



SIMATIC HMI connection box Standard for Mobile Panels, wall mounting, PROFINET and PROFIsafe, connection of safety relay, terminal detection, integrated switch

| General information                                        |                        |
|------------------------------------------------------------|------------------------|
| Product type designation                                   | Connection box         |
| Product function                                           |                        |
| • Web-based management                                     | Yes                    |
| FH technology                                              |                        |
| Safety evaluation through direct wiring                    |                        |
| • Reconnection without emergency stop circuit interruption | No                     |
| • Reconnection with emergency stop circuit interruption    | Yes                    |
| • Monitoring the STOP button                               | Yes                    |
| • Monitoring of emergency stop button                      | Yes                    |
| • Monitoring of acknowledgement button                     | Yes                    |
| Safety evaluation via PROFIsafe                            |                        |
| • Reconnection without emergency stop circuit interruption | Yes                    |
| • Reconnection with emergency stop circuit interruption    | No                     |
| • Monitoring the STOP button                               | Yes                    |
| • Monitoring of emergency stop button                      | Yes                    |
| • Monitoring of acknowledgement button                     | Yes                    |
| Installation type/mounting                                 |                        |
| Wall mounting/direct mounting                              | Yes                    |
| Control cabinet installation                               | No                     |
| 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)                          | 96 mA                  |
| Starting current inrush $I^2t$                             | 0.15 A <sup>2</sup> ·s |
| Power                                                      |                        |
| Active power input, typ.                                   | 2.3 W                  |
| Interfaces                                                 |                        |
| Number of industrial Ethernet interfaces                   | 3                      |
| Number of PROFINET interfaces                              | 3                      |
| Connection point identification                            | Yes                    |
| Industrial Ethernet                                        |                        |
| • Industrial Ethernet status LED                           | 3                      |
| Protocols                                                  |                        |
| PROFINET                                                   | Yes                    |
| IRT                                                        | No                     |
| PROFIsafe                                                  | Yes                    |

|                                                         |                    |
|---------------------------------------------------------|--------------------|
| EtherNet/IP                                             | Yes                |
| AS-Interface                                            | No                 |
| EIB/KNX                                                 | No                 |
| <b>Protocols (Ethernet)</b>                             |                    |
| • TCP/IP                                                | Yes                |
| • DHCP                                                  | Yes                |
| • SNMP                                                  | Yes                |
| • DCP                                                   | Yes                |
| • LLDP                                                  | Yes                |
| <b>Redundancy mode</b>                                  |                    |
| <b>Media redundancy</b>                                 |                    |
| — MRP                                                   | No                 |
| <b>Further protocols</b>                                |                    |
| • MODBUS                                                | Yes                |
| • other bus systems                                     | No                 |
| <b>EMC</b>                                              |                    |
| <b>Emission of radio interference acc. to EN 55 011</b> |                    |
| • Limit class A, for use in industrial areas            | No                 |
| • Limit class B, for use in residential areas           | No                 |
| <b>Degree and class of protection</b>                   |                    |
| IP degree of protection                                 | IP65               |
| IP65 (all-round)                                        | Yes                |
| IP (at the front)                                       | IP65               |
| <b>Standards, approvals, certificates</b>               |                    |
| CE mark                                                 | Yes                |
| cULus                                                   | Yes                |
| RCM (formerly C-TICK)                                   | Yes                |
| KC approval                                             | No; Available soon |
| Suitable for safety functions                           | Yes                |
| <b>Highest safety class achievable in safety mode</b>   |                    |
| • Performance level according to ISO 13849-1            | PL <sub>e</sub>    |
| • SIL acc. to IEC 61508                                 | SIL 3              |
| <b>Use in hazardous areas</b>                           |                    |
| • ATEX Zone 2                                           | No                 |
| • ATEX Zone 22                                          | No                 |
| • cULus Class I Zone 1                                  | No                 |
| • cULus Class I Zone 2, Division 2                      | No                 |
| • FM Class I Division 2                                 | No                 |
| <b>Marine approval</b>                                  |                    |
| • Germanischer Lloyd (GL)                               | Yes                |
| • American Bureau of Shipping (ABS)                     | Yes                |
| • Bureau Veritas (BV)                                   | No; Available soon |
| • Det Norske Veritas (DNV)                              | Yes                |
| • Korean Register of Shipping (KRS)                     | No                 |
| • Lloyds Register of Shipping (LRS)                     | Yes                |
| • Nippon Kaiji Kyokai (Class NK)                        | Yes                |
| • Polski Rejestr Statkow (PRS)                          | No                 |
| • Chinese Classification Society (CCS)                  | No                 |
| <b>Ambient conditions</b>                               |                    |
| <b>Ambient temperature during operation</b>             |                    |
| • min.                                                  | 0 °C               |
| • max.                                                  | 55 °C              |
| <b>Relative humidity</b>                                |                    |
| • Operation, max.                                       | 90 %               |
| <b>configuration / header</b>                           |                    |
| <b>Configuration software</b>                           |                    |
| • STEP 7 Professional (TIA Portal)                      | No                 |
| • WinCC Comfort (TIA Portal)                            | Yes; Optional      |
| • WinCC Advanced (TIA Portal)                           | Yes; Optional      |
| • WinCC Professional (TIA Portal)                       | Yes; Optional      |

| Mechanics/material               |           |
|----------------------------------|-----------|
| Enclosure material (front)       |           |
| • Plastic                        | Yes       |
| • Aluminum                       | No        |
| • Stainless steel                | No        |
| Dimensions                       |           |
| Width of the housing front       | 230 mm    |
| Height of housing front          | 145 mm    |
| Depth of housing                 | 76 mm     |
| Weights                          |           |
| Weight (without packaging)       | 0.72 kg   |
| Weight (with packaging)          | 0.8 kg    |
| Other                            |           |
| Usable in the following products |           |
| • Product 1                      | 6AV2125-* |

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