

# Certificate of Compliance

**Certificate:** 1232105

**Master Contract:** 212191

**Project:** 1232105

**Date Issued:** September 11, 200 1

**Issued to:** Siemens AG  
Elektronikwerk Karlsruhe (EWK)  
Oestliche Rheinbrueckenstrasse 50  
76187 Karlsruhe 21  
GERMANY

*The products listed below are eligible to bear the CSA Mark shown*



**Issued by:** G. Foulem, E.I.T.



## PRODUCTS

### CLASS 2252 01 - PROCESS CONTROL EQUIPMENT

Programmable Controllers of the open type, Series Simatic S5-135U, S5-150U and S5-155U, containing a suitable selection of below listed components. They consist of some or all of the models designated in the ratings tabulation. The system is made up of a main frame equipped with one or several central processing units, power supply, memory modules, input modules, output modules, interface modules, expansion units. These units may be installed together either in the factory or in the field.

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Ambient Operating Temperature: 55 °C

Component Production No.	Description	Rating
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S5-135U Central Controller including power supply

6ES5 135-3UA4. with power supply Type 6ES5 955-3NA1.

S5-155UCentral Controller including power supply

6ES5 155-3UA1. with power supply Type 6ES5 955-3LF1.

6ES5 155-3UA2. with power supply Type 6ES5 955-3NF1.

6ES5 188-3UA1. with power supply Type 6ES5 955-3LC4.

6ES5 188-3UA2. with power supply Type 6ES5955-3LF4.

6ES5 188-3UA3. with power supply Type 6ES5955-3NC4.

6ES5 188-3UA5. with power supply Type 6ES5955-3NF4.

ZG- 15 5H Central Controller including power supply

6ES5 188-3UH5 1 with 2 power supplies  
 Type 6ES7 955-7NC11

with fan module  
 Type 6ES7 408-1 TAO 1-OXAO

S5- 183U Expansion Unit (EU)

6ES5 183-3UA2. with power supply  
 Type 6ES5 955-3NC1.  
 or Type 6ES5955-3NC4.



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Component Production No.	Description	Rating.
6ES5 183-3UA1.	with power supply Type 6ES5 955-3LC1. or Type 6ES5955-3LC4.	
	<u>S5-184U Expansion Unit (EU) excluding power supply</u>	
6ES5 184-3UA2.	only with fan Type 6ES5 988-3NA1.	
6ES5 184-3UA1.	only with fan Type Type 6ES5 988-3LA1.	
	<u>S5-185U Expansion Unit including: power supply</u>	
6ES5 185-3UA2.	with power supply Type 6ES5 955-3NC1. or Type 6ES5955-3NC4.	
6ES5 185-3UA1.	with power supply Type 6ES5 955-3LC1. or Type 6ES5955-3LC4.	
6ES5 185-3UA3.	with power supply Type 6ES5 955-3LF1. or Type 6ES5955-3LF4.	
6ES5 185-3UA4.	with power supply Type 6ES5 955-3NF1. , or Type 6ES5955-3NF4.	

All power supply units and fan modules are Certified and are marked with their Certified rating



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Component Production No.	Description	Rating
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S5-186U Expansion Unit

6ES5 187-5UA1 I	S5-187U Expansion Unit (subrack) without power supply and fan	
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Power Supply Module

6ES5 951-4LB11	Module 240/1 15 V (ac) 24 V isolated outputs	Input (ac): 240/ 115v  Output (dc): 24 VI, 0.4 A
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Intelligent I/O Modules

6ES5 244-3AA..	Temperature controller	5V 18 Outputs: 24 V/0.2 A
6ES5 244-3AB3 1	Temperature controller	5V 18 Outputs: 24 V/0.12 A 2.4 W tungsten
6ES5 246-4UAX1	Positioning module (for incremental encoders)	5V
X may be 1,2,3 or4	X = 1,3: forced air cooled X = 2,4: self-cooled	
6ES5 246-4UBX1	Positioning module (for absolute digital encoders)	5V
X may be 1 or2	X = 1: forced air cooled X = 2: self-cooled	



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Component Production No.	Description	Rating
6ES5 247-4UAX1	Positioning module (for stepping motors)	5 v
X may be 1,2,3 or 4	X= 1: forced air cooled X = 2: self-cooled	
6ES5 261-4UA11	Measurement counter 6 digital inputs 1 counter input 7 digital outputs	5 v
6ES5 260-4UA11	PID Process Controller Module 4 digital inputs 4 digital outputs 4 analog inputs 1 analog outputs	4 digital inputs 24 V/8.5 mA 4 digital outputs 24 V/0.2 A 4 analog inputs 0...+10 v 0...+20 mA 4... 20 mA analog output o... 20 mA/ o... 10 v 4... 20 mA/ 2... 10 v
6ES5 288-4UA. A)	IP288  12 digital inputs	12 x (24 V/0.3  12 x (24 V/0.5
A)	12 digital outputs	
<u>Interface Modules</u>		
6ES5 300-3AB11	Interface to 183U EU	5 V/0.6 A
6ES5 300-5CA11	Interface to 184U or 187U EU	5 V/0.6 A
6ES5 301-5CA12	Interface to 184U or 187U EU	5 V/0,8 A
6ES5 310-3AB11	Interface to CC	5 V/0.7 A



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Component Production No.	Description	Rating,
6ES5 301-3AB13	Interface to 183U EU	5 V/0.8 A
6ES5304-3UB1.	Interface 185U EU	5 V/1.5 A
6ES5 3 12-3ABx. x maybe 1 or3	Interface to CC x = 1 50 cm cable x = 3 95 cm cable	5 V/0.2 A
6ES5 3 12-5CAx. x maybe 1 or2	Interface to CC x = 1 50 cm cable x-2 150cmcable	5 V/0.2 A
6ES5 3 14-3UA11, 3 14-3UR11	Interface to CC	5V/1 A
6ES5324-3UA12, 6ES5 324-3UR11	Interface to CC	5 V/1.8 A
<u>Central Controller Modules</u>		
6ES5 3 13-3AA12	Watchdog module	5 V/0.4 A
6ES5 355-3UA11	Memory Module	5V/1 A
<u>Memory Submodules</u>		
6ES5 373-XAA.. X=O or 1	EPROM submodules	5 V/0.3 A max
6ES5 374-.....	Memory Cards	5 V/0.2 A max 5 V/0.2 A max
6ES5 376-XAA.. X=0 or 1	EPROM submodule for 922 R-processor 92 1 S-processor CP 535 commun. processor	5 V/0.3 A max



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Component Production No.	Description	Rating
6ES5 377-0Axxx xxx may be A 11, A2 1, A41, B21, A32, B31, B41	RAM submodule for 922 R processor 921 S processor CP 525 commun. processor CP 535 commun. processor xxx=All : 8Kwords xxx=A21,B21: 16Kwords xxx = A32, B31 : 32 K words xxx=B41,A41 : 64Kwords	5 V/0.1 A max
6ES5 377-0Bxxx xxx may be A3 1 or B41	RAM submodule xxx=A31: 32Kwords xxx = B41: 64 K words	
<b><u>Digital Input Modules</u></b>		
6ES5 420-4UA13	32 inputs (nonfloating)	32 inputs: +24 V/8.5 mA
6ES5 420-4UA14	32 inputs (nonfloating)	32 inputs: +24 V/8.5 mA
6ES5 430-4UA13, may be followed by additional characters	32 inputs (floating)	32 inputs: +24 V/8.5 mA
6ES5 430-4UA14	32 inputs (floating)	32 inputs: +24 V/7 mA
6ES5 431-4UA12	16 inputs (individually floating)	16 inputs: +24/48/60 V
6ES5 432-4UA12	32 inputs (floating with collective signal)	32 inputs: +24 V/8.5 mA
6ES5 434-4UA12	32 inputs, (floating) (TTL, COMOS, NAMUR signals)	32 inputs: +5/15 v
6ES5 435-4UA12	16 inputs (ac) (floating) 2 groups, 8 channels each	16 inputs: 24/48/50 V (ac)



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Component Production No.	Description	Rating
6ES5 436-4UA12	16 inputs (ac) (floating) 2 groups, 8 channels each	16 inputs: 115/240 V (ac)
6ES5 436-4UB 12	8 inputs (ac) (individually floating)	8 inputs: 115/240 V (ac)
<u>Digital Output Modules</u>		
6ES5 454-4UA13	16 outputs (floating)	Supply: +24 V 16 outputs: 2 A pilot duty max per channel total current 6Amax
6ES5 441-4UA13	32 outputs (nonfloating)	Supply: +24 V 32 outputs: 0.5 A pilot duty,
6ES5 441-4UA14	32 outputs	32 channels 24 V dc 0.5 A resistive/P.D. 5 W tungsten at 55°C with fan 16A total load at 55°C without fan8A total load at 35°C without fan 16 A total load
6ES5 451-4UA13	32 outputs (floating)	Supply: +24 V 32 outputs: 0.5 A pilot duty





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Component Production No.	Description	Rating
6ES5 451-4UA14	32 outputs	32 channels 24 V dc 0.5 A resistive/P.D. 5 W tungsten at 55°C with fan 16 A total load at 55°C without fan 8 A total load at 35°C without fan 16 A total load
6ES5 453-4UA12	16 outputs (individually floating)	Supply: +24 V 16 outputs: 2 A pilot duty
6ES5 454-4UA14	16 outputs	Supply: +24 V 16 outputs 2 A resistive/P.D./ 10 W tungsten Total load 16 A
6ES5 455-4UA12	16 outputs (ac) (floating) 2 groups, 8 channels each	Supply: 24/48/ 60 V (ac) 16 outputs: 2 A pilot duty 1440 VA total load
6ES5 456-4UA12	16 outputs (ac) (floating)	Supply: 15/240 V (ac) 16 outputs: 2 A pilot duty 1440 VA total load
6ES5 457-4UA12	16 outputs (individually floating)	Supply: +24/48/ 60 V 16 outputs: 0.5 A, pilot duty



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Component Production No.	Description	Rating
6ES5 458-4UA12	16 relay outputs (individually floating)	Supply: +24 V 16 outputs: relay- contact 0.5 A
6ES5 458-4UA13	16 outputs	Supply 24 V 16 outputs 0.5 A 60 V dc/ 48Vac 6W Tungsten 60 V dc
6ES5 456-4UB 12	8 outputs (ac)  (individually floating)	Supply: 15/240 V (ac) 8 outputs: 2 A pilot duty 1440 VA total load
6ES5 482-4UA11	24 inputs (floating)  16 outputs (floating)	24 inputs: 24 V dc, 8.5 mA 16 outputs: 24 V dc, 0.5 A pilot duty
6ES5 482-4UA12	24 inputs (floating)  16 outputs (floating)	24 inputs: 24 V dc, 8.5 mA 16 outputs: 24 V dc, 0.5 A pilot duty
6ES5 498-1AB11	Contact protection submodule (RC snubber)	

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Component Production	No.	Description	Rating
<u>Analog Input Modules</u>			
6ES5 460-4UA1 (dc)		8 inputs (individually floating) signal range according to measuring range submodules	Supply: 24 V 8 inputs: ● 500 mV (±50 mV)
6ES5 463-4UA1		4 inputs (individually floating)	Supply: 24 V (dc) 4 inputs: 1 V/ 10V
6ES5 463-4UB 1.		▪ 4UA: 50 Hz ▪ 4UB: 60 Hz	0...20 mA/4... 20 mA 2 wire transducers
6ES5 465-4UA1		8/1 6 inputs (nonfloating) signal range according to measuring range submodules Measuring Range Submodules for analog input modules 460/465,4 channels	8/1 6 inputs: 500 mV (±50 mV)
6ES5 498-1AA11		±50 mV, ±500 mV PT 100 PT 100 (resistance thermometer)	
6ES5 498-1AA21		±1 v	-
6ES5 498-1AA3 1		±10 v	-
6ES5 498-1AA41		±20 mA	-
6ES5 498-1AA5 1		1-4 mA...20 mA (2 wire transd.)	-
6ES5 498- 1AA61		±5 v	-
6ES5 498-1AA71		+4 mA...20 mA (4 wire transd.)	-

Note: . = Any digit



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Component Production No.	Description	Rating
<u>Analog Output Modules</u>		
6ES5 470-4Ux12, 6ES5 470-4UX13 x may be	8 outputs (floating) x = A : ±10 V, 0...20 mA x=B : ±10 V	Supply: +24 V 8 outputs: ±10 v, o... 20 mA
A or B or C	x = C : +1...5 V, 4...20 mA	±10 V or +1..5 v, 4... 20 mA
<u>Communication Processors (CP's)</u>		
6ES5 752-0AAX., OLAX. X may be any numbers 0 to 9	Interface submodule	
6ES5 524-3UAl.	CP for communication with standard peripherals	5V
6ES5 525-3UAX xmaybe 1 or2	CP for communication with standard peripherals etc.	5 V/1.8 A 24 V/0.06 A
6ES5 544-3UAl. 6ES5 544-3UB 1.	CP544	5 V/1.5 A 24 V/0.1 A
6ES5 544-3UA11 6ES5 544-3UB 11	CP544 (redesign 2000)	5 V/0.35 A 24 V
. = any digit		
6ES5 580-XUAL. whereX=O, 1, 2,3,4 or 5 . = any digit	CP580 (FD/HD)	5 V/LVLE
6ES5 75 1-3AA1.	Remote Terminal Interface	LVLE
6ES5 751-2AA1.	Local Bus Module	LVLE
6ES5 985-2MC 1.	Programming Adapte	LVLE



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Component Production No	Description	Rating
CP581		
6ES5 581-0EA1 A	Basic Board	5 V/1.8 A; 24 V/0.1
6ES5 581-1EA1. A	Basic Board	5 V/1.8 A; 24 V/0.1
6ES5 581-OEB...	Basic Board	
6ES5 581-1EB...	Basic Board	
6ES5 581-OEC...		
6ES5 581-1EC...		
6ES5 581-0EE..	Basic Board	LVLE
6ES5 581-1EE..	Basic Board	LVLE
6ES5 581-LA1. A	Bulk Storage	5 V/0.5A; 24 V/0.1
6ES5 581-ORAL.,IRA1	At Slot	5Vmax6A
6ES5 581-OHA...	Memory Extention	5 V/0.2 A
6ES5 581-OHB...		
6ES5 581-1HB...		
6ES5 581-0EDI.		LVLE
	Central Processors for CC 135 U	
6ES5 257-4UA11	IP257	5 V/1.5 A
6ES5 922-3UA1.	R-Processor	5 V/2.2 A
6ES5 928-3UA2., -3UB2.	CPU-928	5V/1 A
6ES5 923-3UA1.	Coordinator 923	5 V/0.5 A
6ES5 923-3UC 1.	Coordinator 923-C	5 V/1.1 A
6ES5 923-3UC11	Coordinator 923 C (redesign)	5 V/0.5 A
6ES5 756-0AA11	Jumping module	
6ES5 946-3UR1., 6ES5 946-3UA1., -3UA2., - 3UR2.	Central controller	5 V/5 A total
6ES5 947-3UAL., -3UA2., 6ES5 947-3URL., - 3UR2.	Central controller	5 V/2 A total
where . = 1 or 2		



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Component Production No.	Description	Rating
ES5 948-3UA1.	CPU948 (A1)	5 V/max 5 A
6ES5 948-3UA2.	CPU948 (A2)	5 V/max 5 A
6ES5 948-3UR1.	CPU948UR (1)	5V/max5A
6ES5 948-3UR2.	CPU948UR (2)	5 V/max 5 A
6ES5 948-3UR5.	CPU948UR (5)	5V/max5A
6ES7 951-... 6ES7 952-...	Memory Cards	5 V/0.2 A max
6ES5 760-.....	Termination Connector	LVLE

Notes:

- 1 Certified for use in equipment where the acceptability of the combination is to be determined by the Canadian Standards Association.
- 2 These programmable controllers are for use in ambient temperature up to 55 °C
- 3 Certified power supply modules and fan modules made by Siemens AG are to be used with these programmable controllers, can be Certified to cCSAus or cUL.

**APPLICABLE REQUIREMENTS**

The product, as described in this report, complies with:

- CSA Standard C22.2 No. 0 - M91 - General Requirements
- " " " " 142 - M1987 - Process Control Equipment

**APPLICABLE REQUIREMENTS**

- CAN/CSA-C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, Part II
- CSA Std C22.2 No. 142-M1987 - Process Control Equipment



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## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
1232105	Sept. 11, 2001	CSA - Programmable controllers of the open type, Series Simatic S5 135U, S5-150U and S5-155U.