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## Data sheet 6AG1138-4FA05-2AB0




Figure similar

SIPLUS ET 200S EM F-DI 24V PROFIsafe based on 6ES7138-4FA05-0AB0 with conformal coating, -25…+60 °C, electronic module for ET 200S, 4/8 F-DI PROFIsafe, 24 V DC, 30 mm overall width, up to category 4 (EN 954-1)/ SIL3 (IEC 61508)/PLE (ISO 13849), can also be used in PROFINET configuration with IM 151-3 HF

| | |
|---|---|
| **Supply voltage** | |
| Rated value (DC) | 24 V |
| **Encoder supply** | |
| Number of outputs | 2 |
| Type of output voltage | min. L+ (-1.5 V) |
| Short-circuit protection | Yes; Electronic (response threshold 0.7 A to 1.8 A) |
| Output current | |
| ● Rated value | 300 mA |
| ● permissible range, lower limit | 0 mA |
| ● permissible range, upper limit | 300 mA |
| **Power loss** | |
| Power loss, typ. | 4 W |
| **Address area** | |
| Address space per module | |
| ● Inputs | 6 byte |
| ● Outputs | 4 byte |
| **Digital inputs** | |
| Number of digital inputs | 8; 8 (one-channel); 4 (two-channel) |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Input voltage | |
| ● Type of input voltage | DC |
| ● Rated value (DC) | 24 V |
| Input current | |
| ● for signal "1", typ. | 3.7 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | Yes |
| — at "0" to "1", min. | 0.3 ms |
| — at "0" to "1", max. | 17 ms |
| — at "1" to "0", min. | 0.3 ms |
| — at "1" to "0", max. | 17 ms |
| Cable length | |
| ● shielded, max. | 500 m |
| ● unshielded, max. | 500 m |
| **Encoder** | |
| Connectable encoders | |
| ● 2-wire sensor | No |
| — permissible quiescent current (2-wire sensor), max. | 0.6 mA; max. |


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| | |
|---|---|
| **Interrupts/diagnostics/status information** | |
| Diagnostics function | Yes |
| Alarms | |
| ● Diagnostic alarm | Yes |
| Diagnoses | |
| ● Diagnostic information readable | Yes |
| ● Short-circuit | Yes |
| Diagnostics indication LED | |
| ● Group error SF (red) | Yes |
| ● Status indicator digital input (green) | Yes |
| **Potential separation** | |
| Potential separation digital inputs | |
| ● between the channels | No |
| ● between the channels and backplane bus | Yes |
| ● Between the channels and load voltage L+ | No |
| **Standards, approvals, certificates** | |
| Highest safety class achievable in safety mode | |
| ● acc. to EN 954 | 4 |
| ● Performance level according to ISO 13849-1 | PLe |
| ● SIL acc. to IEC 61508 | SIL 2 (single-channel), SIL 3 (two-channel) |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● min. | -25 °C |
| ● max. | 60 °C |
| 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) |
| Resistance | |
| 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! |
| **Dimensions** | |
| Width | 30 mm |
| Height | 81 mm |
| Depth | 52 mm |
| **Weights** | |
| Weight, approx. | 78 g |
| **Classifications** | |


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| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-24-26-04 |
| eClass | 14 | 27-24-26-04 |
| eClass | 12 | 27-24-26-04 |
| eClass | 9.1 | 27-24-26-04 |
| eClass | 9 | 27-24-26-04 |
| eClass | 8 | 27-24-26-04 |
| eClass | 7.1 | 27-24-26-04 |
| eClass | 6 | 27-24-26-04 |
| ETIM | 10 | EC001599 |
| ETIM | 9 | EC001599 |
| ETIM | 8 | EC001599 |
| ETIM | 7 | EC001599 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

## Approvals / Certificates

### General Product Approval




Manufacturer Declaration




China RoHS

TUEV




| General Product Approval | EMV | For use in hazardous locations | | | |
|---|---|---|---|---|---|
|  |  |   |   |   | CCC-Ex |

| Functional Saftey | Test Certificates |
|---|---|
| TUEV | TUEV |

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