



Figure similar

SIMATIC DP, Power Module PM-E F PROFIsafe, f. ET200S; 24 V DC suitable for ungrounded setup relay for switching the voltage buses P1 and P2 up to Category 3 (EN 954-1)/ SIL2 (IEC61508)/PLD (ISO13849), 2 fail-safe dig. outputs up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), can also be used in PROFINET configuration with IM 151-3 HF

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> Reverse polarity protection 	No
Input current	
From load voltage L+ (no load), typ.	100 mA
from backplane bus 24 V DC, max.	28 mA
Power loss	
Power loss, typ.	4 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Inputs 	5 byte
<ul style="list-style-type: none"> Outputs 	5 byte
Digital outputs	
Number of digital outputs	2
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> Response threshold, typ. 	Response threshold (short-circuit): 5 to 12 A; response threshold (external short-circuit to ground): 5 to 12 A; response threshold (external short-circuit to P potential): 25 to 45 A
Limitation of inductive shutdown voltage to	L+ (-2x 47 V)
Controlling a digital input	No
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	10 W
Load resistance range	
<ul style="list-style-type: none"> lower limit 	12 Ω
<ul style="list-style-type: none"> upper limit 	1 kΩ
Output voltage	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> for signal "1" rated value 	2 A
<ul style="list-style-type: none"> 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
Parallel switching of two outputs	
<ul style="list-style-type: none"> for uprating 	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

<ul style="list-style-type: none"> • with inductive load, max. 	0.1 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	10 A
— up to 55 °C, max.	7 A
— up to 60 °C, max.	6 A
vertical installation	
— up to 40 °C, max.	6 A
Relay outputs	
Switching capacity of contacts	
— with resistive load, up to 50 °C, max.	10 A
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	200 m
<ul style="list-style-type: none"> • unshielded, max. 	200 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
<ul style="list-style-type: none"> • Diagnostic information readable 	Yes
<ul style="list-style-type: none"> • Wire-break 	Yes
<ul style="list-style-type: none"> • Short-circuit 	Yes
<ul style="list-style-type: none"> • missing load voltage 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • Rated load voltage PWR (green) 	Yes
<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 backplane bus 	Yes
<ul style="list-style-type: none"> • Between the channels and load voltage L+ 	No
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> • acc. to EN 954 	4
<ul style="list-style-type: none"> • Performance level according to ISO 13849-1 	e
<ul style="list-style-type: none"> • SIL acc. to IEC 61508 	Up to SIL 3
Dimensions	
Width	30 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	88 g
last modified:	7/28/2021 