



IE230x, IE231x | 4 x digital input + 4 x digital output 24 V DC, $I_{MAX} = 0.5 A$

The IE23xx digital I/O modules combine four digital inputs and four digital outputs in one device. Various filter constants are available for the inputs. The outputs handle load currents of up to 0.5 A, are short-circuit-proof and protected against inverse polarity. The state of each signal is indicated by means of light emitting diodes. The signals are connected optionally via 8 mm diameter snap types (IE2300, IE2310), screw type M8 connectors (IE2301, IE2311) or connector M12 screw type (IE2302, IE2312).

| Technical data | IE2300 | IE2301 | IE2302 |
|--|--|----------------|-----------------|
| Number of channels | 4 inputs + 4 outputs | | |
| Input/output connections | 8 mm, snap type | M8, screw type | M12, screw type |
| Input filter | 3.0 ms | | |
| "0" signal voltage | -3...+5 V | | |
| "1" signal voltage | 11...30 V, 6 mA input current (EN 61131-2, type 2) | | |
| Sensor supply | from control voltage, max. 0.5 A total, short-circuit-proof | | |
| Load type | ohmic, inductive, lamp load | | |
| Rated load voltage | 24 V DC (-15 %/+20 %) | | |
| Max. output current | 0.5 A per channel, individually short-circuit-proof | | |
| Short circuit current | typ. 1.5 A | | |
| Auxiliary power current | typ. 20 mA per channel | | |
| Current consumption from Us (without sensor current) | 25 mA | | |
| Power supply connection | feed: 1 x M8 male socket, 4-pin; downstream connection: 1 x M8 female socket, 4-pin | | |
| Bit width in the process image | 4 inputs + 4 outputs | | |
| Electrical isolation | channels/control voltage: no, between the channels: no, control voltage/fieldbus: yes, via IP-Link | | |
| Operating/storage temperature | 0...+55 °C/-25...+85 °C | | |
| Vibration/shock resistance | conforms to EN 60068-2-6/EN 60068-2-27 | | |
| EMC immunity/emission | conforms to EN 61000-6-2/EN 61000-6-4 | | |
| Protect. class/installation pos. | IP 65/66/67 (conforms to EN 60529)/variable | | |
| Approvals | CE, UL | | |

| Technical data | IE2310 | IE2311 | IE2312 |
|--|--|----------------|-----------------|
| Number of channels | 4 inputs + 4 outputs | | |
| Input/output connections | 8 mm, snap type | M8, screw type | M12, screw type |
| Input filter | 0.2 ms | | |
| "0" signal voltage | -3...+5 V | | |
| "1" signal voltage | 11...30 V, 6 mA input current (EN 61131-2, type 2) | | |
| Sensor supply | from control voltage, max. 0.5 A total, short-circuit-proof | | |
| Load type | ohmic, inductive, lamp load | | |
| Rated load voltage | 24 V DC (-15 %/+20 %) | | |
| Max. output current | 0.5 A per channel, individually short-circuit-proof | | |
| Short circuit current | typ. 1.5 A | | |
| Auxiliary power current | typ. 20 mA per channel | | |
| Current consumption from Us (without sensor current) | 25 mA | | |
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| Bit width in the process image | 4 inputs + 4 outputs | | |
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| Operating/storage temperature | 0...+55 °C/-25...+85 °C | | |
| Vibration/shock resistance | conforms to EN 60068-2-6/EN 60068-2-27 | | |
| EMC immunity/emission | conforms to EN 61000-6-2/EN 61000-6-4 | | |
| Protect. class/installation pos. | IP 65/66/67 (conforms to EN 60529)/variable | | |
| Approvals | CE, UL | | |