# Product data sheet
## Characteristics

# 140DDM39000
discrete I/O module - 16 I - 24 V DC - 8 O solid state

## Main

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|---|---|
| Range of product | Automation platform |
| Product or component type | Mixed discrete I/O module |
| Discrete I/O number | 24 |

## Complementary

| | |
|---|---|
| Discrete input number | 16 2 groups of 8 |
| Discrete input logic | Sink |
| Addressing requirement | 0.5 output word<br>1 input word |
| Network frequency limits | 47...63 Hz |
| Discrete input voltage | 24 V DC |
| Input voltage limits | <= 1 V during 10 s<br><= 1 V during one cycle<br>30 V<br>56 V during 1.3 ms |
| Voltage state 0 guaranteed | -3...5 V |
| Voltage state 1 guaranteed | 15...30 V |
| Current state 0 guaranteed | <= 0.5 mA |
| Current state 1 guaranteed | >= 2 mA |
| Input impedance | 2500 Ohm |
| Discrete output number | 8 2 groups of 4 |
| Discrete output type | Solid state |
| Discrete output logic | Sink |
| Discrete output voltage | 24 V |
| Output voltage limits | 19.2...30 V DC typical<br>56 V DC during 1.3 ms |
| Maximum load current | <= 0.5 A per point<br><= 2 A per group<br><= 4 A per module |

| | |
|---|---|
| Voltage drop | 0.4 V 0.5 A |
| Absolute maximum output | 5 A during 500 µs per point |
| Load inductance | 500 mH 4 Hz |
| Load capacitance | <= 50 µF |
| Leakage current | 0.4 mA 30 V DC |
| Response time on output | <= 1 ms at state 0 to state 1<br><= 1 ms at state 1 to state 0 |
| Protection type | Internal output protection by 5 A fuse per group<br>On input by resistor limited<br>On output by transient voltage suppression |
| Associated fuse rating | 5 A per group |
| Isolation between group | 500 Vrms for 1 minute |
| Isolation between group and bus | 1780 Vrms for 1 minute |
| Fault indication | Blown fuse on output<br>Loss of field power on output |
| Power dissipation | 1.75 W + (0.36 x input point on) + (1.1 total output load current) |
| Local signalling | 1 LED green bus communication is present (Active)<br>1 LED red no voltage in output and input (F)<br>2 LEDs green output is turned on<br>2 LEDs red fault detected on the input point<br>2 LEDs red fault detected on the output point |
| Marking | CE |
| Bus current requirement | 330 mA |
| Product weight | 0.3 kg |

## Environment

| | |
|---|---|
| Resistance to electrostatic discharge | 4 kV contact conforming to IEC 801-2<br>8 kV on air conforming to IEC 801-2 |
| Resistance to electromagnetic fields | 10 V/m 80...1000 MHz conforming to IEC 801-3 |
| Ambient air temperature for operation | 0...60 °C |
| Ambient air temperature for storage | -40...85 °C |
| Relative humidity | 95 % without condensation |
| Operating altitude | <= 5000 m |
| Standards | CSA C22.2 No 142<br>FM Class 1 Division 2<br>UL 508 |
| Product certifications | CUL |