



EVV Constant Voltage Charger

A reliable thyristor controlled battery charger for demanding applications. Output voltage range 12-440 Vdc and output current range 3-600 Adc.

EVV Constant Voltage Battery Charger

Technical data:

		EVV type V/A	Max output power kW	Mains fuse, A	Input voltage, V	Enclosure type	Weight kg
Electrical characteristics:		24/12	0,35	6	1/230	SM1	26
Input voltage	230/400/440/480/690 VAC +10% ; 50/60 Hz +5%	24/25	0,72	10	1/230	SM2	40
Output voltage range	3-600 Adc	24/35	1,01	4	3/400	LM1	70
Output current range	24-440 Vdc	24/50	1,44	6	3/400	LM1	90
Typical efficiency	24 V >82%; 110 V >89%; 220 V >90%	24/100	2,88	16	3/400	LM2	100
Typical power factor	>0,75	24/150	4,32	25	3/400	LM2	135
Typical cos φ	>0,85	24/200	5,76	35	3/400	LM2	165
Charging curve	IU						
Float-charge voltage (in the supply network range)	1,0-1,2 * Un	48/12	0,69	6	1/230	SM2	36
Boost-charge voltage (in the supply network range)	1,0-1,2 * Un	48/25	1,44	10	1/230	LM1	65
Current limiting	0,7-1,0 * In	48/50	2,88	6	3/400	LM1	105
Static stability	+(-)1% or better	48/100	5,76	16	3/400	LM2	138
Output ripple voltage	< 4% without battery pack (typically <2%)						
Environmental conditions:		110/3	0,39	6	1/230	SM2	30
Ambient temperature	-5...+40°C	110/6	0,79	10	1/230	SM2	41
Storage temperature	-30...+50°C	110/12	1,58	16	1/230	SM2	49
Relative humidity	<90%, non-condensing	110/25	3,30	10	3/400	LM1	100
Altitude above sea level	<1000 m	110/50	6,60	20	3/400	LM2	160
Standard equipment:		110/100	13,20	50	3/400	LMx	230
Mains switch with indicator light		220/3	0,79	10	1/230	SM2	36
Float-/boost-charge switch		220/6	1,58	16	1/230	LM1	52
Combined V/A meter		220/12	3,17	10	3/400	LM1	91
Automatic boost-charge switching in response to undervoltage and cut-off by a timer circuit		220/25	6,60	20	3/400	LM2	160
Potential-free common alarm relay for remote monitoring of alarms		220/35	9,24	35	3/400	LM2	160
Remote voltage measurement of battery pack terminals for compensating cable losses		220/50	13,20	50	3/400	LM2	210
LED indicators:	Float-charging	220/100	26,40	80	3/400	LMx	340
	Boost-charging						
	Overvoltage	440/150	79,20	200	3/400	2x LMx	800
	Undervoltage						
	Output fuse fault						
	Mains/phase fault						
Accessories:							
BV	Battery pack monitoring						
IR	Charge voltage temperature compensation						
KV	Float-charge voltage monitoring (+/- 2%)						
LH	Individual alarm relay outputs						
LS	Additional output voltage filter						
MH	Earth fault monitoring						
UIP	Stepless current and/or voltage control with panel potentiometers						
Standards:							
EMC	IEC 61000-6-2, IEC 61000-6-4 and IEC 61000-6-5						
Design/electrical	IEC 60146-1-1, IEC 60146-1-3						

Enclosure dimensions

Model	Height mm	Width mm	Depth mm	
SM1	290	450	275	SM=
SM2	540	450	275	Wall-mounted model
LM1	790	500	365	LM=
LM2	1020	700	510	Floor-standing model
LM3	2100	800	600	IP21, RAL7035

- Applications include:
 - transformer stations
 - process industry
 - power stations
 - ship building industry
 - nuclear power plants
- 12 – 440 Vdc & 3 – 600 Adc
- Wide variety of models
- Long experience
- High reliability



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