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SmartGen BTM300 Dual Power Transfer Module User Manual

SmartGen BTM300 Dual Power Transfer Module

OVERVIEW

BTM300 Dual-power Transfer Module is especially designed for dual DC power transferring to realize generator-set uninterruptible power supply output with double power sources input. It automatically chooses output power source based on the voltage situation. BTM300 is widely used in Marine and stationary generation units with compact structure and easy installation.
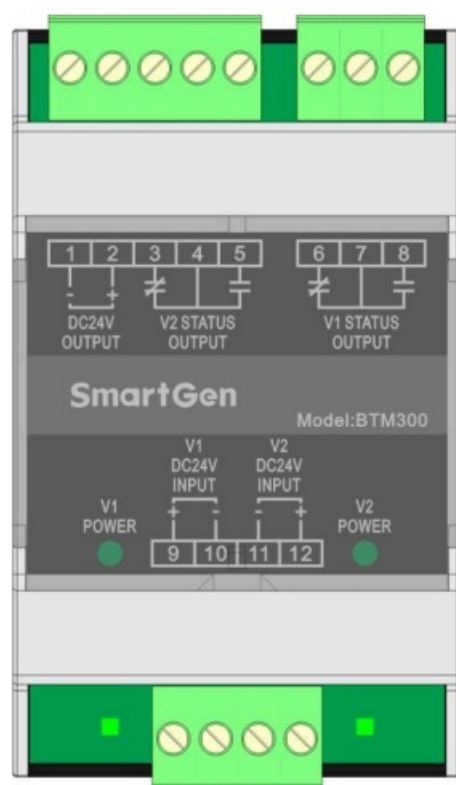
PERFORMANCE AND CHARACTERISTICS

- Suit for dual-power DC power supply system.
- According to the voltage situation select power supply. Choose V2 if both are available; and choose V1 if V2 is unavailable.
- Corresponding LED indicators will display the situation of V1 and V2; meanwhile, relevant relays start output.
- 35mm guide rail installation or M4 screw mounting.
- Modular design and pluggable connection terminals; compact structure with easy mounting.

SPECIFICATION

Table 2 Product Specification

Items	Contents
Input	Both power supplies are DC24V 1A.
Output	DC24V 1A
Relay Output	DC28V 7A Volt free
Max Power Consumption	≤1.5W
Case Dimension	53.6mm x 89.7mm x 60.7mm
Working Conditions	Temperature: (-25~+70)°C; Humidity: (20~93)%RH
Storage Condition	Temperature: (-25~+70)°C
Net Weight	0.16kg

INDICATORS AND TERMINALS FUNCTIONS DESCRIPTION

Fig.1 Front Terminal Diagram

Table 3 LED Indicators Functions Description

Indicators	Color	Function Description	Remark
V1 Power	Green	V1 power supply indicator; light is on when power is available.	
V2 Power	Green	V2 power supply indicator; light is on when power is available.	

Table 4 Terminals Connection Description

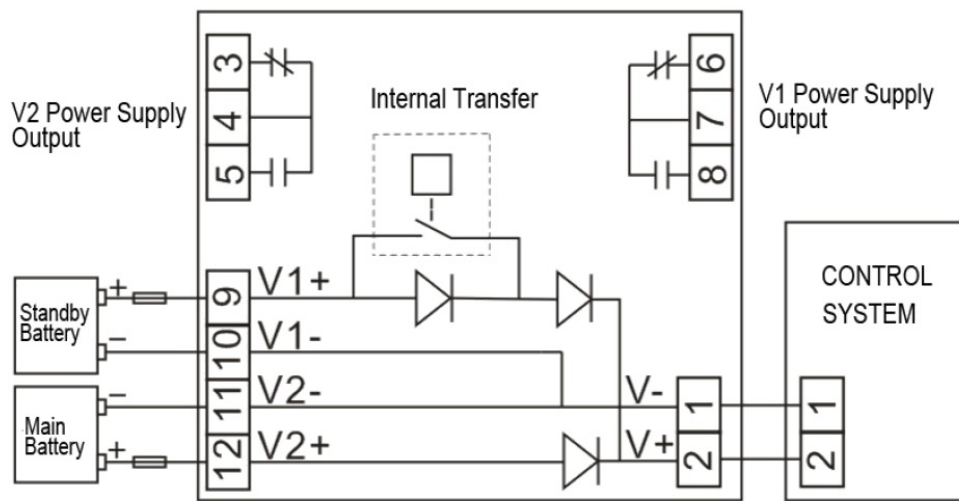| No.	Function		Cable Size	Remark	
1	DC V Output-		1mm2		
2	DC V Output+		1mm2		
3	V2 Power Output	Normally Closed		Output when V2 is available; switch off when V2 is unavailable.	Relay normally open/closed contacts with rated current 7A, volt free contact output.
4		COM	1mm2		
5		Normally Open			
6	V1 Power Output	Normally Closed		Output when V1 is available; switch off when V1 is unavailable.	Relay normally open/closed contacts with rated current 7A, volt free contact output.
7		COM			
8		Normally Open	1mm2		
9	DC V1 input +		1mm2	Connect to positive electrode of powered device, V1 is standby power supply.	
10	DC V1 input –		1mm2	Connect to negative electrode of powered device.	

No.	Function	Cable Size	Remark
11	DC V2 input –	1mm2	Connect to positive electrode of powered device, V2 is main power supply.
12	DC V2 input +	1mm2	Connect to positive electrode of powered device.

FUNCTION DESCRIPTION

BTM300 Dual-power Transfer Module is aiming at providing uninterrupted power supply to realize dual-power seamless switching.

The mainly function of BTM300 is to select power source according to the voltage situation of double power supply. V2 is main power source, thus module will select V2 when both power are available, which means output voltage V is supplied by V2; When V2 is unavailable, the module is supplied by V1. When V1 is available, LED besides V1 POWER lights up and V1 (7A) relay OUTPUT action initiates; When V2 is available, LED besides V2 POWER lights up and V2 (7A) relay OUTPUT action initiates.
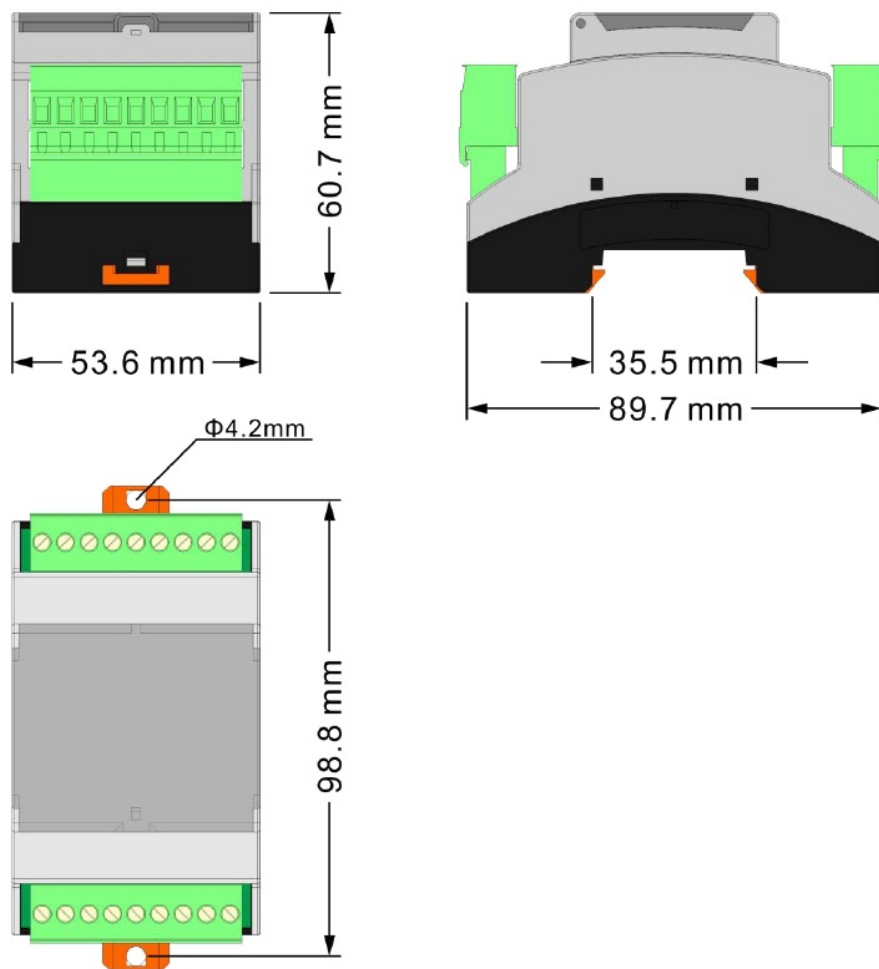
TYPICAL APPLICATION

OVERALL DIMENSION

Fig.3 BTM300 Overall Dimension

Documents / Resources

	SmartGen BTM300 Dual Power Transfer Module [pdf] User Manual BTM300, Dual Power Transfer Module, BTM300 Dual Power Transfer Module, Transfer Module
	SmartGen BTM300 Dual Power Transfer Module [pdf] User Manual BTM300, Dual Power Transfer Module, BTM300 Dual Power Transfer Module, Transfer Module, Module

References

- 众智
- smartGen