

CERTIFICATE

(1) Type Examination

(2) **Product intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) Type Examination Certificate Number: **DEKRA 12ATEX0038 X** Issue Number: **17**

(4) Product: **Programmable Logic Controller Systems SIMATIC ET 200SP, Modules Type 6ES7 ...**

(5) Manufacturer: **Siemens AG**

(6) Address: **Werner-von-Siemens-Strasse 50, 92224 Amberg, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential test report no. 215296100, issue 17.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012 + A11 : 2013

EN 60079-15 : 2010

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and construction of the specified product and not to the manufacturing process and its monitoring.

(12) The marking of the product shall include the following:



II 3 G

Ex nA IIC T4 Gc

Date of certification: **23 August 2016**

DEKRA Certification B.V.

R. Schuller
Certification Manager

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(15) **Description**

Modules Type 6ES7 ... for use in SIMATIC ET 200SP Programmable Logic Controller Systems.

The type code, the ambient temperature range and the temperature class of the modules shall be taken from **Table 1**.

Electrical data

The electrical data of the supply and the input and output circuits shall be taken from **Table 1**.

Installation instructions

The manual provided with the equipment shall be followed in detail to assure safe operation.

(16) **Report Number**

No. 215296100, issue 17.

(17) **Specific conditions of use**

1. The modules shall be installed in a suitable enclosure providing a degree of protection of at least IP54 according to EN 60079-15, taking into account the environmental conditions under which the equipment will be used.
2. Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 119 V.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 215296100, issue 17.

(20) **Certificate history**

Issue 1 - 215296100	Initial certificate
Issue 2 ... 16 -	Revised construction and Addition of modules
Issue 17 - 219651200	Addition of modules

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Table 1

Description	Type/MLFB No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
Base Unit	6ES7 193-6BP00-a	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Base Unit	6ES7 193-6BP20-aaAa	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Base Unit	6ES7 193-6BP40-a	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Interface Module IM 155-6 PN ST	6ES7 155-6AU00-aBaa	T4	0...+60°C	supply 24 Vdc, 340mA at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
BA 2x RJ 45 Busadapter	6ES7 193-6AR00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
Servermodule	6ES7 193-6PA00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
8DI, 24Vdc ST	6ES7 131-6BF00-aBaa	T4	0...+60°C	supply - 24 Vdc, 750 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
16DI, 24Vdc ST	6ES7 131-6BH00-a	T4	0...+60°C	supply - 24 Vdc, 90 mA Inputs - 24 Vdc, 16 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8DQ, 24Vdc/0,5A ST	6ES7 132-6BF00-aBaa	T4	0...+60°C	supply - 24 Vdc, 4 A Outputs - 24 Vdc, 8 channels 0.5 A p.d. / 0.5 A res. / 5 W tung. at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
16DQ, 24Vdc/0,5A ST	6ES7 132-6BH00-a	T4	0...+60°C	supply - 24 Vdc, 8 A Outputs - 24 Vdc, 8 channels 0.5 A p.d. / 0.5 A res. / 5 W tung. at 40°C to 60°C: 8 A to 4 A horizontally mounted at 30°C to 50°C: 8 A to 4 A vertically mounted	24Vdc
4DQ, 24Vdc/2A ST	6ES7 132-6BD20-aBaa	T4	0...+60°C	supply - 24 Vdc, 8 A Outputs - 24 Vdc, 4 channels 2 A p.d. / 2 A res. / 10 W tung. at 40°C to 60°C: 8 A to 4 A horizontally mounted at 30°C to 50°C: 8 A to 4 A vertically mounted	24Vdc
4AI, I 2-/4-wire ST	6ES7 134-6GD00-a	T4	0...+60°C	supply - 24 Vdc, 117 mA 4 Input channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
4AI, U / I 2-wire ST	6ES7 134-6HD00-a	T4	0...+60°C	supply - 24 Vdc, 117 mA 4 Input channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
4AI, RTD/TC 2-/3-/4-wire HF	6ES7 134-6JD00-a	T4	0...+60°C	supply - 24 Vdc, 35 mA 4 Input channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
4AQ, 4 x U / I ST	6ES7 135-6HD00-a	T4	0...+60°C	supply - 24 Vdc, 150 mA 4 Output channels at 40°C to 60°C: 4 to 2 channel horizontally mounted at 30°C to 50°C: 4 to 2 channel vertically mounted	24Vdc
CM PtP	6ES7 137-6AA00-a	T4	0...+60°C	supply - 24 Vdc, 29 mA at 30°C to 60°C: 4 to 1 channel horizontally mounted at 20°C to 50°C: 4 to 1 channel vertically mounted	24Vdc
Base Unit	6ES7 193-6BP20-aaB0	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Base Unit	6ES7 193-6BP20-aaCa	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
BA 2x FC Busadapter	6ES7 193-6AF00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-

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8DI, 24Vdc HF	6ES7 131-6BF00-aCaa	T4	0...+60°C	supply - 24 Vdc, 760 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8DQ, 24Vdc/0,5A HF	6ES7 132-6BF00-aCaa	T4	0...+60°C	supply - 24 Vdc, 4 A Outputs - 24 Vdc, 8 channels 0.5 A p.d. / 0.5 A res. / 5 W tung. at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
IO-Link Master	6ES7 137-6BD00-a	T4	0...+60°C	supply - 24 Vdc Input current - 1,25 A 4 channels (IO-Link or DI or DO) Output channels - 0.1 A per channel at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8 F-DI, 24Vdc HF	6ES7 136-6BA00-a	T4	0...+60°C	supply - 24 Vdc, 900 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
4F-DQ, 24Vdc/2A PM HF	6ES7 136-6DB00-a	T4	0...+60°C	supply - 24 Vdc, 6.1 A Outputs - 24 Vdc, 4 channels 2 A p.d. / 2 A res. / 10 W tung. at 50°C: 4 A total load vertically mounted at 60°C: 4 A total load horizontally mounted at 50°C: 5 A total load horizontally mounted at 40°C: 6 A total load horizontally mounted	24Vdc
F-PM-E, 24Vdc / 10A PPM	6ES7 136-6PA00-a	T4	0...+60°C	supply - 24 Vdc, 8.7 A Inputs - 24 Vdc, 2 channels Outputs - 24 Vdc, 1 channel 8 A p.d. / 8 A res. at 50°C: 4 A total load vertically mounted at 60°C: 4 A total load horizontally mounted at 50°C: 6 A total load horizontally mounted at 40°C: 8 A total load horizontally mounted	24Vdc
IM 151-9F PN CPU	6ES7 151-9FB00-a	T4	0...+60°C	supply - 24 Vdc, 670 mA at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
AI 2xU/I 2-4wire HS	6ES7 134-6HB00-aDaa	T4	0...+60°C	supply - 24 Vdc, 39 mA 2 Input channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
AQ 2xU/I HS	6ES7 135-6HB00-aDaa	T4	0...+60°C	supply - 24 Vdc, 90 mA 2U/I-Output channels At 0°C to 50°C: 2 I-channels horizontally mounted At 50°C to 60°C: 1 I-channel horizontally mounted At 0°C to 40°C: 2 I-channels vertically mounted At 40°C to 50°C: 1 I-channel vertically mounted At 0°C to 55°C: 2 U-channels horizontally mounted At 55°C to 60°C: 1 U-channel horizontally mounted At 0°C to 45°C: 2 U-channels vertically mounted At 45°C to 50°C: 1 U-channel vertically mounted	24Vdc
Interface module IM 155-6 PN HF	6ES7 155-6AU00-aCaa	T4	0...+60°C	supply - 24 Vdc, 700 mA at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Interface module IM 155-6 DP HF	6ES7 155-6BU00-a	T4	0...+60°C	supply - 24 Vdc, 250 mA at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Technology Module TM Count 1x24V	6ES7 138-6AA00-a	T4	0...+60°C	supply - 24 Vdc, 1.4 A Inputs - 24 Vdc, 3 channels Outputs - 24 Vdc, 2 channel 0.5 A p.d. / 0.5 A resistive / 5W tungsten At 50°C: 1 A total load vertically mounted At 60°C: 0.5 A total load horizontally mounted At 55°C: 1 A total load horizontally mounted	-
8DI, 24Vdc SRC BA	6ES7 131-6BF60-a	T4	0...+60°C	supply - 24 Vdc, 68 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8DQ, 24Vdc/0,5A SINK BA	6ES7 132-6BF60-a	T4	0...+60°C	supply - 24 Vdc, 4 A Outputs - 24 Vdc, 8 channels 0.5 A p.d. / 0.5 A res. / 5 W tung. at 50°C vertically mounted at 60°C horizontally mounted	24Vdc

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8DI NAMUR HF	6ES7 131-6TF00-a	T4	0...+60°C	supply - 24 Vdc, 70 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
4DQ, 24Vdc/2A HF	6ES7 132-6BD20-aCaa	T4	0...+60°C	supply - 24 Vdc, 8 A Outputs - 24 Vdc, 4 channels 2 A p.d. / 2 A res. / 10 W tung. at 40°C to 60°C: 8 A to 4 A horizontally mounted at 30°C to 50°C: 8 A to 4 A vertically mounted	24Vdc
AI 2xU/I 2-4wire HF	6ES7 134-6HB00-aCaa	T4	0...+60°C	supply - 24 Vdc, 240 mA 2 Input channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8AI, RTD/TC 2-wire HF	6ES7 134-6JF00-a	T4	0...+60°C	supply - 24 Vdc, 35 mA 8 Input channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
AQ 2xU/I HF	6ES7 135-6HB00-aCaa	T4	0...+60°C	supply - 24 Vdc, 90 mA 2U/I-Output channels at 0°C to 45°C: 2 I-channels horizontally mounted at 45°C to 50°C: 1 I-channel horizontally mounted at 0°C to 40°C: 2 I-channels vertically mounted at 40°C to 50°C: 1 I-channel vertically mounted at 0°C to 50°C: 2 U-channels horizontally mounted at 50°C to 60°C: 1 U-channel horizontally mounted at 0°C to 55°C: 2 U-channels vertically mounted at 55°C to 60°C: 1 U-channel vertically mounted	24Vdc
Technology Module TM PosInput1	6ES7 138-6BA00-a	T4	0...+60°C	supply - 24 Vdc, 1.4 A Inputs - 24 Vdc, 2 channels Outputs - 24 Vdc, 2 channels 0.5 A p.d. / 0.5 A resistive / 5W tungsten at 50°C: 1 A total load vertically mounted at 60°C: 0.5 A total load horizontally mounted at 55°C: 1 A total load horizontally mounted	24Vdc
BA 2x SRC Busadapter	6ES7 193-6AP00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
Base Unit	6ES7 193-6BP20-aaB1	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Base Unit	6ES7 193-6BP20-aaFa	T4	0...+60°C	supply 24 Vdc, 10 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
BA Send (2xFC)	6ES7 193-6AS00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
BU Send (Base Unit)	6ES7 193-6BN00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1510	6ES7 510-1DJ00-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1510F	6ES7 510-1SJ00-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1512	6ES7 512-1DK00-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1512F	6ES7 512-1SK00-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CM - DP	6ES7 545-5DA00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Technology Module TM Timer DI/DQ 10x24V	6ES7 138-6GC00-a	T4	0...+60°C	supply - 24 Vdc, 3.5 A Inputs - 24 Vdc, 4 channels Outputs - 24 Vdc, 6 channels 0.5 A p.d. / 0.5 A resistive / 5W tungsten Total load 3 A at 35°C to 50°C: 3.5 A to 1.2 A total load vertically mounted at 45°C to 60°C: 3.5 A to 1.2 A total load horizontally mounted	24Vdc

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CPU 1515SP PC 2GB (Embedded controller)	6ES7 677-2AA30-a	T4	0...+60°C	supply - 24 Vdc, 1.5 A At 0°C to 55°C: max. 64 modules, 2x 0,5A and 0,1A USB-load, horizontally mounted At 0°C to 60°C: max. 32 modules, 0,3A USB-load, horizontally mounted At 0°C to 50°C: max. 32 modules, 0,3A USB-load, vertically mounted	24Vdc
CPU 1515 SP PC 4GB (Embedded controller)	6ES7 677-2AA40-a	T4	0...+60°C	supply - 24 Vdc, 1.5 A At 0°C to 55°C: max. 64 modules, 2x 0,5A and 0,1A USB-load, horizontally mounted At 0°C to 60°C: max. 32 modules, 0,3A USB-load, horizontally mounted At 0°C to 50°C: max. 32 modules, 0,3A USB-load, vertically mounted	24Vdc
Interface Module IM 155-6 PN BA	6ES7 155-6AR00-a	T4	0...+60°C	supply 24 Vdc, 300mA at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8DI, 24Vdc BA	6ES7 131-6BF00-aAaa	T4	0...+60°C	supply - 24 Vdc, 770 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8DI, 24Vdc HS	6ES7 131-6BF00-aDaa	T4	0...+60°C	supply - 24 Vdc, 770 mA Inputs - 24 Vdc, 8 channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
4DQ, 24Vdc/2A HS	6ES7 132-6BD20-aDaa	T4	0...+60°C	supply - 24 Vdc, 8 A Outputs - 24 Vdc, 4 channels 2 A p.d. / 2 A res. / 10 W tung. At 25°C to 50°C: 8 A to 4 A total load vertically mounted At 35°C to 60°C: 8 A to 2.5 A total load horizontally mounted	24Vdc
8AI, I 2-/4- wire BA	6ES7 134-6GF00-a	T4	0...+60°C	supply - 24 Vdc, 725 mA 8 Input channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
8AI, U BA	6ES7 134-6FF00-a	T4	0...+60°C	supply - 24 Vdc, 25 mA 8 Input channels at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
BA SCRJ / RJ45 Busadapter	6ES7 193-6AP20-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
BA SCRJ / FC Busadapter	6ES7 193-6AP40-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
CPU 1510	6ES7 510-1DJ01-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1510F	6ES7 510-1SJ01-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1512	6ES7 512-1DK01-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
CPU 1512F	6ES7 512-1SK01-a	T4	0...+60°C	supply 24 Vdc, 0.6 A at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
Technology Module TM 2x24V Pulse	6ES7 138-6DB00-a	T4	0...+60°C	supply - 24 Vdc, 4.3 A Inputs - 24 Vdc, 2 channels Outputs - 24 Vdc, 2 channels 2.0 A p.d. / 2.0 A resistive / 10 W tungsten Total load 3 A at 35°C to 50°C: 4.3 A to 2.7 A total load vertically mounted at 45°C to 60°C: 4.3 A to 2.7 A total load horizontally mounted	24Vdc
8DQ, 24Vdc/0,5A BA	6ES7 132-6BF00-aAaa	T4	0...+60°C	supply - 24 Vdc, 4 A Outputs - 24 Vdc, 8 channels 0.5 A p.d. / 0.5 A res. / 5 W tung. at 50°C vertically mounted at 60°C horizontally mounted	24Vdc
AI 2xI 2-/4-wire ST	6ES7 134-6GB00-a	T4	0...+60°C	supply - 24 Vdc, 245 mA 2 Input channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc

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AI 2xU ST	6ES7 134-6FB00-a	T4	0...+60°C	supply - 24 Vdc, 37 mA 2 Input channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
AQ 2xI ST	6ES7 135-6GB00-a	T4	0...+60°C	supply - 24 Vdc, 110 mA 2 Output channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
AQ 2xU ST	6ES7 135-6FB00-a	T4	0...+60°C	supply - 24 Vdc, 80 mA 2 Output channels At 50°C vertically mounted At 60°C horizontally mounted	24Vdc
BA 2xLC Busadapter	6ES7 193-6AG00-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
BA LC / RJ45 Busadapter	6ES7 193-6AG20-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
BA LC / FC Busadapter	6ES7 193-6AG40-a	T4	0...+60°C	at 50°C vertically mounted at 60°C horizontally mounted	-
Interface module IM 155-6 PN HS	6ES7 155-6AU00-aDaa	T4	0...+60°C	supply - 24 Vdc, 700 mA At 50°C vertically mounted At 60°C horizontally mounted	24Vdc

The Suffix –a denotes any letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation etc.