MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6AV6545-0BC15-2AX0

COLOR TOUCH OPERATOR PANEL

Used with the applicable SIMATIC HMI TP170B Color configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens SIMATIC HMI TP170B Color technical documentation

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Data sheet 6AV6545-0BC15-2AX0

Spare part SIMATIC Touch Panel TP170B Color STN-Color-Display MPI/PROFIBUS DP interface Printer/RS232 interface Slot for CF card configurable with ProTool/Lite as of Version V5.2+SP2

Display	
Design of display	STN, 16 colors
Screen diagonal	5.7 in
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	
• 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°
Input current	
Current consumption (rated value)	0.25 A
Power	
Active power input, typ.	7 W
Processor	
Processor type	RISC 32 bit, 66 MHz
Memory	
Type of memory	Flash / RAM
Memory available for user data	768 kbyte

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Time of day	
Clock	
• Type	Software clock, synchronizable, no battery backup
• retentive	No
• synchronizable	Yes
Interfaces	
Interfaces/bus type	TTY optional, 2x RS 232, 1x RS 422, 1x RS 485 (max. 12 Mbit/s)
CF card slot	1x CF card slot
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
Certifications	CE, FM Class I Div. 2, UL, CSA
Ambient conditions	
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	85 %
Operating systems	
pre-installed operating system	Windows CE
Configuration	
Configuration software	
• Configuration tool	ProTool / Lite, Version 5.2 SP 2 or higher or WinCC flexible Compact Version 2004 or higher (to be ordered separately)
Languages	
Online languages	
• Number of online/runtime languages	5
Project languages	
• Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
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	2 000

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• Bit messages	Yes
— Number of bit messages	2 000
• Analog messages	Yes
— Number of analog messages	2 000
• Telegram message procedure Alarm S	No
• System messages HMI	Yes
• System messages PLC	No
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
• Lines	1
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	99
• Message indicator	Yes
• acoustic feedback	No
• First/last value	Yes
Recipe management	
• Number of recipes	100
• Data records per recipe	200
• Entries per data record	200
• Recipe memory	32 KB integrated Flash, expandable
Variables	
• Number of variables per device	1 000
• Number of variables per screen	50
• Number of variables	1 000
• Initial values	1 000
• Type Date & Time	1 000
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
Images	
• Number of configurable images	100
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Text objects	2,000 text elements
• Number of I/O fields per image	0
• Number of date/time fields	30

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• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, icon (full-screen)
— Icons	500
— Icon (full screen)	50
Complex image objects	
• Status/control	Not possible
• dynamic objects	Diagrams, bar graphs, invisible buttons
— Number of objects per project	500
— Number of curve diagrams per image	5
• Methods	Trend
• Bar graphs	
— Number of bars per chart	5
• Sliders	
— Number of slides per image	0
• Pointer instruments	
— Number of analog indicators per image	0
• Limit value lines	Yes
• Number of alphanumerical fields	1 000
— alphanumeric fields per image	100
• Number of numerical fields	1 000
— numerical fields per image	100
• Number of password fields	1 000
• Number of visible switches per project	1 000
— visible switches per image	100
— hidden switches per image	100
• Number of status switches per project	1 000
— Number of status switches per image	100
• Number of selector switches per project	1 000
— Selector switches per image	100
• Number of decade switches per project	0
— Decade switches per image	0
• Number of signal lamps per project	1 000
— Signal lamps per image	100
Attributes for dynamic objects	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
• Angle of rotation	No
Lists	
• Number of text lists per project	300

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• Number of text lists per image	10
• Number of entries per text list	256
• Number of graphics lists per project	100
• Number of graphic lists per image	10
• Number of entries per graphics list	255
Security	
• Number of user groups	10
• Password export/import	Yes
Data carrier support	
• PC card	No
• CF card	Yes
• Diskette drive	No
• Hard disk	No
• CD-ROM	No
Logging through printer	
• Recording/Printing	Alarms, report (shift report), color print
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition
Process coupling	
• Connection to controller	S5, S7-200, S7- 300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	No
— MPI	Yes
— PROFIBUS DP	Yes
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	No
• S5	Yes
— serial	Yes
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	No
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• Telemecanique (ADJUST)	Yes
• Telemecanique (Uni-Telway)	Yes

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• OMRON (LINK/Multilink)	No
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes
Functions	
• Key repeat	No
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• 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	Yes
• Monitoring function for battery and memory	Yes
• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	Yes

Peripherals/Options

Peripherals	Printer
• SIMATIC HMI MM memory card: Multi Media Card	No
• SIMATIC HMI SD memory card: Secure Digital memory card	No
• USB memory	No

Dimensions

Width of the housing front	212 mm
Height of housing front	156 mm
Overall depth	45 mm

Weights

Weight (without packaging)	0.7 kg

Other

free hotline	Yes

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