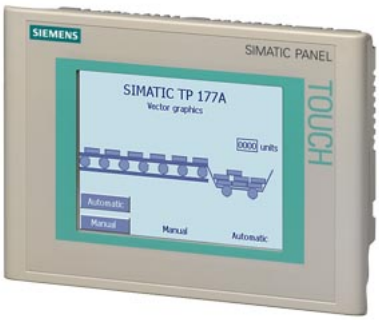
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Data sheet 6AV6642-0AA11-0AX1



*** Spare part *** SIMATIC Touch Panel TP 177A 5.7" blue mode STN display, MPI/PROFIBUS DP interface, configurable from WinCC flexible 2004 Compact HSP Contains open source software which is provided free of charge. See enclosed CD

General information	
Product type designation	TP 177A
Display	
Design of display	STN
Screen diagonal	5.7 in
Color display	No
Number of colors	2; Blue levels
Resolution (pixels)	
● Horizontal image resolution	320 pixel
● Vertical image resolution	240 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
● Function keys	No
— Number of function keys	0
● System keys	No
● Numeric keyboard	Yes
● alphanumeric keyboard	Yes
● hexadecimal keyboard	Yes
● Multi-key operation	No
Touch operation	
● Design as touch screen	Yes; analog, resistive
Connection type	
● Type of connection for mouse/keyboard/barcode reader	- / - / -
Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption (rated value)	0.24 A
Starting current inrush I²t	0.5 A²·s
Power	
Active power input, typ.	6 W
Processor	
Processor type	ARM

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Memory	
Type of memory	Flash / RAM
Memory available for user data	512 kbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Time of day	
Clock	
● Type	Software clock, no battery backup
● retentive	No
● synchronizable	No
Interfaces	
Interfaces/bus type	1x RS 422, 1x RS 485 (max. 1.5 Mbit/s)
Number of industrial Ethernet interfaces	0
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of USB interfaces	0
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	No
Protocols	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	No
Protocols (Ethernet)	
● TCP/IP	No
Further protocols	
● MODBUS	No
● other bus systems	Yes
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	NEMA 4x (when installed)
Standards, approvals, certificates	
Certificate of suitability	CE, GL, ABS, BV, DNV, LRS, FM Class I Div. 2, UL, CSA, cULus, EX-Zone 2 (in Vorbereitung), EX-Zone 22 (in Vorbereitung), C-TICK, NEMA 4x
cULus	Yes
EAC (formerly Gost-R)	No
Suitable for safety functions	No
Use in hazardous areas	
● ATEX Zone 2	Yes
● ATEX Zone 22	Yes
● FM Class I Division 2	Yes
Marine approval	
● Germanischer Lloyd (GL)	Yes
● American Bureau of Shipping (ABS)	Yes
● Bureau Veritas (BV)	Yes
● Det Norske Veritas (DNV)	Yes
● Lloyds Register of Shipping (LRS)	Yes
● Nippon Kaiji Kyokai (Class NK)	Yes
● Polski Rejestr Statkow (PRS)	No
Ambient conditions	
Ambient temperature during operation	
● min.	0 °C
● max.	50 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Relative humidity	

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● Operation, max.	90 %
Operating systems	
pre-installed operating system	LINUX
configuration / header	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
Configuration software	
● Configuration tool	WinCC flexible Compact Version 2004 SP1 or higher (to be ordered separately)
● STEP 7 Basic (TIA Portal)	No
● STEP 7 Professional (TIA Portal)	No
● WinCC flexible Compact	Yes
● WinCC flexible Standard	Yes
● WinCC flexible Advanced	Yes
● WinCC Basic (TIA Portal)	No
● WinCC Comfort (TIA Portal)	Yes
● WinCC Advanced (TIA Portal)	Yes
● WinCC Professional (TIA Portal)	Yes
Languages	
Online languages	
● Number of online/runtime languages	5
Project languages	
● Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Number of Visual Basic Scripts	
● Debugging in the simulator	No
Task planner	Yes
Help system	Yes
● Number of characters per info text	70
● Number of tooltips	0
Message system	
● Number of alarm classes	32
● Number of messages	1 000
● Bit messages	Yes
— Number of bit messages	1 000
● Analog messages	Yes
— Number of analog messages	20
● Telegram message procedure Alarm S	No
● System messages HMI	Yes
● System messages PLC	Yes
● System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...)	No
● Lines	1
● Number of characters per message	80
● Number of process values per message	8
● Acknowledgment groups	Yes
● Message indicator	Yes
● acoustic feedback	No
● First/last value	Yes
Recipe management	
● Number of recipes	5
● Data records per recipe	20
● Entries per data record	20
● Recipe memory	32 KB integrated Flash
Variables	
● Number of variables per device	500
● Number of variables per screen	30
● Limit values	Yes
● Multiplexing	Yes

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● Structures	No
Images	
● Number of configurable images	250
● Permanent window/default	Yes
● Start screen configurable	Yes
● Image selection by PLC	Yes
● Image number in the PLC	Yes
Image objects	
● Text objects	1 000 text elements
● Number of I/O fields per image	30
● Index of screen context	No
● Return	No
● Graphics object	Bit maps, icons, icon (full-screen), vector graphics
— Icons	1
— Icon (full screen)	1
Complex image objects	
● Status/control	Not possible
● dynamic objects	Diagrams, bar graphs
● Bar graphs	
— Number of bars per chart	5
● Limit value lines	Yes
Attributes for dynamic objects	
● Color change	No
● X/Y movement	No
● Hide	Yes
● Angle of rotation	No
Lists	
● Number of text lists per project	300
● Number of graphics lists per project	100
Security	
● Number of user groups	50
● Number of user rights	32
● Password export/import	Yes
Data carrier support	
● PC card	No
● CF card	No
Transfer (upload/download)	
● Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition
Process coupling	
● Connection to controller	S7-200, S7- 300/400, Win AC see section on "System interfaces"
● S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	No
● S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	No
● S5	No
— serial	No
— PROFIBUS DP	No
● TI 505	No
● Allen Bradley (DF1)	No
● Allen Bradley (DF485)	No
● Mitsubishi (FX)	No
● Mitsubishi (MP4)	No
● Telemecanique (ADJUST)	No
● Telemecanique (Uni-Telway)	No
● OMRON (LINK/Multilink)	No
● Modicon (Modbus)	No
● GE-Fanuc (SNP)	No
Functions	

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● Key repeat	No
● TAB sequence	Yes
● Calculating functions	Yes
● Animate	No
● Menu tree editor	No
● Unit switchover	No
Service tools/configuration aids	
● Clean screen	Yes
● Touch calibration	Yes
● Backup/Restore manually	Yes
● Simulation	Yes
● Device switchover	Yes
● Delta transfer	No
● Monitoring function for battery and memory	No
● Trace (operation archive)	No
Expandability/openness	
● Open Platform Program	No
Peripherals/Options	
SIMATIC HMI MM memory card: Multi Media Card	No
Additional software components loadable	Yes
Dimensions	
Width of the housing front	212 mm
Height of housing front	156 mm
Mounting cutout, width	198 mm
Mounting cutout, height	142 mm
Overall depth	44 mm
Weights	
Weight (without packaging)	0.75 kg
Other	
free hotline	Yes

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