

SIMATIC HMI connection box compact for Mobile Panels, installation in control cabinet, PROFINET and PROFIsafe, connection of safety relay, Connection point detection



### General information

|                          |         |
|--------------------------|---------|
| Product type designation | Compact |
| Product function         |         |
| • Web-based management   | No      |

### 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
- Monitoring of acknowledgement button

Yes  
Yes

#### Installation type/mounting

|                               |     |
|-------------------------------|-----|
| Wall mounting/direct mounting | No  |
| Control cabinet installation  | Yes |

#### 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) | 18 mA                   |
| Starting current inrush $I^2t$    | 0.003 A <sup>2</sup> ·s |

#### Power

|                          |        |
|--------------------------|--------|
| Active power input, typ. | 0.43 W |
|--------------------------|--------|

#### Interfaces

|                                          |     |
|------------------------------------------|-----|
| Number of industrial Ethernet interfaces | 2   |
| Number of PROFINET interfaces            | 2   |
| Connection point identification          | Yes |

#### Industrial Ethernet

- Industrial Ethernet status LED

0

#### Protocols

|              |                              |
|--------------|------------------------------|
| PROFINET     | Yes; No switch functionality |
| IRT          | No                           |
| MRP          | No                           |
| PROFIsafe    | Yes; No switch functionality |
| AS-Interface | No                           |
| EIB/KNX      | No                           |

#### Protocols (Ethernet)

- TCP/IP
- DHCP
- SNMP
- DCP
- LLDP

Yes; No switch functionality  
No  
No  
No  
No

#### Further protocols

- AS-Interface Safety at Work
- CAN
- Data-Highway
- DeviceNet
- DeviceNet Safety

No  
No  
No  
No  
No

|                           |     |
|---------------------------|-----|
| • EtherNet/IP             | Yes |
| • Foundation Fieldbus     | No  |
| • INTERBUS                | No  |
| • INTERBUS-Safety         | No  |
| • Local Operating Network | No  |
| • MODBUS                  | Yes |
| • SafetyBUS p             | No  |
| • SERCOS                  | No  |
| • SUCOnet                 | No  |
| • other bus systems       | No  |

## EMC

### Emission of radio interference acc. to EN 55 011

|                                               |                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------|
| • Limit class A, for use in industrial areas  | Yes; EN 61000-6-4, interference emission: Intended for use in industrial areas. |
| • Limit class B, for use in residential areas | No                                                                              |

## Degree and class of protection

|                   |      |
|-------------------|------|
| IP (at the front) | IP65 |
| IP (rear)         | IP20 |

## Standards, approvals, certificates

|                               |                    |
|-------------------------------|--------------------|
| CE mark                       | Yes                |
| cULus                         | Yes                |
| RCM (formerly C-TICK)         | Yes                |
| KC approval                   | No; Available soon |
| Suitable for safety functions | Yes                |

### Marine approval

|                                        |                    |
|----------------------------------------|--------------------|
| • 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                 |

### Highest safety class achievable in safety mode

|                                              |       |
|----------------------------------------------|-------|
| • Performance level according to ISO 13849-1 | PLe   |
| • SIL acc. to IEC 61508                      | SIL 3 |

### Use in hazardous areas

|                        |    |
|------------------------|----|
| • ATEX Zone 2          | No |
| • ATEX Zone 22         | No |
| • cULus Class I Zone 1 | No |

- cULus Class I Zone 2, Division 2
- FM Class I Division 2

No

No

## Ambient conditions

### Ambient temperature during operation

- min. 0 °C
- max. 55 °C

### Relative humidity

- Operation, max. 90 %

## Configuration

### Configuration software

- STEP 7 Professional (TIA Portal) No
- WinCC Comfort (TIA Portal) No
- WinCC Advanced (TIA Portal) No
- WinCC Professional (TIA Portal) No

## Mechanics/material

### Enclosure material (front)

- Plastic Yes
- Aluminum No
- Stainless steel No

## Dimensions

|                            |          |
|----------------------------|----------|
| Width of the housing front | 96 mm    |
| Height of housing front    | 125 mm   |
| Depth of housing           | 78 mm    |
| Mounting cutout, width     | 77.5 mm  |
| Mounting cutout, height    | 106.5 mm |
| Overall depth              | 30 mm    |

## Weights

|                          |         |
|--------------------------|---------|
| Weight without packaging | 0.25 kg |
| Weight incl. packaging   | 0.29 kg |

## Other

### Usable in the following products

- Product 1 6AV2125-\*

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