



SIMATIC DP, ELECTRON. MODULE F. ET200S, 4 F-DO PROFISAFE, DC 24V/2A, 30 MM WIDTH UP TO PL E (ISO13849), UP TO SIL 3 (IEC 61508), ALSO USEABLE IN PROFINET-NETWORKS WITH IM151-3 HF

Supply voltage

Load voltage L+

- | | |
|-------------------------------|------|
| • Rated value (DC) | 24 V |
| • Reverse polarity protection | No |

Input current

- | | |
|---|-------------|
| from load voltage L+ (without load), max. | typ. 100 mA |
| from backplane bus 3.3 V DC, max. | 28 mA |

Digital outputs

- | | |
|---|------------------|
| Number of digital outputs | 4 |
| short-circuit protection | Yes |
| Limitation of inductive shutdown voltage to | Typ. (2L+) -47 V |
| Controlling a digital input | No |

Switching capacity of the outputs

- | | |
|----------------------|------|
| • on lamp load, max. | 10 W |
|----------------------|------|

Load resistance range

- | | |
|---------------|--------------|
| • lower limit | 12 Ω |
| • upper limit | 1 k Ω |

Output voltage

- | | |
|------------------------|---|
| • for signal "1", min. | L+ (-2,0 V), current sourcing switch: L+ (-1,5 V), voltage drop on current sinking switch: max. 0.5 V |
|------------------------|---|

Output current

- | | |
|---|-------|
| • for signal "1" rated value | 2 A |
| • for signal "1" permissible range for 0 to 60 °C, min. | 20 mA |

<ul style="list-style-type: none"> • for signal "1" permissible range for 0 to 60 °C, max. 	2.4 A
<ul style="list-style-type: none"> • for signal "0" residual current, max. 	0.5 mA; Current-sourcing and current-sinking switches
Parallel switching of 2 outputs	
<ul style="list-style-type: none"> • for increased power 	No
<ul style="list-style-type: none"> • for redundant control of a load 	No
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. 	30 Hz; Symmetrical
<ul style="list-style-type: none"> • with inductive load, max. 	0.1 Hz; Symmetrical
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz; Symmetrical
horizontal installation	
— up to 40 °C, max.	6 A
— up to 55 °C, max.	5 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	500 m
<ul style="list-style-type: none"> • Unshielded, max. 	500 m
Interrupts/diagnostics/status information	
Diagnostic messages	
<ul style="list-style-type: none"> • Diagnostic functions 	Yes
<ul style="list-style-type: none"> • Wire break 	Yes
<ul style="list-style-type: none"> • Short circuit 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
<ul style="list-style-type: none"> • Status indicator digital output (green) 	Yes
Potential separation	
Potential separation digital outputs	
<ul style="list-style-type: none"> • between the channels 	No
<ul style="list-style-type: none"> • between the channels and the backplane bus 	Yes
<ul style="list-style-type: none"> • between the channels and the load voltage L+ 	No
Isolation	
tested with	
<ul style="list-style-type: none"> • Load voltage L+ against backplane bus 	2545 V DC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> • SIL acc. to IEC 61508 	SIL 3
Dimensions	
Width	30 mm

Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	85 g
last modified:	20.04.2015