




SIPLUS ET 200S EM 4DQ standard based on 6ES7132-4BD02-0AA0 with conformal coating, -25...+70 °C, electronic module 24 V DC/0.5 A 15 mm width, 5 units per packing unit

| Supply voltage | |
|---|---|
| Reverse voltage protection | Yes; when using the same load voltage as on the power module |
| Load voltage L+ | |
| <ul style="list-style-type: none"> Rated value (DC) Reverse polarity protection | 24 V; From power module Yes; polarity reversal can lead to the digital outputs being connected through |
| Input current | |
| from load voltage L+ (without load), max. | 10 mA; Per channel |
| from backplane bus 3.3 V DC, max. | 10 mA |
| Power loss | |
| Power loss, typ. | 0.8 W |
| Address area | |
| Address space per module | |
| <ul style="list-style-type: none"> Address space per module, max. with packing | 1 byte 4 bit |
| Digital outputs | |
| Type of digital output | Transistor |
| Number of digital outputs | 4 |
| Short-circuit protection | Yes |
| <ul style="list-style-type: none"> Response threshold, typ. | 1 to 1.5 A |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| <ul style="list-style-type: none"> on lamp load, max. | 5 W |
| Load resistance range | |
| <ul style="list-style-type: none"> lower limit upper limit | 48 Ω 3 400 Ω |
| Output voltage | |
| <ul style="list-style-type: none"> for signal "1", min. | L+ (-1 V) |
| Output current | |
| <ul style="list-style-type: none"> for signal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, max. for signal "0" residual current, max. | 0.5 A 7 mA 600 mA 0.3 mA |
| Output delay with resistive load | |
| <ul style="list-style-type: none"> "0" to "1", max. "1" to "0", max. | 45 μs; Typical value 90 μs; Typical value |
| Parallel switching of two outputs | |
| <ul style="list-style-type: none"> for uprating for redundant control of a load | No Yes; per module |
| Switching frequency | |
| <ul style="list-style-type: none"> with resistive load, max. | 800 Hz |

| | |
|---|---|
| <ul style="list-style-type: none"> with inductive load, max. | 2 Hz |
| <ul style="list-style-type: none"> on lamp load, max. | 10 Hz |
| Total current of the outputs | |
| <ul style="list-style-type: none"> Current per module, max. | 2 A |
| Cable length | |
| <ul style="list-style-type: none"> shielded, max. | 1 000 m |
| <ul style="list-style-type: none"> unshielded, max. | 600 m |
| Interrupts/diagnostics/status information | |
| Diagnostics function | No |
| Diagnostics indication LED | |
| <ul style="list-style-type: none"> Status indicator digital output (green) | Yes |
| Parameter | |
| Remark | 1 byte |
| Potential separation | |
| Potential separation digital outputs | |
| <ul style="list-style-type: none"> between the channels | No |
| <ul style="list-style-type: none"> between the channels and backplane bus | Yes |
| Isolation | |
| Isolation tested with | 500 V DC |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> min. | -25 °C; = Tmin |
| <ul style="list-style-type: none"> max. | 70 °C; = Tmax |
| Altitude during operation relating to sea level | |
| <ul style="list-style-type: none"> Installation altitude above sea level, max. | 5 000 m |
| <ul style="list-style-type: none"> Ambient air temperature-barometric pressure-altitude | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 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 | |
| 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 | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |
| Weights | |
| Weight, approx. | 40 g |
| last modified: | 1/16/2021  |