



SIMATIC HMI connection box Advanced for Mobile Panels, wall mounting, PROFINET and PROFIsafe, connection of safety relay, emergency stop circuit bridging, terminal detection, Integrated switch, MRP client, IRT

General information	
Product type designation	Connection box
Product function	
<ul style="list-style-type: none"> <li>Web-based management</li> </ul>	Yes
FH technology	
Safety evaluation through direct wiring	
<ul style="list-style-type: none"> <li>Reconnection without emergency stop circuit interruption</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Reconnection with emergency stop circuit interruption</li> </ul>	No
<ul style="list-style-type: none"> <li>Monitoring the STOP button</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Monitoring of emergency stop button</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Monitoring of acknowledgement button</li> </ul>	Yes
Safety evaluation via PROFIsafe	
<ul style="list-style-type: none"> <li>Reconnection without emergency stop circuit interruption</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Reconnection with emergency stop circuit interruption</li> </ul>	No
<ul style="list-style-type: none"> <li>Monitoring the STOP button</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Monitoring of emergency stop button</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Monitoring of acknowledgement button</li> </ul>	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)	95 mA
Starting current inrush I <sup>2</sup> t	0.16 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	
<ul style="list-style-type: none"> <li>Industrial Ethernet status LED</li> </ul>	3
Protocols	
PROFINET	Yes
IRT	Yes
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	Yes
<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; in preparation
Suitable for safety functions	Yes
<b>Highest safety class achievable in safety mode</b>	
• Performance level according to ISO 13849-1	PLe
• 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; in preparation
• 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	230 mm
Height	151.3 mm
Depth	75.4 mm
Weights	
Weight (without packaging)	0.72 kg
Weight (with packaging)	0.8 kg
Other	
Usable in the following products	
• Product 1	6AV2125-*

**last modified:** 8/8/2024 