

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	Standard
Product function	
<ul style="list-style-type: none"> • Web-based management 	Yes
FH technology	
Safety evaluation through direct wiring	
<ul style="list-style-type: none"> • Reconnection without emergency stop circuit interruption 	No
<ul style="list-style-type: none"> • Reconnection with emergency stop circuit interruption 	Yes
<ul style="list-style-type: none"> • Monitoring the STOP button 	Yes
<ul style="list-style-type: none"> • Monitoring of emergency stop button 	Yes
<ul style="list-style-type: none"> • Monitoring of acknowledgement button 	Yes
Safety evaluation via PROFIsafe	
<ul style="list-style-type: none"> • Reconnection without emergency stop circuit interruption 	Yes
<ul style="list-style-type: none"> • Reconnection with emergency stop circuit interruption 	No
<ul style="list-style-type: none"> • 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 ² t	0.15 A ² ·s

Power

Active power input, typ.	2.3 W
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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
AS-Interface	No
EIB/KNX	No

Protocols (Ethernet)

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

Redundancy mode

- MRP No

Further protocols

- AS-Interface Safety at Work No
- CAN No
- Data-Highway No
- DeviceNet No

• DeviceNet Safety	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	No
• Limit class B, for use in residential areas	No

Degree and class of protection

IP degree of protection	IP65
IP65 (all-round)	Yes
IP (at the front)	IP65

Standards, approvals, certificates

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

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	No
• FM Class I Division 2	No

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

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) 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 incl. packaging	0.8 kg

Other

Usable in the following products

- Product 1 6AV2125-*

last modified: 03/19/2020