
Constant Voltage Chargertype UNIQ



- With built-in monitoring for applications with high demands for reliability.
- **Built-in monitoring**
covers the DC supply system for easy installation and commissioning
- **Improved safety**
by battery monitoring, gives alarm at interruption or short-circuit in battery cell. Monitoring of each battery cell (option)
- **Temperature compensated**
float voltage reduces the risk of battery damage
- **Earth leakage detection**
with test function for bi-polar earth fault and readout in kS
- **Powerful communication**
by four programmable alarms, relay output and RS232 port for serial communication
- **Our product range for uninterruptible power**
also covers inverters, distribution board and batteries

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Constant Voltage Charger UNIQ Working principle

The mains is supplied through an RFI filter (1) and a switch/contactactor (2) to the main transformer unit (3). The transformer provides galvanic insulation and sets the voltage to the battery system level. The voltage is rectified and regulated in the SCR unit (4) to appropriate level responding to the command from the control unit (6). The rectified voltage is smoothed in an LC filter (5). The output voltage (U) and current (I) are fed back to the control unit.

The DC supply system is monitored by voltage level ($u \ll$, $u <$, $u >$, $u \gg$) and earth leakage resistance which is displayed in kohm. The output current and charging mode of the charger is displayed. Interruption of charging is continuously monitored. Automatic control of boost charging with manual or automatic start is included. Control of fan, for battery room and blocking of boost charging are built in. Battery circuit test is performed daily. Mid point measurement of battery issues alarm at interruption of battery cell.

The temperature of the battery is displayed and supervised and the float voltage is temperature compensated.

Each alarm function can be delayed individually, selected for manual reset and connected to one of the four alarm relays.

Technical data

Control principle: SCR controlled

Power requirements: 3-ph: 3x400V+ 10/-15% 47-63Hz

Power factor: approx 0,8 at full load.

Degree of enclosure protection: IP21 according to SS EN 60529

Ambient temperature: 0-40EC

EMC, immunity: SS EN 50082-2

EMC, emission: SS EN 50081-1 >18kW SS EN 50081-2

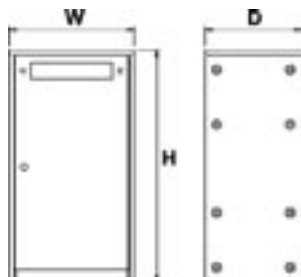
Regulation accuracy: Voltage: $\pm 0,5\%$ Current: $\pm 2\%$

Ripple voltage (without battery): <2% RMS of rated voltage
<5% p-p of rated voltage

Ripple current (RMS): <10% of nominal current

Alarm setting accuracy: $\pm 0,5\%$ of nominal value

Terminal size: Remote alarm 2,5 mm². Size of other terminals, see further in table below.

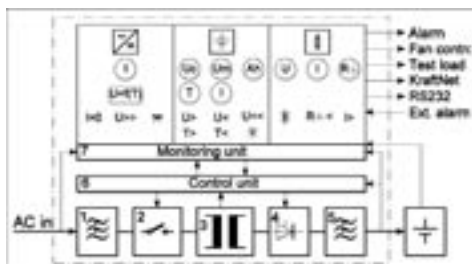


Type Dim. in mm	Floor mounted		
	G11	G12	G22
Height H	1200	1650	2150
Width W	650	650	805
Depth D	500	500	805

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Options

- Heavy duty enclosure IP43
- Tropical design
- Mains input 3x415-500VAC
- Monitoring of battery temperature
- Cell voltage monitoring
- According to customers specification by request.



DC data		Mains data for 400V 3-phase 50-60Hz			Efficiency at full load %	Mains terminal size mm ²	Battery terminal size mm ²	Enclo- sure	Weight kg
Rated voltage (A)	Rated current (A)	Mains power (VA)	Mains current (A)	External fuse (A slow)					
24	50	2450	3,5	6	91	10	35	G11	115
	75	3800	5,5	10	91	10	70	G11	122
	100	4850	7	10	91	10	70	G11	130
	150	7300	10,5	16	91	10	150	G11	142
	200	9700	14	16	90	10	150	G11	166
	300	14900	21,5	25	90	10	240	G12	195
	400	19800	28,5	35	91	10	240	G12	230
48	50	4500	6,5	10	91	10	35	G11	130
	75	6600	9,5	16	91	10	70	G11	142
	100	9000	13	20	91	10	70	G11	156
	150	13150	19	25	91	10	150	G11	182
	200	17700	25,5	35	91	16	150	G12	221
	300	27000	39	50	91	16	240	G12	340
	400	36000	52	63	91	35	240	G12	410
110	25	4500	6,5	10	92	10	35	G11	135
	50	9000	13	20	93	10	35	G11	160
	75	13500	19,5	25	93	16	70	G11	195
	100	17700	25,5	35	93	16	70	G11	220
	150	26700	38,5	50	93	16	150	G12	250
	200	35350	51	63	93	35	150	G12	335
	250	45050	65	100	94	150	240	G22	450
	300	54020	78	100	94	150	240	G22	570
400	72050	104	125	94	150	240	G22	650	
125	25	4850	7	10	92	10	35	G11	140
	50	9700	14	20	93	10	35	G11	165
	75	14550	21	35	93	16	70	G11	200
	100	19400	28	35	94	16	70	G11	225
	150	29450	42,5	50	94	16	150	G12	260
	200	39150	56,5	63	94	35	150	G12	350
	300	58900	85	100	93	150	240	G22	580
400	78300	113	125	93	150	240	G22	660	
220	25	9000	13	20	94	10	35	G11	158
	50	18400	26,5	35	94	16	35	G11	217
	75	27400	39,5	50	95	16	70	G12	275
	100	36400	52,5	63	95	35	70	G12	335
	150	54400	78,5	100	95	70	150	G22	520
	200	72750	105	125	96	70	150	G22	570
	250	92850	134	160	96	150	240	G22	680
300	110850	160	200	96	150	240	G22	730	