SPECIFICATIONS FOR 4440 LA

	6V Lead Acid	12V Lead Acid	18V Lead Acid	24V Lead Acid
Available versions	x			
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz			
Max output power	18.4W	29.4W	28.9W	29.4W
Step 0 < 30min Yellow	CC 100mA ± 25mA, when batt voltage < 5.5V.	CC 100mA ± 25mA, when batt voltage < 10.5V.	CC 100mA ± 25mA, when batt voltage < 16V.	CC 100mA ± 25mA, when batt voltage < 21V.
Step 0 > 30min Red (4 blinks)	0A / 0V			
Step 1 (Constant Current) Yellow	CC 2.5A ± 0.2A, when 5.25V < Vbat < 7.35V.	CC 2.0A ± 0.1A, when 10.5V < Vbat < 14.7V.	CC 1.3A ± 0.1A, when 16V < Vbat < 22.05V.	CC 1.0A ± 0.1A, when 21V < Vbat < 29.4V.
Step 2 (Constant Voltage) Flashing Yellow	CV 7.35V ± 0.1V, until I charge < 600mA or max. 4h.	CV 14.7V ± 0.2V, until I charge < 500mA or max. 4h.	CV 22.05V ± 0.2V, until I charge < 300mA or max. 4h.	CV 29.4V ± 0.2V, until I charge < 250mA or max. 4h.
Charge timer (step2, CV)	4h			
Safety timer (all steps) Red (5 blinks)	72h			
Step 3 (Maintenance voltage) Green	6.85V	13.7V	20.5V	27.4V
Restart voltage	6.5V	13.0V	19.5V	26.0V
Efficiency (at 100% load) approx.	0.8	0.8	0.82	0.84
No load consumption	< 0,5 W			
Switch frequency approx.	35kHz			
Ripple	< 100mV p-p			
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.			
Float charge	CC pulses at safe float voltage level for maximum topping of battery capacity.			
Indication when “Battery not connected”	Flashing Green (1s/1s)			
Leakage current from battery with mains switched off	<0.3 mA			
Temperature compensation of charge voltage (optional)	-3.5mV/°C pr cell. Nominal charge voltage at 20°C. (min 2.2V/cell, max 2.67V/cell)			
Protection	Error indications: LED off: Battery voltage too high. Check battery voltage 2 red blinks: Battery is connected to charger with reverse polarity. 3 red blinks: Charger output is shorted. Check cable/connectors. 4 red blinks: Battery voltage is low after start timer has run out. 5 red blinks: Timeout safety timer. 6 red blinks: Defect battery. Abnormal voltage changes 7 red blinks: Temperature too high, disconnect mains to reset 8 red blinks: Thermistor open or short (if mandatory)			
Temperature range	Operating: -25 to +40oC. Transport and short time storage: -25 to +85oC			
Safety	EN 62368-1			
Insulation class	Class II			
Insulation voltage: Primary – secondary	3000VAC / 4243VDC			
EMC standards	EN 55014-1 and –2			
Input terminal	2-pins IEC 320 connector, C8.			
Output terminals	DC connector, Battery clips, Push-on terminals or open ends.			
IP-Grade	4X			
Rec. battery capacity	12.5Ah (C/5) to 30Ah (<600mA charge current as EoC detection) or up to 125Ah (utilizing the 4h CV timer as EoC detection)	10Ah (C/5) to 25Ah (<500mA charge current as EoC detection) or up to 100Ah (utilizing the 4h CV timer as EoC detection)	6.5Ah (C/5) to 15Ah (<300mA charge current as EoC detection) or up to 50Ah (utilizing the 4h CV timer as EoC detection)	5Ah (C/5) to 12.5Ah (<250mA charge current as EoC detection) or up to 100Ah (utilizing the 4h CV timer as EoC detection)
Dimensions	123.5 × 49.5 × 37 mm			
Weight	220g			
Other	CBC functionality: Configurable Battery Charger. Charging history: Log of latest charge cycles.			