



SIMATIC S7, DIGITAL OUTPUT SM 326,  
F-DO 8 X DC 24V/2A PM FAILSAFE DIGITAL OUTPUTS P-  
M SWITCHING UP TO CATEGORY 4 (EN954-1)/ SIL3  
(IEC61508)/PLE (ISO13849),  
1 X 40 PIN

|   |                             |
|---|-----------------------------|
| <b>Supply voltage</b>                       |                             |
| <b>Load voltage L+</b>                      |                             |
| Rated value (DC)                            | 24 V ; 1L+, 2L+, 3L+        |
| <b>Input current</b>                        |                             |
| from load voltage 1L+, max.                 | 75 mA ; from supply voltage |
| from load voltage 2L+ (without load), max.  | 100 mA                      |
| from load voltage 3L+ (without load), max.  | 100 mA                      |
| from backplane bus 5 V DC, max.             | 100 mA                      |
| <b>Power losses</b>                         |                             |
| Power loss, typ.                            | 12 W                        |
| <b>Digital outputs</b>                      |                             |
| Number/binary outputs                       | 8                           |
| Functionality/short-circuit strength        | Yes ; Electronic            |
| Limitation of inductive shutdown voltage to | L+ (-33 V)                  |
| Lamp load, max.                             | 5 W                         |
| <b>Output voltage</b>                       |                             |
| for signal "1" without series diode, min.   | L+ (-1.0 V)                 |
| <b>Output current</b>                       |                             |

|  |  |
|--|--|
| for signal "1" rated value                                   | 2 A  |
| for signal "1" permissible range for 0 to 40 °C, min.        | 7 mA   |
| for signal "1" permissible range for 0 to 40 °C, max.        | 2 A ; 2 A for horizontal installation, 1 A for vertical installation |
| for signal "1" permissible range for 40 to 60 °C, min.       | 7 mA   |
| for signal "1" permissible range for 40 to 60 °C, max.       | 1 A ; for horizontal installation                                    |
| for signal "0" residual current, max.                        | 0.5 mA   |
| <b>Switching frequency</b>                                   |  |
| with resistive load, max.                                    | 30 Hz  |
| with inductive load, max.                                    | 2 Hz   |
| on lamp load, max.   | 10 Hz  |
| <b>Aggregate current of outputs (per group)</b>              |  |
| <b>horizontal installation</b>                               |  |
| up to 40 °C, max.  | 7.5 A  |
| up to 60 °C, max.  | 5 A  |
| <b>vertical installation</b>                                 |  |
| up to 40 °C, max.  | 5 A  |
| <b>Cable length</b>  |  |
| Cable length, shielded, max.                                 | 200 m ; 200 m for SIL3, AK 6, Cat 4                                  |
| Cable length unshielded, max.                                | 200 m  |
| <b>Interrupts/diagnostics/status information</b>             |  |
| <b>Alarms</b>  |  |
| Diagnostic alarm   | Yes ; Parameterizable  |
| <b>Diagnostic messages</b>                                   |  |
| Diagnostic information readable                              | Yes  |
| <b>Diagnostics indication LED</b>                            |  |
| Fail-safe operation  | Yes  |
| Group error SF (red)   | Yes  |
| <b>Galvanic isolation</b>                                    |  |
| <b>Galvanic isolation digital outputs</b>                    |  |
| between the channels   | Yes  |
| between the channels, in groups of                           | 4  |
| between the channels and the backplane bus                   | Yes  |
| between the channels and the power supply of the electronics | Yes  |
| <b>Isolation</b>   |  |
| Isolation checked with                                       | 500 V DC / 350 V AC  |
| <b>Standards, approvals, certificates</b>                    |  |
| Highest safety class achievable in safety mode               |  |

|                                 |             |
|---------------------------------|-------------|
| <b>acc. to IEC 61508</b>        | SIL 3       |
| <b>Connection method</b>        |             |
| <b>required front connector</b> | 40-pin      |
| <b>Dimensions</b>               |             |
| <b>Width</b>                    | 80 mm       |
| <b>Height</b>                   | 125 mm      |
| <b>Depth</b>                    | 120 mm      |
| <b>Weight</b>                   |             |
| <b>Weight, approx.</b>          | 465 g       |
| Status                          | Mar 4, 2013 |