



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

General information	
Product type designation	Connection box
Product function	
<ul style="list-style-type: none"> Web-based management 	No
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 PROFI-safe	
<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	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 ² t	0.003 A ² ·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	
<ul style="list-style-type: none"> Industrial Ethernet status LED 	0
Protocols	
PROFINET	Yes; No switch functionality
IRT	No
PROFI-safe	Yes; No switch functionality

EtherNet/IP	Yes
AS-Interface	No
EIB/KNX	No
Protocols (Ethernet)	
• TCP/IP	Yes; No switch functionality
• DHCP	No
• SNMP	No
• DCP	No
• LLDP	No
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	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
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)	No
• WinCC Advanced (TIA Portal)	No
• WinCC Professional (TIA Portal)	No
Mechanics/material	

Enclosure material (front)	
<ul style="list-style-type: none"> • Plastic • Aluminum • Stainless steel 	<p>Yes</p> <p>No</p> <p>No</p>
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 (with packaging)	0.29 kg
Other	
Usable in the following products	
<ul style="list-style-type: none"> • Product 1 	6AV2125-*

last modified: 10/9/2023 