

SIMATIC S7-1200,
DIGITAL OUTPUT SM 1222, 8 DO,
RELAY CHANGEOVER CONTACT

| Supply voltage | |
|---|--------------------------------|
| permissible range, lower limit (DC) | 5 V |
| permissible range, upper limit (DC) | 30 V |
| Input current | |
| from backplane bus 5 V DC, max. | 140 mA |
| Digital inputs | |
| from load voltage L+ (without load), max. | 16.7 mA/relay coil |
| Power losses | |
| Power loss, typ. | 5 W |
| Digital inputs | |
| Number of digital inputs | 0 |
| Digital outputs | |
| Number of digital outputs | 8 |
| In groups of | 1 |
| short-circuit protection | No ; to be provided externally |
| Switching capacity of the outputs | |
| with resistive load, max. | 2 A |
| on lamp load, max. | 30 W with DC, 200 W with AC |
| Output voltage | |
| Rated value (AC) | 5 V AC to 250 V AC |
| Rated value (DC) | 5 V DC to 30 V DC |
| Output current | |
| for signal "1" permissible range, max. | 2 A |
| Output delay with resistive load | |
| "0" to "1", max. | 10 ms |
| "1" to "0", max. | 10 ms |
| Aggregate current of outputs (per group) | |
| horizontal installation | |
| up to 50 °C, max. | 2 A ; Current per mass |
| Relay outputs | |
| Number of relay outputs | 8 |

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|---|--|
| Rated input voltage of relay coil L+ (DC) | 24 V |
| Number of operating cycles, max. | mechanically 10 million, at rated load voltage 100,000 |
| Switching capacity of contacts | |
| with inductive load, max. | 2 A |
| on lamp load, max. | 30 W with DC, 200 W with AC |
| with resistive load, max. | 2 A |
| Cable length | |
| Cable length, shielded, max. | 500 m |
| Cable length unshielded, max. | 150 m |
| Interrupts/diagnostics/status information | |
| Alarms | |
| Alarms | Yes |
| Diagnostic alarm | Yes |
| Diagnostic messages | |
| Diagnostic functions | Yes |
| Diagnostics indication LED | |
| For status of the outputs | Yes |
| for maintenance | Yes |
| Status indicator digital output (green) | Yes |
| Galvanic isolation | |
| Galvanic isolation digital outputs | |
| between the channels | Relays |
| between the channels, in groups of | 1 |
| between the channels and the backplane bus | 1500 V AC for 1 minute |
| Permissible potential difference | |
| between different circuits | 750 V AC for 1 minute |
| Degree and class of protection | |
| IP20 | Yes |
| Standards, approvals, certificates | |
| CE mark | Yes |
| CSA approval | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |
| FM approval | Yes |
| Marine approval | |
| Marine approval | Yes |
| Climatic and mechanical conditions for storage and transport | |
| Climatic conditions for storage and transport | |

| | |
|--|---|
| Free fall | |
| Drop height, max. (in packaging) | 0.3 m ; five times, in dispatch package |
| Relative humidity | |
| Permissible range (without condensation) at 25 °C | 95 % |
| Mechanical and climatic conditions during operation | |
| Climatic conditions in operation | |
| Temperature | |
| Permissible temperature range | -20 °C to +60 °C horizontal mounting, -20 °C to 50 °C vertical mounting, 95% humidity, non-condensing |
| Connection method | |
| required front connector | Yes |
| Mechanics/material | |
| Type of housing (front) | |
| plastic | Yes |
| Dimensions | |
| Width | 45 mm |
| Height | 100 mm |
| Depth | 75 mm |
| Weights | |
| Weight, approx. | 310 g |
| Status | Dec 20, 2014 |