

STC TRADITIONAL Wa-CHARGER



- Economic
- Variable additional charging
- Soft start
- 24-80V, 20-200A

STC

- Different safety shut offs
- Electronically monitored charging
- Low start current
- Small size



STC models are supplied as wall, desk or floor cabinets in red, durable industrial lacquer or as requested.

STC is a fully automatic Wa-charger. After connection, it starts automatically and provides the correct charge irrespective of the condition and discharge level of the battery. It is robust, compact and lowweight. More than 10,000 units of STC are produced yearly and those are today charging batteries all over the world.

Charging principle

STC-chargers work with Wa-characteristic as per DIN 41774, i.e. the charging current decreases as the battery voltage increases. The electronics monitor charging. Three LED's indicate the actual charging progress;

- Yellow 1: Main charging
Voltage < 2.42 V/cell.
Capacity < 90-95 %.
- Yellow 2: > 2.42 V/cell. Additional charging takes place. Charging continues until the battery reaches max. capacity.
- Green: Fully charged!
The battery is fully charged and maintenance charging takes place, as long as the battery is connected.

The security system

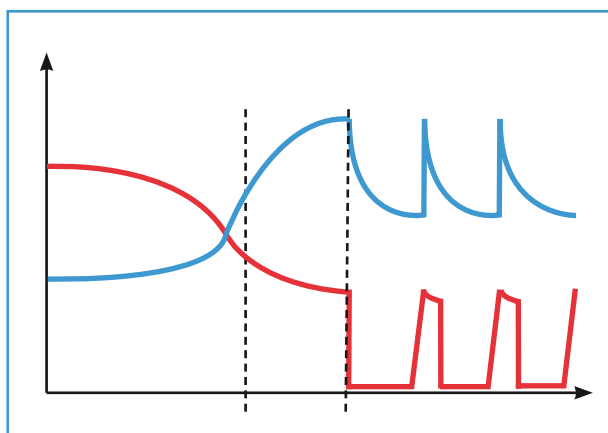
There are three different safety shut off criterias. These disconnect the charger if;

- 2.42V/cell has not been achieved within 10 hours
- Charging has not been completed within 16 hours
- The temperature of the charger's vital components is too high (temporary disconnection)



The LED's indicate the actual charging progress.

STC standard charging curve



STC charges with Wa-character sketch according to DIN 41774.

Variable additional charging

The additional charging time depends on the main charging and continues until the correct charging factor has been reached. The battery is charged in the shortest time possible, without risk of over-charging. The gassing time for the battery is limited and water consumption is therefore minimised.

Minimum starting current peaks

The start current in the STC charger is low. All 1-phase and most 3-phase chargers are equipped with softstart to reduce the starting current peak. In this way the charger starts without a risk of the mains fuse blowing. The chargers can be switched over to a higher respectively lower supply voltage.

Compact

Micropower chargers are all constructed with toroid transformers, resulting in low weight and small volume. The toroid transformer design also have the benefit of lower heat losses and higher efficiency.

Service-friendly

The chargers have been constructed so that the components that might be subject to replacement are easily accessible. On the inside of the door (or the cover) there are instructions and an electric wiring diagram that simplifies the service.



A printed circuit board with monitoring functions ensures safe charging.

Type description				Recommended battery size standard charger			Number of phases / mains current (A)			Weight
				Charging time (Wa-characteristics)						
Type	Battery voltage (V)	Current (A)	Cabinet type	8 hours kap.Ah/5h	10 hours kap.Ah/5h	12 hours kap.Ah/5h	1-phase 220-230 (V)	3-phase 220-230 (V)	3-phase 380-400 (V)	~kg
STC	24	20	C3	100	131	161	3,5			10
		30	C3	150	196	242	5,3			12
		40	C3	200	262	323	7,1			13
		50	C3	250	327	404	8,9			14
		60	C3	300	392	484	10,6			15
		80	C4	400	523	646	14,2			20
		80	W1	400	523	646		7,1	4,3	41
		100	W1	500	654	807		8,9	5,4	45
		125	W1	625	818	1009		11,1	6,8	49
	150	W1	750	981	1211		13,3	8,1	53	
	36	30	C3	150	196	242	8			12
		40	C3	200	262	323	10,6			14
		50	C4	250	327	404	13,2			20
		60	W1	300	392	484		8,0	4,9	54
		80	W1	400	523	646		10,6	6,5	54
		100	W1	500	654	807		13,3	8,1	54
		125	W1	625	818	1009		16,6	10,1	55
		150	F2	750	981	1211		20,0	12,2	91
		48	20	C3	100	131	161	7,1		
	30		C3	150	196	242	10,6			14
	40		C4	200	262	323	14,2			20
	50		W1	250	327	404		8,9	5,4	45
	60		W1	300	392	484		10,6	6,1	42
	70		W1	350	457	565		12,4	7,6	55
	80		W1	400	523	646		14,2	8,6	55
	100		W1	500	654	807		17,7	10,8	62
	125		F2	625	818	1009		22,2	13,5	84
	150		F2	750	981	1211		26,6	16,2	91
	80	200	F3	1000	1308	1614		35,5	21,6	97
		40	W1	200	262	323		11,8	6,8	31
		60	W1	300	392	484		17,7	10,8	54
		80	F2	400	523	646		23,7	14,4	88
		100	F2	500	654	807		29,6	18,0	97
		125	F2	625	818	1009		37,0	22,5	117
		150	F3	750	981	1211		44,3	27,0	128

The right to make changes without prior notice is reserved.

Standard chargers include:

1-phase charger: Primary cable 2.5 m with contact.

3-phase charger: Primary cable 3 m with contact (no contact delivered at interchangeable chargers).

Secondary cable: Twin cable length 3 m.

Chargers for other voltages and currents can be quoted on request.

Dimensions and data:

Cabinet	Height	Width	Depth
Typ	H	B	D
C3	200	293	230
C4	260	293	230
W1	512	348	251
F2	980	520	340
F3	1120	560	420

All cabinets are classified as IP21. Other classifications can be obtained as an option.
All measurements in mm.

