

spare part SIPLUS HMI KTP400 Basic mono PN based on 6AV6647-0AA11-3AX1 with conformal coating, -10...+60 °C, display, Ethernet interface



| General information | |
|---|------------------------------------|
| Product type designation | KTP400 Basic mono PN |
| based on | 6AV6647-0AA11-3AX1 |
| 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 | |
| • 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 ² t | 0.5 A ² ·s |
| Processor | |
| Processor type | RISC 32 bit |
| Storage | |

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| Flash | Yes |
| RAM | Yes |
| Memory available for user data | 512 kbyte |
| Type of output | |
| Acoustics | Sound signal |
| Time of day | |
| Clock | |
| • Software clock | 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 |
| With software interfaces | No |
| Industrial Ethernet | |
| • Industrial Ethernet status LED | 2 |
| Protocols | |
| PROFINET | Yes |
| Supports protocol for PROFINET IO | No |
| PROFIBUS | No |
| EtherNet/IP | Yes |
| MPI | No |
| Protocols (Ethernet) | |
| • TCP/IP | Yes |
| • DHCP | Yes |
| • SNMP | Yes |
| • DCP | Yes |
| • LLDP | Yes |
| Further protocols | |
| • 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; = Tmin (incl. condensation/frost) |
| — For vertical installation, max. | 60 °C; = Tmax |
| Operation (max. tilt angle) | |
| — At maximum tilt angle, min. | -10 °C |
| — At maximum tilt angle, max. | 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 1 080 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 | |

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| Coolants and lubricants | |
| — Resistant to commercially available coolants and lubricants | Yes; Incl. diesel and oil droplets in the air |
| Use in stationary industrial systems | |
| — 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, * |
| Use on ships/at sea | |
| — 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; * |
| Remark | |
| — 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! |
| Conformal coating | |
| <ul style="list-style-type: none"> • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A | <p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p> |
| Configuration | |
| Message indicator | Yes |
| Alarm system (incl. buffer and acknowledgment) | Yes |
| Process value display (output) | Yes |
| Process value default (input) possible | Yes |
| Recipe management | 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 | Yes |
| Help system | Yes |
| • 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 | Ring buffer (n x 256 entries), non-retentive |
| — Number of entries | 256 |
| — Circulating buffer | Yes |

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| 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 | 128 |
| • Number of variables per screen | 30 |
| • Limit values | Yes |
| • Multiplexing | Yes |
| • Structures | No |
| Images | |
| • 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 |
| Complex image objects | |
| • Status/control | No |
| Lists | |
| • 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 (Host Link) | No |
| • Modicon (Modbus RTU) | 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 |
| mounting depth | 40 mm |

Weights

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|----------------------------|---------|
| Weight (without packaging) | 0.32 kg |
| Weight (with packaging) | 0.53 kg |

Classifications

| | Version | Classification |
|--------|---------|----------------|
| eClass | 14 | 27-33-02-01 |
| eClass | 12 | 27-33-02-01 |
| eClass | 9.1 | 27-33-02-01 |
| eClass | 9 | 27-33-02-01 |
| eClass | 8 | 27-24-23-02 |
| eClass | 7.1 | 27-24-23-02 |
| eClass | 6 | 27-24-23-02 |
| ETIM | 10 | EC001412 |
| ETIM | 9 | EC001412 |
| ETIM | 8 | EC001412 |
| ETIM | 7 | EC001412 |

Approvals / Certificates

General Product Approval



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