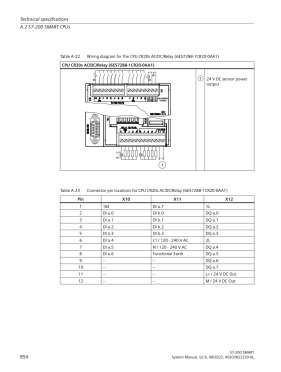
FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Siemens 6ES7288-1CR20-0AA1

CPU CR20s Compact Controller



PRODUCT	6ES7288-1CR20-0AA1
FAMILY	SIMATIC S7-200 SMART
FUNCTION	CPU CR20s Compact Controller
STATUS	Verify exact configuration

Prepared by Amikon Limited from Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Supply operating range	85 to 264 V AC or 77 to 138 V DC
AC supply frequency	47 to 63 Hz
Onboard digital inputs	12; sink/source, nominal 24 V DC
Relay outputs	8 dry contacts; up to 2 A per point
Relay switching frequency	1 Hz maximum
Program memory	12 KB
User data memory	8 KB

02 MOUNTING AND CONNECTION

- Isolate the controller supply and all separate relay load circuits using the approved maintenance procedure.
- Mount the CPU using the documented panel or DIN-rail arrangement and maintain the specified installation clearances.
- Use the exact CR20s diagram for supply, functional earth, input common and the two relay commons.
- Do not connect an external supply in parallel with the CPU sensor power output; verify the sensor load budget.
- Configure the serial connection and restore the checked project, I/O assignments and retentive ranges.

03

OFFICIAL INSTALLATION REFERENCE

Technical specifications
A.2 S7-200 SMART CPUs

Table A-22 Wiring diagram for the CPU CR20s AC/DC/Relay (6ES7288-1CR20-0AA1)

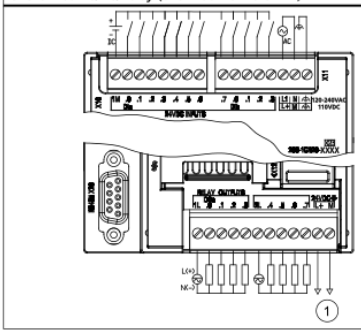
CPU CR20s AC/DC/Relay (6ES7288-1CR20-0AA1)	
	① 24 V DC sensor power output

Table A-23 Connector pin locations for CPU CR20s AC/DC/Relay (6ES7288-1CR20-0AA1)

Pin	X10	X11	X12
1	1M	DI a.7	1L
2	DI a.0	DI b.0	DQ a.0
3	DI a.1	DI b.1	DQ a.1
4	DI a.2	DI b.2	DQ a.2
5	DI a.3	DI b.3	DQ a.3
6	DI a.4	L1 / 120 - 240 V AC	2L
7	DI a.5	N / 120 - 240 V AC	DQ a.4
8	DI a.6	Functional Earth	DQ a.5
9	--	--	DQ a.6
10	--	--	DQ a.7
11	--	--	L+ / 24 V DC Out
12	--	--	M / 24 V DC Out

Official manufacturer reference reproduced from Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023. Use the current source document and all referenced drawings and notes for installation.

04 CABLE ROUTING AND CONNECTION

- Mount the CPU using the documented panel or DIN-rail arrangement and maintain the specified installation clearances.
- Use the exact CR20s diagram for supply, functional earth, input common and the two relay commons.
- Do not connect an external supply in parallel with the CPU sensor power output; verify the sensor load budget.
- Configure the serial connection and restore the checked project, I/O assignments and retentive ranges.
- Test input states, relay loads, serial communication and controlled restart behavior before returning the machine to service.

05 INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Test the actual discrete control sequence, serial communication and restart behavior.
- Record the installed order number and baseline operating condition.

06 CONTROLLED DOCUMENTS

Official source	Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023
Product record	6ES7288-1CR20-0AA1
Manufacturer	Siemens
Support	INFO@AMIKON.CN