

SIEMENS

Product data sheet

6ES7138-4CF03-0AB0


SIMATIC DP,
POWER MODULE PM-E F PROFISAFE,
FOR ET 200S;
24V DC USEABLE FOR INSTALLATIONS WITH
UNGROUNDING REFERENCE POTENTIAL RELAYS
FOR FAIL-SAFE SWITCHING OF VOLTAGE BUSES
P1 AND P2 UP TO CAT. 3/ SIL 2 AND 2 FAIL-SAFE
DIGITAL OUTPUTS UP TO CAT. 4/ SIL 3,
ALSO USEABLE IN PROFINET-NETWORKS

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 24 V DC, max.	28 mA
Current carrying capacity	
Current carrying capacity up to 40 °C, max.	10 A
Current carrying capacity up to 60 °C, max.	6 A
Power losses	
Power loss, typ.	4 W
Address area	
Address space per module	
without packing	5 byte ; Input and output in each case

Digital inputs	
Cable length	
Cable length, shielded, max.	200 m
Cable length unshielded, max.	200 m
Digital outputs	
Number/binary outputs	2
Functionality/short-circuit strength	Yes ; Electronic
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)
Lamp load, max.	10 W
Controlling a digital input	No
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
for signal "1" permissible range for 0 to 60 °C, max.	2.4 A
for signal "0" residual current, max.	0.5 mA
Parallel switching of 2 outputs	
for increased power	No
for redundant control of a load	No
Switching frequency	
with resistive load, max.	30 Hz
with inductive load, max.	0.1 Hz
on lamp load, max.	10 Hz
Aggregate current of 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	
at ohmic load, up to 50 °C, max.	10 A
Cable length	
Cable length, shielded, max.	200 m
Cable length unshielded, max.	200 m
Interrupts/diagnostics/status information	
Diagnostic messages	
Diagnostic functions	Yes
Diagnostic information readable	Yes
Diagnostics	Yes
Wire break	Yes
Short circuit	Yes
Missing load voltage	Yes
Diagnostics indication LED	
Rated load voltage PWR (green)	Yes
Group error SF (red)	Yes
Status indicator digital output (green)	Yes
Galvanic isolation	
Galvanic isolation digital outputs	
between the channels	No
between the channels and the backplane bus	Yes
between the channels and the load voltage L+	No
Isolation	
Isolation checked with	500 V DC
tested with	
Channels against backplane bus and load voltage L+	500 V DC
Standards, approvals, certificates	

Highest safety class achievable in safety mode	
acc. to EN 954	Up to Cat. 4
acc. to IEC 61508	Up to SIL 3
Dimensions	
Width	30 mm
Height	81 mm
Depth	52 mm
Weight	
Weight, approx.	88 g
Status	Jul 17, 2012