## SIEMENS

## Data sheet

## 6ES7138-4CF03-0AB0



\*\*\*\* spare part \*\*\* SIMATIC DP, Power Module PM-E F PROFIsafe, for ET200S; 24 V DC suitable for ungrounded setup relay for switching the voltage buses P1 and P2 up to Category 3 (EN 954-1)/ SIL2 (IEC61508)/PLD (ISO13849), 2 fail-safe dig. outputs up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), can also be used in PROFINET configuration with IM 151-3 HF

| Figuresimilar |  |
|---------------|--|
|---------------|--|

| Supply voltage  |   |
|---|---|
| Load voltage L+   |   |
| Rated value (DC)  | 24 V  |
| Reverse polarity protection   | No  |
| Input current   |   |
| From load voltage L+ (no load), typ.                                      | 100 mA  |
| from backplane bus 24 V DC, max.  | 28 mA   |
| Power loss  |   |
| Power loss, typ.  | 4 W   |
| Address area  |   |
| Address space per module  |   |
| • Inputs  | 5 byte  |
| Outputs   | 5 byte  |
| Digital outputs   |   |
| Number of digital outputs   | 2   |
| Short-circuit protection  | Yes; Electronic   |
| Response threshold, typ.  | Response threshold (short-circuit): 5 to 12 A; response threshold (external short-circuit to ground): 5 to 12 A; response threshold (external short-circuit to P potential): 25 to 45 A |
| Limitation of inductive shutdown voltage to                               | L+ (-2x 47 V)   |
| Controlling a digital input   | No  |
| Switching capacity of the outputs   |   |
| <ul> <li>on lamp load, max.</li> </ul>                                    | 10 W  |
| Load resistance range   |   |
| lower limit   | 12 Ω  |
| • upper limit   | 1 kΩ  |
| Output voltage  |   |
| • for signal "1", min.  | L+ (-2,0 V), current sourcing switch: L+ (-1,5 V), voltage drop on current sinking switch: max. 0.5 V   |
| Output current  |   |
| <ul> <li>for signal "1" rated value</li> </ul>                            | 2 A   |
| <ul> <li>for signal "1" permissible range for 0 to 60 °C, min.</li> </ul> | 20 mA   |
| <ul> <li>for signal "1" permissible range for 0 to 60 °C, max.</li> </ul> | 2.4 A   |
| <ul> <li>for signal "0" residual current, max.</li> </ul>                 | 0.5 mA  |
| Parallel switching of two outputs   |   |
| • for uprating  | No  |
| <ul> <li>for redundant control of a load</li> </ul>                       | No  |
| Switching frequency   |   |
| <ul> <li>with resistive load, max.</li> </ul>                             | 30 Hz   |
| <ul> <li>with inductive load, max.</li> </ul>                             | 0.1 Hz  |



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| <ul> <li>on lamp load, max.</li> </ul>                         | 10 Hz       |
|--|-------------|
| Total current of the outputs (per group)                       |             |
| horizontal installation  |             |
| — up to 40 °C, max.  | 10 A        |
| — up to 55 °C, max.  | 7 A         |
| — up to 60 °C, max.  | 6 A         |
| vertical installation  |             |
| — up to 40 °C, max.  | 6 A         |
| Relay outputs  |             |
| Switching capacity of contacts                                 |             |
| — with resistive load, up to 50 °C, max.                       | 10 A        |
| Cable length   |             |
| shielded, max.   | 200 m       |
| • unshielded, max.   | 200 m       |
| Interrupts/diagnostics/status information                      |             |
| Diagnostics function   | Yes         |
| Diagnoses  |             |
| Diagnostic information readable                                | Yes         |
| • Wire-break   | Yes         |
| Short-circuit  | Yes         |
| <ul> <li>missing load voltage</li> </ul>                       | Yes         |
| Diagnostics indication LED                                     |             |
| <ul> <li>Rated load voltage PWR (green)</li> </ul>             | Yes         |
| Group error SF (red)   | Yes         |
| <ul> <li>Status indicator digital output (green)</li> </ul>    | Yes         |
| Potential separation   |             |
| Potential separation digital outputs                           |             |
| between the channels   | No          |
| <ul> <li>between the channels and backplane bus</li> </ul>     | Yes         |
| <ul> <li>Between the channels and load voltage L+</li> </ul>   | No          |
| Isolation  |             |
| Isolation tested with  | 500 V DC    |
| Standards, approvals, certificates                             |             |
| Highest safety class achievable in safety mode                 |             |
| • acc. to EN 954   | 4           |
| <ul> <li>Performance level according to ISO 13849-1</li> </ul> | e           |
| • SIL acc. to IEC 61508  | Up to SIL 3 |
| Dimensions   |             |
| Width  | 30 mm       |
| Height   | 81 mm       |
| Depth  | 52 mm       |
| Weights  |             |
| Weight, approx.  | 88 g        |
|  |             |
| last modified:   | 8/23/2023 🖸 |
|  |             |

