

Product Information

# S7-Compact-PLC

# CC303V



(valid from version CC303V-xxx-**03**)

## Changes to older versions of this document

**Rev. 02** → **03**: description of Profibus-signals made compatible to Siemens-manuals  
**Rev. 03** → **04**: new design line, connectors added

## Description

Compact-PLC for 35mm DIN-rail

- **CC303V** with 3 slots for periphery

### Standard configuration:

- **RS232** with
  - free ASCII-protocol
- **RS485** with
  - free ASCII-protocol
  - Modbus RTU
  - with switchable terminate resistors for RS485
- **Ethernet** with
  - RFC1006,
  - Send/ Receive via TCP and UDP,
  - Modbus TCP
- **CAN** with
  - protocol compatible to CANopen®
  - layer2-communication
  - with switchable terminate resistors for CAN

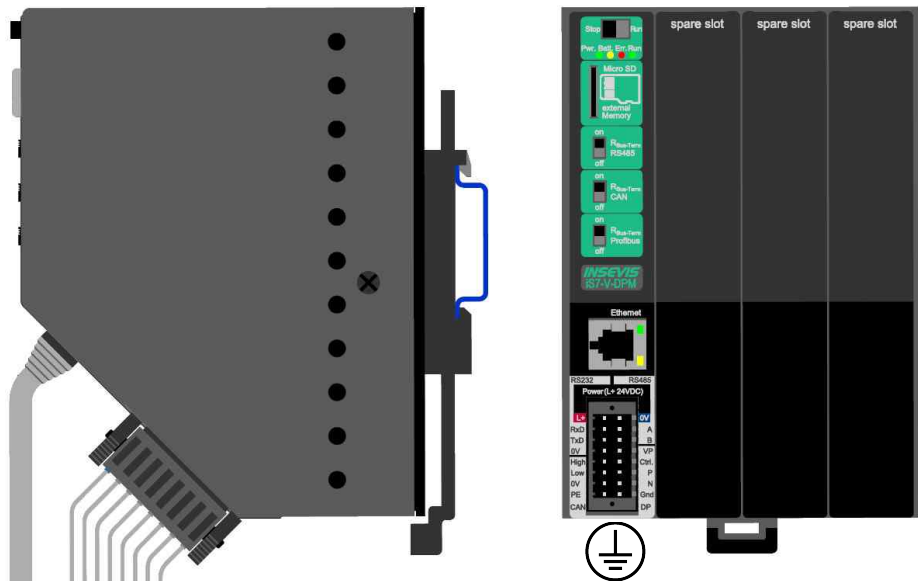


Figure above: Compact-PLC CC303V rear view and view from the side

- **Micro-SD-slot**
  - for SD-cards up to 8 GByte

- **Run/Stop-switch**

- **Status LEDs** for Power, Battery, Error, Run

- **Inserting stripes** for Logo and identification (thereby customized adaption possible easy)

### optional configuration:

- (optional)
- **Profibus DP-Master**
- **Profibus DP-Slave**
- with switchable terminate resistors for Profibus

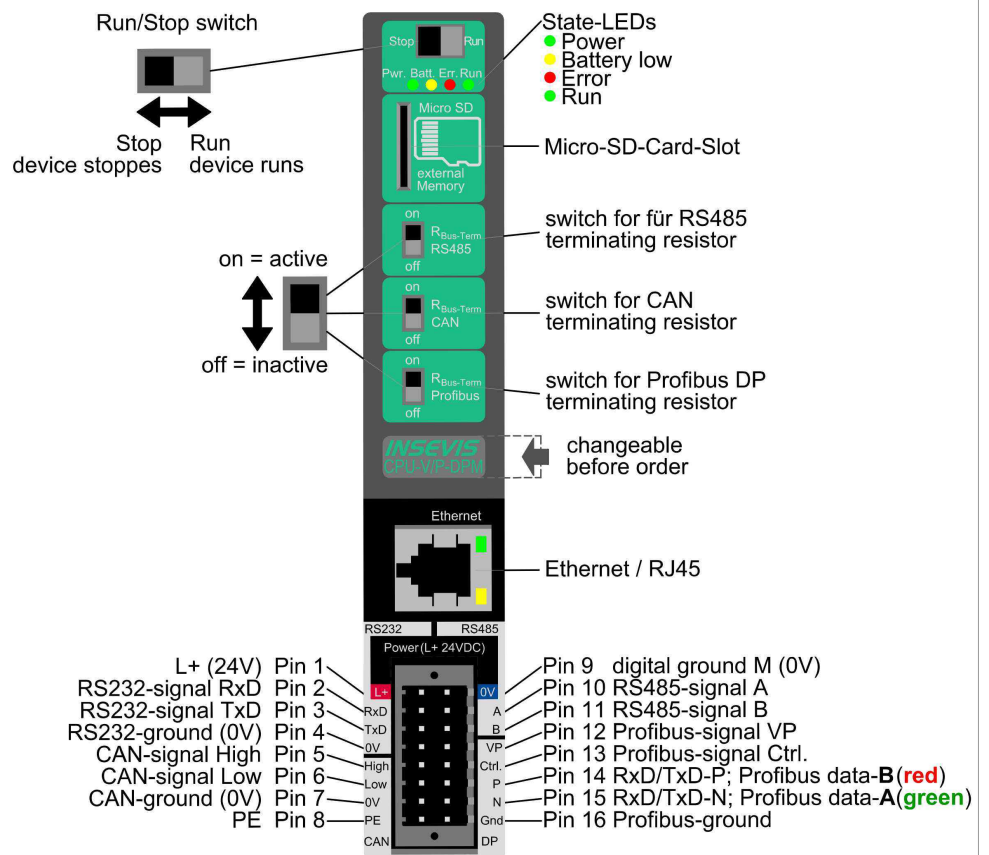


Figure above: Identification of all CPUs of all CompactPLCs devices with periphery slots, with CPU-type V and with Profibus DP Master

Technical data	
Dimensions W x H x D (mm) Weight	80 x 116,5 x 92 ca. 400g
Mounting IP-leak protection class	to clip on a 35mm DIN-rail IP41
Operating temperature range Storage temperature range	-20°C ... +60°C (without condensation) -30°C ... +80°C
Connection technology	connector with pin-marked pushers and 2 lift-arms or 2x bolt flanges on side (cage clamp technology) for cross sections up to max. 1,5mm <sup>2</sup>
Load voltage L+	24V DC (11 ... 30V DC)
Current consumption Power dissipation	20 mA ... 485 mA 0,5 W (typ.), 10 W (max.)
Technical data CPU	
CPU-type	<b>Type V (CC303V)</b>
Working memory = battery backed load memory Diagnostic buffer	512kB, thereof 256 kByte remanent data 100 messages (all remanent)
Internal flash memory External flash memory	4 MByte Micro SD, up to max. 8 GByte (not necessary for operation)
OB, FC, FB, DB Lokal data Number of in- and outputs Process image Number of Merkerbytes Number of Taktmerker Number of timer, counter Depth of nesting	each 1.024 32kByte (2kByte per block) in each case 2.048 Byte (16.384 Bit) adressable in each case 2.048 Byte (default set is 128 Byte) 2.048 (remanence adjustable, default set is 0..15) 8 (1 Merkerbyte) in each case 256 (each remanence adjustable, default set is 0) up to 16 code blocks
Real-time clock elapsed hour counter	yes (accumulator-backed hardware clock) 1 (32Bit, resolution 1h)
Program language Program system	STEP 7® - AWL, KOP, FUP, S7-SCL, S7-Graph from SIEMENS SIMATIC® Manager from SIEMENS or compatible products
Operating system Program unit to reference	compatible to S7-300® from SIEMENS CPU 315-2PNDP
Serial interfaces (protocols)	COM1: RS 232 (free ASCII) COM2: RS 485 (free ASCII, Modbus-RTU)
Ethernet (protocols)	Ethernet: 10/100 Mbit with CP343 functionality (RFC1006, TCP, UDP, Modbus-TCP)
CAN (protocols)	CAN-Telegramms (Layer 2), compatible to CANopen® MasterSlave 10 kBaud ... 1 MBaud
Profibus (protocols)	Profibus DP V0 master/ slave 9,6kBaud ... 12 MBaud
Onboard periphery	3 free slots for INSEVIS-periphery modules
Decentral periphery	- INSEVIS- Periphery (with automatic configuration via „ConfigStage“) - all CANopen® Slaves according to DS401 - all Profibus DP-V0-slaves - diverse external periphery families

## Ordering data devices

Identification	Standard	with Profibus DP Master	with Profibus DP Slave
S7-Compact-PLC <b>CC303V</b>	CC303V-0-03	CC303V-DPM-03	CC303V-DPS-03

## Ordering data accessoires

Identification / Order-No.	Identification / Order-No.
Periphery module <b>DI16</b> / PM-DI16-02	Periphery module <b>AI8O2</b> / PM-AI8O2-02
Periphery module <b>DIO16</b> / PM-DIO16-02	Periphery module <b>AI4O4</b> / PM-AI4O4-02
Periphery module <b>DO-4R</b> / PM-DO4R-02	Periphery module <b>RTD8O2</b> / PM-RTD8O2-02
Functional module <b>DIO8-Z</b> (configurations reg. catalog)	Periphery module <b>E-MESS UI</b> / PM-E-MESS UI-02
Periphery module <b>MIO84</b> / PM-MIO84-02	
Connector 2x8pin (for PLC) / E-CON(S)16-00	Connector 1x8pin (for DO4R) / E-CON8-00
Connector 2x10pin (for digital PM) / E-CON(S)20D-00	Shield cable support for CC307V / E-CONPEC7-00 / <i>on request only</i>
Connector 2x10pin (for analog PM) / E-CON(S)20A-00	Grounding loop * (PU 10pcs.) / E-MNT-00
Micro SD-card 1GB (external memory) / E-MSD1-00	Micro SD-card 4GB (external memory) / E-MSD4-00
Micro SD-card 2GB (external memory) / E-MSD2-00	Micro SD-card 8GB (external memory) / E-MSD8-00
OEM-Inserting stripe V for logo and identification for rear side (PU100 pcs.)	Profibus-adapter for 12MBaud-nets / E-AD-DP12

\* (1x already part of first deliveries scope)

### Qualified personnel

All devices described in this manual may only be used, built up and operated together with this documentation. Installation, initiation and operation of these devices might only be done by instructed personnel with certified skills, who can prove their ability to install and initiate electrical and mechanical devices, systems and current circuits in a generally accepted and admitted standard.

### Manuals, sample programs

Additional documentation by manuals is available as well sample applications at the download area of [www.insevis.com](http://www.insevis.com) in English language for free download.

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