
Distribution Module

C12

Specifications

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1 Product Overview

1.1 Product Overview

The C12 is a DC power supply expansion module with an operating voltage of 9~16VDC and a maximum support of 100A current input and output.

The C12 module features 12 output channels: six rated at 15 A and six rated at 30 A. These are divided into three groups (C2-1~4, C3-1~4, and Out1~4), each comprising two 15 A and two 30 A channels. The control logic for these groups—driven by two output dry contacts—can be configured via the device's DIP switches.

It has two dry contact ports: one is a dry contact input port supporting two pairs of dry contact inputs, and the other is a dry contact expansion port supporting two pairs of dry contact output expansions. Multiple C12s can be connected in parallel.

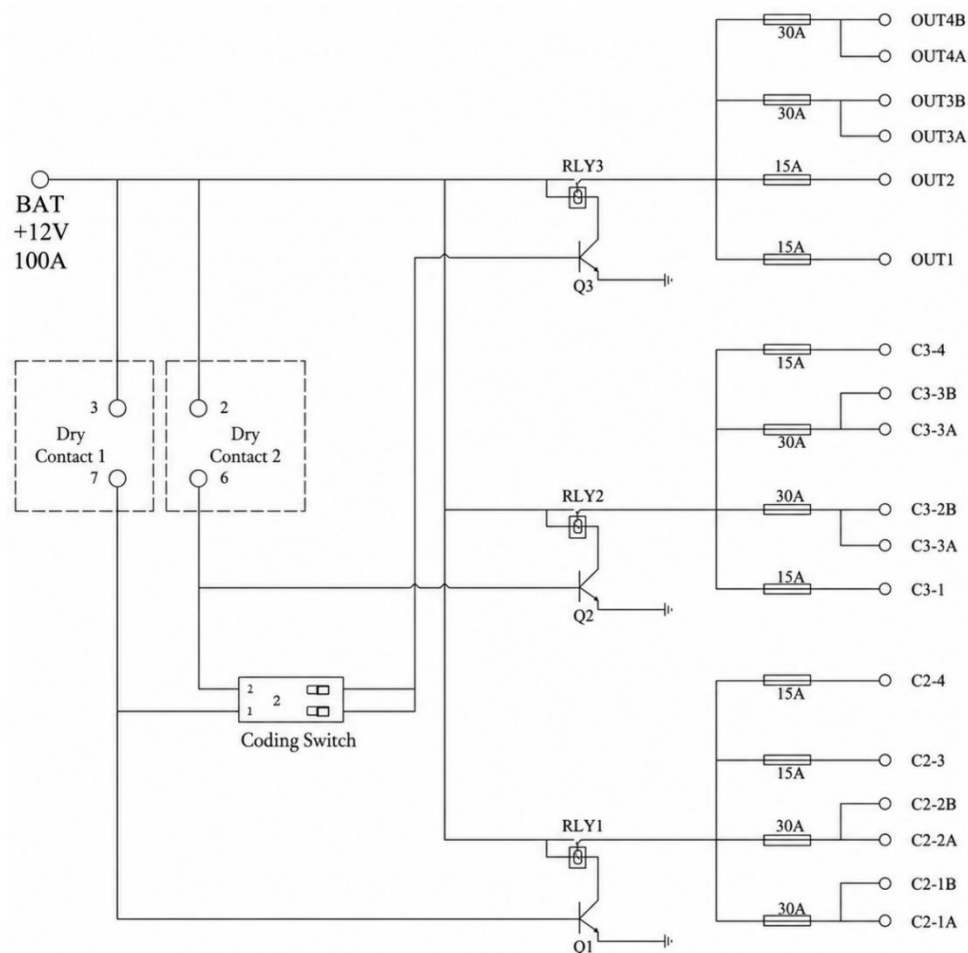


Fig 1-1 System Schematic

2 Product Appearance

2.1 Appearance

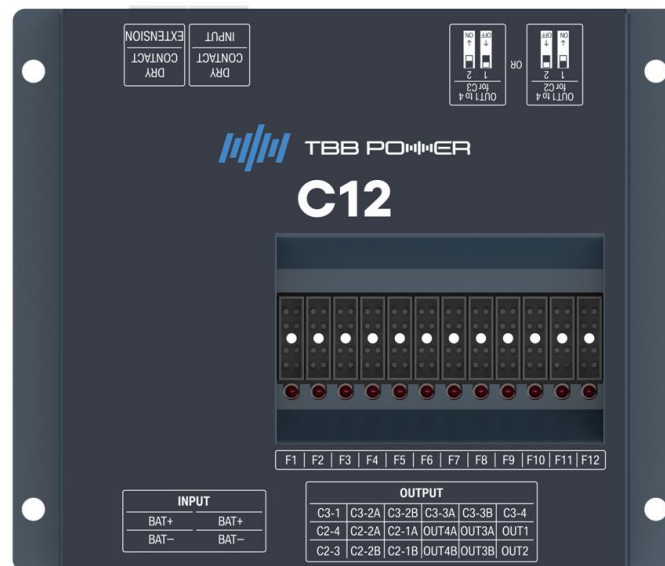


Fig. 2-1 C12 View

2.2 Dimensions

C12 module Dimensions: 159.5mm × 135mm × 45 mm

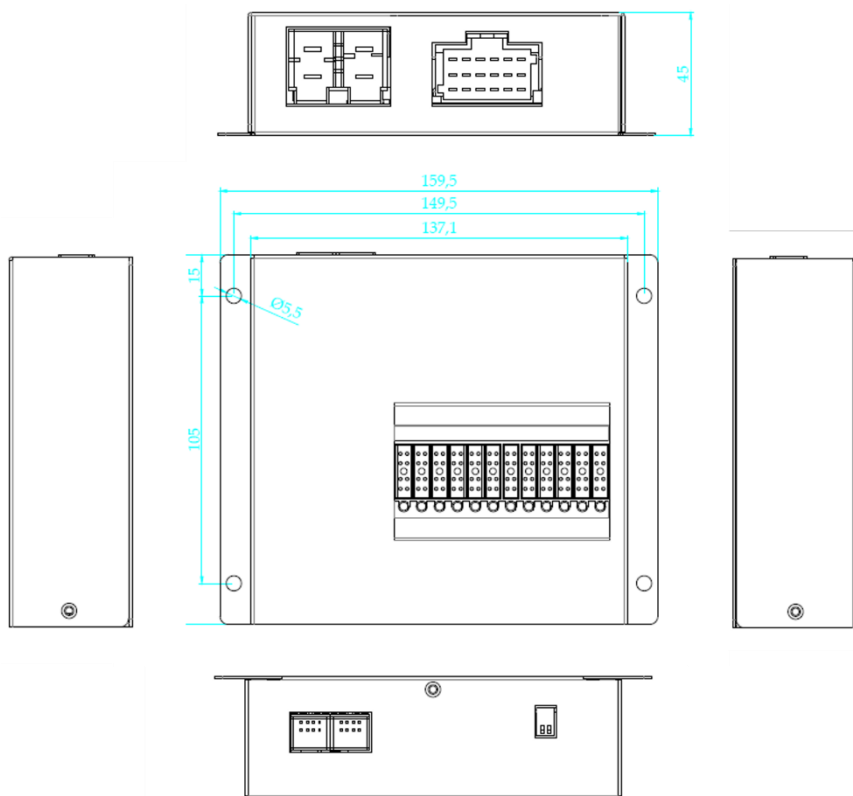


Fig. 2-2 Dimension of C12

3 Product Interface

3.1 Input Terminal Pin definitions



Fig. 3-1 Input Port View

Input Terminal: 0514101 + 0514103

Tab 3-1 Power Input Port Definitions

Pin	Pin Definition	Description	Voltage Range	Remarks
1	BAT+	12V Battery power input positive	9 ~ 16V	Rated current 60A
2	BAT+	12V Battery power input positive	9 ~ 16V	Rated current 60A
3	BAT-	12V Battery power input negative	0	Rated current 60A
4	BAT-	12V Battery power input negative	0	Rated current 60A

Note: The two BAT inputs are connected in parallel. Both channels must be connected simultaneously to support a maximum continuous load of 80 A.

3.2 OUTPUT Terminal Pin definitions

OUTPUT					
C3-1	C3-2A	C3-2B	C3-3A	C3-3B	C3-4
C2-4	C2-2A	C2-1A	OUT4A	OUT3A	OUT1
C2-3	C2-2B	C2-1B	OUT4B	OUT3B	OUT2



Fig. 3-2 Output Port View

Output Terminal: 50033-18Y-6

Tab 3-2 Output Port Definitions

Pin	Pin Definition	Voltage Range	Rated Current	Remark
1	C3-1	9 ~ 16V	Rated current 15A	Combined Current 30A
4	C3-2A	9 ~ 16V	Rated current 15A	
7	C3-2B	9 ~ 16V	Rated current 15A	

Pin	Pin Definition	Voltage Range	Rated Current	Remark
10	C3-3A	9 ~ 16V	Rated current 15A	Combined Current 30A
13	C3-3B	9 ~ 16V	Rated current 15A	
16	C3-4	9 ~ 16V	Rated current 15A	
2	C2-4	9 ~ 16V	Rated current 15A	
3	C2-3	9 ~ 16V	Rated current 15A	
5	C2-2A	9 ~ 16V	Rated current 15A	Combined Current 30A
6	C2-2B	9 ~ 16V	Rated current 15A	
8	C2-1A	9 ~ 16V	Rated current 15A	Combined Current 30A
9	C2-1B	9 ~ 16V	Rated current 15A	
11	OUT4A	9 ~ 16V	Rated current 15A	Combined Current 30A
12	OUT4B	9 ~ 16V	Rated current 15A	
14	OUT3A	9 ~ 16V	Rated current 15A	Combined Current 30A
15	OUT3B	9 ~ 16V	Rated current 15A	
17	OUT1	9 ~ 16V	Rated current 15A	
18	OUT2	9 ~ 16V	Rated current 15A	

Note: The C12 module provides positive-side switching only. Connect the negative terminal of all loads directly to the battery negative (common ground).

3.3 Dry Contact Terminal Pin Definitions

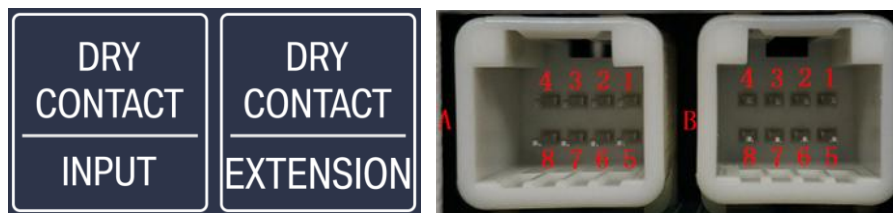


Fig. 3-3 Dry Contact Port View

Dry Contact terminal: 22011-8Y-1

Tab 3-3 Dry Out Port Definitions

Pin	Pin Definition	Description
1	-	-
2	+12V	+12V DC
3	+12V	+12V DC
4	-	-
5	-	-
6	Dry contact 2	High-Level Trigger: Apply 12V to close Dry Contact 2
7	Dry contact 1	High-Level Trigger: Apply 12V to close Dry Contact 1
8	-	-

3.4 Dip Switch Definitions



Fig. 3-4 Dip Switch View

Tab 3-4 Dip Switch Definitions

Pin 1	Pin2	C2 (1~4)	C3 (1~4)	OUT (1~4)
OFF	OFF	Controlled by Dry Contact 1	Controlled by Dry Contact 2	Always Off
OFF	ON	Controlled by Dry Contact 1	Controlled by Dry Contact 2	Controlled by Dry Contact 2
On	OFF	Controlled by Dry Contact 1	Controlled by Dry Contact 2	Controlled by Dry Contact 1
On	On	Controlled by Dry Contact 1 or 2	Controlled by Dry Contact 1 or 2	Controlled by Dry Contact 1 or 2

4 Technical Parameters

Tab 4-1 C12 Technical Parameters

Model	C12
Electrical Performance	
Input Voltage (V)	9~16V
Input Current (A)	Constant 80A, Max 100A
Output Voltage (V)	Voltage: 9~16V
Output Current (A)	Single channel: 15A / Paralleled channels: 30A
Dry contact	2-way dry contacts
Environmental Requirements	
Storage Temperature	-40°C~60°C
Operating Altitude	≤2000m
Structural Design	
Protection Level	IP20
Dimensions (mm)	159.5mm × 135mm ×45 mm
Weight (kg)	0.78kg
Standard	
Certification Requirements	CE: AS/NZS 61000.6.3:2012 E-mark, UN-R10-06