

SIPLUS HMI KP300 Basic mono PN, based on 6AV6647-0AH11-3AX1 with conformal coating, -25...+60 °C

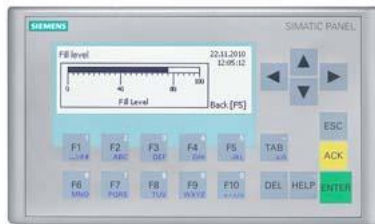


Figure similar

| General information                                                   |                                                     |
|-----------------------------------------------------------------------|-----------------------------------------------------|
| Product type designation                                              | KP300 Basic mono PN                                 |
| based on                                                              | <a href="#">6AV6647-0AH11-3AX1</a>                  |
| Display                                                               |                                                     |
| Design of display                                                     | FSTN                                                |
| Screen diagonal                                                       | 3.6 in                                              |
| Display width                                                         | 87 mm                                               |
| Display height                                                        | 31 mm                                               |
| Number of colors                                                      | 4; backlit display only (white, red, green, yellow) |
| Resolution (pixels)                                                   |                                                     |
| • Horizontal image resolution                                         | 240 pixel                                           |
| • Vertical image resolution                                           | 80 pixel                                            |
| Backlighting                                                          |                                                     |
| • MTBF backlighting (at 25 °C)                                        | 50 000 h                                            |
| • Backlight dimmable                                                  | No                                                  |
| Control elements                                                      |                                                     |
| Keyboard fonts                                                        |                                                     |
| • Function keys                                                       |                                                     |
| — Number of function keys                                             | 10                                                  |
| — Number of function keys with LEDs                                   | 0                                                   |
| • Keys with LED                                                       | No                                                  |
| • System keys                                                         | Yes                                                 |
| • Numeric keyboard                                                    | Yes; Keyboard                                       |
| • alphanumeric keyboard                                               | Yes; Keyboard                                       |
| Touch operation                                                       |                                                     |
| • Design as touch screen                                              | No; without                                         |
| Installation type/mounting                                            |                                                     |
| Mounting position                                                     | vertical                                            |
| Rack mounting                                                         | No                                                  |
| Wall mounting/direct mounting                                         | No                                                  |
| Mounting in portrait format possible                                  | No                                                  |
| 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                                              |

|                                                         |                              |
|---------------------------------------------------------|------------------------------|
| <b>Input current</b>                                    |                              |
| Current consumption (rated value)                       | 0.1 A                        |
| Starting current inrush I <sup>2</sup> t                | 0.5 A <sup>2</sup> ·s        |
| <b>Power</b>                                            |                              |
| Active power input, typ.                                | 3 W                          |
| <b>Processor</b>                                        |                              |
| Processor type                                          | RISC 32 bit                  |
| <b>Memory</b>                                           |                              |
| Flash                                                   | Yes                          |
| RAM                                                     | Yes                          |
| Memory available for user data                          | 1 Mbyte                      |
| <b>Type of output</b>                                   |                              |
| Acoustics                                               |                              |
| • Buzzer                                                | No                           |
| • Speaker                                               | No                           |
| <b>Time of day</b>                                      |                              |
| Clock                                                   |                              |
| • Hardware clock (real-time)                            | No                           |
| • Software clock                                        | Yes                          |
| • retentive                                             | No                           |
| • synchronizable                                        | 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                            |
| Number of SD card slots                                 | 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                           |
| IRT                                                     | No                           |
| PROFIBUS                                                | No                           |
| EtherNet/IP                                             | Yes                          |
| MPI                                                     | No                           |
| <b>Protocols (Ethernet)</b>                             |                              |
| • TCP/IP                                                | Yes                          |
| • DHCP                                                  | Yes                          |
| • SNMP                                                  | Yes                          |
| • DCP                                                   | Yes                          |
| • LLDP                                                  | Yes                          |
| <b>WEB characteristics</b>                              |                              |
| • HTTP                                                  | No                           |
| • HTML                                                  | No                           |
| <b>Further protocols</b>                                |                              |
| • CAN                                                   | No                           |
| • MODBUS                                                | Yes; Modicon (MODBUS TCP/IP) |
| <b>Interrupts/diagnostics/status information</b>        |                              |
| <b>Diagnoses</b>                                        |                              |
| • Diagnostic information readable                       | No                           |
| <b>EMC</b>                                              |                              |
| <b>Emission of radio interference acc. to EN 55 011</b> |                              |
| • 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                                                                                                                                                                                                             |
| Ambient conditions                                                                                                      |                                                                                                                                                                                                                 |
| Suited for indoor use                                                                                                   | Yes                                                                                                                                                                                                             |
| Suited for outdoor use                                                                                                  | No                                                                                                                                                                                                              |
| Ambient temperature during operation                                                                                    |                                                                                                                                                                                                                 |
| Operation (vertical installation)                                                                                       |                                                                                                                                                                                                                 |
| — For vertical installation, min.                                                                                       | -25 °C; = Tmin                                                                                                                                                                                                  |
| — For vertical installation, max.                                                                                       | 60 °C; = Tmax                                                                                                                                                                                                   |
| Operation (max. tilt angle)                                                                                             |                                                                                                                                                                                                                 |
| — At maximum tilt angle, min.                                                                                           | -25 °C; = Tmin                                                                                                                                                                                                  |
| — At maximum tilt angle, max.                                                                                           | 40 °C; = Tmax                                                                                                                                                                                                   |
| Ambient temperature during storage/transportation                                                                       |                                                                                                                                                                                                                 |
| • min.                                                                                                                  | -25 °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 when condensation present), horizontal at vertical mounting position                                                                                       |
| Resistance                                                                                                              |                                                                                                                                                                                                                 |
| 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, fungal and dry rot spores (excluding fauna)                                                                                                                                                |
| — 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; *                                                                                                                                                                              |
| Usage in industrial process technology                                                                                  |                                                                                                                                                                                                                 |
| — Against chemically active substances acc. to EN 60654-4                                                               | Yes; Class 3 (excluding trichlorethylene)                                                                                                                                                                       |
| — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04                            | Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)                             |
| 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                                                                                                       |                                                                                                                                                                                                                 |
| • 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                                                                                                                                                                                 |
| Operating systems                                                                                                       |                                                                                                                                                                                                                 |
| proprietary                                                                                                             | Yes                                                                                                                                                                                                             |
| pre-installed operating system                                                                                          |                                                                                                                                                                                                                 |

|                                                             |                                              |
|-------------------------------------------------------------|----------------------------------------------|
| • Windows CE                                                | No                                           |
| <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>Configuration software</b>                               |                                              |
| • STEP 7 Basic (TIA Portal)                                 | Yes; via integrated WinCC Basic (TIA Portal) |
| • STEP 7 Professional (TIA Portal)                          | Yes; via integrated WinCC Basic (TIA Portal) |
| • WinCC flexible Compact                                    | No                                           |
| • WinCC flexible Standard                                   | No                                           |
| • WinCC flexible Advanced                                   | No                                           |
| • WinCC Basic (TIA Portal)                                  | Yes                                          |
| • WinCC Comfort (TIA Portal)                                | Yes                                          |
| • WinCC Advanced (TIA Portal)                               | Yes                                          |
| • WinCC Professional (TIA Portal)                           | 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                                                |                                              |
| • time-controlled                                           | No                                           |
| • task-controlled                                           | 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                                            |                                              |
| — Number of entries                                         | 256                                          |
| — Circulating buffer                                        | Yes                                          |
| — retentive                                                 | Yes                                          |
| — maintenance-free                                          | 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                            | 250                                          |
| • Number of variables per screen                            | 30                                           |
| • Limit values                                              | Yes                                          |
| • Multiplexing                                              | Yes                                          |
| • Structures                                                | No                                           |

|                                        |     |
|----------------------------------------|-----|
| • Arrays                               | Yes |
| <b>Images</b>                          |     |
| • Number of configurable images        | 50  |
| • Permanent window/default             | Yes |
| • Global image                         | Yes |
| • Image selection by PLC               | Yes |
| • Image number in the PLC              | Yes |
| <b>Image objects</b>                   |     |
| • Number of objects per image          | 30  |
| • Text fields                          | Yes |
| • I/O fields                           | Yes |
| • Graphic I/O fields (graphics list)   | Yes |
| • Symbolic I/O fields (text list)      | Yes |
| • Date/time fields                     | Yes |
| • Switches                             | Yes |
| • Buttons                              | Yes |
| • Graphic display                      | Yes |
| • Icons                                | Yes |
| • Geometric objects                    | Yes |
| <b>Complex image objects</b>           |     |
| • Number of complex objects per screen | 5   |
| • Alarm view                           | Yes |
| • Trend view                           | Yes |
| • User view                            | Yes |
| • Status/control                       | No  |
| • Sm@rtClient view                     | No  |
| • Recipe view                          | Yes |
| • f(x) trend view                      | No  |
| • System diagnostics view              | No  |
| • Media Player                         | No  |
| • Bar graphs                           | Yes |
| • Sliders                              | No  |
| • Pointer instruments                  | No  |
| • Analog/digital clock                 | No  |
| <b>Lists</b>                           |     |
| • Number of text lists per project     | 150 |
| • Number of entries per text list      | 30  |
| • Number of graphics lists per project | 100 |
| • Number of entries per graphics list  | 30  |
| <b>Archiving</b>                       |     |
| • Number of archives per device        | 0   |
| <b>Security</b>                        |     |
| • Number of user groups                | 50  |
| • Number of user rights                | 32  |
| • Number of users                      | 50  |
| • Password export/import               | No  |
| • SIMATIC Logon                        | No  |
| <b>Character sets</b>                  |     |
| • Keyboard fonts                       |     |
| — 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>                |     |
| • S7-1200                              | Yes |
| • S7-1500                              | Yes |
| • S7-200                               | Yes |
| • S7-300/400                           | Yes |
| • LOGO!                                | Yes |

|                                                        |         |
|--------------------------------------------------------|---------|
| • WinAC                                                | Yes     |
| • SINUMERIK                                            | No      |
| • SIMOTION                                             | No      |
| • Allen Bradley (EtherNet/IP)                          | Yes     |
| • Allen Bradley (DF1)                                  | No      |
| • Mitsubishi (MC TCP/IP)                               | Yes     |
| • Mitsubishi (FX)                                      | No      |
| • OMRON (FINS TCP)                                     | No      |
| • OMRON (LINK/Multilink)                               | No      |
| • Modicon (Modbus TCP/IP)                              | Yes     |
| • Modicon (Modbus)                                     | No      |
| <b>Service tools/configuration aids</b>                |         |
| • Backup/Restore manually                              | Yes     |
| • Backup/Restore automatically                         | No      |
| • Simulation                                           | Yes     |
| • Device switchover                                    | Yes     |
| <b>Peripherals/Options</b>                             |         |
| 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      |
| • Stainless steel                                      | No      |
| <b>Dimensions</b>                                      |         |
| Width of the housing front                             | 165 mm  |
| Height of housing front                                | 97 mm   |
| Mounting cutout, width                                 | 149 mm  |
| Mounting cutout, height                                | 82 mm   |
| Overall depth                                          | 30 mm   |
| <b>Weights</b>                                         |         |
| Weight (without packaging)                             | 0.25 kg |
| Weight (with packaging)                                | 0.38 kg |

last modified:

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