BATTERY CHARGER, 454040-F, LiFePO4

SPECIFICATIONS	4 CELLS	6 CELLS	8 CELLS	10 CELLS	11 CELLS	12 CELLS	13 CELLS	16 CELLS
Cell-Con part number:	454040-FD	454040-FF	454040-FH	454040-FJ	454040-FK	454040-FL	454040-FM	454040-FP
Input voltage:	90-264VAC							
Line frequency:	47-63Hz							
Active power factor correction:	Yes							
Max output power:	116.8W	116W	16.8W	116.8W	116.4W	116.5W	119W	117.6W
Step 0. <30min Yellow:	CC 500mA ± 50mA, when batt voltage <10.5V	CC 350mA ± 25mA, when batt voltage <15.0V	CC 350mA ± 25mA, when batt voltage <21.0V	CC 350mA ± 25mA, when batt voltage <25.0V	CC 200mA ± 25mA, when batt voltage <27.5V	CC 200mA ± 25mA, when batt voltage <30.0V	CC 200mA ± 25mA, when batt voltage <32.5V	CC 200mA ± 25mA, when batt voltage <41.6V
Step 0. >30min Red (4 blinks):	0A/0V							
Step 1. constant current (Yellow):	CC 8.0A ± 0.2A,when 10.5V <Vbat <14.6V	CC 5.3A ± 0.2A, when 15.0V <Vbat <21.9V	CC 4.0A ± 0.2A, when 21.0V <Vbat <29.2V	CC 3.2A ± 0.2A, when 25.0V <Vbat <36.5V	CC 2.9A ± 0.2A, when 27.5V <Vbat <40.15V	CC 2.65A ± 0.2A, when 31.2V <Vbat <43.8V	CC 2.5A ± 0.2A, when 32.5V <Vbat <47.45V	CC 2.0A ± 0.2A, when 41.6V <Vbat <58.4V
Step 2. constant voltage (Flashing Yellow):	CV 14.6V ± 0.2V <5.5A until I charge <400mA or max. 1h	CV 21.9V ± 0.2V <3.7A until I charge <350mA or max. 1h	CV 29.2V ± 0.2V <2.8A until I charge <350mA or max. 1h	CV 36.5V ± 0.2V <2.2A until I charge <250mA or max. 1h	CV 40.15V ± 0.3V <2.0A until I charge <200mA or max. 1h	CV 43.8V ± 0.3V <1.8A until I charge <200mA or max. 1h	CV 47.45V ± 0.3V <1.7A until I charge <200mA or max. 1h	CV 58.4V ± 0.3V <1.4A until I charge <200mA or max. 1h
Charge timer (step2, CV):	1h							
Safety timer (all steps) Red (5blinks):	72h							
Step 3. charge completed (Green):	14.0V ± 0.2V	21.0V ± 0.2V	28.0V ± 0.2V	35.0V ± 0.2V	38.5V ± 0.2V	42.0V ± 0.3V	45.5V ± 0.3V	56.0V ± 0.3V
Restart voltage:	13.2V	19.8V	26.4V	33.0V	36.3V	39.6V	42.9V	52.8V
Formation charge (step 0):	Low current start-up of deeply discharged battery							
Wake-up of deeply discharged battery:	Yes, will apply voltage which deactivates deep discharge protection in battery pack							
Indication when "battery not connected":	Flashing Green (1s/1s)							
NTC input, on request: (std is 10kohm, B-value approx. 4000):	0–45 °C: Normal charge. Battery temperature too high >60°C: Error Red (7 blinks). Battery temperature <0 °C (too cold) or >45°C (too hot): No charge, wait until temp. is OK.							
Ripple:	<100mV p-p							
Efficiency (at 230V 100% load) approx.:	0.91							
Switch frequency approx.:	45-75kHz							
Leakage current from battery with mains switched off:	<1mA at nominal battery voltage (<0.72Ah/month)							
Protection:	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3blinks) Charging of wrong lower voltage battery pack will be terminated after 30min. (See step 0). Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF							
Temperature range:	**Operating:** -25 to +40oC / **Transport and short time storage:** -25 to +85oC							
Derating at 40oC approx.:	5.5A	3.8A	3.1A	2.3A	2.1A	1.9A	1.9A	1.5A
Safety medical:	**Medical:** EN 60601-1 / **Home Health Care:** EN 60601-1-11 / **Battery Charger:** EN 60335-2-29 / **A/V and Comm. Tech:** IEC 62368-1							
Insulation class:	Class II (Class I on request)							
Insulation voltage (primary–secondary):	4000VAC/5700VDC							
EMC standards:	EN 55014-1 and–2, **Emission EN:** 61000-6-3, **Immunity EN:** 61000-6-1, EN 60601-1-2							
Input terminal:	2-pins IEC 320 connector, C8 or mains cable (3pins IEC 320 connector, C6 on request)							
Output terminals:	DC connector, Battery clips, Push-on terminals or open ends							
IP-Grade:	41							
Rec. battery capacity:	4.0-320Ah	2.65-212Ah	2.0-160Ah	1.60-128Ah	1.45-116Ah	1.33-106Ah	1.25-100Ah	1-80Ah
Dimensions:	203.5×87×43.5mm							
Weight:	590g							
Other:	**CBC Functionality:** Configurable Battery Charger. **Charging History:** Log of 10 latest charge cycles. Automatic detection of diode in series with battery.							

CELL-CON
Battery & Charger Solutions

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