

CERTIFICATE

(1) Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) Type Examination Certificate Number: **KEMA 01ATEX1238 X** Issue Number: **20**

(4) Equipment: **Decentral Peripheral Programmable Control System ET 200S, Terminal and Extension Modules Type 6ES7 ... and Type 3RK1 ...**

(5) Manufacturer: **Siemens AG**

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

(7) This equipment 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report no. 214828800.

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

EN 60079-0 : 2006

EN 60079-15 : 2005

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.

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



II 3 G Ex nA II T4 or T5 or T6

This certificate is issued on 7 October 2011 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es
Certification Manager

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DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 26 3 56 20 00 F +31 26 3 52 58 00 www.dekra-certification.com Registered Arnhem 09085396

(13) **SCHEDULE**

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Issue No. **20**

(15) **Description**

Modules Type 6ES7 ... and Type 3RK1 ... for use in a SIMATIC ET 200S Programmable Logic Control System.

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 proper and safe operation.

(16) **Test Report**

No. 214828800.

(17) **Special conditions for safe use**

1. The modules shall be installed in a suitable enclosure providing a degree of protection of at least IP54 according to EN 60529, taking into account the environmental conditions under which the equipment will be used.
2. When the temperature under rated conditions exceeds 70 °C at the cable or conduit entry point, or 80 °C at the branching point of the conductors, the temperature specification of the selected cable shall be in compliance with the actual measured temperature values.
3. Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 40%.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 214828800.

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Table 1

Description	Type/MLFB No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
IM 151 CPU FO 24k Sp.	6ES7 151-7AB00-a	T4	0...+60°C	-----	24Vdc
IM 151-1 BASIC	6ES7 151-1CA00-a	T5	0...+60°C	-----	24Vdc
SM 2 Pulse	6ES7 138-4DD00-a	T4	0...+60°C	2A Res. 10W Tungsten	24Vdc
SM STEP1 Stepper Motor-Module	6ES7 138-4DC00-a	T4	0...+60°C	-----	24Vdc
SM 2AI RTD	6ES7 134-4JB50-a	T4	0...+60°C	-----	24Vdc
SM 2AI TC	6ES7 134-4JB00-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*3 Terminals	6ES7 193-4CC20-a	T4	0...+60°C	-----	24Vdc
TM Spring/2*3 Terminals	6ES7 193-4CC30-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*3 Terminals	6ES7 193-4CD20-a	T4	0...+60°C	-----	24Vdc
TM Spring/2*3 Terminals	6ES7 193-4CD30-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*2 Terminals	6ES7 193-4CE00-a	T4	0...+60°C	-----	24Vdc
TM Spring /2*2 Terminals	6ES7 193-4CE10-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*4 Terminals	6ES7 193-4CA20-a	T4	0...+60°C	-----	24Vdc
TM Spring /2*4 Terminals	6ES7 193-4CA30-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*4 Terminals	6ES7 193-4CB20-a	T4	0...+60°C	-----	24Vdc
TM Spring /2*4 Terminals	6ES7 193-4CB30-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*3 Terminals	6ES7 193-4CB00-a	T4	0...+60°C	-----	24Vdc
TM Spring/2*4 Terminals	6ES7 193-4CB10-a	T4	0...+60°C	-----	24Vdc
TM Screw/2*6 Terminals	6ES7 193-4CA40-a	T4	0...+60°C	-----	24Vdc
TM Spring/2*6 Terminals	6ES7 193-4CA50-a	T4	0...+60°C	-----	24Vdc
TM f.30mm Screw	6ES7 193-4CG20-a	T4	0...+60°C	-----	24Vdc
TM f.30mm Spring	6ES7 193-4CG30-a	T4	0...+60°C	-----	24Vdc
TM-E15S24-AT Screw	6ES7 193-4CL20-a	T4	0...+60°C	-----	24Vdc
TM-E15C24-AT Spring	6ES7 193-4CL30-a	T4	0...+60°C	-----	24Vdc
TM f.30mm-Spring	6ES7 193-4CF50-a	T4	0...+60°C	-----	24Vdc
TM f.30mm-Screw	6ES7 193-4CF40-a	T4	0...+60°C	-----	24Vdc
TM f.30mm-Spring	6ES7 193-4CK30-a	T4	0...+60°C	-----	24Vdc
TM- f.30mm-Screw	6ES7 193-4CK20-a	T4	0...+60°C	-----	24Vdc
Terminator Module	6ES7 193-4JA00-a	----	0...+60°C	-----	-----
4 IQ-Sense	6ES7 138-4GA00-a	T4	0...+60°C	-----	24Vdc
TM-E15N23-01	6ES7 193-4CB60-a	T6	0...+60°C	-----	24Vdc
TM-E15N24-01	6ES7 193-4CB70-a	T6	0...+60°C	-----	24Vdc
TM-E15N24-A1	6ES7 193-4CA70-a	T6	0...+60°C	-----	24Vdc
TM-E15N26-A1	6ES7 193-4CA80-a	T6	0...+60°C	-----	24Vdc
TM-P15N22-01	6ES7 193-4CE60-a	T6	0...+60°C	-----	24Vdc
TM-P15N23-A0	6ES7 193-4CD70-a	T6	0...+60°C	-----	24Vdc
TM-P15N23-A1	6ES7 193-4CC70-a	T6	0...+60°C	-----	24Vdc
4 DI 24 ...48V UC	6ES7 131-4CD00-a	T4	0...+60°C	4DI 24 ... 48V UC	24/48V UC
PM-E DC24 ... 48V	6ES7 138-4CA50-a	T4	0...+60°C	-----	24/48Vdc
IM 151	6ES7 138-4HA00-a	T4	0...+60°C	-----	24Vdc
4DI Namur	6ES7 131-4RD00-a	T4	0...+60°C	-----	24Vdc
2AI U HS	6ES7 134-4FB51-a	T4	0...+60°C	-----	24Vdc
2AI I 4WIRE HS	6ES7 134-4GB61-a	T4	0...+60°C	-----	24Vdc
4 AI 2 WIRE	6ES7 134-4GD00-a	T4	0...+60°C	-----	24Vdc
SM 2DI 24VDC Standard	6ES7 131-4BB01-a	T4	0...+60°C	-----	24Vdc
SM 2DI 24VDC High-Feature	6ES7 131-4BB01-a	T4	0...+60°C	-----	24Vdc
Reserve Module 15mm	6ES7 138-4AA01-a	T4	0...+60°C	-----	24Vdc
Reserve Module 30mm	6ES7 138-4AA11-a	T4	0...+60°C	-----	24Vdc
4 DI Source Input	6ES7 131-4BD51-a	T4	0...+60°C	-----	24Vdc
SM 4DI 24VDC Standard	6ES7 131-4BD01-a	T4	0...+60°C	-----	24Vdc
SM 4DI 24VDC High-Feature	6ES7 131-4BD01-a	T4	0...+60°C	-----	24Vdc

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SM 2DO 24VDC 0,5A Standard	6ES7 132-4BB01-a	T4	0...+60°C	0,5A Res./P.D.	24Vdc
SM 2DO 24VDC 0,5A High-Feature	6ES7 132-4BB01-a	T4	0...+60°C	0,5A Res./P.D.	24Vdc
SM 2DO 24VDC 2A Standard	6ES7 132-4BB31-a	T4	0...+60°C	2A Res./P.D.	24Vdc
SM 2DO 24VDC 2A High-Feature	6ES7 132-4BB31-a	T4	0...+60°C	2A Res./P.D.	24Vdc
SM 4DO 24VDC 0,5A Standard	6ES7 132-4BD01-a	T4	0...+60°C	0,5A Res./P.D.	24Vdc
1SI 3964/ASCII	6ES7 138-4DF01-a	T4	0...+60°C	-----	24Vdc
1SI MODBUS/USS	6ES7 138-4DF11-a	T4	0...+60°C	-----	24Vdc
SM Count1 Counter 24V	6ES7 138-4DA04-a	T4	0...+60°C	AT 40°C: 2A Res./P.D. 5W Tung. 24V DC AT 50°C: 1A Res./P.D. 5W Tung. 24V DC AT 60°C: 0,5A Res./P.D. 5W Tung. 24V DC	24Vdc
SM Counter Module 5V/500kHz	6ES7 138-4DE02-a	T4	0...+60°C	2A Res./P.D. 10W Tungsten	24Vdc
1POS. U	6ES7 138-4DL00-a	T4	0...+60°C	-----	24Vdc
2 AI 2 WIRE	6ES7 134-4GB01-a	T4	0...+60°C	-----	24Vdc
2 AI 4 WIRE	6ES7 134-4GB11-a	T4	0...+60°C	-----	24Vdc
2 AI U	6ES7 134-4FB01-a	T4	0...+60°C	-----	24Vdc
2 AO U	6ES7 135-4FB01-a	T4	0...+60°C	-----	24Vdc
2 AO I	6ES7 135-4GB01-a	T4	0...+60°C	-----	24Vdc
PM-E 24 V	6ES7 138-4CA01-a	T4	0...+60°C	-----	24Vdc
IM 151-7	6ES7 151-7AA11-a	T4	0...+60°C	-----	24Vdc
4/8 F-DI DC24V PROFIsafe	6ES7 138-4FA02-a	T4	0...+60°C	-----	24Vdc
4F-DO DC24V/2A PROFIsafe	6ES7 138-4FB02-a	T4	0...+60°C	2A Res./P.D. 10W Tungsten	24Vdc
IM 151-3PN	6ES7 151-3BA00-a	T4	0...+60°C	-----	24Vdc
Analog Input Module (2AI TC HF)	6ES7 134-4NB01-a	T5	0...+60°C	-----	24Vdc
Analog Input Module (2AI RTD HF)	6ES7 134-4NB51-a	T5	0...+60°C	-----	24Vdc
IM 151-1 Compact 16DI/16DO	6ES7 151-1CA00-3a	T4	0...+60°C	0,5A Res./P.D. 5W Tungsten	24Vdc
IM 151-1 Compact 32DI	6ES7 151-1CA00-1a	T4	0...+60°C	-----	24Vdc
Terminalmodul (Federzug)	6ES7 193-4DL00-a	T4	0...+60°C	-----	24Vdc
Terminalmodul (Schraubklemme)	6ES7 193-4DL10-a	T4	0...+60°C	-----	24Vdc
Zusatzklemme (Federzug)	6ES7 193-4FL00-a	T4	0...+60°C	-----	24Vdc
Zusatzklemme (Schraubklemme)	6ES7 193-4FL10-a	T4	0...+60°C	-----	24Vdc
IM 151-3PN	6ES7 151-3AA10-a	T4	0...+60°C	-----	24Vdc
IM151-3PN	6ES7 151-3BA20-a	T4	0...+60°C	-----	24Vdc
IM151-3PN	6ES7 151-3AA20-a	T4	0...+60°C	-----	24Vdc
2AI U HF	6ES7 134-4LB02-a	T4	0...+60°C	-----	24Vdc
2AI I 2/4WIRE HF	6ES7 134-4MB02-a	T4	0...+60°C	-----	24Vdc
2 AO U High Feature	6ES7 135-4LB02-a	T4	0...+60°C	-----	24Vdc
2 AO I High Feature	6ES7 135-4MB02-a	T4	0...+60°C	-----	24Vdc
8DI DC 24V HD	6ES7 131-4BF00-a	T4	0...+60°C	-----	24Vdc
8DO DC 24V/0,5 A HD	6ES7 132-4BF00-a	T4	0...+60°C	-----	24Vdc
IM 151-7	6ES7 151-7AA13-a	T4	0...+60°C	-----	24Vdc
IM 151-1 with Term.	6ES7 151-1BA02-a	T5	0...+60°C	-----	24Vdc
IM 151-3PN FO	6ES7 151-3BB21-a	T4	0...+60°C	-----	24Vdc
PN/PN IO-Coupler	6ES7 158-3AD00-a	T4	0...+60°C	-----	24Vdc
4/8 F-DI DC24V PROFIsafe	6ES7 138-4FA03-a	T4	0...+60°C	-----	24Vdc
4F-DI / 3F-DO DC 24V	6ES7 138-4FC00-a	T4	0...+60°C	-----	24Vdc
4 DO DC24V/2A HS	6ES7 132-4BD32-a	T4	0...+60°C	2A per channel At 55°C: 4A total load, vertical mounted AT 60°C: 4A total load, horizontal mounted	24Vdc
2AI I 2WIRE HS	6ES7 134-4GB52-a	T4	0...+60°C	-----	24Vdc
2 AO U HS	6ES7 135-4FB52-a	T4	0...+60°C	-----	24Vdc
IM151-3PN	6ES7 151-3AA22-a	T4	0...+60°C	-----	24Vdc

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IM151-3PN	6ES7 151-3BA22-a	T4	0...+60°C	-----	24Vdc
IM 151-3PN FO	6ES7 151-3BB22-a	T4	0...+60°C	-----	24Vdc
1SSI-FastIO	6ES7 138-4DB03-a	T4	0...+60°C	-----	24Vdc
IM151-3 FastIO	6ES7 151-3BA50-a	T4	0...+60°C	-----	24Vdc
IM 151-7	6ES7 151-7AA20-a	T4	0...+60°C	-----	24Vdc
IM 151-7 F-CPU	6ES7 151-7FA20-a	T4	0...+60°C	-----	24Vdc
IM 151-1 ST	6ES7 151-1AA04-a	T4	0...+60°C	-----	24Vdc
IM 151-1 HF	6ES7 151-1BA02-a	T5	0...+60°C	-----	24Vdc
8DI HD	6ES7 131-4BF50-a	T4	0...+60°C	-----	24Vdc
8DO DC 24V/0,5 A HD sink	6ES7 132-4BF50-a	T4	0...+60°C	-----	24Vdc
4DO DC 24V/0,5A Fast sink	6ES7 132-4BD50-a	T4	0...+60°C	0,5A Res./ P.D. max. 5W Tungsten Total load 2A	24Vdc
2AI I 2WIRE HS	6ES7 134-4GB52-a	T4	0...+60°C	-----	24Vdc
2AI I 4WIRE HS	6ES7 134-4GB62-a	T4	0...+60°C	-----	24Vdc
2AI U HS	6ES7 134-4FB52-a	T4	0...+60°C	-----	24Vdc
2 AO U HS	6ES7 135-4FB52-a	T4	0...+60°C	-----	24Vdc
2 AO I HS	6ES7 135-4GB52-a	T4	0...+60°C	-----	24Vdc
SM 4DO 24VDC 0,5A	6ES7 132-4BD02-a	T4	0...+60°C	0,5A Res./P.D. 5W Tungsten 24V dc 4 channels vertically mounted: 55°C horizontally mounted: 60°C	24Vdc
2AI I 2WIRE HF	6ES7 134-4MB02-a	T4	0...+60°C	-----	24Vdc
IM 151-1 BASIC	6ES7 151-1CA00-a	T5	0...+60°C	vertically mounted: 55°C horizontally mounted: 60°C	24 - 48Vdc
IM 151-1 Standard	6ES7 151-1AA05-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
8DI DC 24V HD	6ES7 131-4BF00-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
8DO DC 24V/0,5 A HD	6ES7 132-4BF00-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
PM-E DC... 48V	6ES7 138-4CA50-a	T4	0...+60°C	horizontally mounted 60°C	24Vdc
IM 151-3 Standard	6ES7 151-3AA23-a	T4	0...+60°C	horizontally mounted 60°C	24Vdc
IM 151-3 High Feature	6ES7 151-3BA23-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-3 FastIO	6ES7 151-3BA60-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
2AI TC Standard	6ES7 134-4JB01-a	T4	0...+60°C	supply 24Vdc vertically mounted 55°C horizontally mounted 60°C	24Vdc
2AI RTD Standard	6ES7 134-4JB51-a	T4	0...+60°C	vertically mounted: 55°C horizontally mounted: 60°C	24 - 48Vdc
IM 151-8 PN/DP CPU	6ES7 151-8AB00-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-8 F-CPU PN	6ES7 151-8FB00-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
4 SI IO - Link	6ES7 138-4GA50-a	T4	0...+60°C	vertically mounted 40°C horizontally mounted 60°C	24Vdc
4/8 F-DI	6ES7 138-4FA04-a	T4	0...+60°C	-----	24Vdc
4 F-DOI	6ES7 138-4FB03-a	T4	0...+60°C	2A Res./P.D. 10W Tungsten	24Vdc
4F-DI / 3F-DO DC 24V	6ES7 138-4FC01-a	T4	0...+60°C	-----	24Vdc
IM 151-3PN FO	6ES7 151-3BB23-a	T4	0...+60°C	-----	24Vdc
4 SI SIRIUS IO - Link	3RK1 005-0LB00-a	T4	0...+60°C	supply 24Vdc vertically mounted 55°C horizontally mounted 60°	24Vdc
PN/PN IO-Coupler	6ES7 158-3AD01-a	T4	0...+60°C	-----	24Vdc
4DO DC 24V/ 0,5A High Feature	6ES7 132-4BD00-a	T4	0...+60°C	supply 24Vdc, output 24Vdc 0,5A Res./P.D. 5W Tungsten, 4 channels vertically mounted 40°C horizontally mounted 60°C	24Vdc
4DO DC 24V/ 2A High Feature	6ES7 132-4BD30-a	T4	0...+60°C	supply 24Vdc, output 24Vdc 2A Res./P.D. 10W Tungsten, 4 channels	24Vdc

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				total load 4A vertically mounted 40°C horizontally mounted 60°C	
8DO DC 24V/0,5A High Feature	6ES7 132-4BF00-a	T4	0...+60°C	supply 24Vdc, output 24Vdc 0,5A Res./P.D. 5W Tungsten, 8 channels total load 4A vertically mounted 40°C horizontally mounted 60°C	24Vdc
PM-E DC 24 V High Feature	6ES7 138-4CA60-a	T4	0...+60°C	supply 24Vdc Input current 10A vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-1 FO	6ES7 151-1AB05-a	T4	0...+60°C	supply 24Vdc Input current 200mA vertically mounted 40°C horizontally mounted 60°C	24Vdc
4AI TC Standard	6ES7 134-4JD00-a	T4	0...+60°C	supply 24Vdc horizontally mounted 60°C	24Vdc
8DI DC 24V Source Input	6ES7 131-4BF50-a	T4	0...+60°C	-----	24Vdc
8DO DC 24V/0,5 A Sink Output	6ES7 132-4BF50-a	T4	0...+60°C	Sink output 24Vdc; 0,5A Res./P.D. 5W Tungsten, 8 channels total load 4A vertically mounted 40°C horizontally mounted 60°C	24Vdc
2 AI U ST	6ES7 134-4FB01-a	T4	0...+60°C	-----	24Vdc
2DI DC24V High Feature	6ES7 131-4BB01-a	T4	0...+60°C	-----	24Vdc
4DI 24VDC High Feature	6ES7 131-4BD01-a	T4	0...+60°C	-----	24Vdc
2AI U HF	6ES7 134-4LB02-a	T4	0...+60°C	-----	24Vdc
8DO DC 24V/0,5A High Feature	6ES7 132-4BF00-a	T4	0...+60°C	Output 24Vdc ; 0,5A Res./P.D. 5W Tungsten, 8 channels total load 4A vertically mounted 40°C horizontally mounted 60°C	24Vdc
4DI Namur	6ES7 131-4RD02-a	T4	0...+60°C	-----	24Vdc
4 DI UC 24 ..48V UC	6ES7 131-4CD02-a	T4	0...+60°C	-----	24Vdc
STEP1 Step-Module	6ES7 138-4DC01-a	T4	0...+60°C	supply 24Vdc Input current 540mA vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-8 PN/DP CPU	6ES7 151-8AB01-a	T4	0...+60°C	supply 24Vdc Input current <426mA vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-8 F-CPU PN	6ES7 151-8FB01-a	T4	0...+60°C	supply 24Vdc Input current <426mA vertically mounted 40°C horizontally mounted 60°C	24Vdc
SM 2 Pulse	6ES7 138-4DD01-a	T4	0...+60°C	supply 24 Vdc Input 24 Vdc, 2 channels Input current 4.53 A Output 24 Vdc, 2A res./P.D. per channel 10W tungsten, 2 channels vertically mounted 40°C horizontally mounted 60°C	24Vdc
1 POS. U	6ES7 138-4DL00-a	T4	0...+60°C	supply 24Vdc Input current 1A 0.5A Res./P.D. 5W Tungsten vertically mounted 40°C horizontally mounted 60°C	24Vdc
IM 151-7 CPU	6ES7 151-7AA21-a	T4	0...+60°C	supply 24Vdc Input current 410 mA vertically mounted 40°C horizontally mounted 60°C	24Vdc

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IM 151-7 F-CPU	6ES7 151-7FA21-a	T4	0...+60°C	supply 24Vdc Input current 410 mA vertically mounted 40°C horizontally mounted 60°C	24Vdc
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The Suffix -a denotes any letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation etc.