A PL10Y-501-135: 400A PL10Y-501-150: 500A Plug connector (GEN2 only): PL18Y-501-70-2-5: 250A PL18Y-501-95-2-5: 300A PL18Y-501-120-2-5: 400A

MGMHV800300 – power connectors		
Brand	Amphenol PowerLok®	
Series	300 series	
	Positive terminal (orange)	Negative terminal (black)
Receptacle types (mounted on MG Master HV)	PL00X-301-10-M10	PL00Y-301-10-M10
Plug types <ul style="list-style-type: none"> - HVIL type required. - Use only straight versions. 	Over-molded cable assembly: PL10X-301-35: 150A PL10X-301-50: 200A PL10X-301-70: 250A PL10X-301-95: 300A Plug connector: PL18X-301-35: 150A PL18X-301-50: 200A PL18X-301-70: 250A	Over-molded cable assembly: PL10Y-301-35: 150A PL10Y-301-50: 200A PL10Y-301-70: 250A PL10Y-301-95: 300A Plug connector: PL18Y-301-35: 150A PL18Y-301-50: 200A PL18Y-301-70: 250A