



LOGO! DM8 230R expansion module, PS/I/O: 230V/230V/relay, 2 MW, 4 DI/4 DO for LOGO! 8

| Installation type/mounting                             |                                           |
|--------------------------------------------------------|-------------------------------------------|
| Mounting                                               | on 35 mm DIN rail, 2 spacing units wide   |
| Supply voltage                                         |                                           |
| Rated value (DC)                                       |                                           |
| • 115 V DC                                             | Yes                                       |
| • 230 V DC                                             | Yes                                       |
| permissible range, lower limit (DC)                    | 100 V                                     |
| permissible range, upper limit (DC)                    | 253 V                                     |
| Rated value (AC)                                       |                                           |
| • 115 V AC                                             | Yes                                       |
| • 230 V AC                                             | Yes                                       |
| Line frequency                                         |                                           |
| • permissible range, lower limit                       | 47 Hz                                     |
| • permissible range, upper limit                       | 63 Hz                                     |
| Digital inputs                                         |                                           |
| Number of digital inputs                               | 4                                         |
| Input voltage                                          |                                           |
| • Type of input voltage                                | AC/DC                                     |
| • for signal "0"                                       | < 40 V AC, < 30 V DC                      |
| • for signal "1"                                       | > 79 V AC, > 79 V DC                      |
| Input current                                          |                                           |
| • for signal "0", max. (permissible quiescent current) | 0.06 mA; 0.05 mA with AC, 0.06 mA with DC |
| • for signal "1", typ.                                 | 0.13 mA                                   |
| Input delay (for rated value of input voltage)         |                                           |
| for standard inputs                                    |                                           |
| — at "0" to "1", max.                                  | 40 ms                                     |
| — at "1" to "0", max.                                  | 75 ms                                     |
| Digital outputs                                        |                                           |
| Number of digital outputs                              | 4; Relays                                 |
| Short-circuit protection                               | No                                        |
| Controlling a digital input                            | Yes                                       |
| Switching capacity of the outputs                      |                                           |
| • on lamp load, max.                                   | 1 000 W; 500 W at 115V AC                 |
| Output current                                         |                                           |
| • for signal "1" rated value                           | 5 A                                       |
| • for signal "1" minimum load current                  | 100 mA                                    |
| Parallel switching of two outputs                      |                                           |
| • for uprating                                         | No                                        |
| Switching frequency                                    |                                           |

|                                                                                                                                            |                                  |         |                |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------|----------------|
| <ul style="list-style-type: none"><li>• with resistive load, max.</li><li>• with inductive load, max.</li><li>• mechanical, max.</li></ul> | 2 Hz<br>0.5 Hz<br>10 Hz          |         |                |
| Relay outputs                                                                                                                              |                                  |         |                |
| Switching capacity of contacts                                                                                                             |                                  |         |                |
| — with inductive load, max.                                                                                                                | 3 A                              |         |                |
| — with resistive load, max.                                                                                                                | 5 A                              |         |                |
| EMC                                                                                                                                        |                                  |         |                |
| Emission of radio interference acc. to EN 55 011                                                                                           |                                  |         |                |
| <ul style="list-style-type: none"><li>• Limit class B, for use in residential areas</li></ul>                                              | Yes                              |         |                |
| Degree and class of protection                                                                                                             |                                  |         |                |
| IP degree of protection                                                                                                                    | IP20                             |         |                |
| Standards, approvals, certificates                                                                                                         |                                  |         |                |
| CE mark                                                                                                                                    | Yes                              |         |                |
| CSA approval                                                                                                                               | Yes                              |         |                |
| UL approval                                                                                                                                | Yes                              |         |                |
| FM approval                                                                                                                                | Yes                              |         |                |
| developed in accordance with IEC 61131                                                                                                     | Yes                              |         |                |
| according to VDE 0631                                                                                                                      | Yes                              |         |                |
| Marine approval                                                                                                                            | Yes                              |         |                |
| Ecological footprint                                                                                                                       |                                  |         |                |
| <ul style="list-style-type: none"><li>• environmental product declaration</li></ul>                                                        | Yes                              |         |                |
| Global warming potential                                                                                                                   |                                  |         |                |
| — global warming potential, (total) [CO2 eq]                                                                                               | 145 kg                           |         |                |
| — global warming potential, (during production) [CO2 eq]                                                                                   | 7.49 kg                          |         |                |
| — global warming potential, (during operation) [CO2 eq]                                                                                    | 138 kg                           |         |                |
| — global warming potential, (after end of life cycle) [CO2 eq]                                                                             | -0.491 kg                        |         |                |
| Ambient conditions                                                                                                                         |                                  |         |                |
| Ambient temperature during operation                                                                                                       |                                  |         |                |
| <ul style="list-style-type: none"><li>• min.</li><li>• max.</li></ul>                                                                      | -20 °C; No condensation<br>55 °C |         |                |
| Dimensions                                                                                                                                 |                                  |         |                |
| Width                                                                                                                                      | 35.5 mm                          |         |                |
| Height                                                                                                                                     | 90 mm                            |         |                |
| Depth                                                                                                                                      | 58 mm                            |         |                |
| Classifications                                                                                                                            |                                  |         |                |
|                                                                                                                                            |                                  | Version | Classification |
|                                                                                                                                            | eClass                           | 16      | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 14      | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 12      | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 9.1     | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 9       | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 8       | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 7.1     | 27-24-22-04    |
|                                                                                                                                            | eClass                           | 6       | 27-24-22-04    |
|                                                                                                                                            | ETIM                             | 10      | EC001419       |
|                                                                                                                                            | ETIM                             | 9       | EC001419       |
|                                                                                                                                            | ETIM                             | 8       | EC001419       |
|                                                                                                                                            | ETIM                             | 7       | EC001419       |
|                                                                                                                                            | IDEA                             | 4       | 3566           |
|                                                                                                                                            | UNSPSC                           | 15      | 32-15-17-05    |
| Approvals / Certificates                                                                                                                   |                                  |         |                |
| General Product Approval                                                                                                                   |                                  |         |                |

Miscellaneous



Manufacturer Declaration



General Product Approval

Metrological Approval



General Product Approval

For use in hazardous locations

Manufacturer Declaration

China RoHS

CCC-Ex

FM



FM

For use in hazardous locations

Maritime application

CCC-Ex



NK / Nippon Kaiji Kyokai

Maritime application

Environment

CCS (China Classification Society)

KR (Korean Register of Shipping)



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