

# 美标便携式交流充电桩测试仪

HY-SAEACTS-P

产品规格书

**American Standard Portable AC Charging  
Pile Tester**

HY-SAEACTS-P

**Product Specifications**



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20220819



### 版本更迭记录

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## 1 产品简介

该系列便携式交流充电桩测试仪主要应用于美标交流充电桩产品在线调试、下线检测、功能验证、施工售后检测。该测试仪真实模拟实车充电过程。具备体积小、方便携带等特点，同时避免采用电动汽车实车作为检测装置带来的测试使用不方便、故障无法模拟等弊端

### 1 Product Introduction

This series of portable AC charging pile testers are mainly used in online debugging, offline testing, functional verification, and construction after-sales testing of American Standard AC charging pile products. The tester truly simulates the charging process of a real vehicle. It has the characteristics of small size and easy portability, and at the same time avoids the inconvenience of testing and the inability to simulate faults caused by the use of electric vehicles as the detection device.

## 2 功能介绍

该系列便携式交流充电桩测试仪主要具备充电电压测量、引导电路控制（通过充电开关控制）等功能。通过测量充电电压可以判定充电桩是否按要求输出。通过切换充电开关可以判定充电桩是否按照要求使能输出及关断输出。产品具体其面板示意图如图 1 所示，主要有欧标交流充电车端插座接口，插枪控制开关，充电控制开关（S2）、交流电压表、负载拓展口组成。

### 2 Function introduction

This series of portable AC charging pile testers mainly have the functions of charging voltage measurement, guiding circuit control (controlled by charging switch) and so on. By measuring the charging voltage, it can be determined whether the charging pile is outputting as required. By switching the charging switch, it can be determined whether the charging pile enables or disables the output as required. The specific panel diagram of the product is shown in Figure 1, which mainly consists of the European standard AC charging vehicle end socket

interface, the plug-in control switch, the charging control switch (S2), the AC voltmeter, and the load expansion port.



图 2：交流便携测试系统面板介绍图

Figure 2: Introduction to the Panel of the AC Portable Test System

### 3 产品参数

- 测试仪器供电电压：无需供电电源
- 测量电压输入范围（交流充电桩输出电压）：0~380V±20%（电压超出范围会损坏测试设备）
- 负载类型：无负载(可外拓负载)
- 负载拓展口：配置标准美标交流车端插座，最大负载电流 32A
- 使用温度：-30° - 65°
- 尺寸：255mm\* 155mm\* 150mm(长\*宽\*高)

#### 3 Product parameters



Test instrument power supply voltage: no power supply required

Measurement voltage input range (AC charging pile output voltage):  $0\sim 380V \pm 20\%$   
(voltage beyond the range will damage the test equipment)

Load type: no load (external load can be extended)

Load expansion port: equipped with standard American standard AC vehicle end socket,  
the maximum load current is 32A

Using temperature:  $-30^{\circ} - 65^{\circ}$

Size: 255mm\* 155mm\* 150mm (length\*width\*height)

## 4 产品型号

| 产品名称       | 型号           | 备注     |
|------------|--------------|--------|
| 欧标交流便携式测试仪 | HY-SAEACTS-P | 交流 32A |

### 4 product models

| Product name                         | Model           | Remarks |
|--------------------------------------|-----------------|---------|
| European standard AC portable tester | HY-SAEACTS-P AC | 32A     |

## 5 使用步骤

- 1) 打开充电枪插座盖板，将充电枪插入。
- 2) 将插枪按钮按下，再按下充电按钮

a) 观察实时电压表，若有电压指示且电压值在交流桩输出额定电压的 $\pm 20\%$ 之间，则认为充电桩电压输出合格。若电压表无指示或电压不在指定范围之内，则充电桩电压输出不合格。

e) 本测试仪侧面带有负载扩展口，可以外接负载，测试充电桩是否输出。每相最大输出电流应低于 32A，严禁超功率使用。

- 3) 将充电按钮按下，观察电压表，1s 左右若电压表关闭，则充电桩合格；若持续点亮则说明充电桩的控制导引不合格。
- 4) 步骤 2) 和步骤 3) 中测试项目全部合格，则认为充电桩合格，有任意一项不合格，则不合格。

5 steps to use

1) Open the cover of the charging gun socket and insert the charging gun.

2) Press the insert button, then press the charge button

a) Observe the real-time voltmeter. If there is a voltage indication and the voltage value is within  $\pm 20\%$  of the rated voltage of the AC pile output, it is considered that the voltage output of the charging pile is qualified. If the voltmeter has no indication or the voltage is not within the specified range, the voltage output of the charging pile is unqualified.

e) There is a load expansion port on the side of the tester, which can be connected to an external load to test whether the charging pile is output. The maximum output current of each phase should be lower than 32A, and the use of overpower is strictly prohibited.

3) Press the charging button and observe the voltmeter. If the voltmeter is off for about 1s, the charging pile is qualified; if it continues to light, it means that the control and guidance of the charging pile is unqualified.

4) If all the test items in step 2) and step 3) are qualified, the charging pile is considered qualified, and any one of them is unqualified, it is unqualified.

## 6 使用注意事项

- 1) 被检测交流充电桩每一相的输出电压范围务必小于 275VAC，否则会损坏内部设备。
- 2) 外部负载扩展接口负载每一相电流务必小于 32A，否则将引起设备损坏。
- 3) 使用设备时候，轻拿轻放，避免硬物刷蹭设备表面。



- 4) 由于本测试仪比较小巧，使用本测试仪时，建议将设备单手抱在怀中进行插枪和拔枪操作。

## 6 Precautions for use

- 1) The output voltage range of each phase of the detected AC charging pile must be less than 275VAC, otherwise the internal equipment will be damaged.
- 2) The current of each phase of the external load expansion interface load must be less than 32A, otherwise the equipment will be damaged.
- 3) When using the device, handle it with care to avoid hard objects scratching the surface of the device.
- 4) Since this tester is relatively small, when using this tester, it is recommended to hold the device in one hand to insert and pull out the gun.





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