## **SIEMENS**

## Data sheet

## 6AG2521-1BH00-4AB0

SIPLUS S7-1500 DI 16x24 V DC HF TX RAIL -40 ... +70°C TX with 85°C for 10 minutes with conformal coating based on 6ES7521-1BH00-0AB0 . 16 channels in groups of 16 Input "delay 0,05 ... 20ms; Input type" "3 (IEC 61131); diagnostics," Hardware interrupts



Figure similar

| General information                  |                   |  |
|--------------------------------------|-------------------|--|
| Product type designation             | DI 16x24VDC HF    |  |
| Product function                     |                   |  |
| ● I&M data                           | Yes; I&M0 to I&M3 |  |
| <ul> <li>Isochronous mode</li> </ul> | Yes               |  |
| Prioritized startup                  | Yes               |  |
| Operating mode                       |                   |  |
| • DI                                 | Yes               |  |
| Counter                              | Yes               |  |
| • MSI                                | Yes               |  |
| Supply voltage                       |                   |  |
| Rated value (DC)                     | 24 V              |  |
| permissible range, lower limit (DC)  | 20.4 V            |  |
| permissible range, upper limit (DC)  | 28.8 V            |  |
| Reverse polarity protection          | Yes               |  |
| Input current                        |                   |  |

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| Current consumption, max.                                       | 20 mA; with 24 V DC supply                       |
|---|--|
| Power   |  |
| Power available from the backplane bus                          | 1.1 W  |
| Dewerless   |  |
| Power loss<br>Power loss, typ.                                  | 2.6 W  |
|   | 2.0 11   |
| Digital inputs  |  |
| Number of digital inputs  | 16   |
| Digital inputs, parameterizable                                 | Yes  |
| Source/sink input   | P-reading  |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes  |
| Digital input functions, parameterizable                        |  |
| Gate start/stop   | Yes  |
| <ul> <li>Freely usable digital input</li> </ul>                 | Yes  |
| Counter   |  |
| — Number, max.  | 2  |
| — Counting frequency, max.                                      | 1 kHz  |
| — Counting width  | 32 bit   |
| — Counting direction up/down                                    | Up   |
| Input voltage   |  |
| • Rated value (DC)  | 24 V   |
| • for signal "0"  | -30 to +5 V                                      |
| ● for signal "1"  | +11 to +30V                                      |
| Input current   |  |
| ● for signal "1", typ.  | 2.5 mA   |
| Input delay (for rated value of input voltage)                  |  |
| for standard inputs   |  |
| — parameterizable   | Yes; 0.05 / 0.1 / 0.4 / 1.6 / 3.2 / 12.8 / 20 ms |
| — at "0" to "1", min.   | 0.05 ms  |
| — at "0" to "1", max.   | 20 ms  |
| — at "1" to "0", min.   | 0.05 ms  |
| — at "1" to "0", max.   | 20 ms  |
| for interrupt inputs  |  |
| — parameterizable   | Yes  |
| for technological functions                                     |  |
| — parameterizable   | Yes  |
| Cable length  |  |
| • shielded, max.  | 1 000 m  |
| • unshielded, max.  | 600 m  |
| Encoder   |  |

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| • 2-wire sensor     Yes       - permissible quiescent current (2-wire sensor), max.     1.5 mA       Isensor), max.     1.5 mA       Exectmonus mode     50 µs; At 50 µs filter time       Eus cycle time (TDP), min.     250 µs       Interrupts/diagnostics/status information     Diagnostics function       Polagnostics/status information     Yes       Alarms     • Diagnostics/status information       Polagnostics/status information     Yes       Diagnostics function     Yes       Alarms     • Oligonostics/status information       Polagnostics/status information     Yes       Diagnostic alarm     Yes       • Monitoring the supply voltage     Yes       • Wire-break     Yes; to I < 350 µA       • Short-circuit     No       • Fuse blown     No       Diagnostic indication LED     Yes; green LED       • ERROR LED     Yes; green LED       • Channel status display     Yes; green LED       • for channel status display     Yes; green LED       • for channel diagnostics     Yes; red LED       • between the channels     No       • between the channels     No       • between the channels     No       • between the channels and backplane bus     Yes       • between the channels and backplane bus     Yes </th <th>Connectable encoders</th> <th></th>  | Connectable encoders   |   |
|--|--|---|
| sensor), max.           sensor), max.           Filtering and processing time (TCI), min.         80 μs; At 50 μs filter time           Bus cycle time (TDP), min.         250 μs           Interrupts/diagnostic/status information         Diagnostics function           Diagnostic starm         Yes           Atarms         Ves           Atarms         Ves           Monitoring the supply voltage         Yes           Wire-break         Yes; to 1 < 350 μA   | • 2-wire sensor  | Yes   |
| Filtering and processing time (TCI), min.       80 µs; At 50 µs filter time         Bus cycle time (TDP), min.       250 µs         Interrupts/diagnostics/status information       Diagnostics function         Polagnostics function       Yes         Alarms       •         • Diagnostic alarm       Yes         • Hardware interrupt       Yes         Diagnoses       •         • Monitoring the supply voltage       Yes         • Wire-break       Yes; to 1 < 350 µA  |  | 1.5 mA  |
| Bus cycle time (TDP), min.       250 µs         Interrupts/diagnostics/status information       Yes         Jarms       Ves         Alarms       Yes         Interrupts/diagnostics/status information       Yes         Alarms       Yes         Interrupts/diagnostic alarm       Yes         Hardware interrupt       Yes         Diagnostic alarm       Yes         Monitoring the supply voltage       Yes         Short-circuit       No         Fuse blown       No         Diagnostics indication LED       Yes; green LED         RUN LED       Yes; green LED         Ves; red LED       Yes; green LED         Channel status display       Yes; green LED         Yes; red LED       Yes; red LED     <  | Isochronous mode   |   |
| Interrupts/diagnostics/status information           Diagnostics function         Yes           Alarms         Yes           Diagnostic alarm         Yes           Hardware interrupt         Yes           Diagnoses         Monitoring the supply voltage         Yes           • Wire-break         Yes; to I < 350 μA  | Filtering and processing time (TCI), min.                        | 80 μs; At 50 μs filter time                                   |
| Diagnostics function         Yes           Alarms         •           Diagnostic alarm         Yes           • Hardware interrupt         Yes           Diagnoses         •           • Monitoring the supply voltage         Yes           • Wire-break         Yes; to I < 350 µA  | Bus cycle time (TDP), min.                                       | 250 μs  |
| Alarms            • Diagnostic alarm        Yes             • Hardware interrupt        Yes             • Monitoring the supply voltage        Yes             • Monitoring the supply voltage        Yes             • Monitoring the supply voltage        Yes             • Wire-break        Yes; to I < 350 µA  | Interrupts/diagnostics/status information                        |   |
| • Diagnostic alarm       Yes         • Hardware interrupt       Yes         Diagnoses  | Diagnostics function   | Yes   |
| Hardware interrupt     Yes       Diagnoses     Yes       • Monitoring the supply voltage     Yes       • Wire-break     Yes: to I < 350 μA   | Alarms   |   |
| Diagnoses       • Monitoring the supply voltage       Yes         • Wire-break       Yes; to I < 350 µA  | Diagnostic alarm   | Yes   |
| <ul> <li>Monitoring the supply voltage</li> <li>Yes</li> <li>Wire-break</li> <li>Short-circuit</li> <li>No</li> <li>Fuse blown</li> <li>No</li> <li>Diagnostics indication LED</li> <li>RUN LED</li> <li>Yes; green LED</li> <li>Yes; red LED</li> <li>Monitoring of the supply voltage (PWR-LED)</li> <li>Yes; green LED</li> <li>Channel status display</li> <li>Yes; red LED</li> <li>Channel diagnostics</li> <li>Yes; red LED</li> <li>Yes</li> <li>Y</li></ul> | Hardware interrupt   | Yes   |
| • Wire-break       Yes; to I < 350 μA  | Diagnoses  |   |
| • Short-circuitNo• Fuse blownNoDiagnostics indication LED• RUN LEDYes; green LED• ERROR LEDYes; green LED• Monitoring of the supply voltage (PWR-LED)Yes; green LED• Channel status displayYes; green LED• Channel diagnosticsYes; red LED• for channel diagnosticsYes; red LED• for module diagnosticsYes; red LED• for module diagnosticsYes; red LED• for module diagnosticsYes; red LED• between the channelsNo• between the channelsNo• between the channels and backplane busYes• between the channels and backplane busYes• between the channels and the power supply of<br>the electronicsNoIsolationIsolation tested withSuitable for safety functionsNoSuitable for safety functionsNo• EN S0121-3-2Yes; EMC for rail vehicles• EN S0121-4Yes; FMC for signal and telecommunications systems• EN S0121-4Yes; Railway application - overvoltage category OV2; pollution   | <ul> <li>Monitoring the supply voltage</li> </ul>                | Yes   |
| • Fuse blown       No         Diagnostics indication LED       • RUN LED         • RUN LED       Yes; green LED         • ERROR LED       Yes; red LED         • Monitoring of the supply voltage (PWR-LED)       Yes; green LED         • Channel status display       Yes; green LED         • for channel diagnostics       Yes; red LED         • for channel diagnostics       Yes; red LED         • for module diagnostics       Yes; red LED         • between the channels       No         • between the channels       No         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       No         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; ReliWay applications - overvoltag   | • Wire-break   | Yes; to I < 350 μA  |
| Diagnostics indication LED       Pies: green LED         • RUN LED       Yes: red LED         • KON ILED       Yes: green LED         • Monitoring of the supply voltage (PWR-LED)       Yes: green LED         • Channel status display       Yes: green LED         • for channel diagnostics       Yes: red LED         • for module diagnostics       Yes: red LED         Potential separation       Potential separation channels         • between the channels       No         • between the channels and backplane bus       Yes         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       16         Isolation       Vot VDC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50121-4       Yes; EMC for signal and telecommunications systems  | Short-circuit  | No  |
| • RUN LED       Yes; green LED         • ERROR LED       Yes; red LED         • Monitoring of the supply voltage (PWR-LED)       Yes; green LED         • Channel status display       Yes; green LED         • for channel diagnostics       Yes; red LED         • for module diagnostics       Yes; red LED         • for module diagnostics       Yes; red LED         • for module diagnostics       Yes; red LED         • between the channels       No         • between the channels in groups of       16         • between the channels and backplane bus       Yes         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       1         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway applications - overvoltage category OV2; pollution   | • Fuse blown   | No  |
| • ERROR LEDYes; red LED• Monitoring of the supply voltage (PWR-LED)Yes; green LED• Channel status displayYes; green LED• for channel diagnosticsYes; red LED• for module diagnosticsYes; red LED• for module diagnosticsYes; red LEDPotential separationPotential separation channels• between the channelsNo• between the channels, in groups of16• between the channels and backplane busYes• between the channels and backplane busYes• between the channels and the power supply of<br>the electronicsNoIsolation707 V DC (type test) and according to EN 50155 (routine test)Standards, approvals, certificatesNoSuitable for safety functionsNo• EN 50121-3-2Yes; EMC for rail vehicles• EN 50121-4Yes; EMC for signal and telecommunications systems• EN 50121-4Yes; EMC for signal and telecommunications systems• EN 50124-1Yes; Railway applications - overvoltage category OV2; pollution   | Diagnostics indication LED                                       |   |
| <ul> <li>Monitoring of the supply voltage (PWR-LED)</li> <li>Yes; green LED</li> <li>Channel status display</li> <li>Yes; red LED</li> <li>for module diagnostics</li> <li>Yes; red LED</li> <li>for module diagnostics</li> <li>Yes; red LED</li> </ul> Potential separation           Potential separation channels           • between the channels           • between the channels and backplane bus           • between the channels and the power supply of the electronics           Isolation           Isolation tested with           Standards, approvals, certificates           Suitable for safety functions           No           Railway application           • EN 50121-3-2           • EN 50121-4           • EN 50124-1  | • RUN LED  | Yes; green LED  |
| • Channel status display       Yes; green LED         • for channel diagnostics       Yes; red LED         • for module diagnostics       Yes; red LED         Potential separation       Potential separation channels         • between the channels       No         • between the channels, in groups of       16         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       10         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         No       Railway application         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; Railway applications - overvoltage category OV2; pollution   | • ERROR LED  | Yes; red LED  |
| <ul> <li>for channel diagnostics</li> <li>for module diagnostics</li> <li>Yes; red LED</li> <li>Potential separation</li> <li>Potential separation channels</li> <li>between the channels</li> <li>between the channels, in groups of</li> <li>between the channels and backplane bus</li> <li>between the channels and the power supply of<br/>the electronics</li> <li>Isolation</li> <li>Isolation tested with</li> <li>707 V DC (type test) and according to EN 50155 (routine test)</li> <li>Standards, approvals, certificates</li> <li>Suitable for safety functions</li> <li>No</li> <li>Railway application</li> <li>EN 50121-3-2</li> <li>Yes; EMC for rail vehicles</li> <li>EN 50121-4</li> <li>Yes; EMC for signal and telecommunications systems</li> <li>EN 50124-1</li> <li>Yes; Railway applications - overvoltage category OV2; pollution</li> </ul>   | <ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>   | Yes; green LED  |
| • for module diagnostics       Yes; red LED         Potential separation       Potential separation channels         • between the channels       No         • between the channels, in groups of       16         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; Railway applications - overvoltage category OV2; pollution   | Channel status display   | Yes; green LED  |
| Potential separation         Potential separation channels         • between the channels         • between the channels, in groups of         • between the channels and backplane bus         • between the channels and backplane bus         • between the channels and backplane bus         • between the channels and the power supply of<br>the electronics         Isolation         Isolation         Isolation tested with         707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates         Suitable for safety functions       No         Railway application         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway applications - overvoltage category OV2; pollution   | <ul> <li>for channel diagnostics</li> </ul>                      | Yes; red LED  |
| Potential separation channels       No         • between the channels       No         • between the channels, in groups of       16         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       No         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway application - overvoltage category OV2; pollution   | <ul> <li>for module diagnostics</li> </ul>                       | Yes; red LED  |
| • between the channels       No         • between the channels, in groups of       16         • between the channels and backplane bus       Yes         • between the channels and the power supply of the electronics       No         Isolation       No         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         Suitable for safety functions       No         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway application - overvoltage category OV2; pollution  | Potential separation   |   |
| <ul> <li>between the channels, in groups of</li> <li>between the channels and backplane bus</li> <li>between the channels and the power supply of<br/>the electronics</li> <li>Isolation</li> <li>Isolation tested with</li> <li>707 V DC (type test) and according to EN 50155 (routine test)</li> <li>Standards, approvals, certificates</li> <li>Suitable for safety functions</li> <li>No</li> <li>Railway application</li> <li>EN 50121-3-2</li> <li>Yes; EMC for rail vehicles</li> <li>EN 50121-4</li> <li>Yes; EMC for signal and telecommunications systems</li> <li>EN 50124-1</li> <li>Yes; Railway applications - overvoltage category OV2; pollution</li> </ul>   | Potential separation channels                                    |   |
| <ul> <li>between the channels and backplane bus</li> <li>between the channels and the power supply of<br/>the electronics</li> <li>Isolation</li> <li>Isolation tested with</li> <li>707 V DC (type test) and according to EN 50155 (routine test)</li> <li>Standards, approvals, certificates</li> <li>Suitable for safety functions</li> <li>No</li> <li>Railway application</li> <li>EN 50121-3-2</li> <li>Yes; EMC for rail vehicles</li> <li>EN 50121-4</li> <li>Yes; EMC for signal and telecommunications systems</li> <li>EN 50124-1</li> <li>Yes; Railway applications - overvoltage category OV2; pollution</li> </ul>   | <ul> <li>between the channels</li> </ul>                         | No  |
| • between the channels and the power supply of<br>the electronics      No      Isolation      Isolation tested with      707 V DC (type test) and according to EN 50155 (routine test)      Standards, approvals, certificates      Suitable for safety functions      No      Railway application      EN 50121-3-2      Yes; EMC for rail vehicles      EN 50121-4      EN 50124-1      Yes; Railway applications - overvoltage category OV2; pollution  | <ul> <li>between the channels, in groups of</li> </ul>           | 16  |
| the electronics         Isolation         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates         Suitable for safety functions       No         Railway application         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway application - overvoltage category OV2; pollution  | <ul> <li>between the channels and backplane bus</li> </ul>       | Yes   |
| Isolation         Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       Suitable for safety functions         No       Railway application         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway applications - overvoltage category OV2; pollution   | <ul> <li>between the channels and the power supply of</li> </ul> | No  |
| Isolation tested with       707 V DC (type test) and according to EN 50155 (routine test)         Standards, approvals, certificates       No         Suitable for safety functions       No         Railway application       Yes; EMC for rail vehicles         • EN 50121-3-2       Yes; EMC for signal and telecommunications systems         • EN 50121-4       Yes; Railway applications - overvoltage category OV2; pollution   | the electronics  |   |
| Standards, approvals, certificates         Suitable for safety functions       No         Railway application       Yes; EMC for rail vehicles         • EN 50121-3-2       Yes; EMC for rail vehicles         • EN 50121-4       Yes; EMC for signal and telecommunications systems         • EN 50124-1       Yes; Railway applications - overvoltage category OV2; pollution  | Isolation  |   |
| Suitable for safety functions       No         Railway application       Yes; EMC for rail vehicles         • EN 50121-3-2       Yes; EMC for signal and telecommunications systems         • EN 50121-4       Yes; Railway applications - overvoltage category OV2; pollution   | Isolation tested with  | 707 V DC (type test) and according to EN 50155 (routine test) |
| Suitable for safety functions       No         Railway application       Yes; EMC for rail vehicles         • EN 50121-3-2       Yes; EMC for signal and telecommunications systems         • EN 50121-4       Yes; Railway applications - overvoltage category OV2; pollution   | Standards, approvals, certificates                               |   |
| <ul> <li>EN 50121-3-2</li> <li>EN 50121-4</li> <li>EN 50124-1</li> <li>Yes; EMC for signal and telecommunications systems</li> <li>Yes; Railway applications - overvoltage category OV2; pollution</li> </ul>  | Suitable for safety functions                                    | No  |
| <ul> <li>EN 50121-4 Yes; EMC for signal and telecommunications systems</li> <li>EN 50124-1 Yes; Railway applications - overvoltage category OV2; pollution</li> </ul>  | Railway application  |   |
| • EN 50124-1 Yes; Railway applications - overvoltage category OV2; pollution   | • EN 50121-3-2   | Yes; EMC for rail vehicles                                    |
|  | • EN 50121-4   | Yes; EMC for signal and telecommunications systems            |
|  | • EN 50124-1   |   |

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| • EN 50125-1                         | Yes; Rail vehicles - see ambient conditions  |
|--------------------------------------|--|
| • EN 50125-2                         | Yes; Stationary electrical equipment - see ambient conditions  |
| • EN 50125-3                         | Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track) |
| • EN 50155                           | Yes; Rail vehicles - temperature class Tx, horizontal mounting position, salt spray Class ST2  |
| • EN 61373                           | Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B   |
| • Fire protection acc. to EN 45545-2 | Yes; Rail vehicles - verification on request   |
|                                      |  |

## Ambient conditions Ambient temperature during operation -40 °C; = Tmin (incl. condensation/frost) • horizontal installation, min. 70 °C; = Tmax; +85 °C for 10 min (Tx acc. to EN 50155) horizontal installation, max. Altitude during operation relating to sea level 2 000 m Installation altitude above sea level, max. Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) Ambient air temperature-barometric pressurealtitude Relative humidity • With condensation, tested in accordance with 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) IEC 60068-2-38, max. Resistance Coolants and lubricants Yes; Incl. diesel and oil droplets in the air - Resistant to commercially available coolants and lubricants Use in stationary industrial systems Yes; Class 3B2 mold, fungus and dry rot spores (with the - to biologically active substances according exception of fauna); Class 3B3 on request to EN 60721-3-3 Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-- to chemically active substances according to EN 60721-3-3 52 (severity degree 3); \* Yes; Class 3S4 incl. sand, dust, \* to mechanically active substances according to EN 60721-3-3 Use on land craft, rail vehicles and special-purpose vehicles - to biologically active substances according Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request to EN 60721-3-5 - to chemically active substances according Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 to EN 60721-3-5 (ST2); \* Yes; Class 5S3 incl. sand, dust; \* - to mechanically active substances according to EN 60721-3-5 Usage in industrial process technology Yes; Class 3 (excluding trichlorethylene) - Against chemically active substances acc. to EN 60654-4 Yes; Level GX group A/B (excluding trichlorethylene; harmful gas - Environmental conditions for process, concentrations up to the limits of EN 60721-3-3 class 3C4 measuring and control systems acc. to permissible); level LC3 (salt spray) and level LB3 (oil) ANSI/ISA-71.04



| Remark  |  |  |  |
|---|--|--|--|
| <ul> <li>— Note regarding classification of<br/>environmental conditions acc. to EN 60721,<br/>EN 60654-4 and ANSI/ISA-71.04</li> </ul>           | * The supplied plug covers must remain in place over the unused interfaces during operation!   |  |  |
| Conformal coating   |  |  |  |
| <ul> <li>Coatings for printed circuit board assemblies<br/>acc. to EN 61086</li> </ul>  | Yes; Class 2 for high reliability  |  |  |
| <ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>   | Yes; Type 1 protection   |  |  |
| <ul> <li>Electronic equipment on rolling stock acc. to<br/>EN 50155</li> </ul>  | Yes; Class PC2 protective coating acc. to EN 50155:2017  |  |  |
| <ul> <li>Military testing according to MIL-I-46058C,<br/>Amendment 7</li> </ul>   | Yes; Discoloration of coating possible during service life   |  |  |
| <ul> <li>Qualification and Performance of Electrical<br/>Insulating Compound for Printed Board<br/>Assemblies according to IPC-CC-830A</li> </ul> | Yes; Conformal coating, Class A  |  |  |
| Dimensions  |  |  |  |
| Width   | 35 mm  |  |  |
| Height  | 147 mm   |  |  |
| Depth   | 129 mm   |  |  |
| Weights   | Weights  |  |  |
| Weight, approx.   | 240 g  |  |  |
| Other   |  |  |  |
| Note:   | for use in railway applications, also observe the product<br>information "SIPLUS extreme RAIL" A5E37661960A, Online<br>Support article 109736776 |  |  |
| last modified:  | 10/13/2020   |  |  |
|   |  |  |  |

