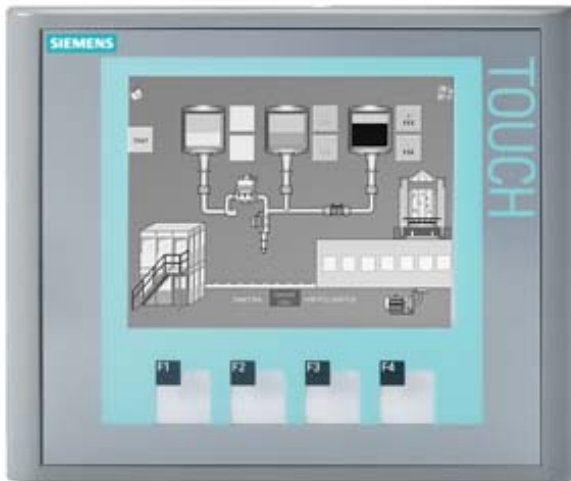


SIPLUS HMI KTP400 Basic mono PN -10...+60°C with conformal coating based on 6AV6647-0AA11-3AX0 display, Ethernet interface



### General information

Product type designation	KTP400 Basic mono PN
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### 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
<b>Touch operation</b>	
• Design as touch screen	Yes

<b>Installation type/mounting</b>	
Mounting position	vertical
Rack mounting	No
Wall mounting/direct mounting	No
maximum permissible angle of inclination without external ventilation	35°

<b>Supply voltage</b>	
Type of supply voltage	DC
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V

<b>Input current</b>	
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s

<b>Processor</b>	
Processor type	RISC 32 bit

<b>Memory</b>	
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

Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	No
PROFIBUS	No
MPI	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Further protocols	
• EtherNet/IP	Yes
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
• 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, min.	40 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Altitude during operation relating to sea level	
• 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)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	

— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
<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</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 messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	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

Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	No
Character sets	
• Keyboard fonts	US American (English)
— US English	Yes
Transfer (upload/download)	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• using external storage medium	No
Process coupling	
• 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
Service tools/configuration aids	
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
Peripherals/Options	
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
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
• Aluminum	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
<b>Weights</b>	
Weight without packaging	0.32 kg
Weight incl. packaging	0.53 kg
<b>last modified:</b>	10/09/2020