

Notes on the CE Marking of SIMATIC S5

**EC EMV Directive
89/336/EEC**



The following applies for the SIMATIC products described in this manual:

Our products meet the requirements and protection guidelines of the following EC Directive and comply with the harmonized European standards (EN) issued in the Official Journal of the Communities with regard to programmable controllers:

- 89/336/EEC "Electromagnetic Compatibility" (EMC Directive)
- 73/23/EEC "Electrical Equipment Designed for Use between Certain Voltage Limits" (Low-Voltage Directive)

The declarations of conformity are held at the address below, when they can be obtained if and when required by the respective authorities:

Siemens Aktiengesellschaft
Bereich Automatisierungstechnik
AUT E 14
Postfach 1963
D-92209 Amberg
Federal Republic of Germany

Area of Application

SIMATIC products have been designed for use in the industrial area and meet the following requirements:

Area of Application	Requirements:	
	Emitted interference	Immunity
Industry	EN 50081-2 : 1993	EN 50082-2 : 1995

SIMATIC products can also be used in the domestic environment (household, business and trade area, small plants) with individual approval.

Area of Application	Requirements:	
	Emitted interference	Immunity
Domestic	Individual approval	EN 50082-1 : 1992

You must acquire the individual approval from the respective national authority or testing body.

Observing the Installation Guidelines

SIMATIC products meet the requirements if you:

1. Observe the installation guidelines described in the manual when installing and operating the equipment.
2. Observe, in addition, the following rules regarding installing the devices and working on switching cabinets and the notes on the individual modules.

Installing the Devices

Programmable controllers of the SIMATIC S5-90U, S5-95U/F and S5-100U range must be installed in electrical equipment rooms in closed housings (for example, metal or plastic switchboxes).

Programmable controllers of the SIMATIC S5-115U/H/F range must be installed in grounded, closed metal housings (for example, switching cabinets).

Working on Switching Cabinets

In order to protect the modules from static electrical discharge, operating personnel discharge themselves of static electricity before opening switching cabinets or switchboxes.

Notes on the Individual Modules

Additional measures are required when using the following modules.

Order Number	Module	Measures Required
6ES5 252-3AA13	Closed-loop control module	Signal lines must be shielded. Apply shield of the AI/AQ lines at the plug connector and on the shielding bar. Apply the shield of the tacho lines only on the shielding bar at the entrance to the cabinet.
6ES5 266-8MA11	Positioning module	When using the IP 266, the controller must be installed in a grounded, closed metal housing.
6ES5 430-8MB11	Digital input module	When using the DI 430, the controller must be installed in a grounded, closed metal housing. Signal lines must be shielded. Apply the shield of the signal lines on the shielding bar at the entrance to the cabinet.
6ES5 385-8MA11	Counter module	Signal lines must be shielded. Apply the shield of the signal lines on the shielding bar at the entrance to the cabinet.
6ES5 453-7LA11	Digital output module	
6ES5 454-7LB11	Digital output module	
6ES5 482-7LF11	Digital input/output module	
6ES5 482-7LF21	Digital input/output module	
6EW1 380-4AB01	Load current supply module	A filter must be installed in the supply cable (SIFI C, B84113-C-B30 or equivalent).

Updated Technical Specifications

Contrary to the information in the ‘General Technical Specifications’ of the manual, the EMC specifications listed below apply for modules bearing the CE marking.

The specifications are only valid for devices installed in accordance with the installation guidelines named above.

Electromagnetic Compatibility Specifications	Test Values
Immunity to static electrical discharge tested in accordance with EN 61000-4-2	Discharge to air 8 kV Discharge on contact 4 kV
Immunity to electromagnetic fields tested in accordance with EN V 50140 (amplitude-modulated HF)	80 to 1000 MHz 10 V/m 80% AM (1kHz)
tested in accordance with EN V 50204 (pulse-modulated HF)	900 MHz 10 V/m 50% ED, 200 Hz repetition frequency
Immunity to fast transient bursts tested in accordance with EN 61000-4-4 Supply lines for 120/230 V AC Supply lines for 24 V DC Signal lines (I/O and bus lines)	2 kV 2 kV 2 kV*
Immunity to high frequency tested in accordance with EN V 50141	0.15 to 80 MHz 10 V 80% AM (1kHz) Source impedance 150 Ω
Emitted interference tested in accordance with EN 55011 Emission of electromagnetic fields Emitted interference over supply cable	Limit value class A, Group 1 Limit value class A, Group 1

* Signal lines that are not used for process control, for example, connections to external printers: 1 kV