




SIMATIC DP, ET 200ECO PN, 8 DO 24 V DC/2 A; 8xM12, Degree of protection IP67

Figure similar

| General information                            |                       |
|--|-----------------------|
| Vendor identification (VendorID)               | 002AH                 |
| Device identifier (DeviceID)                   | 0306H                 |
| Supply voltage                                 |                       |
| Rated value (DC)                               | 24 V                  |
| Reverse polarity protection                    | Yes                   |
| power supply according to NEC Class 2 required | Yes                   |
| Load voltage 1L+                               |                       |
| • Rated value (DC)                             | 24 V                  |
| • permissible range, lower limit (DC)          | 20.4 V                |
| • permissible range, upper limit (DC)          | 28.8 V                |
| • Reverse polarity protection                  | Yes                   |
| Load voltage 2L+                               |                       |
| • Rated value (DC)                             | 24 V                  |
| • permissible range, lower limit (DC)          | 20.4 V                |
| • permissible range, upper limit (DC)          | 28.8 V                |
| • Reverse polarity protection                  | Yes                   |
| Input current                                  |                       |
| Current consumption, typ.                      | 100 mA                |
| from supply voltage 1L+, max.                  | 4 A                   |
| from load voltage 1L+ (unswitched voltage)     | 4 A                   |
| from load voltage 2L+, max.                    | 4 A                   |
| Power loss                                     |                       |
| Power loss, typ.                               | 5 W                   |
| Digital outputs                                |                       |
| Number of digital outputs                      | 8                     |
| • in groups of                                 | 4                     |
| Short-circuit protection                       | Yes                   |
| • Response threshold, typ.                     | 2.8 A                 |
| Limitation of inductive shutdown voltage to    | Typ. (L1+, L2+) -47 V |
| Controlling a digital input                    | Yes                   |
| Switching capacity of the outputs              |                       |
| • on lamp load, max.                           | 10 W                  |
| Output current                                 |                       |
| • for signal "1" rated value                   | 2 A                   |
| • for signal "0" residual current, max.        | 1.5 mA                |
| Parallel switching of two outputs              |                       |
| • for uprating                                 | No                    |

|  |                                  |
|--|----------------------------------|
| <ul style="list-style-type: none"> <li>• for redundant control of a load</li> </ul>              | Yes                              |
| <b>Switching frequency</b>   |                                  |
| <ul style="list-style-type: none"> <li>• with resistive load, max.</li> </ul>                    | 100 Hz                           |
| <ul style="list-style-type: none"> <li>• with inductive load, max.</li> </ul>                    | 0.5 Hz                           |
| <ul style="list-style-type: none"> <li>• on lamp load, max.</li> </ul>                           | 1 Hz                             |
| <b>Total current of the outputs (per group)</b>  |                                  |
| all mounting positions   |                                  |
| — up to 60 °C, max.  | 3.9 A                            |
| <b>Cable length</b>  |                                  |
| <ul style="list-style-type: none"> <li>• unshielded, max.</li> </ul>                             | 30 m                             |
| <b>Interfaces</b>  |                                  |
| Transmission procedure   | 100BASE-TX                       |
| Number of PROFINET interfaces  | 1                                |
| <b>1. Interface</b>  |                                  |
| <b>Interface types</b>   |                                  |
| <ul style="list-style-type: none"> <li>• integrated switch</li> </ul>                            | Yes                              |
| <b>Interface types</b>   |                                  |
| <b>M12 port</b>  |                                  |
| <ul style="list-style-type: none"> <li>• Autonegotiation</li> </ul>                              | Yes                              |
| <ul style="list-style-type: none"> <li>• Autocrossing</li> </ul>                                 | Yes                              |
| <ul style="list-style-type: none"> <li>• Transmission rate, max.</li> </ul>                      | 100 Mbit/s                       |
| <b>Protocols</b>   |                                  |
| Supports protocol for PROFINET IO  | Yes                              |
| PROFINET CBA   | No                               |
| PROFIsafe  | No                               |
| <b>PROFINET IO Device</b>  |                                  |
| <b>Services</b>  |                                  |
| — IRT with the option "high flexibility"   | Yes                              |
| — Prioritized startup  | Yes                              |
| <b>Redundancy mode</b>   |                                  |
| <b>Media redundancy</b>  |                                  |
| — MRP  | Yes                              |
| <b>Open IE communication</b>   |                                  |
| <ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>                                       | No                               |
| <ul style="list-style-type: none"> <li>• SNMP</li> </ul>   | Yes                              |
| <ul style="list-style-type: none"> <li>• DCP</li> </ul>  | Yes                              |
| <ul style="list-style-type: none"> <li>• LLDP</li> </ul>   | Yes                              |
| <ul style="list-style-type: none"> <li>• ping</li> </ul>   | Yes                              |
| <ul style="list-style-type: none"> <li>• ARP</li> </ul>  | Yes                              |
| <b>Interrupts/diagnostics/status information</b>   |                                  |
| Diagnostics function   | Yes                              |
| <b>Alarms</b>  |                                  |
| <ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>                             | Yes                              |
| <b>Diagnoses</b>   |                                  |
| <ul style="list-style-type: none"> <li>• Diagnostic information readable</li> </ul>              | Yes                              |
| <ul style="list-style-type: none"> <li>• Monitoring the supply voltage</li> </ul>                | Yes; green "ON" LED              |
| <ul style="list-style-type: none"> <li>• Wire-break in actuator cable</li> </ul>                 | Yes                              |
| <ul style="list-style-type: none"> <li>• Short-circuit</li> </ul>                                | Yes                              |
| <ul style="list-style-type: none"> <li>• Group error</li> </ul>                                  | Yes; Red/yellow "SF/MT" LED      |
| <b>Potential separation</b>  |                                  |
| between the load voltages  | Yes                              |
| between load voltage and all other switching components  | No                               |
| between Ethernet and electronics   | Yes                              |
| <b>Potential separation channels</b>   |                                  |
| <ul style="list-style-type: none"> <li>• between the channels</li> </ul>                         | No                               |
| <b>Isolation</b>   |                                  |
| tested with  |                                  |
| <ul style="list-style-type: none"> <li>• 24 V DC circuits</li> </ul>                             | 707 V DC (type test)             |
| <ul style="list-style-type: none"> <li>• Test voltage for interface, rms value [Vrms]</li> </ul> | 1 500 V; According to IEEE 802.3 |

| Degree and class of protection   |  |
|--|--|
| IP degree of protection  | IP65/67  |
| Standards, approvals, certificates   |  |
| Suitable for safety-related tripping of standard modules   | Yes  |
| Highest safety class achievable for safety-related tripping of standard modules  |  |
| <ul style="list-style-type: none"> <li>• Performance level according to ISO 13849-1</li> <li>• Category according to ISO 13849-1</li> <li>• SIL acc. to IEC 62061</li> </ul> | PL d<br>Cat. 3<br>SIL 2  |
| connection method / header   |  |
| Design of electrical connection  | 4/5-pin M12 circular connectors  |
| Dimensions   |  |
| Width  | 60 mm  |
| Height   | 175 mm   |
| Depth  | 49 mm  |
| Weights  |  |
| Weight, approx.  | 910 g  |
| <b>last modified:</b>  | 3/7/2022  |