

FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

6AV Series. Panel Series Modules
NI / I / 2 / ABCD / T*
NI / I / 2 / IIC / T**

Model No.	Description	T-Code*	T-Code**	Tambient
6AV6 542-0AG10-a	Multi Panel MP270B Key-10 TFT	T4	T4	50 °C
6AV6 542-0BB15-a	Operator Panel OP 170B Mono	T4A	T4	50 °C
6AV6 542-0CA10-a	Panel OP270 Key-6 CSTN	T4	T4	50 °C
6AV6 542-0CC10-a	Panel OP270 Key-10 CSTN	T4	T4	50 °C
6AV6 542-0DA10-a	Multi Panel MP 370 Key	T4A	T4	50 °C
6AV6 545-0AA15-a	Touch Panel TP 070	T4A	T4	50 °C
6AV6 545-0AG10-a	Multi Panel MP270B Touch-10 TFT	T4	T4	50 °C
6AV6 545-0AH10-a	Multi Panel MP270B Touch-6 TFT	T4	T4	50 °C
6AV6 545-0BA15-a	Touch Panel 170A	T4A	T4	50 °C
6AV6 545-0BB15-a	Touch Panel TP 170B Mono	T4A	T4	50 °C
6AV6 545-0BC15-a	Touch Panel TP170B Color	T4A	T4	50 °C
6AV6 545-0CA10-a	Panel TP270 Touch-6 CSTN	T4	T4	50 °C
6AV6 545-0CC10-a	Panel TP270 Touch-10 CSTN	T4	T4	50 °C
6AV6 545-0DA10-a	Multi Panel MP 370 Touch	T4A	T4	50 °C
6AV6 545-0DB10-a	Multi Panel MP 370 Touch	T4	T4	50 °C
6AV6 545-8BC10-a	Simatic Panel Q TP170	T4A	T4	50 °C
6AV6 545-8DB10-a	Simatic Panel Q MP370 Touch	T4A	T4	50 °C
6AV6 640-0CA01-a	Touch Panel TP 170 Micro	T4A	T4	50 °C

a = Options not affecting safety, 4 digit alphanumeric code

Special Conditions of Use:

1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3611	2004
Class 3810	2005



6AV Series. Panel Series Modules

NI / I / 2 / ABCD / T*; IP66; Type 4X/12 NI / I / 2 / IIC / T**; IP66; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV6 545-8CC10-a	Q TP270 Touch-10 CSTN	T4	T4	50 °C

a = Options not affecting safety, any 2, 3 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. The modules shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the IP66 and Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3611	2004
Class 3810	2005
ANSI/NEMA-250	1997
IEC 60529	2004
1 1 P A 1 4 4	

Including Amendment 1



6AV Series. Panel Series Modules

NI / I / 2 / ABCD / T*; IP65; Type 4X/12 NI / I / 2 / IIC / T**; IP65; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV6 640-0CA11-a	TP177micro	T4	T4	50 °C
6AV6 641-0BA11-a	Operator Panel OP77A	T4	T4	50 °C
6AV6 641-0CA01-a	Operator Panel OP77B	T4	T4	50 °C
6AV6 642-0AA11-a	TP177A	T4	T4	50 °C
6AV6 642-0BA01-a	Touch Panel TP177B PN/DP	T4	T4	50 °C
6AV6 642-0BC01-a	Touch Panel TP177B DP	T4	T4	50 °C
6AV6 642-0BD01-a	TP 177B-4" Color Panel PN/DP	T4	T4	50 °C
6AV6 642-0DA01-a	Operator Panel OP177B PN/DP	T4	T4	50 °C
6AV6 642-0DC01-a	Operator Panel OP177B DP	T4	T4	50 °C
6AV6 642-7BA11-a	Touch Panel OEM TP177B PN/DP HK	T4	T4	50 °C
6AV6 643-0CB01-a	MP 277T-8"	T4	T4	50 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- The modules shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- In order for the IP65 and Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3611	2004
Class 3810	2005
ANSI/NEMA-250	2003
IEC 60529	2001
Class 3810 ANSI/NEMA-250	2005 2003



6AV Series. Panel Series Modules

NI / I / 2 / ABCD / T*; Type 4X/12 NI / I / 2 / IIC / T**; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV3 688-3AF37-a	KP8F	T4	T4	55 °C
6AV3 688-3AY36-a	KP8	T4	T4	55 °C
6AV6 642-0EA01-a	MP 177-6" Touch Panel	T4	T4	50 °C
6AV6 642-8BA1a-a	TP177B color INOX	T4	T4	50 °C
6AV6 643-0AA01-a	TP 277-6"	T4	T4	50 °C
6AV6 643-0CD01-a	MP 277T-10"	T4	T4	50 °C
6AV6 643-0DD01-a	MP 277K-10"	T4	T4	50 °C
6AV6 643-0ED01-a	MP 277T-10" INOX Ex	T4	T4	50 °C
6AV6 643-8AD10-a	MP 277T-10" INOX	T4	T4	50 °C
6AV6 644-0AA01-a	MP 377 12" Touch	T4	T4	50 °C
6AV6 644-0AB01-a	MP 377 15" Touch	T4	T4	50 °C
6AV6 644-0AC01-a	MP 377 19" Touch	T4	T4	50 °C
6AV6 644-0BA01-a	MP 377 12" Key	T4	T4	50 °C
6AV6 644-0CB01-a	MP 377 15" Touch INOX	T4	T4	50 °C
6AV7 863-2AA00-a	IFP1500 Monitor Standard	T4	T4	50 °C
6AV7 863-2TA00-a	IFP1500 Touch Standard	T4	T4	50 °C
6AV7 863-3AA00-a	IFP1900 Monitor Standard	T4	T4	45 °C
6AV7 863-3TA00-a	IFP1900 Touch Standard	T4	T4	45 °C
6AV7 863-4AA00-a	IFP2200 Monitor Standard	T4	T4	45 °C
6AV7 863-4TA00-a	IFP2200 Touch Standard	T4	T4	45 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.

6AV Series. Panel Series Modules

NI / I / 2 / ABCD / T*; Type 4X/12 NI / I / 2 / IIC / T**; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV6 644-8AB20-a	MP 377 15" Touch Daylight	T4	T4	50 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.
- The front panel has a temperature range of -30 °C \leq Ta \leq +70 °C, though the ambient temperature of the electronics must remain between 0 °C \leq Ta \leq +50 °C.



6AV Series. Comfort Series Panel Modules

NI / I / 2 / ABCD / T*; Type 4X/12 NI / I / 2 / IIC / T**; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV2 124-0GC01-a	TP700 Comfort	T4	T4	50 °C
6AV2 124-0JC01-a	TP900 Comfort	T4	T4	50 °C
6AV2 124-0MC01-a	TP1200 Comfort	T4	T4	50 °C
6AV2 124-0QC02-a	TP1500 Comfort	T4	T4	50 °C
6AV2 124-0UC02-a	TP1900 Comfort	T4	T4	45 °C
6AV2 124-0XC02-a	TP2200 Comfort	T4	T4	45 °C
6AV2 124-1DC01-a	KP400 Comfort	T4	T4	50 °C
6AV2 124-1GC01-a	KP700 Comfort	T4	T4	50 °C
6AV2 124-1JC01-a	KP900 Comfort	T4	T4	50 °C
6AV2 124-1MC01-a	KP1200 Comfort	T4	T4	50 °C
6AV2 124-1QC02-a	KP1500 Comfort	T4	T4	50 °C
6AV2 124-2DC01-a	KTP400 Comfort	T4	T4	50 °C
6AV2 124-5DC00-a	KTP400 Comfort (OEM)	T4	T4	50 °C
6AV2 124-5GC00-a	TP700 Comfort (OEM)	T4	T4	50 °C
6AV2 124-5JC00-a	TP900 Comfort (OEM)	T4	T4	50 °C
6AV2 124-5QC00-a	TP1500 Comfort (OEM)	T4	T4	50 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.
- 3. The Tambient of all 7" to 15" Comfort Panels is increased to 55 °C if the following conditions are met:
 - a. The load at the USB ports does not exceed a total of 100 mA.
 - b. The +24 V DC connection of the PROFIBUS interface is not used.
 - c. The relative humidity during operation is 10% to 60%, without condensation.

6AV Series. Comfort Series Panel Modules

NI / I / 2 / ABCD / T*; Type 4X NI / I / 2 / IIC / T**; Type 4X

Model No.	Description	T-Code*	T-Code**	Tambient
6AV2 144-8GC10-a	TP 700 Comfort INOX	T4	T4	50 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.
- 3. The Tambient of all 7" to 15" Comfort Panels is increased to 55 °C if the following conditions are met:
 - a. The load at the USB ports does not exceed a total of 100 mA.
 - b. The +24 V DC connection of the PROFIBUS interface is not used.
 - c. The relative humidity during operation is 10% to 60%, without condensation.

To verify the availability of the Approved product, please refer to www.approvalguide.com 3012250



6AV Series. ITC Series Panel Modules

NI / I / 2 / ABCD / T*; Type 4X/12 NI / I / 2 / IIC / T**; Type 4X/12

Model No.	Description	T-Code*	T-Code**	Tambient
6AV6 646-1AA22-a	ITC1200	T4	T4	50 °C
6AV6 646-1AB22-a	ITC1500	T4	T4	50 °C
6AV6 646-1AC22-a	ITC1900	T4	T4	45 °C
6AV6 646-1AD22-a	ITC2200	T4	T4	45 °C

a = Options not affecting safety, any 2 or 4 digit letter or number referring to non-electrical properties as product associates, language, delivery packing, documentation, etc.

Special Conditions of Use:

- 1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.
- 2. In order for the Enclosure Type 4X/12 ratings to apply, the module must be installed in accordance with the manufacturer's installation manual.
- 3. The Tambient of all 7" to 15" ITC Panels is increased to 55 °C if the following conditions are met:
 - a. The load at the USB ports does not exceed a total of 100 mA.
 - b. The +24 V DC connection of the PROFIBUS interface is not used.
 - c. The relative humidity during operation is 10% to 60%, without condensation.

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3611	2004
Class 3810	2005
ANSI/NEMA-250	2003

Equipment Ratings:

Nonincendive for Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC Hazardous (Classified) indoor Locations

Nonincendive for Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC Hazardous (Classified) indoor/outdoor (IP66 and Type 4X/12) Locations

Nonincendive for Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC Hazardous (Classified) indoor/outdoor (IP65 and Type 4X/12) Locations

Nonincendive for Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC Hazardous (Classified) indoor/outdoor (Type 4X/12) Locations

Nonincendive for Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC Hazardous (Classified) indoor/outdoor (Type 4X) Locations

FM Approved for:

Siemens AG - I IA AS RD ST TT Amberg, Germany



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Subsequent Revision Reports / Date Approval Amended

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3013507	April 24, 2002	3042138	March 22, 2011
3014949	October 2, 2002	3042445	April 12, 2011
3017709	June 6, 2003	3042849	July 26, 2011
3017859	July 31, 2003	3046606	August 10, 2012
040809	September 2, 2004	3047515	October 8, 2012
050221	March 16, 2005	3047742	December 4, 2012
3024625	September 30, 2005	3048115	February 20, 2013
3025211	February 22, 2006	121023	March 25, 2013
060331	April 14, 2006	3051445	March 11, 2014
3027848	October 13, 2006		
3028500	November 10, 2006		
061127	December 7, 2006		
3033904	July 3, 2008		
3034292	September 24, 2008		
3035063	December 19, 2008		
3035385	January 30, 2009		
090514	May 29, 2009		
3037145	August 7, 2009		
3037782	October 19, 2009		

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11 March 2014

Date