



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	
<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
<ul style="list-style-type: none"> • Monitoring of emergency stop button 	Yes
<ul style="list-style-type: none"> • 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
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
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Redundancy mode	
Media redundancy	
— MRP	No
Further protocols	
• MODBUS	Yes
• 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 / header	
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 (with packaging)	0.8 kg
Other	
Usable in the following products	
• Product 1	6AV2125-*
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