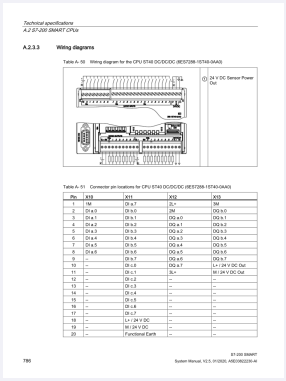
FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Siemens 6ES7288-1ST40-0AA0

CPU ST40 DC/DC/DC


Technical specifications
A.2 S7-200 SMART CPUs

A.2.3.3 Wiring diagrams

Table A- 50 Wiring diagram for the CPU ST40 DC/DC/DC (6ES7288-1ST40-0AA0)

① 24 V DC Sensor Power Out

Table A- 51 Connector pin locations for CPU ST40 DC/DC/DC (6ES7288-1ST40-0AA0)

Pin	X10	X11	X12	X13
1	1M	DI a.7	DI.+	3M
2	DI a.0	DI b.0	2M	DQ b.0
3	DI a.1	DI b.1	DQ a.0	DQ b.1
4	DI a.2	DI b.2	DQ a.1	DQ b.2
5	DI a.3	DI b.3	DQ a.2	DQ b.3
6	DI a.4	DI b.4	DQ a.3	DQ b.4
7	DI a.5	DI b.5	DQ a.4	DQ b.5
8	DI a.6	DI b.6	DQ a.5	DQ b.6
9	--	DI b.7	DQ a.6	DQ b.7
10	--	DI c.0	DQ a.7	L+ / 24 V DC Out
11	--	DI c.1	1L+	M / 24 V DC Out
12	--	DI c.2	--	--
13	--	DI c.3	--	--
14	--	DI c.4	--	--
15	--	DI c.5	--	--
16	--	DI c.6	--	--
17	--	DI c.7	--	--
18	--	L+ / 24 V DC	--	--
19	--	M / 24 V DC	--	--
20	--	Functional Earth	--	--

780

S7-200 SMART
System Manual, V2.5, 01/2020, A5E03822230-AI

PRODUCT	6ES7288-1ST40-0AA0
FAMILY	SIMATIC S7-200 SMART
FUNCTION	CPU ST40 DC/DC/DC
STATUS	Verify exact configuration

Prepared by Amikon Limited from Siemens S7-200 SMART V2.5, A5E03822230-AI, 01/2020. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

CPU supply voltage	24 V DC nominal; 20.4 to 28.8 V DC
Integrated digital inputs	24 sinking or sourcing inputs
Integrated digital outputs	16 sourcing MOSFET outputs
Program memory	24 KB
User data memory	16 KB
Retentive memory	10 KB maximum
Local expansion capacity	6 expansion modules and 1 signal board maximum

02 MOUNTING AND CONNECTION

- Isolate power to the CPU and all associated input, output and expansion equipment.
- Secure the CPU on the specified rail or panel and preserve the expansion-module order.
- Identify X11 pins18 and19 as the incoming 24 V DC supply and X13 pins10 and11 as sensor supply output.
- Check sourcing-output group wiring, the 0.5 A point limit and 6 A common limit; provide external protection.
- Confirm pulse and counter terminal assignments against the saved project and exact ST40 pin map.

03

OFFICIAL INSTALLATION REFERENCE

A.2.3.3 Wiring diagrams

Table A- 50 Wiring diagram for the CPU ST40 DC/DC/DC (6ES7288-1ST40-0AA0)

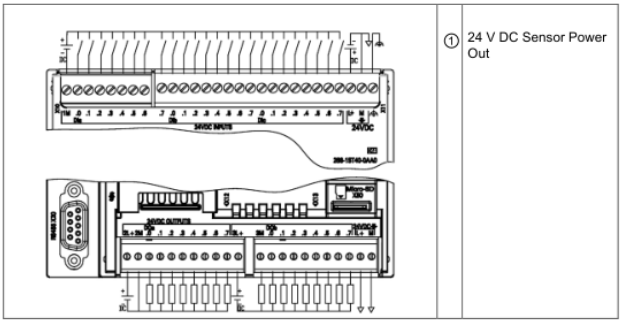


Table A- 51 Connector pin locations for CPU ST40 DC/DC/DC (6ES7288-1ST40-0AA0)

Pin	X10	X11	X12	X13
1	1M	DI a.7	2L+	3M
2	DI a.0	DI b.0	2M	DQ b.0
3	DI a.1	DI b.1	DQ a.0	DQ b.1
4	DI a.2	DI b.2	DQ a.1	DQ b.2
5	DI a.3	DI b.3	DQ a.2	DQ b.3
6	DI a.4	DI b.4	DQ a.3	DQ b.4
7	DI a.5	DI b.5	DQ a.4	DQ b.5
8	DI a.6	DI b.6	DQ a.5	DQ b.6
9	--	DI b.7	DQ a.6	DQ b.7
10	--	DI c.0	DQ a.7	L+ / 24 V DC Out
11	--	DI c.1	3L+	M / 24 V DC Out
12	--	DI c.2	--	--
13	--	DI c.3	--	--
14	--	DI c.4	--	--
15	--	DI c.5	--	--
16	--	DI c.6	--	--
17	--	DI c.7	--	--
18	--	L+ / 24 V DC	--	--
19	--	M / 24 V DC	--	--
20	--	Functional Earth	--	--

Official manufacturer reference reproduced from Siemens S7-200 SMART V2.5, A5E03822230-AI, 01/2020. Use the current source document and all referenced drawings and notes for installation.

04 CABLE ROUTING AND CONNECTION

- Secure the CPU on the specified rail or panel and preserve the expansion-module order.
- Identify X11 pins18 and19 as the incoming 24 V DC supply and X13 pins10 and11 as sensor supply output.
- Check sourcing-output group wiring, the 0.5 A point limit and 6 A common limit; provide external protection.
- Confirm pulse and counter terminal assignments against the saved project and exact ST40 pin map.
- Commission the configured I/O and communication tasks with independent protective functions in place.

05 INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Verify firmware, I/O assignments, output loading and all configured communication tasks.
- Record the installed order number and baseline operating condition.

06 CONTROLLED DOCUMENTS

Official source	Siemens S7-200 SMART V2.5, A5E03822230-AI, 01/2020
Product record	6ES7288-1ST40-0AA0
Manufacturer	Siemens
Support	INFO@AMIKON.CN