MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7193-4CC30-0AA0

POWER MODULE TERMINAL BASE

Used with the applicable SIMATIC ET 200S TM-P15C23-A1 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens ET 200S terminal-specific excerpt and shared terminal wiring specifications

Terminal modules

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Terminal modules implement the electrical and mechanical connection of the I/O modules with the interface module and the terminating module.

- The inserted I/O module determines the signals to terminals 1 to 16, A3, A4, A7, A8, A11, A12, A15, A16.
- Depending on the selected terminal module, only specific terminals are available.

Select the required terminal module based on the potentials required by your application. For more information on the signal assignment see the *ET 200S Distributed I/O System* manual in the description of the specific I/O module.

An AUX(iliary) bus AUX1 is integrated into the terminal modules. Any desired potential (up to 230 VAC) can be applied there. You can set the AUX(iliary) bus individually:

- As a protective conductor bar
- For additionally required voltage

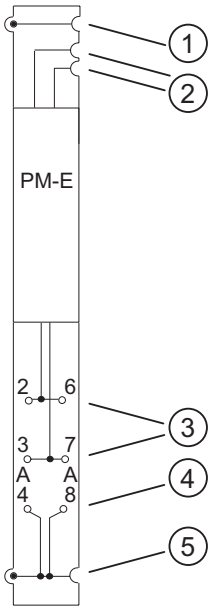
1.1 Terminal module TM-P15S23-A1, TM-P15C23-A1 and TM-P15N23-A1 (6ES7193-4CCx0-0AA0)

Properties

- Terminal module for power modules
- Infeed for a new potential group up to the next TM-P terminal module
- Available in two variants: screw terminal, spring terminal, "fast connect" quick connection method without stripping
- The signal assignment of the AUX1 bus is specified by the feed to the power module of this potential group.
- Pass-through AUX1 bus with electrical connection to the next potential group to the left
- Access to the AUX1 potential through terminals A4 and A8

Block diagram

Block diagram of the TM-P15S23-A1, TM-P15C23-A1, and TM-P15N23-A1 terminal modules



(1) Backplane bus

(2) Infeed of the power buses to the electronic modules

(3) Terminals with connection to the power module

(4) Use of terminals A4 and A8 as protective conductor terminals or potential terminals of any kind

(5) Infeed of the AUX1 bus by means of terminals A4 and A8

TM-P15x23-A1 Technical Specifications (6ES7193-4CCx0-0AA0)

Dimensions and Weight	
Dimensions W × H × D (mm)	
• Screw-type/spring terminals	15 × 132 × 43
• Fast Connect	15 × 162 × 43
Weight	Approx. 65 g

3.9 Wiring the ET 200S

3.9.1 Wiring rules for the ET 200S

Wiring rules for:		Interface voltage (supply voltage)	Terminal modules (spring and screw-type terminals)	Terminal modules (Fast Connect)
Connectable wire cross-sections for rigid lines		No	0.14 to 2.5 mm^2	0.5 to 1.5 mm^2
Connectable wire cross-sections for flexible lines	Without wire end ferrule	0.25 to 2.5 mm^2	0.14 to 2.5 mm^2	0.5 to 1.5 mm^2
	With wire end ferrule	0.25 to 1.5 mm^2	0.14 to 1.5 mm^2	---
Number of wires per connection		1 or a combination of 2 wires up to 1.5 mm^2 (sum) in a common wire end ferrule		1
Maximum external diameter of the wire's insulation		∅ 3.8 mm	∅ 3.1 mm at 1.5 mm^2 ∅ 3.8 mm at 2.5 mm^2	∅ 3.2 mm at 1.5 mm^2
Stripping length of the wires		11 mm		---
Wire end ferrules to DIN 46228	Without insulating collar	Form A, 8 to 12 mm long	Form A, up to 12 mm long	---
	With insulating collar 0.25 to 1.5 mm^2	Form B, up to 12 mm long		---

3.9.2 Wiring a terminal module with screw-type terminals

Features

In terminal modules with screw-type terminals, the individual wires are screwed into the terminal.

No wire end ferrules are required.

Prerequisites

Adhere to the wiring rules.

Tool required

3 mm screwdriver

Wiring a terminal module with a screw-type terminal

To wire a terminal module with a screw-type terminal, follow these steps:

1. Strip 11 mm (0.43 in) of insulation from the wires.
2. Insert the individual wires in the terminal.
3. Screw the ends of the individual wires onto the terminal module (torque: 0.4...0.7 Nm).

3.9.3 Wiring a terminal module with spring terminals

Features

In terminal modules with spring terminals, the individual wires are held securely when you simply insert them in the terminal.

Prerequisites

Adhere to the wiring rules.

Tool required

3 mm screwdriver

Wiring a terminal module with spring terminals

To wire a terminal module with a spring terminals, follow these steps:

1. Strip 11 mm (0.43 in) of insulation from the wires.
2. Insert the screwdriver in the upper (round) opening of the terminal.
3. Insert the wire until it stops in the lower (square) opening of the terminal.
4. Release the terminal by pushing the screwdriver into the opening.
5. Push the wire into the released spring terminal, and pull the screwdriver out.

