

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SIMATIC HMI

6AV2124-2DC01-0AX0

KTP400 COMFORT OPERATOR PANEL

Used with the applicable SIMATIC HMI Comfort Panels configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer documentation

Overview



Comfort Panel family, KP, TP, KTP

SIMATIC HMI Comfort Panels – Standard devices

- Excellent HMI functionality for demanding applications
- Widescreen TFT displays with 4", 7", 9", 12", 15", 19" and 22" diagonals (all 16 million colors) with up to 40% more visualization area as compared to the predecessor devices
- Integrated high-end functionality with archives, scripts, PDF/Word/Excel viewer, Internet Explorer, Media Player and Web Server
- Dimmable displays from 0 to 100% via PROFIenergy, via the HMI project or via a controller
- Modern industrial design, cast aluminum fronts for 7" upwards
- Upright installation for all touch devices
- Data security in the event of a power failure for the device and for the SIMATIC HMI Memory Card
- Innovative service and commissioning concept
- Maximum performance with short screen refresh times
- Suitable for extremely harsh industrial environments thanks to extended approvals such as ATEX 2/22 and marine approvals
- All versions can be used as an OPC UA client or as a server
- Key-operated devices with LED in every function key and new text input mechanism, similar to the keypads of mobile phones
- All keys have a service life of 2 million operations
- Configuring with the WinCC engineering software of the TIA Portal engineering framework

Note:

A 7" and a 15" Comfort Outdoor version are available. These devices have been specially designed for outdoor applications in difficult environments. Best display quality, even under sunlight, UV-resistant fronts and much more.

For further information, please go to:

<http://www.siemens.com/comfort-panels>

Technical specifications

Article number	6AV2124-2DC01-0AX0 SIMATIC HMI KTP400 Comfort
General information	
Product type designation	KTP400 Comfort
Display	
Design of display	TFT
Screen diagonal	4.3 in
Number of colors	16 777 216
Resolution (pixels)	
• Horizontal image resolution	480 Pixel
• Vertical image resolution	272 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	80 000 h
• Backlight dimmable	Yes; 0-100 %
Keyboard fonts	
• Function keys	
- Number of function keys	4
Touch operation	
• Design as touch screen	Yes
Installation type/mounting	
Mounting in portrait format possible	Yes
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V
Memory	
Memory available for user data	4 Mbyte
Type of output	
Acoustics	
• Speaker	No

Operator panels

Advanced HMI Panel-based Comfort Panels

Comfort Panels standard devices

Technical specifications (continued)

Article number	6AV2124-2DC01-0AX0 SIMATIC HMI KTP400 Comfort
Time of day	
Clock	
• Hardware clock (real-time)	Yes
• retentive	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	1
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of USB interfaces	1; USB 2.0
• USB Mini B	1; 5-pole
Number of SD card slots	2
Industrial Ethernet	
• Number of ports of the integrated switch	1; No switch integrated
Protocols	
PROFINET	Yes
IRT	No
PROFIBUS	Yes
MPI	Yes
Redundancy mode	
• MRP	No
Degree and class of protection	
IP (at the front)	IP65
Enclosure Type 4x at the front	Yes
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Use in hazardous areas	
• ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• IECEx Zone 2	Yes
• IECEx Zone 22	Yes
• cULus Class I Zone 2, Division 2	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

Article number	6AV2124-2DC01-0AX0 SIMATIC HMI KTP400 Comfort
Ambient conditions	
Ambient temperature during operation	
• Operation (vertical installation)	
- For vertical installation, min.	0 °C
- For vertical installation, max.	50 °C
Relative humidity	
• Operation, max.	90 %; no condensation
Configuration	
Configuration software	
• WinCC Comfort (TIA Portal)	Yes; from V11
Languages	
Online languages	
• Number of online/runtime languages	32
Functionality under WinCC (TIA Portal)	
Applications/options	
• Web browser	Yes
• Pocket Word	Yes
• Pocket Excel	Yes
• PDF Viewer	Yes
• Media Player	Yes
• SIMATIC WinCC Sm@rtServer	Yes
• SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
• time-controlled	Yes
• task-controlled	Yes
Message system	
• Bit messages	
- Number of bit messages	2 000
• Analog messages	
- Number of analog messages	50
• Message buffer	
- Number of entries	256
- Circulating buffer	Yes
- retentive	Yes
Recipe management	
• Number of recipes	100
• Size of internal recipe memory	512 kbyte
• Recipe memory expandable	Yes
Variables	
• Number of variables per device	1 024
• Number of variables per screen	50
Images	
• Number of configurable images	500

Technical specifications (continued)

Article number	6AV2124-2DC01-0AX0 SIMATIC HMI KTP400 Comfort
Archiving	
• Number of archives per device	10
Security	
• Number of user groups	50
• Number of users	50
• SIMATIC Logon	Yes
Logging through printer	
• Alarms	Yes
• Report (shift log)	Yes
• Hardcopy	Yes
• Electronic print to file	Yes; PDF, HTML
Transfer (upload/download)	
• MPI/PROFIBUS DP	Yes
• Ethernet	Yes
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SIMOTION	Yes
• Allen Bradley (EtherNet/IP)	Yes
• Allen Bradley (DF1)	Yes
• Mitsubishi (MC TCP/IP)	Yes
• Mitsubishi (FX)	Yes
• OMRON (FINS TCP)	No
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus TCP/IP)	Yes
• Modicon (Modbus)	Yes
• OPC UA Client	Yes
• OPC UA Server	Yes

Article number	6AV2124-2DC01-0AX0 SIMATIC HMI KTP400 Comfort
Peripherals/Options	
Peripherals	
• Printer	Yes
• SIMATIC HMI MM memory card: Multi Media Card	Yes; Up to 128 MB
• SIMATIC HMI SD memory card: Secure Digital memory card	Yes; Up to 2 GB
• USB memory	Yes
• Network camera	Yes
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	49 mm
Weights	
Weight without packaging	0.6 kg

Operator panels

Advanced HMI Panel-based Comfort Panels

Comfort Panels standard devices

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Ordering data	Article No.
SIMATIC HMI Comfort Panels	
Key and touch devices	
SIMATIC HMI KTP400 Comfort Key/touch-screen operation; 4" widescreen display	6AV2124-2DC01-0AX0
Touch devices	
SIMATIC HMI TP700 Comfort Touch-screen operation; 7" widescreen display	6AV2124-0GC01-0AX0
SIMATIC HMI TP900 Comfort Touch-screen operation; 9" widescreen display	6AV2124-0JC01-0AX0
SIMATIC HMI TP1200 Comfort Touch-screen operation; 12" widescreen display	6AV2124-0MC01-0AX0
SIMATIC HMI TP1500 Comfort Touch-screen operation; 15" widescreen display	6AV2124-0QC02-0AX1
SIMATIC HMI TP1900 Comfort Touch-screen operation; 19" widescreen display	6AV2124-0UC02-0AX1
SIMATIC HMI TP2200 Comfort Touch-screen operation; 22" widescreen display	6AV2124-0XC02-0AX1
Key devices	
SIMATIC HMI KP400 Comfort Key operation; 4" widescreen display	6AV2124-1DC01-0AX0
SIMATIC HMI KP700 Comfort Key operation; 7" widescreen display	6AV2124-1GC01-0AX0
SIMATIC HMI KP900 Comfort Key operation; 9" widescreen display	6AV2124-1JC01-0AX0
SIMATIC HMI KP1200 Comfort Key operation; 12" widescreen display	6AV2124-1MC01-0AX0
SIMATIC HMI KP1500 Comfort Key operation; 15" widescreen display	6AV2124-1QC02-0AX1
Starter kits for SIMATIC HMI Comfort Panels Consisting of: the respective SIMATIC HMI Comfort Panel, SIMATIC WinCC Comfort, Ethernet cable, 2 m SIMATIC HMI Memory Card 2 GB , 10 protective films for touch screen devices	
Starter kit for SIMATIC HMI KTP400 Comfort, Key and Touch	6AV2181-4DB20-0AX0
Starter kit for SIMATIC HMI TP700 Comfort, Touch	6AV2181-4GB00-0AX0
Starter kit for SIMATIC HMI TP900 Comfort, Touch	6AV2181-4JB00-0AX0
Starter kit for SIMATIC HMI TP1200 Comfort, Touch	6AV2181-4MB00-0AX0
Starter kit for SIMATIC HMI TP1500 Comfort, Touch	6AV2181-4QB00-0AX0
Starter kit for SIMATIC HMI TP1900 Comfort, Touch	6AV2181-4UB00-0AX0
Starter kit for SIMATIC HMI TP2200 Comfort, Touch	6AV2181-4XB00-0AX0
Accessories	See "Operator Control and Monitoring Systems SIMATIC HMI" -> "Accessories"

More information

More information is available on the Internet at:

<http://www.siemens.com/comfort-panels>

You can find an overview of approved printers, supply sources
and printer settings on the Internet at:

<http://support.automation.siemens.com/WW/view/en/11376409>

Certain SIMATIC HMI Comfort Panels allow the application of a
customer name or logo, or selection of the membrane color in
accordance with the customer's corporate design. This is also
possible for small quantities.

More information is available at:

<http://www.siemens.com/express-hmi-tool>