

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6AV6647-0AA11-3AX1

MONOCHROME TOUCH OPERATOR PANEL

Used with the applicable SIMATIC HMI KTP400 Basic mono PN configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens SIMATIC HMI KTP400 Basic mono PN technical documentation

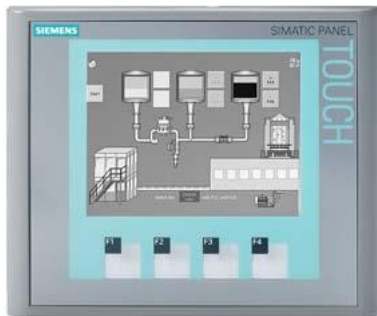


Figure similar

SIMATIC HMI KTP400 Basic mono PN, Basic Panel, key/touch operation, 4" STN display, 4 gray levels, PROFINET interface, configurable as of WinCC flexible 2008 SP2 Compact/ WinCC Basic V10.5/ STEP 7 Basic V10.5, contains open-source software, which is provided free of charge see enclosed CD

General information	
Product type designation	KTP400 Basic mono PN
Display	
Design of display	STN
Screen diagonal	3.8 in
Display width	76.8 mm
Display height	57.6 mm
Number of colors	4; Grayscales
Resolution (pixels)	
• Horizontal image resolution	320 pixel
• Vertical image resolution	240 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	30 000 h
• Backlight dimmable	No
Control elements	
Keyboard fonts	
• Function keys	
— Number of function keys	4
— Number of function keys with LEDs	0
• Keys with LED	No
• System keys	No
• Numeric keyboard	Yes; Onscreen keyboard
• alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
• Design as touch screen	Yes; Analog-resistive
Installation type/mounting	
Mounting position	vertical
Rack mounting	No
Wall mounting/direct mounting	No
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	0.1 A

Starting current inrush I ² t	0.5 A ² ·s
Power	
Active power input, typ.	3 W
Processor	
Processor type	RISC 32 bit
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	1 Mbyte
Type of output	
Acoustics	
• Buzzer	Yes
• Speaker	No
Time of day	
Clock	
• Hardware clock (real-time)	No
• Software clock	Yes
• retentive	No
• synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	1
Number of RS 485 interfaces	0
Number of RS 422 interfaces	0
Number of RS 232 interfaces	0
Number of USB interfaces	0
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
Number of SD card slots	0
With software interfaces	No
Industrial Ethernet	
• Industrial Ethernet status LED	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
PROFIBUS	No
EtherNet/IP	Yes
MPI	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	No
• HTML	No
Further protocols	
• CAN	No
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
Interrupts/diagnostics/status information	
Diagnoses	
• Diagnostic information readable	No
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
• Enclosure Type 4 at the front	Yes
• Enclosure Type 4x at the front	Yes
Standards, approvals, certificates	

CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Use in hazardous areas	
• ATEX Zone 2	No; valid only when stated on the device nameplate!
• ATEX Zone 22	No; valid only when stated on the device nameplate!
• IECEx Zone 2	No; valid only when stated on the device nameplate!
• IECEx Zone 22	No; valid only when stated on the device nameplate!
• cULus Class I Zone 1	No; valid only when stated on the device nameplate!
• cULus Class I Zone 2, Division 2	No; valid only when stated on the device nameplate!
• cULus Class II Division 2	No; valid only when stated on the device nameplate!
• FM Class I Division 2	No; valid only when stated on the device nameplate!
• FM Class II Division 2	No; valid only when stated on the device nameplate!
Marine approval	
• Germanischer Lloyd (GL)	No
• American Bureau of Shipping (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Korean Register of Shipping (KRS)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (Class NK)	No
• Polski Rejestr Statkow (PRS)	No
• Chinese Classification Society (CCS)	No
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	90 %; no condensation
Operating systems	
proprietary	Yes
pre-installed operating system	
• Windows CE	No
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	
• STEP 7 Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• STEP 7 Professional (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• WinCC flexible Compact	Yes
• WinCC flexible Standard	Yes
• WinCC flexible Advanced	Yes
• WinCC Basic (TIA Portal)	Yes
• 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
- Applications/options none
 - Web browser No
 - SIMATIC WinCC Sm@rtServer No
- Task planner
 - time-controlled No
 - task-controlled Yes
- Help system
 - Number of characters per info text 320

Message system

- Number of alarm classes 32
- Bit messages Yes
 - Number of bit messages 200
- Analog messages Yes
 - Number of analog messages 15
- System messages HMI Yes
- System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...) No
- Number of characters per message 80
- Number of process values per message 8
- Message indicator Yes
- Message buffer
 - Number of entries 256
 - Circulating buffer Yes
 - retentive Yes
 - maintenance-free Yes

Recipe management

- Number of recipes 5
- Data records per recipe 20
- Entries per data record 20
- Size of internal recipe memory 40 kbyte
- Recipe memory expandable No

Variables

- Number of variables per device 250
- Number of variables per screen 30
- Limit values Yes
- Multiplexing Yes
- Structures No
- Arrays Yes

Images

- Number of configurable images 50
- Permanent window/default Yes
- Global image Yes
- Image selection by PLC Yes
- Image number in the PLC Yes

Image objects

- Number of objects per image 30
- Text fields Yes
- I/O fields Yes
- Graphic I/O fields (graphics list) Yes
- Symbolic I/O fields (text list) Yes
- Date/time fields Yes
- Switches Yes
- Buttons Yes
- Graphic display Yes
- Icons Yes

• Geometric objects	Yes
Complex image objects	
• Number of complex objects per screen	5
• Alarm view	Yes
• Trend view	Yes
• User view	Yes
• Status/control	No
• Sm@rtClient view	No
• Recipe view	Yes
• f(x) trend view	No
• System diagnostics view	No
• Media Player	No
• Bar graphs	Yes
• Sliders	No
• Pointer instruments	No
• Analog/digital clock	No
Lists	
• Number of text lists per project	150
• Number of entries per text list	30
• Number of graphics lists per project	100
• Number of entries per graphics list	30
Archiving	
• Number of archives per device	0
Security	
• Number of user groups	50
• Number of user rights	32
• Number of users	50
• Password export/import	No
• SIMATIC Logon	No
Character sets	
• Keyboard fonts	
— US English	Yes
Transfer (upload/download)	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• using external storage medium	No
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SINUMERIK	No
• SIMOTION	No
• Allen Bradley (EtherNet/IP)	Yes
• Allen Bradley (DF1)	No
• Mitsubishi (MC TCP/IP)	Yes
• Mitsubishi (FX)	No
• OMRON (FINS TCP)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus TCP/IP)	Yes
• Modicon (Modbus)	No
Service tools/configuration aids	
• Backup/Restore manually	Yes
• Backup/Restore automatically	No
• Simulation	Yes
• Device switchover	Yes
Peripherals/Options	
Printer	No
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No

USB memory	No
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
• Aluminum	No
• Stainless steel	No
Dimensions	
Width of the housing front	140 mm
Height of housing front	116 mm
Mounting cutout, width	123 mm
Mounting cutout, height	99 mm
Overall depth	40 mm
Weights	
Weight (without packaging)	0.32 kg
Weight (with packaging)	0.53 kg
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