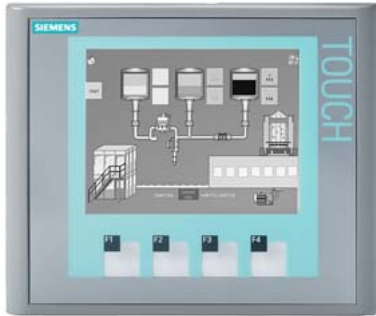


\*\*\*spare part\*\*\* SIPLUS HMI KTP400 Basic mono PN based on 6AV6647-0AA11-3AX0 with conformal coating, -10...+60 °C, display, Ethernet interface



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
Resolution (pixels)	
• Horizontal image resolution	320 pixel
• Vertical image resolution	240 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	30 000 h
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
Installation type/mounting	
Mounting position	vertical
Rack mounting	No
Wall mounting/direct mounting	No
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
Processor	
Processor type	RISC 32 bit
Memory	
Flash	Yes

RAM	Yes
Memory available for user data	512 kbyte
<b>Type of output</b>	
Acoustics	Sound signal
<b>Time of day</b>	
Clock	
• Software clock	Yes
<b>Interfaces</b>	
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
With software interfaces	No
<b>Industrial Ethernet</b>	
• Industrial Ethernet status LED	2
<b>Protocols</b>	
PROFINET	Yes
Supports protocol for PROFINET IO	No
PROFIBUS	No
EtherNet/IP	Yes
MPI	No
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
<b>Further protocols</b>	
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
<b>Degree and class of protection</b>	
IP (at the front)	IP65
IP (rear)	IP20
<b>Ambient conditions</b>	
Suited for indoor use	Yes
Suited for outdoor use	No
<b>Ambient temperature during operation</b>	
Operation (vertical installation)	
— For vertical installation, min.	-10 °C
— For vertical installation, max.	60 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	-10 °C
— At maximum tilt angle, max.	40 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Altitude during operation relating to sea level</b>	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
Coolants and lubricants	
— Resistant to commercially available coolants	Yes; Incl. diesel and oil droplets in the air

and lubricants	
<b>Use in stationary industrial systems</b>	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
<b>Use on ships/at sea</b>	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
<b>Remark</b>	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Conformal coating</b>	
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A
<b>configuration / header</b>	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	5
<b>Project languages</b>	
• Languages per project	32
<b>Functionality under WinCC (TIA Portal)</b>	
Libraries	Yes
Applications/options	none
• Web browser	No
• SIMATIC WinCC Sm@rtServer	No
Task planner	Yes
Help system	Yes
• Number of characters per info text	320
<b>Message system</b>	
• 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	Ring buffer (n x 256 entries), non-retentive
— Number of entries	256
— Circulating buffer	Yes
<b>Recipe management</b>	

• 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
<b>Variables</b>	
• Number of variables per device	128
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
<b>Images</b>	
• Number of configurable images	50
• Permanent window/default	Yes; No permanent window can be configured
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Complex image objects</b>	
• Status/control	No
<b>Lists</b>	
• Number of text lists per project	150
• Number of graphics lists per project	100
<b>Security</b>	
• Number of user groups	50
• Number of user rights	32
• Password export/import	No
<b>Character sets</b>	
• Keyboard fonts	US American (English)
— US English	Yes
<b>Transfer (upload/download)</b>	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• using external storage medium	No
<b>Process coupling</b>	
• S7-200	Yes; Via CP
• S7-300/400	Yes
• SINUMERIK	No
• SIMOTION	No
• Allen Bradley (DF1)	No
• Mitsubishi (FX)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus)	No
<b>Service tools/configuration aids</b>	
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
<b>Peripherals/Options</b>	
Peripherals	none
Printer	No
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No
USB memory	No
<b>Mechanics/material</b>	
Enclosure material (front)	
• Plastic	Yes
• Aluminum	No
<b>Dimensions</b>	
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
<b>Weights</b>	
Weight (without packaging)	0.32 kg
Weight (with packaging)	0.53 kg

**last modified:** 4/22/2021 