

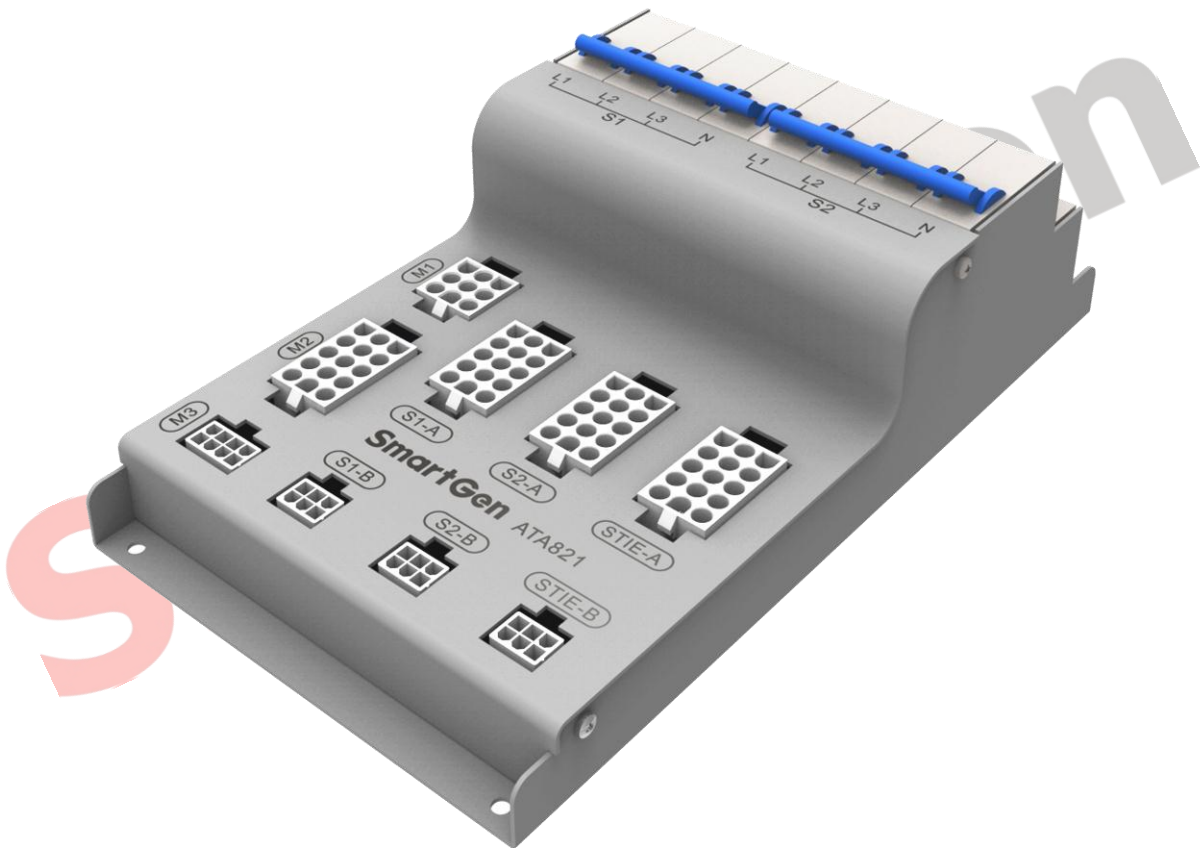


SmartGen
ideas for power

ATA821

BUS TIE ADAPTOR FOR DUAL POWER SWITCH

USER MANUAL



SMARTGEN (ZHENGZHOU) TECHNOLOGY CO., LTD.



Chinese trademark

SmartGen English trademark

SmartGen – make your generator *smart*

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Table 1 Software Version

Date	Version	Note
2019-12-30	1.0	Original Release.
2020-01-20	1.1	Upgrade.
2021-02-25	1.3	Add illustration for optional terminals.



CONTENT

1	OVERVIEW.....	4
2	PERFORMANCE AND CHARACTERISTICS.....	4
3	SPECIFICATION.....	4
4	PANEL DESCRIPTION.....	5
5	APPLICATION DIAGRAM.....	8
6	ACCESSORY ILLUSTRATION.....	9
7	CASE DIMENSIONS.....	9

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1 OVERVIEW

ATA821 Bus Tie Adapter for Dual Power Switch is a kind of adapter which makes convenience for connection between HAT821 dual power bus tie ATS controller and smart breaker, reducing a lot of field wiring work for users, not only labor saving, time saving but also reliable.

2 PERFORMANCE AND CHARACTERISTICS

- Suitable for 3Ph 4W AC system;
- Two integrated 400V/50Hz/10A circuits of air breaker, which are individually used to connect two circuits of AC power;
- All-in-one integrated adaptor, which can simultaneously connect S1 breaker, S2 breaker and bus tie breaker;
- Suitable for HAT821 dual power bus tie ATS controller;
- Cold rolled plate closure;
- With screw installation method, adapter is fixed by 4 screws.

3 SPECIFICATION

Table 2 Performance Parameters

Item	Description
Rated Working Voltage	AC 400V 50/60Hz
Max Working Current	10A
Air Breaker	400V~ 50Hz 10A
Case Dimensions	144.4mmx252mmx75.3mm
Working Conditions	Temperature: (-25~+70)°C Humidity: (20~93)%RH
Storage Condition	Temperature: (-30~+80)°C
Insulation Strength	Apply AC1.5kV voltage between high voltage terminal and low voltage terminal and the leakage current is not more than 3mA within 1min.
Weight	1.6kg

4 PANEL DESCRIPTION

4.1 PANEL ILLUSTRATION

Panel illustration is as Fig. 1.

Two circuits of air breaker, connect separately with S1/S2 AC power.

Connector M1, M2, M3 need to connect to the side of HAT821 controller.

Connector S1-A, S1-B need to connect to the side of S1 breaker.

Connector S2-A, S2-B need to connect to the side of S2 breaker.

Connector STIE-A, STIE-B need to connect to the side of bus tie breaker.

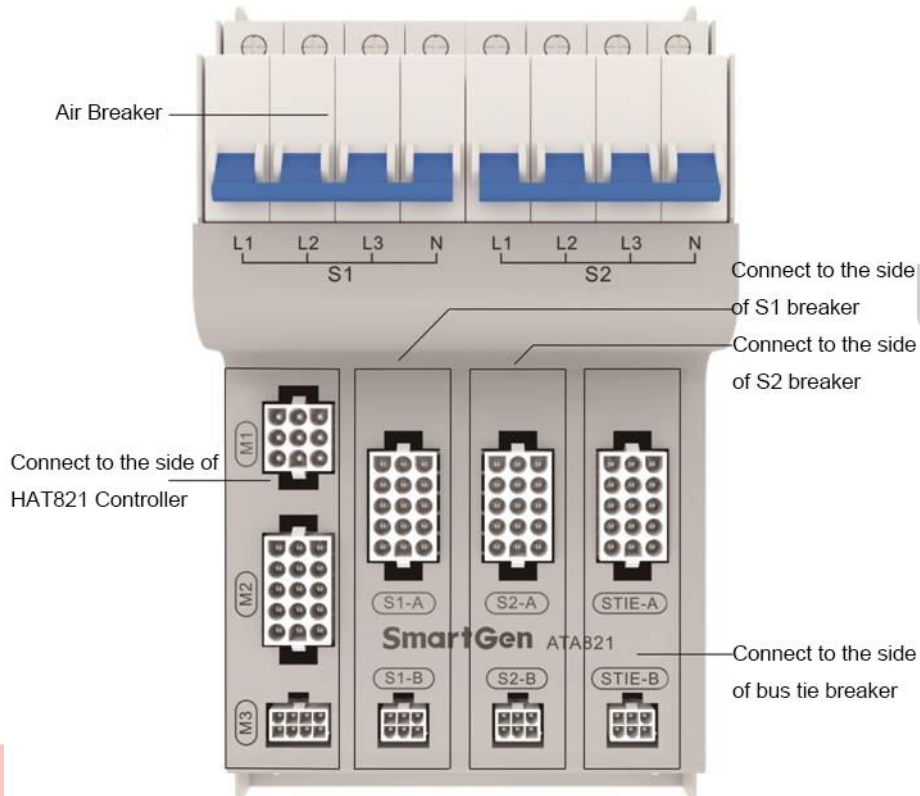


Fig. 1 Panel Instruction

4.2 CONNECTOR ILLUSTRATION

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

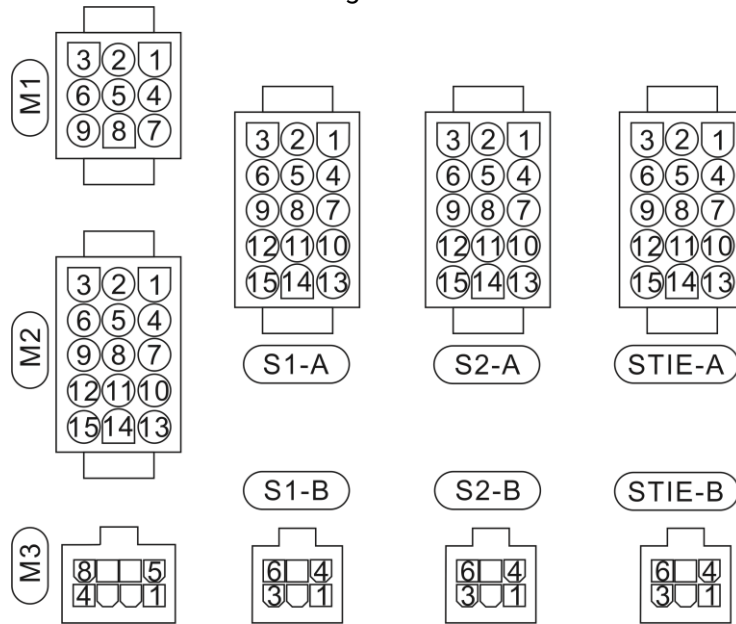


Fig. 2 Pin Numbers of Connector Terminals

Terminal Wirings of connector is as Table 3.

Table 3 Connector Wiring Illustration

Connector No.	Pin No.	Wire No.	Wire Harness No.	Connector No.	Pin No.	Wire No.	Wire Harness No.
M1	1	M-18	WH821-M-20-RM	S1-A	1	Q1-32	WH821-Q1-30RM
	2	M-19			2	Q1-28	
	3	M-15			3	Q1-27	
	4	M-20			4	Q1-35	
	5	NC			5	Q1-1	
	6	M-17			6	NC	
	7	M-21			7	Q1-33	
	8	M-22			8	Q1-30	
	9	M-16			9	Q1-2	
M2	1	M-4		S1-B	10	Q1-24	
	2	M-14			11	Q1-36	
	3	M-1	12		Q1-29		
	4	M-10	13		Q1-41		
	5	M-11	14		Q1-25		
	6	M-3	15	Q1-42			
	7	M-2	1	NC			
	8	M-9	2	Q1-4			
	9	M-5	3	Q1-22			
	10	M-6	4	NC			
	11	NC	5	Q1-23			

Connector No.	Pin No.	Wire No.	Wire Harness No.	Connector No.	Pin No.	Wire No.	Wire Harness No.	
	12	M-7			6	Q1-5		
	13	M-8						
	14	M-12						
	15	M-13						
M3	1	M-29						
	2	M-30						
	3	M-41						
	4	NC						
	5	M-34						
	6	M-35						
	7	M-31						
	8	M-36						

NOTE: Connector S2-A and S2-B, STIE-A and STIE-B connected wire number starts with Q2, Q3; Others are the same with S1-A, S1-B, connected separately with WH821-Q2-30-RM and WH821-Q3-30-RM. For example: P1 wire number of connector S2-A is Q2-32.

Wire number definition:

Q1-1 Example: Q1-1 means 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 wire needs to connect;

M means HAT821 Controller;

Q1 means S1 breaker;

Q2 means S2 breaker;

Q3 means bus tie breaker.

Wire harness definition:

WH821-□□-□□-□□

means acronym of the factory;

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

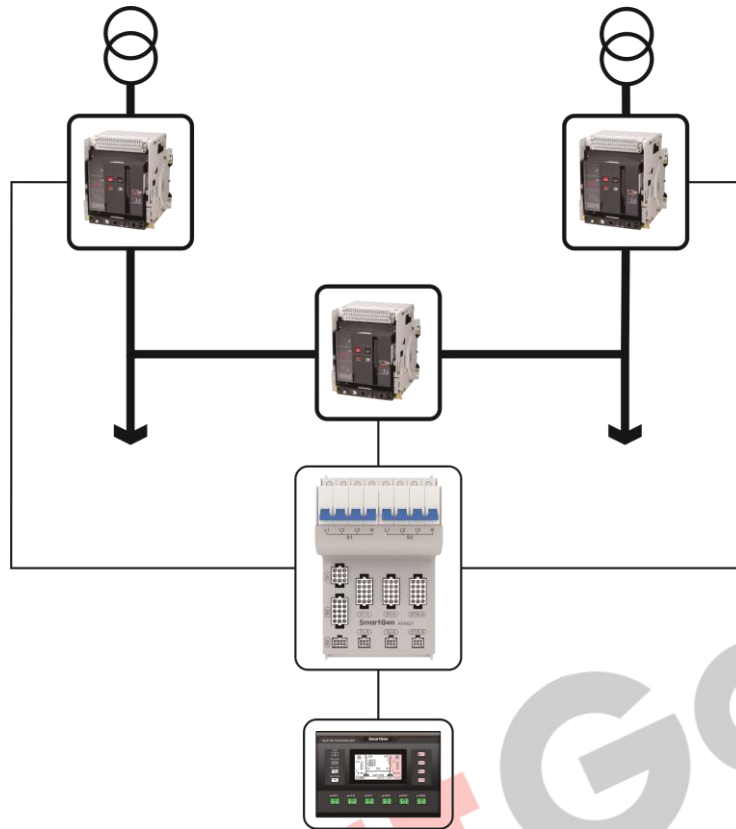


Fig. 3 Application Diagram

6 OPTIONAL ACCESSORY ILLUSTRATION

The connected wire harness and terminals matched with terminal block of this product are optional; Users can make clarification at ordering, note the harness requirements and breaker type. See Table 4 for details.

Table 4 Optional Accessory Description

Category	Note
Optional Wire Harness	There are four in total, one of them will be connected to the controller side and the other three will be connected to the circuit breaker side. The length of the wire harness (unit: m) and the model of the circuit breaker should be indicated when choosing.
Optional Terminals	Include the matching terminals and connector terminals.

7 CASE DIMENSIONS

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

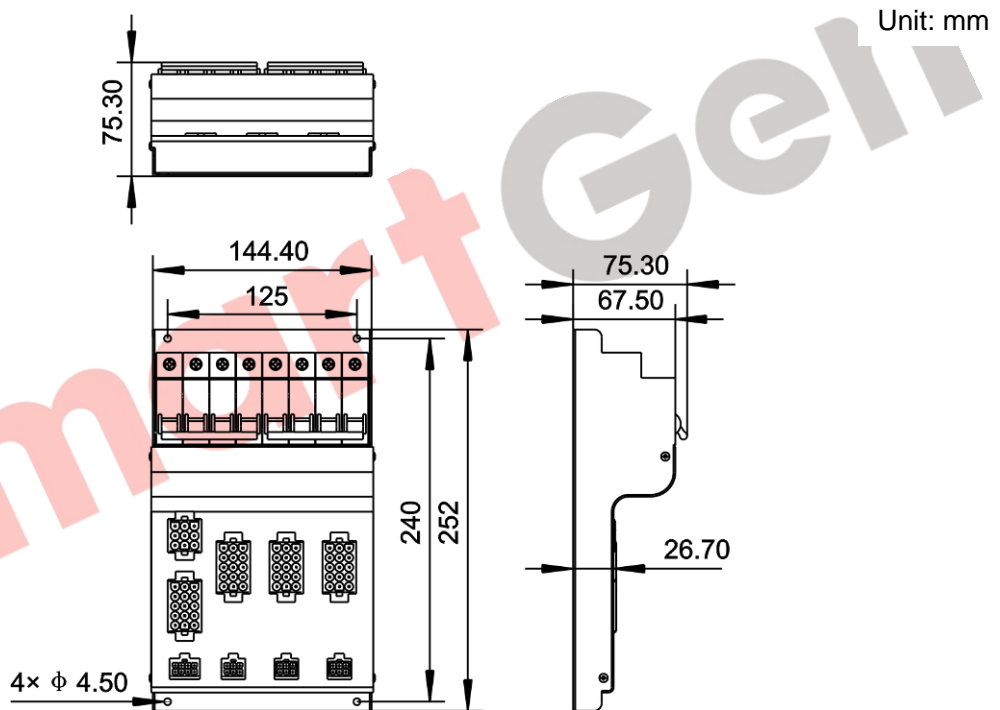


Fig. 4 Case Dimensions and Cutout