

SIPLUS S7-300 SM 326F DI8 NAMUR for medial exposure with conformal coating based on 6ES7326-1RF01-0AB0 . Digital input "SM 326, 8 DI; 24 V DC, NAMUR," fail-safe NAMUR input for SIMATIC S7 F-systems, up to Category 4 (EN 954-1)/ SIL3 (IEC 61508)/PLE (ISO 13849), 1x 40-pole



Supply voltage

| | |
|-----------------------------|-----|
| Reverse polarity protection | Yes |
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Input current

| | |
|---|--------|
| from load voltage L+ (without load), max. | 160 mA |
| from backplane bus 5 V DC, max. | 90 mA |

Encoder supply

| | |
|------------------------|----------|
| Number of outputs | 8 |
| Type of output voltage | 8.2 V DC |

Power loss

| | |
|------------------|-------|
| Power loss, typ. | 4.5 W |
|------------------|-------|

Digital inputs

| | |
|--------------------------|---|
| Number of digital inputs | 8 |
|--------------------------|---|

Number of simultaneously controllable inputs

all mounting positions

| | |
|---------------------|---|
| — up to 40 °C, max. | 8 |
| — up to 60 °C, max. | 8 |

Input voltage

| | |
|--|----------------------|
| • Type of input voltage | DC |
| Input current | |
| • for signal "0", max. (permissible quiescent current) | 0.35 to 1.2 mA |
| • for signal "1", typ. | 2.1 to 7 mA |
| Input delay (for rated value of input voltage) | |
| for NAMUR inputs | |
| — at "0" to "1", max. | 1.2 to 3 ms |
| — at "1" to "0", max. | 1.2 to 3 ms |
| Cable length | |
| • shielded, max. | 200 m |
| • unshielded, max. | 100 m |
| Interrupts/diagnostics/status information | |
| Alarms | |
| • Diagnostic alarm | Yes; Parameterizable |
| Diagnostics indication LED | |
| • Fail-safe operation | Yes |
| • Group error SF (red) | Yes |
| Ex(i) characteristics | |
| Module for Ex(i) protection | Yes |
| Maximum values of input circuits (per channel) | |
| • Co (permissible external capacity), max. | 3 µF |
| • Io (short-circuit current), max. | 13.9 mA |
| • Lo (permissible external inductivity), max. | 80 mH |
| • Po (power of load), max. | 33.1 mW |
| • Uo (output no-load voltage), max. | 10 V |
| • Um (fault voltage), max. | 60 V DC/30 V AC |
| • Ta (permissible ambient temperature), max. | 60 °C |
| Potential separation | |
| Potential separation digital inputs | |
| • between the channels | Yes |
| • between the channels and backplane bus | Yes |
| • between the channels and the power supply of the electronics | Yes |
| Isolation | |
| tested with | |
| • Channels against backplane bus and load voltage L+ | 1500 V AC |
| • Between channels | 1500 V AC |
| • Load voltage L+ against backplane bus | 500 V DC/350 V AC |

Standards, approvals, certificates

| | |
|---|---|
| CE mark | Yes |
| Highest safety class achievable in safety mode | |
| <ul style="list-style-type: none"> • acc. to EN 954 • SIL acc. to IEC 61508 | Cat. 4 SIL 2 (single-channel), SIL 3 (two-channel) |

Ambient conditions

| | |
|---|---|
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> • min. • max. | 0 °C; = Tmin 60 °C; = Tmax |
| Altitude during operation relating to sea level | |
| <ul style="list-style-type: none"> • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude | 2 000 m Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) |
| Relative humidity | |
| <ul style="list-style-type: none"> • With condensation, tested in accordance with IEC 60068-2-38, max. | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) |

Resistance

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|---|--|
| Use in stationary industrial systems | |
| <ul style="list-style-type: none"> — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, * |
| Use on ships/at sea | |
| <ul style="list-style-type: none"> — to biologically active substances according to EN 60721-3-6 — to chemically active substances according to EN 60721-3-6 — to mechanically active substances according to EN 60721-3-6 | Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; * |

Remark

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| <ul style="list-style-type: none"> — Note regarding classification of environmental conditions acc. to EN 60721 | * The supplied plug covers must remain in place over the unused interfaces during operation! |
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Conformal coating

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|--|---|
| <ul style="list-style-type: none"> • Coatings for printed circuit board assemblies acc. to EN 61086 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A | Yes; Class 2 for high availability Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A |
|--|---|

Connection method

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|--------------------------|------------|
| required front connector | 1x 40-pin |
| Dimensions | |
| Width | 80 mm |
| Height | 125 mm |
| Depth | 120 mm |
| Weights | |
| Weight, approx. | 482 g |
| last modified: | 12/14/2018 |