CERTIFICATE

Type Examination

(1)

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

(3) Type Examination Certificate Number: **KEMA 03ATEX1125 X** Issue Number: **30**

(4) Equipment: **Programmable Logic Controller System SIMATIC S7-400, Modules Type 6ES7 …, 6GK7 4 .. and 6DD1 ...**

(5) Manufacturer: **Siemens AG**

(6) Address: **Gleiwitzerstraße 555, 90475, Nuremberg, 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. 217904700.

(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**

(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 IIC T4 Gc

This certificate is issued on 11 February 2015 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.

R. Schuller
Certification Manager

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(13) # SCHEDULE

(14) **to Type Examination Certificate KEMA 03ATEX1125 X** Issue No. **30**

(15) **Description**

Modules Type 6ES7 ..., Type 6GK7 4.. and Type 6DD1 ... for use in a SIMATIC S7-400 Programmable Logic Controller System.

The description, 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. 217904700.

(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 60079-15, 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.

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. 217904700.

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Table 1

Description	Type/MLFB No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
S7-400 Racks					
Rack: UR1 (18 slots) red. PS support	6ES7 400-1TA01-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: UR1 (18 slots) red. PS support	6ES7 400-1TA11-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: UR2 (9 slots) red. PS support	6ES7 400-1JA01-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: UR2 ALU (9 slots)	6ES7 400-1JA11-0AA1	---	0…+70°C	-----	5Vdc/ 24Vdc
Rack: UR2 ALU (9 slots)	6ES7 400-1JA11-0AA0	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: CR3 (4 slots)	6ES7 401-1DA01-0AA1	T4	0…+70°C	-----	5Vdc/ 24Vdc
Rack: CR3 (4 slots)	6ES7 401-1DA01-0AA0	T4	0…+60°C	-----	5Vdc/ 24Vdc
Rack: CR2 (18 slots, segmented, 2 segments) redunant PS support	6ES7 401-2TA01-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: ER1 (18 slots, only for SM) redunant PS support	6ES7 403-1TA01-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: ER1 (18 slots, only for SM) redunant PS support	6ES7 403-1TA11-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: ER2 (9 slots, only for SM) redunant PS support	6ES7 403-1JA01-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: ER2 (9 slots, only for SM) redunant PS support	6ES7 403-1JA11-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: UR2-H (18 slot) 2 segmented (9+9) for H-system	6ES7 400-2JA00-a	---	0…+60°C	-----	5Vdc/ 24Vdc
Rack: UR2-H (18 slot) 2 segmented (9+9) for H-system	6ES7 400-2JA10-0AA1	---	0…+70°C	-----	5Vdc/ 24Vdc
Rack: UR2-H ALU (18 slot) 2 segmented (9+9) for H-system	6ES7 400-2JA10-0AA0	---	0…+60°C	-----	5Vdc/ 24Vdc
S7-400 Power Supplies					
PS DC4S	6ES7 405-0DA02-0AA0	T4	0…+60°C	-----	24V 48V 60V
PS DC4S	6ES7 405-0DA02-0AA1	T4	0…+70°C	-----	24V 48V 60V
PS DC10S	6ES7 405-0KA02-0AA0, Version 10	T4	0…+60°C	-----	24V 48V 60V
PS DC10R	6ES7 405-0KR02-0AA1	T4	0…+70°C	-----	24V 48V 60V
PS DC10R	6ES7 405-0KR02-0AA0, Version 2	T4	0…+60°C	-----	24V 48V 60V
PS DC20S	6ES7 405-0RA02-0AA0	T4	0…+60°C	-----	24V 48V 60V
S7-400 CPUs					
CPU: CPU412-1; 16 MB Code; 16 MB Data, MPIDP	6ES7 412-1XJ05-a	T4	0…+60°C	-----	5Vdc

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CPU: CPU412-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 412-2XJ05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU412-1; 16 MB Code; 16 MB Data, MPIDP	6ES7 412-1XJ07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU412-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 412-2XK07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU412-3H; 64 MB 1 MPIDP, 2 Sync-Module	6ES7 412-3HJ14-a	T4	0…+60°C	-----	5Vdc
CPU: CPU 414-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 414-2XK05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU 414-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 414-2XL07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-3; 384 KB Code; 384 KB Data, 100ns, MPIDP, DP, free	6ES7 414-3XJ00-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-3; 16 MB Code; 16 MB Data, MPIDP, DP, DP	6ES7 414-3XM05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-3; 16 MB Code; 16 MB Data, MPIDP, DP, DP	6ES7 414-3XM07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-3PN/DP; 16 MB Code; 16 MB Data, MPIDP, DP, DP	6ES7 414-3EM05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-4H; 768 KB MEMORY; 4 Interfaces	6ES7 414-4HJ00-a	T4	0…+60°C	-----	5Vdc
CPU: CPU414-4H; 32 MB MEMORY; 4 Interfaces	6ES7 414-4HJ04-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU414-4H; 64 MB 1 MPIDP, 1 DP, 2 Sync-Module	6ES7 414-4HM14-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU414-4H PG; 64 MB 1 MPIDP, 1 DP, 2 Sync-Module	6ES7 414-4HR14-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU416-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 416-2XN05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416F-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 416-2FN05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 416-2XP07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416F-2; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7 416-2FP07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416-3; 1,6 KB Code; 1,6 KB Data, 80ns, MPIDP, DP, free	6ES7 416-3XL00-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416-3; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7 416-3XR05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416-3; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7 416-3XS07-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416-3PN/DP; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7 416-3ER05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU416F-3PN/DP; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7 416-3FR05-a	T4	0…+60°C	-----	5Vdc
CPU: CPU412-2 PN; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7412-2EK06-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU412-2 PN; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7412-2EK07-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU412-5H PN/DP; 256 MB, 1 MPIDP, 1 DP, 2 PN, 2 Sync-Module	6ES7 412-5HK06-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU414-3 PN ; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7414-3EM06-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU414F-3 PN ; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7414-3FM06-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU414-3 PN ; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7414-3EM07-0AB0	T4	0…+60°C	-----	5Vdc

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CPU: CPU414F-3 PN ; 16 MB Code; 16 MB Data, MPIDP, DP	6ES7414-3FM07-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU414-5H PN/DP; 256 MB, 1 MPIDP, 1 DP, 2 PN, 2 Sync-Module	6ES7 414-5HM06-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU416-3 PN ; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7416-3ES06-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU416F-3 PN ; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7416-3FS06-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU416-3 PN ; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7416-3ES07-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU416F-3 PN ; 32 MB Code; 32 MB Data, MPIDP, DP, DP	6ES7416-3FS07-0AB0	T4	0…+60°C	-----	5Vdc
CPU: CPU416-5H PN/DP; 256 MB, 1 MPIDP, 1 DP, 2 PN, 2 Sync-Module	6ES7 416-5HS06-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU417-4; 128 MB, 1 MPIDP, 3 DP	6ES7 417-4XT05-a	---	0…+60°C	-----	5Vdc
CPU: CPU417-4; 128 MB, 1 MPIDP, 3 DP	6ES7 417-4XT07-a	---	0…+60°C	-----	5Vdc
CPU: CPU417-4H; 4 MB, 100ns, 1 MPIDP, 1 DP, 2 Sync-Module	6ES7 417-4HL01-a	---	0…+60°C	-----	5Vdc
CPU: CPU417-4H; 32 MB, 1 MPIDP, 1 DP, 2 Sync-Module	6ES7 417-4HL04-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU417-4H; 64 MB, 1 MPIDP, 1 DP, 2 Sync-Module	6ES7 417-4HT14-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU417-5H PN/DP; 256 MB, 1 MPIDP, 1 DP, 2 PN, 2 Sync-Module	6ES7 417-5HT06-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU410-5H PN/DP; 1 MPIDP, 4 PN, 2 Sync-Module	6ES7 410-5HX08-0AB0 Version ≥2	---	0…+70°C	-----	5Vdc
CPU: CPU410-5H PN/DP; 1 MPIDP, 4 PN, 2 Sync-Module	6ES7 410-5HN08-0AB0 Version ≥2	---	0…+70°C	-----	5Vdc
CPU: CPU410-5H PN/DP; 1 MPIDP, 4 PN, 2 Sync-Module	6ES7 410-5HX08-0AB0	---	0…+60°C	-----	5Vdc
CPU: CPU410-5H PN/DP; 1 MPIDP, 4 PN, 2 Sync-Module	6ES7 410-5HN08-0AB0	---	0…+60°C	-----	5Vdc
S7-400 Memory Cards					
CPU_Memory: FEPROM 64 KB	6ES7 952-0KF00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 256 KB	6ES7 952-0KH00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 1 MB	6ES7 952-1KK00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 2 MB	6ES7 952-1KL00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 4 MB	6ES7 952-1KM00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 8 MB	6ES7 952-1KP00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 16 MB	6ES7 952-1KS00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 32 MB	6ES7 952-1KT00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: FEPROM 64 MB	6ES7 952-1KY00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 64 KB	6ES7 952-0AF00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 256 KB	6ES7 952-1AH00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 1 MB	6ES7 952-1AK00-0AA0	---	0…+60°C	-----	5Vdc

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CPU_Memory: RAM 2 MB	6ES7 952-1AL00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 4 MB	6ES7 952-1AM00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 8 MB	6ES7 952-1AP00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 16 MB	6ES7 952-1AS00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 16 MB (Ratio)	6ES7 952-1AS00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: 2x 2Mbyte (für CPU 417-4/417-H)	6ES7 955-2AL00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: 2x 4Mbyte (für CPU 417-4/417-H)	6ES7 955-2AM00-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: 2x 4Mbyte (für CPU 417-4/417-H)	6ES7 955-2AM10-0AA0	---	0…+60°C	-----	5Vdc
CPU_Memory: RAM 64 MB	6ES7 952-1AY00-0AA0	---	0…+60°C	-----	5Vdc
S7-400 CPU Accessories					
CPU_Zubehör: IF submodule; SINEC L2-DP, for M7 and S7	6ES7 964-2AA01-0AB0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: IF submodule; SINEC L2-DP, for M7 and S7	6ES7 964-2AA04-0AB0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module	6ES7 960-1AA00-0XA0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module near	6ES7 960-1AA04-0XA0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module far	6ES7 960-1AB04-0XA0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module near	6ES7 960-1AA06-0XA0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module far	6ES7 960-1AB06-0XA0	T4	0…+60°C	-----	5Vdc
CPU_Zubehör: H/F-Sync.-Module	6ES7 960-1AA08-0XA0	T4	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CA00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CC00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CM00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CE00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CF00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CG00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CH00-a	TA	0…+70°C	-----	5Vdc
CPU_Zubehör:System Expansion Card (SEC)	6ES7653-2CP00-a	TA	0…+70°C	-----	5Vdc
S7-400 Interface Modules					
IM: IM460-0; Nahkopplung 5.0m with K-Bus / without 5V PS	6ES7 460-0AA01-0AB0	T4	0…+60°C	-----	5Vdc
IM: IM461-0; Nahkopplung 5.0m with K-Bus / without 5V PS	6ES7 461-0AA01-0AA0	T4	0…+60°C	-----	5Vdc
IM: IM460-1; Nahkopplung 1,5m without K-Bus / with 5V PS	6ES7 460-1BA01-0AB0	T4	0…+60°C	Output 5V / max. 5 A	5Vdc
IM: IM461-1; Nahkopplung 1,5m without K-Bus / with 5V PS	6ES7 461-1BA01-0AA0	T4	0…+60°C	Output 5V / max. 5 A	5Vdc
IM: IM460-3; Fernkopplung 100m with K-Bus / without 5V PS	6ES7 460-3AA01-0AB0	T4	0…+60°C	-----	5Vdc

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IM: IM461-3; Fernkopplung 100m with K-Bus / without 5V PS	6ES7 461-3AA01-0AA0	T4	0…+60°C	-----	5Vdc
IM: IM460-4; Fernkopplung 600m without K-Bus / with 5V PS	6ES7 460-4AA01-0AB0	T4	0…+60°C	-----	5Vdc
IM: IM461-4; Fernkopplung 600m without K-Bus / with 5V PS	6ES7 461-4AA01-0AA0	T4	0…+60°C	-----	5Vdc
IM: IM463; Kopplung zu S5-ER mit IM 314; 600m	6ES7 463-2AA00-0AA0	---	0…+60°C	-----	5Vdc
S7-400 DIs/DOs					
SM: DI 32 I, 24V DC, floating group of 32, Type 1	6ES7 421-1BL01-0AA0	---	0... +60°C	-----	24 V
SM: DI 16 I, 24V DC, group of 8, process int, diagnostics int	6ES7 421-7BH01-0AB0	T4	0... +60°C	-----	24 V
SM: DI 16 I, 24-60V UC, fl., group of 1, process int, diagnostics int	6ES7 421-7DH00-0AB0	T4	0... +60°C	-----	24 V - 60 V
SM: DO 32 O, 24V DC/0,5A, floating, group of 32	6ES7 422-1BL00-0AA0	T4	0... +60°C	max. total load per 8 channel: AT 40°C: 4A Res./P.D. 40W Tung. 24V DC AT 60°C: 2A Res./P.D. 20W Tung. 24V DC	24 V
SM: DO 16 O, 24V DC/2A, floating, group of 8	6ES7 422-1BH11-0AA0	T4	0... +60°C	max. total load per 2 channel: AT 40°C: 3A Res./P.D. 10W Tung. 24V DC AT 60°C: 2A Res./P.D. 7W Tung. 24V DC	24 V
SM: DO 32 O, 24V DC/0,5A	6ES7 422-7BL00-0AB0	T4	0... +60°C	max. total load per 8 channel: AT 40°C: 4A Res./P.D. 40W Tung. 24V DC AT 60°C: 2A Res./P.D. 20W Tung. 24V DC	24 V
S7-400 AIs/AOs					
SM: AI 8 I, 13 bit+sign, 640µs, floating	6ES7 431-1KF20-0AB0	T4	0... +60°C	-----	24 V
SM: AI 16I,15 bit+sign,425ms,fl.,process int,diagn. int,chara.	6ES7 431-7QH00-0AB0	T4	0... +60°C	-----	24 V
SM: AI 16 I; 13 bit; 65 ms per channel	6ES7 431-0HH00-0AB0	T4	0... +60°C	-----	24 V
SM: AI 8 I, 14 bit, floating	6ES7 431-1KF00-0AB0	T4	0... +60°C	-----	not required
SM: AI 8 I, 14 bit, floating	6ES7 431-1KF10-0AB0	T4	0... +60°C	-----	
SM: AI8xTC/U	6ES7 431-7KF00-0AB0	T4	0... +60°C	-----	24 V
SM: AI8xRTD	6ES7 431-7KF10-0AB0	T4	0... +60°C	-----	24 V
SM: AO 8 O, 0-10V/0-20mA,13 bit, 2ms,floating	6ES7 432-1HF00-0AB0	T4	0... +60°C	8 Channels: per Channel 10 V / 20mA	24 V

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S7-400 SM Accessories					
SM_Zubehör: 48 pin - screw-type	6ES7 492-1AL00-0AA0	T4	0... +60°C	Connector is adapted to SM-Modules in this table	--------
SM_Zubehör: 48 pin - spring-loaded	6ES7 492-1BL00-0AA0	T4	0... +60°C	Connector is adapted to SM-Modules in this table	--------
SM_Zubehör: 48 pin - crimp	6ES7 492-1CL00-0AA0	T4	0... +60°C	Connector is adapted to SM-Modules in this table	--------

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S7-400 Function Modules					
FM 450; Counter; 2 channels; 500 kHz; 6 DI; 4 DO	6ES7 450-1AP00-0AE0	T4	0... +60°C	2 Encoder Supply Outputs: per Output 300 mA 4 Channels: per Channel 0.5 A / 24 V	24 V
FM 450; Counter; 2 channels; 500 kHz; 6 DI; 4 DO	6ES7 450-1AP01-0AE0	T4	0... +60°C	2 Encoder Supply Outputs: per Output 300 mA 4 Channels: per Channel 0.5 A / 24 V	24 V
FM 451; Rapid Traverse/Creep Feed pos.; 3-channel	6ES7 451-3AL00-0AE0	-----	0... +60°C	3 Encoder Supply Outputs: per Output 300 mA 12 digital Outputs: per Output 0.5 A Res./P.D./ 5W Tungsten 24V DC	24 V
FM 452; Electronic Cam Controller	6ES7 452-1AH00-0AE0	-----	0... +60°C	2 Encoder Supply Outputs: per Output 300 mA 16 digital Outputs: per Output 0.5 A Res./P.D./ 5W Tungsten 24V DC	24 V
FM 455 C PID Control; 16 controllers; 16 DI; 8/16 AI; 16 AO; cycle 20-800 ms	6ES7 455-0VS00-0AE0	T4	0... +60°C	16 output channels: 320mA for 16 x AO / 10 V	24 V
FM 455-S PID Control; 16 controllers; 16 DI; 8/16 AI; 32 DO; cycle 20-800 ms	6ES7 455-1VS00-0AE0	T4	0... +60°C	32 output channels: 0.1 A per channel, max. 1.6 A for 32 x DO / 24 V	24 V
S7-400 FM458					
FM 458-1DP+	6DD1607-0AA2	T4	0... +50°C	-----	5 V
EXM 438-1	6DD1607-0CA1	T4	0... +40°C	-----	5 V/24 V
EXM 438-1	6DD1607-0CA1, Version 13	T4	0... +40°C	-----	5 V/24 V
EXM 448-0	6DD1607-0EA0	T4	0... +40°C	-----	5 V
EXM 448-2	6DD1607-0EA2	T4	0... +40°C	-----	5 V
Interface Module SB10	6DD1681-0AE2	T4	0... +50°C	-----	24 V
Interface Module SB61	6DD1681-0EB3	T4	0... +50°C	-----	24 V/48 V
Interface Module SB71	6DD1681-0DH1	T4	0... +40°C	-----	24 V/48 V
Interface Module SU12	6DD1681-0AJ1	T4	0... +50°C	-----	24 V
Interface Module SU13	6DD1681-0GK0	T4	0... +40°C	-----	24 V
S7-400 Communication Prozessors					
CP 440-1, 1SS; RS422/485 (X.27)	6ES7 440-1CS00-0YE0	T4	0... +60°C	-----	5 V
CP 441-1, 1 interface	6ES7 441-1AA04-0AE0	T4	0... +60°C	-----	5 V/24 V
CP 441-2, 2 interfaces	6ES7 441-2AA04-0AE0	T4	0... +60°C	-----	5 V/24 V

(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 03ATEX1125 X** Issue No. **30**

CP441-1,Version 2, 1 interface	6ES7 441-1AA05-0AE0	T4	0... +60°C	-----	5 V/24 V
CP441-1,Version 2, 2 interfaces	6ES7 441-2AA05-0AE0	T4	0... +60°C	-----	5 V/24 V
Industrial Ethernet CP 443-1	6GK7 443-1EX11-0XE0	T4	0... +60°C	-----	24 V
Industrial Ethernet CP 443-1	6GK7 443-1GX20-0XE0	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1	6GK7 443-1GX30-0XE0	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1	6GK7 443-1EX20-0XE0	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1	6GK7 443-1EX30-0XE0	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1 IT	6GK7 443-1GX11-0XE0	T4	0... +60°C	-----	24 V
Industrial Ethernet CP 443-1 V3	6GK7 443-1EX40-0XE0	T4	0... +60°C	-----	5 V/24 V
Industrial Ethernet CP 443-1 V3 Advanced	6GK7 443-1EX41-0XE0	T4	0 ... +60°C	-----	5 V/24 V
PROFIBUS CP 443-5 Basic	6GK7 443-5FX01-0XE0	T4	0... +60°C	-----	24 V
PROFIBUS CP 443-5 Basic	6GK7 443-5FX02-0XE0	T4	0... +60°C	-----	5 V
PROFIBUS CP 443-5 Extended	6GK7 443-5DX03-0XE0	T4	0... +60°C	-----	24 V
PROFIBUS CP 443-5 Extended	6GK7 443-5DX04-0XE0	T4	0... +60°C	-----	5 V
Industrial Ethernet CP 443-5 Extended	6GK7 443-5DX04-0XE1	T4	0 ... +60°C	-----	5 V
PROFIBUS CP 443-5 DX05 Extended	6GK7 443-5DX05-0XE0	T4	0... +60°C	-----	5 V
Industrial Ethernet CP 443-1	6GK7 443-1GX30-0XE1	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1	6GK7 443-1EX30-0XE1	T4	0 ... +60°C	-----	5 V
PROFIBUS CP 443-5 DX05 Extended	6GK7 443-5DX05-0XE1	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 442-1 RNA	6GK7 442-1RX00-0XE0	T4	0 ... +60°C	-----	5 V
Industrial Ethernet CP 443-1 RNA	6GK7 443-1RX00-0XE0	T4	0 ... +60°C	-----	5 V
S7-400 Interface Modules for CP441					
RS232 Interface Modul for CP441	6ES7 963-1AA00-0AA0	T4	0... +60°C	-----	5 V
20mA TTY Interface Modul for CP441	6ES7 963-2AA00-0AA0	T4	0... +60°C	-----	5 V
X27(RS422/485) Interface Modul for CP441	6ES7 963-3AA00-0AA0	T4	0... +60°C	-----	5 V
RS232 Interface Modul for CP441 , Version 2	6ES7 963-1AA10-0AA0	T4	0... +60°C	-----	3,3 V
20mA TTY Interface Modul for CP441 , Version 2	6ES7 963-2AA10-0AA0	T4	0... +60°C	-----	3,3V/24V
X27(RS422/485) Interface Modul for CP441 , Version 2	6ES7 963-3AA10-0AA0	T4	0... +60°C	-----	3,3V
S7-400 Profibus Interface					
PROFIBUS DP-Master IM467	6ES7 467-5GJ02-0AB0	T4	0... +60°C	-----	5V
PROFIBUS DP-Master IM467-FO	6ES7 467-5FJ00-0AB0	T4	0... +60°C	-----	5V

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