



Main

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| Range of product | Twido |
| Product or component type | Modular base controller |
| Discrete I/O number | 20 |
| Discrete input number | 12 |
| Discrete input voltage | 24 V |
| Discrete input voltage type | DC |
| Discrete output number | 8 for transistor (sink) |
| Number of I/O expansion module | 4 |
| [Us] rated supply voltage | 24 V DC |
| Use of slot | 32 K memory cartridge and 1 realtime clock |

Complementary

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| Discrete input logic | Sink or source |
| Input voltage limits | 20.4...26.4 V |
| Discrete input current | 5 mA for I0.0 to I0.1 5 mA for I0.6 to I0.7 7 mA for I0.2 to I0.5 7 mA for I0.8 to I0.11 |
| Input impedance | 4700 Ohm for I0.2 to I0.5 4700 Ohm for I0.8 to I0.11 5700 Ohm for I0.0 to I0.1 5700 Ohm for I0.6 to I0.7 |
| Filter time | 35 µs for I0.0 to I0.1 at state 1 35 µs for I0.6 to I0.7 at state 1 40 µs for I0.2 to I0.5 at state 1 40 µs for I0.8 to I0.11 at state 1 45 µs for I0.0 to I0.1 at state 0 45 µs for I0.6 to I0.7 at state 0 150 µs for I0.2 to I0.5 at state 0 150 µs for I0.8 to I0.11 at state 0 |
| Insulation between channel and internal logic | 1500 Vrms for 1 minute |
| Insulation resistance between channel | None |
| Discrete output voltage | 24 V |
| Output voltage limits | 20.4...28.8 V |
| Current per channel | 0.36 A for transistor output |
| Current per output common | 1 A for transistor output |
| Response time | 5 µs for Q0.0 to Q0.1 at state 1 5 µs for Q0.0 to Q0.1 at state 0 300 µs for Q0.2 to Q0.7 at state 1 300 µs for Q0.2 to Q0.7 at state 0 |
| [Ures] residual voltage | ≤ 1 V at state 1 |
| Leakage current | 0.1 mA |
| Output overvoltage protection | 39 V |
| Tungsten load | 8 W |
| Discrete output current | 300 mA |
| I/O connection | HE-10 connector |
| Input/Output number | ≤ 116 , spring terminal block with I/O expansion module ≤ 148 , HE-10 connector with I/O expansion module ≤ 88 , removable screw terminal block with I/O expansion module |
| Supply voltage limits | 20.4...26.4 V |

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| Protection type | Power protection with internal fuse |
| Power consumption in W | ≤ 15 W (base + 4 expansion module) |
| Inrush current | ≤ 1 A for transistor output ≤ 50 A for power supply |
| Insulation resistance | > 10 MOhm at 500 V, between supply and earth terminals > 10 MOhm at 500 V, between I/O and earth terminals |
| Program memory | 3000 instructions |
| Exact time for 1 K instruction | 1 ms |
| System overhead | 0.5 ms |
| Memory description | Internal RAM , 256 internal bits, no floating, no trigonometrical Internal RAM , 3000 internal words, no floating, no trigonometrical Internal RAM , 128 timers, no floating, no trigonometrical Internal RAM , 128 counters, no floating, no trigonometrical Internal RAM , double words, no floating, no trigonometrical |
| Free slots | 2 |
| Battery type | Lithium for internal RAM , autonomy: 30 days , charging time = 15 h , battery life = 10 yr |
| Integrated connection type | Non isolated serial link mini DIN, Modbus/character mode master/slave RTU/ ASCII (RS485) half duplex , 38,4 kbit/s Power supply |
| Counting input number | 2 channel(s) at 5000 Hz 16 bits 2 channel(s) at 20000 Hz 32 bits |
| Positioning functions | PWM/PLS 2 channel(s) at 7 kHz |
| Analogue input number | 1 |
| Analogue input range | 0...10 V |
| Analogue input resolution | 9 bits |
| Input impedance | 100000 Ohm |
| Complementary function | PID Event processing |
| Analogue adjustment points | 1 point adjustable from 0...1023 |
| Marking | CE |
| Status LED | 1 LED green for PWR 1 LED green for RUN 1 LED for ERR 1 LED for STAT 1 LED per channel for I/O status |
| Product weight | 0.14 kg |

Environment

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| Immunity to microbreaks | 10 ms |
| Dielectric strength | 500 V for 1 minute, between supply and earth terminals 1500 V for 1 minute, between I/O and earth terminals |
| Product certifications | CSA UL |
| Ambient air temperature for storage | -25...70 °C |
| Ambient air temperature for operation | 0...55 °C |
| Relative humidity | 30...95 % without condensation |
| IP degree of protection | IP20 |
| Operating altitude | 0...2000 m |
| Storage altitude | 0...3000 m |
| Vibration resistance | 0.075 mm , 10...57 Hz mounting on: 35 mm symmetrical DIN rail 1 gn , 57...150 Hz mounting on: 35 mm symmetrical DIN rail 1.6 mm , 2...25 Hz mounting on: plate or panel with fixing kit 4 gn , 25...100 Hz mounting on: plate or panel with fixing kit |
| Shock resistance | 15 gn for 11 ms |
| RoHS EUR conformity date | 0630 |
| RoHS EUR status | Compliant |