Siemens 6AV2123-2DB03-0AX0

SIMATIC HMI KTP400 Basic

A second-generation SIMATIC HMI Basic Panel for machine operation and process monitoring. It combines a color touchscreen and four hardware function keys with Industrial Ethernet for supported controller communications and USB for supported peripherals.



Technical Specifications

Product Identity	
Manufacturer	Siemens AG
Complete order number	6AV2123-2DB03-0AX0
Product family	SIMATIC HMI Basic Panels, second generation
Product designation	KTP400 Basic
Housing front (W × H)	140 × 116 mm
Mounting cutout (W × H)	124 × 100 mm
Mounting depth	34.9 mm
Functional Configuration	
Operation	Touchscreen and 4 function keys
Display	4.3-inch TFT widescreen; LED backlighting
Resolution / colors	480 × 272 pixels / 65,536 colors
Active display area	95 × 53.9 mm
Interfaces	1 Industrial Ethernet interface; 1 USB interface
PROFINET IO / PROFIBUS	Not supported / not supported
Engineering software	Configurable from WinCC Basic V13 / STEP 7 Basic V13
Performance & Power	
Rated supply / permitted range	24 V DC / 19.2–28.8 V DC
Rated current / typical active power	125 mA / 3 W
User-data memory	10 MB
Environment	
Protection	IP65 front; IP20 rear, subject to correct installation
Operating temperature, landscape	0–50 °C vertical; 0–40 °C at maximum tilt
Operating temperature, portrait	0–40 °C vertical; 0–35 °C at maximum tilt
Maximum inclination	35° from vertical
Storage / transport temperature	–20 to +60 °C
Operating humidity	Maximum 90%; no condensation

Siemens datasheet and selected original pages are included on pages 3–6.

Compatibility & Selection Guide

Controller connections. 6AV2123-2DB03-0AX0 is the PROFINET version of the KTP400 Basic. Supported controller families for Ethernet communication include SIMATIC S7-200, S7-300/400, S7-1200, S7-1500, WinAC, SIMOTION and LOGO! controllers. Third-party communication drivers include Modicon Modbus TCP/IP, Allen-Bradley EtherNet/IP and Mitsubishi MC TCP/IP.

Engineering and ordering. The panel is configurable from TIA Portal WinCC Basic V13 / STEP 7 Basic V13. WinCC flexible is not supported. This order number has an Industrial Ethernet interface and no PROFIBUS interface; the KTP700 Basic DP and KTP1200 Basic DP are separate PROFIBUS models.

Replacement and project transfer. The mounting cutout is compatible with the KTP400 Basic color PN. Project transfer also requires compatible HMI device-image and configuration-software versions: a version mismatch can prevent transfer. The replacement project must use the correct target device and communication configuration.

Wiring & Installation Reference

Power and bonding. Connect the 24 V DC supply at X80, pin 1 L+ and pin 2 M. Use a safely isolated SELV/PELV supply within 19.2–28.8 V DC. With supply power off, terminate conductors up to 1.5 mm² with 6 mm strip length and ferrules. Use a 4 mm² conductor for the panel functional-earth bond.

Panel cutout and mounting. Use a 124 × 100 mm opening in a flat, 2–6 mm thick mounting surface. Install indoors in an enclosure that prevents unauthorized rear access. Insert from the front and fit four clips using no more than 0.2 N·m torque. Maintain ventilation clearance for the installed orientation.

Interfaces and connection sequence. Bond the panel before connecting the supply, engineering PC and controller. Check supply polarity and use cable strain relief. X1 is the RJ45 Industrial Ethernet connection. X60 is USB for supported peripherals and storage.

In this PDF Siemens dimensions table · page 6

Siemens sources: datasheet for 6AV2123-2DB03-0AX0, 28 September 2026. Basic Panels 2nd Generation Operating Instructions, A5E33293231-AB, 10/2016, pp. 17, 19 and 22–30.

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Data sheet 6AV2123-2DB03-0AX0



SIMATIC HMI, KTP400 Basic, Basic Panel, Key/touch operation, 4" TFT display, 65536 colors, PROFINET interface, configurable from WinCC Basic V13/ STEP 7 Basic V13, contains open-source software, which is provided free of charge see enclosed CD

General information	
Product type designation	KTP400 Basic
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	4.3 in
Display width	95 mm
Display height	53.9 mm
Number of colors	65 536
Resolution (pixels)	
● Horizontal image resolution	480 pixel
● Vertical image resolution	272 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	20 000 h
● Backlight dimmable	Yes
Control elements	
Keyboard	
● 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
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)	125 mA

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Starting current inrush I²t	0.2 A²·s
Power	
Active power input, typ.	3 W
Processor	
Processor type	ARM
Storage	
Flash	Yes
RAM	Yes
Memory available for user data	10 Mbyte
Type of output	
Acoustics	
● Buzzer	Yes
● Speaker	No
Time of day	
Clock	
● Hardware clock (real-time)	Yes
● Software clock	Yes
● retentive	Yes; Back-up duration typically 6 weeks
● 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	1; Up to 16 GB
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
● DCP	Yes
● LLDP	Yes
WEB characteristics	
● HTTP	No
● HTML	No
Redundancy mode	
Media redundancy	
— MRP	No
Further protocols	
● CAN	No
● MODBUS	Yes; Modicon (MODBUS TCP/IP)
Interrupts/diagnostics/status information	
Diagnoses	
● Diagnostic information readable	No
EMC	
Emission of radio interference acc. to EN 55 011	

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● Limit class A, for use in industrial areas	Yes
● Limit class B, for use in residential areas	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
● ATEX Zone 22	No
● IECEx Zone 2	No
● IECEx Zone 22	No
● cULus Class I Zone 1	No
● cULus Class I Zone 2, Division 2	No
● FM Class I Division 2	No
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
● 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.	40 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	35 °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	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes

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— RDB	No
Security	
● Number of user groups	50
● Number of user rights	32
● Number of users	50
● Password export/import	Yes
● 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	Yes
Process coupling	
● S7-1200	Yes
● S7-1500	Yes
● S7-200	Yes
● S7-300/400	Yes
● LOGO!	Yes
● WinAC	Yes
● SINUMERIK	Yes; No access to NCK data
● SIMOTION	Yes
● Allen Bradley (EtherNet/IP)	Yes
● Allen Bradley (DF1)	No
● Mitsubishi (MC TCP/IP)	Yes
● Mitsubishi (FX)	No
● OMRON (FINS TCP)	No
● OMRON (Host Link)	No
● Modicon (Modbus TCP/IP)	Yes
● Modicon (Modbus RTU)	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
SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes
SIMATIC HMI USB stick	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	124 mm
Mounting cutout, height	100 mm
mounting depth	34.9 mm
Weights	
Weight (without packaging)	360 g
Weight (with packaging)	470 g

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