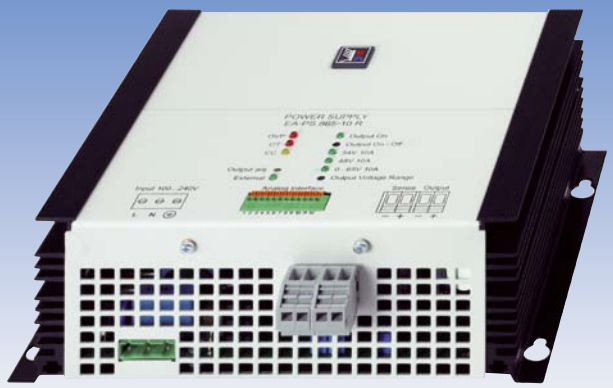
EA-BC 800 R 320W - 1500W
铅酸电池自动充电器 / AUTOMATIC LEAD ACID BATTERY CHARGERS



外壳结构类型 **1 / Enclosure type 1**

EA-BC 812-20 R

- 宽范围输入电压90...264V带PFC
- 效率：高达 92%
- 输出功率：320W 至 1500W
- 电池电压：12V，24V 和 48V
- 充电电流：5A 至 60A
- 温控充电特性
- 单片机控制充电特性
- 三种不同的电池类型可选
- 可转为可调电源
- 有短路保护和反接保护
- 有过压保护(OVP)
- 有过温保护(OT)
- 可自动检测的远程感测端
- 模拟接口
- 自然风冷*
- 温控风扇制冷**

- **Wide input voltage 90...264V with PFC**
- **High efficiency: up to 92%**
- **Output powers: 320W up to 1500W**
- **Battery voltages: 12V, 24V and 48V**
- **Charging currents: 5A up to 60A**
- **Temperature controlled charging characteristics**
- **Microprocessor controlled charging characteristics**
- **Three different lead-acid battery types selectable**
- **Power supply mode with adjustable voltage**
- **Short-circuit and reverse polarity protected**
- **Overvoltage protection (OVP)**
- **Overtemperature protection (OT)**
- **Remote sense with automatic detection**
- **Analogue interface**
- **Natural convection cooling***
- **Temperature controlled fans for cooling****

概要

EA-BC 800 R系列是一款由单片机控制的电池充电器。它有3个充电阶段，能快速、完整地完成充电循环，并优化电池寿命。

各充电循环阶段

本系列充电器可充液态、胶体(Gel 电池)、或电解液吸收在隔板内的贫液(AGM)铅酸电池。
电池接到充电器上后，微处理器会检测电池极型和电池电压，再确定是否开始充电。电池极性错误或完全过放(<0.2 x U_{Bat})时，则不开始充电。

稍微过放或深度过放的电池(>0.2 至 <0.9 x U_{Bat})，可以减小后的电流开始**预充循环**阶段。

完成上述阶段后，紧接着进行**快充循环**阶段，以全电压和最大电流进行，直到充电电流下降到输出电流的5%以下。
第三阶段就是**涓充循环**阶段，此时一直保持给电池充电，防止电池自放电。

General

The microprocessor controlled battery chargers from series EA-BC 800 R operate with a 3-stage charging process for a rapid and complete charging cycle, optimising the life of the battery.

Charging cycles

The chargers can be used to charge lead-acid batteries with liquid, gel cell or felt soaked (AGM) electrolyte.
After connecting the battery to the charger, the microprocessor checks the polarity and voltage of the battery and determines if the charging process is allowed to start. At false polarity or complete discharge (<0.2 x U_{Bat}) the charging procedure can not be started.
Normally or deeply discharged batteries (>0.2 to <0.9 x U_{Bat}) start with a **precharge cycle** at reduced current.

This stage is followed by a **boost charging cycle** with full voltage and maximum current, until the charging current sinks below 5% of the nominal output current.
The third stage is a **trickle charge cycle** in which the charging level of the battery is kept constant, preventing self-discharge.

* 650W以下型号
** 1000W以上型号

* Models up to 650W
** Models from 1000W

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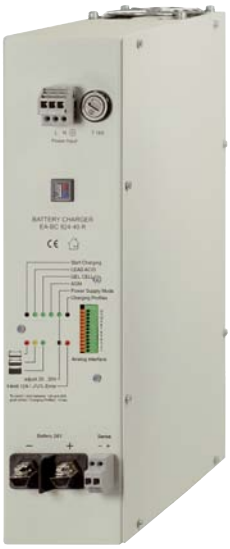
温度补偿充电循环阶段
电池充电时建议用一温度感测器，根据电池的温度，调节电压，从而限制危险气体的释放，防止过充。

输出
本系列不同型号针对不同电压(12V，24V，和48V)的电池充电，充电电流有从5A至60A，功率从320W至1500W的型号。

远程感测端
远程感测输入端可直接连到负载输入端，以补偿连线上的压降。如果输入端已接上电池，本充电器将自动纠正输出电压，确保电池获得准确所需的电压。

模拟接口
模拟接口上有一温度补偿输入端。想要监控充电电压和电流，可在模拟输出端接上 0V...10V电压。此外，还有数个输入端和输出端，用来控制和监控产品状态。

Temperature compensated charging cycle
It is recommended to use the included emperature sensor for battery charging. The charging voltage will then be adjusted by the temperature of the battery and thus limiting the emissions of dangerous gases and prevent overcharging.



Output
Different units for batteries with 12V, 24V and 48V, charging currents from 5A to 60A and powers from 320W to 1500W are available.

Remote sense
The sense input is directly connected to the battery to compensate voltage drops along the leads. The battery charger will correct the voltage automatically, in order to ensure that the accurate required voltage is available on the battery.

Analogue Interface
An input for temperature compensation is available. To monitor the charging voltage and current, analogue outputs are realised with voltage ranges from 0V...10V. Several digital inputs and outputs are available for controlling and monitoring the status.

外壳类型**2** / **Enclosure type 2**

技术参数	Technical Data	EA-BC 800 R
输入电压	**Input voltage**	90...264V
-频率	-Frequency	45...65Hz
-功率因数	-Power factor	>0.99
输出：电压	**Output: Voltage**	
-精确度	-Accuracy	<0.2%
-负载0-100% 时的稳定度	-Stability at 0-100% load	<0.05%
-在±10% Δ U_{IN}时的稳定度	-Stability at ±10% ΔU_{IN}	<0.02%
-负载10%-100%调整需时	-Regulation 10-100% load	<2ms
-过压保护值	-Overvoltage protection	自动偏移 / automatic offset
输出：电流	**Output: Current**	
-精确度	-Accuracy	<0.2%
-负载0-100% 时的稳定度	-Stability at 0-100% ΔU_{OUT}	<0.15%
-在±10% Δ U_{IN}时的稳定度	-Stability at ±10% ΔU_{IN}	<0.05%
安规标准	**Standards**	EN 60950, EN 61326, EN 55022 级别 B / Class B
工作温度	**Operation temperature**	0...50°C
储存温度	**Storage temperature**	-20...70°C

型号	充电电压	电流	功率	U纹波	I纹波	电源模式的调节范围	尺寸 WxHxD	安装尺寸 WxHxD	外壳类型	重量	产品编号
Model	**Charging voltage**	**Current**	**Power**	**Ripple U**	**Ripple I**	**Adjustment range PS mode**	**Dimensions WxHxD**	**Installation dimensions WxHxD**	**Housing type**	**Weight**	**Article number**
BC 812-20 R	12V	20A	300W	<40mV_{PP}	<60mA_{PP}	10...15V	218x163x83mm	218x190x85mm	1	2.2kg	27150311
BC 824-10 R	24V	10A	300W	<100mV_{PP}	<35mA_{PP}	20...30V	218x163x83mm	218x190x85mm	1	2.2kg	27150312
BC 848-05 R	48V	5A	300W	<150mV_{PP}	<12mA_{PP}	40...60V	218x163x83mm	218x190x85mm	1	2.2kg	27150313
BC 824-20 R	24V	20A	600W	<100mV_{PP}	<65mA_{PP}	20...30V	218x163x83mm	218x190x85mm	1	2.2kg	27150314
BC 848-10 R	48V	10A	600W	<150mV_{PP}	<25mA_{PP}	40...60V	218x163x83mm	218x190x85mm	1	2.2kg	27150315
BC 812-40 R	12V	40A	600W	<10mV_{PP}	<19mA_{PP}	10...15V	90x360x240mm	90x370x265mm	2	6.5kg	27150316
BC 812-60 R	12V	60A	900W	<10mV_{PP}	<19mA_{PP}	10...15V	90x360x240mm	90x370x265mm	2	6.5kg	27150317
BC 824-40 R	24V	40A	1200W	<10mV_{PP}	<19mA_{PP}	20...30V	90x360x240mm	90x370x265mm	2	6.5kg	27150318
BC 824-60 R	24V	60A	1500W	<10mV_{PP}	<19mA_{PP}	20...30V	90x360x240mm	90x370x265mm	2	6.5kg	27150319
BC 848-40 R	48V	40A	1500W	<10mV_{PP}	<19mA_{PP}	40...60V	90x360x240mm	90x370x265mm	2	6.5kg	27150320