SmartGen

MAKING CONTROL SMARTER

ATA833

THREE POWER SWITCH ADAPTER

USER MANUAL

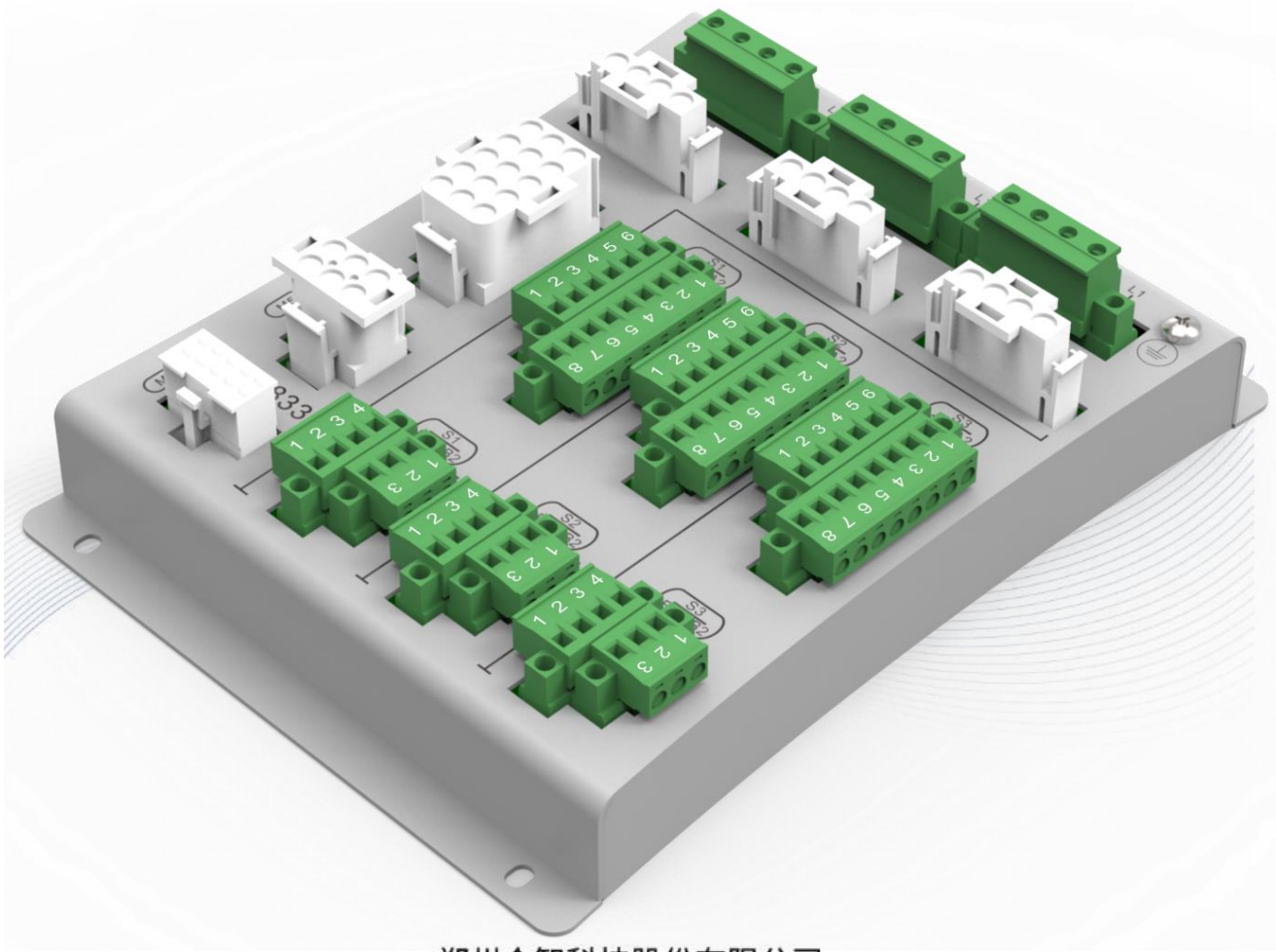

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Table 1 Software Version

Date	Version	Note
2021-09-18	1.0	Original Release.
2021-10-28	1.1	Modify the wire harness description in Fig.1.
2022-06-08	1.2	Modify the pin number description in Fig.2, and add the function description of terminals.
2025-07-05	1.3	Update the information of SmartGen.

CONTENTS

SmartGen

1 OVERVIEW

The ATA833 Three Power Switch Adapter is designed for the connection between HAT833 three power ATS controller and smart circuit breaker, significantly reducing on-site wiring work for users. It saves labor and time while ensuring safe and reliable operation.

2 PERFORMANCE AND CHARACTERISTICS

- Suitable for 3P4W AC system with three-way power supply inputs;
- All-in-one integrated adapter, whose input side can simultaneously connect to three breakers (S1, S2 and S3);
- Suitable for HAT833 three power ATS controller;
- Electrical interlock functions for closing control and parallel switching;
- It supports QS1/QS2/QS3 ready-to-close function, which is suitable for circuit breakers with the ready-to-close signal (no wiring required if not supported);
- Cold rolled plate enclosure;
- With screw installation method, the adapter is fixed by four screws.

3 SPECIFICATIONS

Table 2 Performance Parameters

Parameters	Description
Rated Working Voltage	AC90V~AC305V
Max. Working Current	10A
Case Dimensions	156.7mmx210mmx46mm
Working Temperature	(-25~+70)°C
Working Humidity	(20~93)%RH
Storage Temperature	(-30~+80)°C
Insulation Strength	Apply AC2.2kV voltage between high voltage terminal and low voltage terminal and the leakage current is not more than 3mA within 1min.
Weight	1.1kg

4 PANEL DESCRIPTION

4.1 PANEL ILLUSTRATION

Panel illustration is as Fig. 1.

Three AC inputs can connect to external air breakers, and connect with S1/S2/S3 AC power respectively.

- Connector M1, M2, M3, M4, M5, and M6 need to connect to the HAT833 controller.
- Connector S1-A and S1-B need to connect to the S1 breaker.
- Connector S2-A and S2-B need to connect to the S2 breaker.
- Connector S3-A and S3-B need to connect to the S3 breaker.

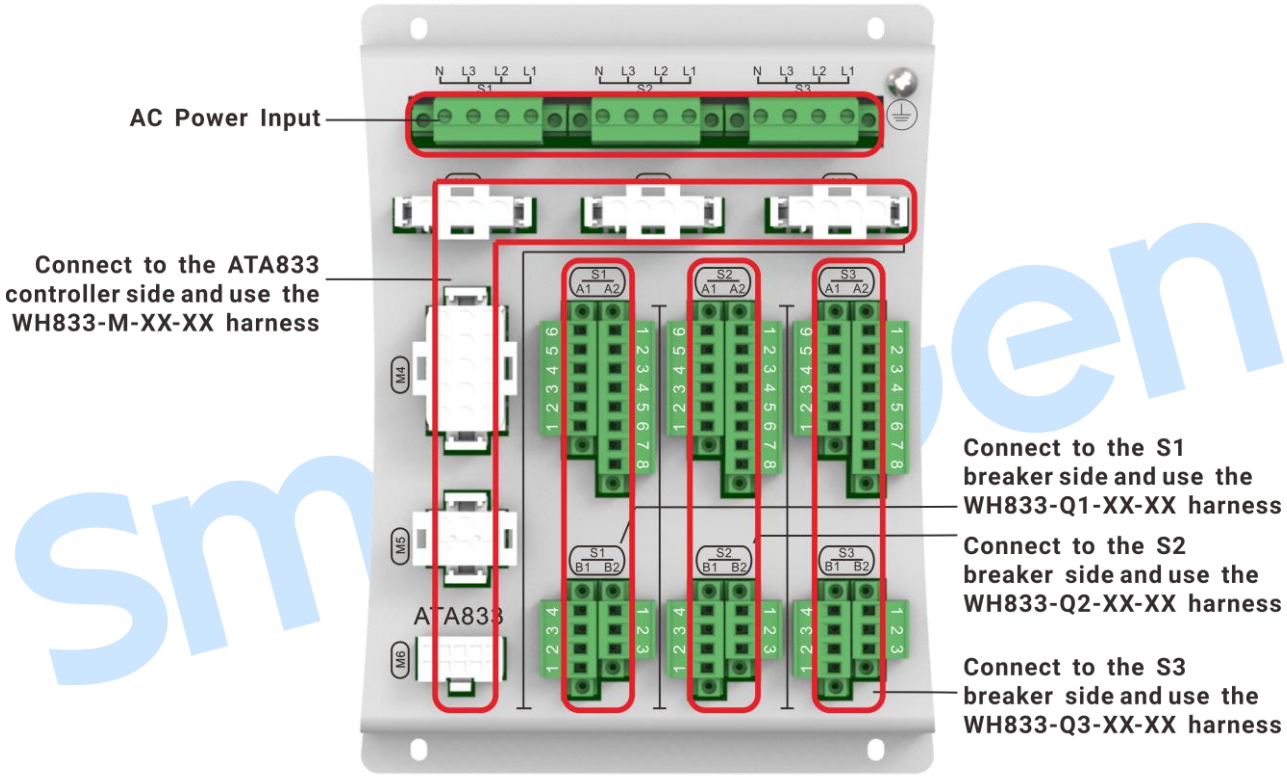

Fig. 1 Panel Instruction

4.2 CONNECTOR ILLUSTRATION

The pin numbers of connector terminals are as Fig. 2.

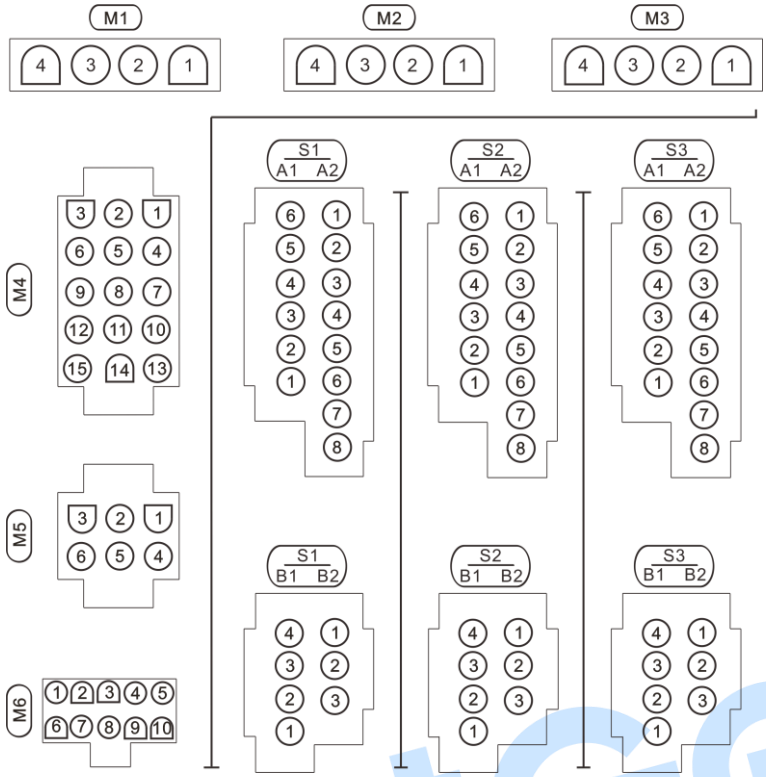

Fig. 2 Pin Numbers of Connector Terminals

Terminal Wirings of connector is as Table 3.

Table 3 Controller Side Connector Wiring Illustration for WH833-M-XX-XX Harness

Connector No.	Pin No.	Wire No.	Connector No.	Pin No.	Wire No.
M1	1	M-15	M4	1	M-8
	2	M-16		2	M-12
	3	M-17		3	M-52
	4	M-18		4	M-4
M2	1	M-19		5	M-13
	2	M-20		6	M-55
	3	M-21		7	M-53
	4	M-22		8	M-51
M3	1	M-23		9	M-54
	2	M-24		10	M-50
	3	M-25		11	M-1
	4	M-26		12	M-14
M6	1	M-41		13	M-6
	2	M-37		14	M-2
	3	M-38		15	M-10
	4	M-34	M5	1	M-44
	5	M-29		2	M-45

Connector No.	Pin No.	Wire No.	Connector No.	Pin No.	Wire No.
	6	M-31		3	M-43
	7	M-36		4	M-46
	8	M-39		5	M-42
	9	M-30		6	M-47
	10	M-35		\	\

Table 4 Breaker Side Connector Wiring Illustration for WH833-QX-XX-XX Harness

Connector No.		Pin No.	Wire No.	Function
Q1	S1-A1	1	Q1-36	Q1 NC 1
		2	Q1-1	Q1 Power L
		3	Q1-35	Q1 ESS N
		4	Q1-2	Q1 Power N
		5	Q1-29	Q1 Open L
		6	Q1-28	Q1 UV N
	S1-A2	1	Q1-27	Q1 UV L
		2	Q1-31	Q1 Close L
		3	Q1-30	Q1 Open N
		4	Q1-32	Q1 Close N
		5	Q1-34	Q1 ESS L
		6	Q1-37	Q1 NC 1*
		7	Q1-39	Q1 NC 2
		8	Q1-40	Q1 NC 2*
	S1-B1	1	NC/GND	NC
		2	Q-6	Q1 NO
		3	Q-5	Q1 Fault*
		4	Q-251	Q1 Close Enable
	S1-B2	1	Q-4	Q1 Fault
		2	Q-7	Q1 NO*
		3	Q-252	Q1 Close Enable *

NOTE: The wire number of connector S1-A and S1-B, S2-A and S2-B, S3-A and S3-B starts with Q1, Q2, and Q3, and the corresponding harness numbers are WH833-Q1-XX-XX, WH833-Q2-XX-XX and WH833-Q3-XX-XX.

For example: The wire number for Pin 1 of connector S2-A-1 is Q2-36.

Wire number definition:

Q1-1 e.g. Q1-1 means the wire needs to connect to Terminal 1 of S1 breaker.

□□-□

- means wire needs to connect to corresponding terminal number of smart breaker;
- means the position where the wire needs to connect;
  - M means HAT833 Controller;
  - Q1 means S1 breaker;
  - Q2 means S2 breaker;
  - Q3 means S3 breaker.

Wire harness definition:

WH833-□□-□□-□□

- means special model number, which can custom according to customer requirements;
- means wire harness length, unit: m. e.g. 30 means 3.0m;
- means the position where wire needs to connect; definition same as wire No.

5 APPLICATION DIAGRAM

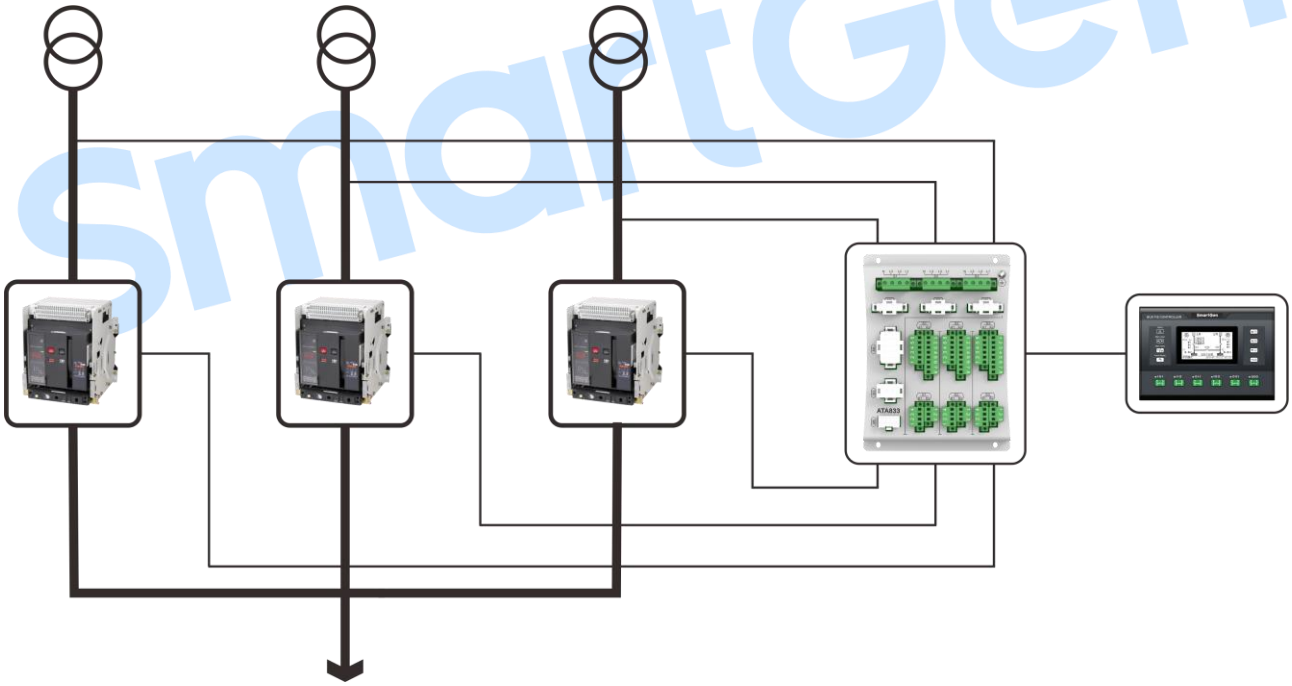

Fig. 3 Application Diagram

6 ACCESSORY ILLUSTRATION

The connected wire harness and terminals matched with terminal block of this product are optional; Users can make clarification at ordering. The harness requirements and type should be indicated when selecting. See Table 5 for details.

Table 5 Optional Accessory Description

Category	Note
Optional Wire Harness	There are four in total: WH833-M-XX-XX, WH833-Q1-XX-XX, WH833-Q2-XX-XX, and WH833-Q3-XX-XX. The length of the harness (unit: m) should be indicated when selecting.
Optional Terminals	Include the matching terminals and connector terminal pins.

NOTE: If no wire harness is selected, terminals will be provided by default, allowing users to perform wiring as needed.

7 CASE DIMENSIONS

This adapter is designed by screw installation method, and is fixed by four screws at installation.

Unit: mm

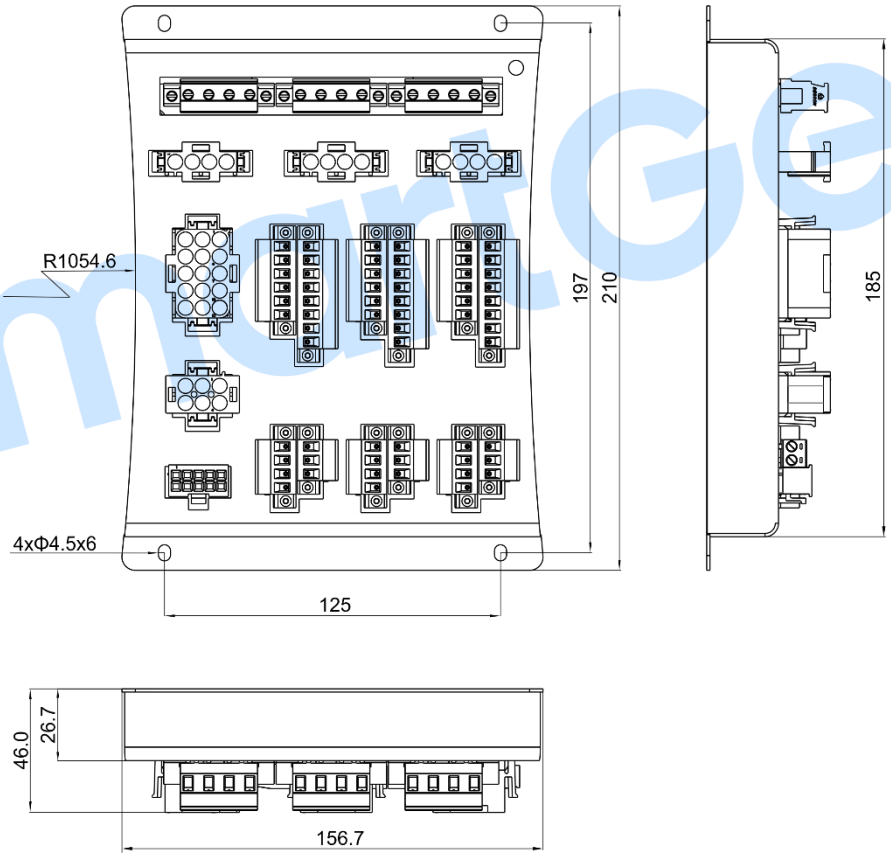

Fig. 4 Case Dimensions and Panel Cutout