



Figure similar

SIPLUS S7-300 SM 326F DI8 NAMUR based on 6ES7326-1RF01-0AB0 with conformal coating, 0...+60 °C, 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

| General information                                    |                                    |
|--------------------------------------------------------|------------------------------------|
| based on                                               | <a href="#">6ES7326-1RF01-0AB0</a> |
| Supply voltage                                         |                                    |
| Rated value (DC)                                       | 24 V                               |
| Reverse polarity protection                            | Yes                                |
| 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 for connecting terminals for gas group IIC                                                   |                                                                                                                                                                                     |
| • Uo (no-load voltage), max.                                                                                | 10 V                                                                                                                                                                                |
| • Io (short-circuit current), max.                                                                          | 13.9 mA                                                                                                                                                                             |
| • Po (power output), max.                                                                                   | 33.1 mW                                                                                                                                                                             |
| • Co (permissible external capacity), max.                                                                  | 3 µF                                                                                                                                                                                |
| • Lo (permissible external inductivity), max.                                                               | 80 mH                                                                                                                                                                               |
| • Um (voltage at non-intrinsically safe connecting terminals), max.                                         | 60 V DC/30 V AC                                                                                                                                                                     |
| <b>Potential separation</b>                                                                                 |                                                                                                                                                                                     |
| 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                                                                                                                                                                                 |
| <b>Standards, approvals, certificates</b>                                                                   |                                                                                                                                                                                     |
| CE mark                                                                                                     | Yes                                                                                                                                                                                 |
| Highest safety class achievable in safety mode                                                              |                                                                                                                                                                                     |
| • acc. to EN 954                                                                                            | Cat. 4                                                                                                                                                                              |
| • Performance level according to ISO 13849-1                                                                | PLe                                                                                                                                                                                 |
| • SIL acc. to IEC 61508                                                                                     | SIL 2 (single-channel), SIL 3 (two-channel)                                                                                                                                         |
| <b>Ambient conditions</b>                                                                                   |                                                                                                                                                                                     |
| Ambient temperature during operation                                                                        |                                                                                                                                                                                     |
| • min.                                                                                                      | 0 °C; = Tmin                                                                                                                                                                        |
| • max.                                                                                                      | 60 °C; = Tmax                                                                                                                                                                       |
| Altitude during operation relating to sea level                                                             |                                                                                                                                                                                     |
| • Installation altitude above sea level, max.                                                               | 2 000 m                                                                                                                                                                             |
| • Ambient air temperature-barometric pressure-altitude                                                      | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)                                                                                                                      |
| Relative humidity                                                                                           |                                                                                                                                                                                     |
| • With condensation, tested in accordance with IEC 60068-2-38, max.                                         | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions)                                                                                                 |
| <b>Resistance</b>                                                                                           |                                                                                                                                                                                     |
| Use in stationary industrial systems                                                                        |                                                                                                                                                                                     |
| — to biologically 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                                                                                  |
| — to chemically active substances according to EN 60721-3-3                                                 | Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *                                                                                            |
| — to mechanically active substances according to EN 60721-3-3                                               | Yes; Class 3S4 incl. sand, dust, *                                                                                                                                                  |
| Use on ships/at sea                                                                                         |                                                                                                                                                                                     |
| — to biologically active substances according to EN 60721-3-6                                               | Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request                                                                                                       |
| — to chemically active substances according to EN 60721-3-6                                                 | Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *                                                                                            |
| — to mechanically active substances according to EN 60721-3-6                                               | Yes; Class 6S3 incl. sand, dust; *                                                                                                                                                  |
| Usage in industrial process technology                                                                      |                                                                                                                                                                                     |
| — Against chemically active substances acc. to EN 60654-4                                                   | Yes; Class 3 (excluding trichlorethylene)                                                                                                                                           |
| — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04                | Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil) |
| Remark                                                                                                      |                                                                                                                                                                                     |
| — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 | * The supplied plug covers must remain in place over the unused interfaces during operation!                                                                                        |
| <b>connection method</b>                                                                                    |                                                                                                                                                                                     |
| required front connector                                                                                    | 1x 40-pin                                                                                                                                                                           |
| <b>Dimensions</b>                                                                                           |                                                                                                                                                                                     |
| Width                                                                                                       | 80 mm                                                                                                                                                                               |
| Height                                                                                                      | 125 mm                                                                                                                                                                              |
| Depth                                                                                                       | 120 mm                                                                                                                                                                              |
| <b>Weights</b>                                                                                              |                                                                                                                                                                                     |
| Weight, approx.                                                                                             | 482 g                                                                                                                                                                               |
| <b>Classifications</b>                                                                                      |                                                                                                                                                                                     |

|        | Version | Classification |
|--------|---------|----------------|
| eClass | 14      | 27-24-22-04    |
| eClass | 12      | 27-24-22-04    |
| eClass | 9.1     | 27-24-22-04    |
| eClass | 9       | 27-24-22-04    |
| eClass | 8       | 27-24-22-04    |
| eClass | 7.1     | 27-24-22-04    |
| eClass | 6       | 27-24-22-04    |
| ETIM   | 9       | EC001419       |
| ETIM   | 8       | EC001419       |
| ETIM   | 7       | EC001419       |
| IDEA   | 4       | 3566           |
| UNSPSC | 15      | 32-15-17-05    |

Approvals / Certificates

General Product Approval

[Miscellaneous](#)

[Manufacturer Declaration](#)

  
EG-Konf.



  
TUV

  
UL

EMV

Functional Safety

[KC](#)

  
RCM

  
TUV

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