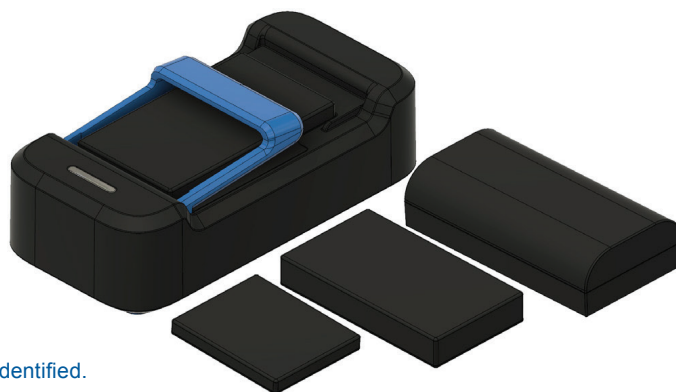


# CHARGER FOR VARTA EASY- PACK LI-ION BATTERIES.



- ▶ 3-step adaptive charge control.
- ▶ Charge adapts to battery pack type, which is automatically identified.
- ▶ Automatic battery temperature monitoring and thermal control to prevent charge of cold or warm batteries.
- ▶ Universal input voltage (90 - 264 VAC).
- ▶ Wake up and low current start-up of deeply discharged batteries.
- ▶ Error indication for reverse polarity, short circuit, charging battery packs with wrong number of cells and safety timer run-out.

## ▶ Technical specifications

### GENERAL DATA

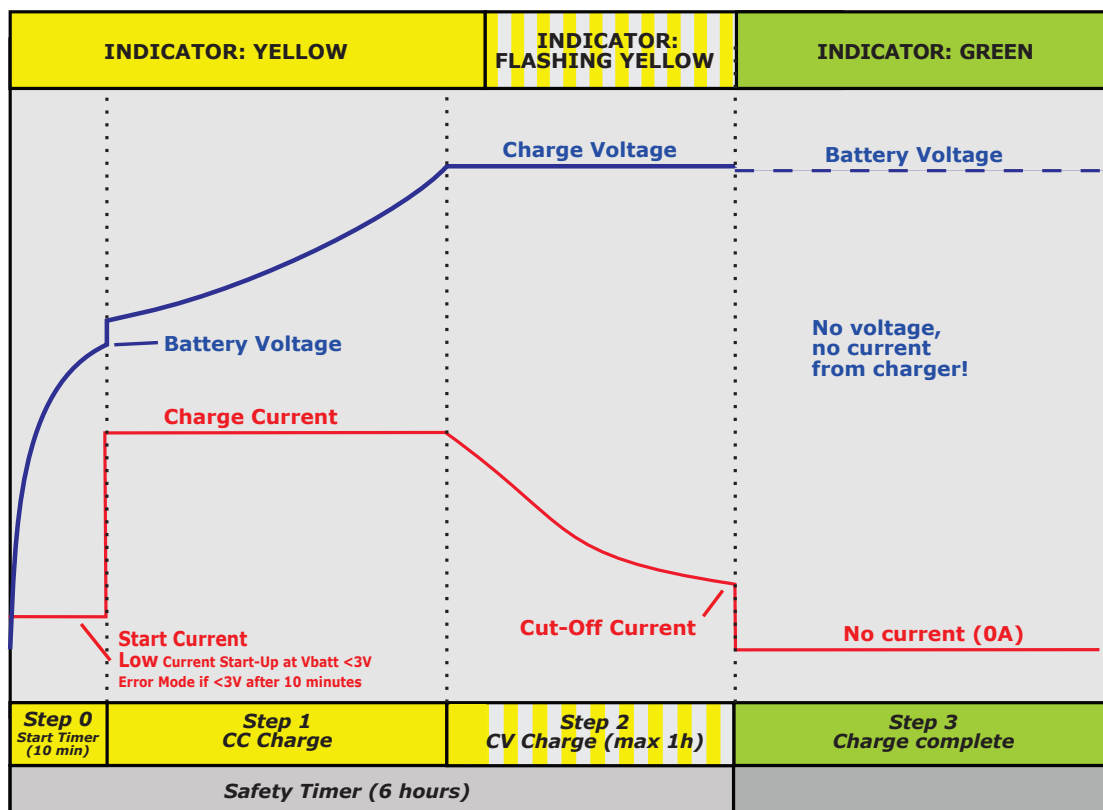
Input voltage	90 - 264 VAC
Line frequency	37 - 63 Hz
Switch frequency, approx.	55 kHz
Leakage current from battery with mains switched off	~ 0 A
Temperature range operating	-25 °C to +40 °C
Temperature range storage	-25 °C to +85 °C
Ripple	< 100 mV p-p
Protection	Protected against reversed polarity and short circuit proof
Insulation class	Class II
Insulation voltage primary / secondary	4000 VAC / 5700 VDC
Input terminals	2-pin IEC 60320/C8
Output terminals	Battery docking
IP-code	4X
Dimensions (l x w x d)	115 x 56 x 35 mm
Weight	175 g

### STANDARDS

EN/IEC/ANSI 60601-1 3ed, EN/IEC 60335-1 and -2-29, EN/IEC/UL 62368-1, EN 61000-6-1 and -3, EN 60601-1-2, EN 55014-1 and -2, EN 55022 and EN 55024, EN 55032

CHARGE CONTROL		STEP 0 (YELLOW)	STEP 1 (YELLOW)	STEP 2 (FLASH YELLOW)	STEP 3 (GREEN)	
BATTERY PACK	MAX OUTPUT POWER (W)	LOW CURRENT START-UP FOR DEEPLY DISCHARGED BATT.	CHARGE CURRENT	CHARGE VOLTAGE	CHARGE TERMINATION WHEN ICH:	RESTART WHEN VBAT
SMALL	1.9 W	CC 25mA±10mA when batt. < 3V	0.45A ±0.1A	4.2V ±0.05V	< 25mA or max. 1 hr.	< 4.1V±0.05V
LARGE	3.6 W	CC 55mA±25mA when batt. < 3V	0.85A ±0.1A		< 55mA or max. 1 hr.	
X-LARGE	6.3 W	CC 125mA±50mA when batt. < 3V	1.5A ±0.15A		< 125mA or max. 1 hr.	
PLUS	6.3 W	CC 260mA±75mA when batt. < 3V	1.5A ±0.15A		< 260mA or max. 1 hr.	

► Charging characteristics and LED indication



► BATTERY NOT CONNECTED INDICATIONS

Battery not connected is indicated by FLASHING GREEN. In this mode charger will apply short pulses attempting to wake up deeply discharged batteries.

► ERROR INDICATIONS

- 2 red blinks: Battery is connected to charger with wrong polarity!
- 3 red blinks: Charger output is shorted. Check output cable connection!
- 4 red blinks: Battery voltage is low. Check battery status or voltage.
- 5 red blinks: Safety timer has run out. Check battery status or capacity.
- LED off: Battery voltage is too high. Check battery voltage.

► WAIT MODE INDICATIONS

- Yellow with 1 red blink: Battery temperature is too low (<0°C).
- Yellow with 2 red blink: Battery temperature is too high (>45°C).