



SIMATIC ET 200SP,
DIGITAL OUTPUT MODULE,
DQ 4X24VDC/2A STANDARD,
FITS TO BU-TYPE A0, COLOR CODE CC02,
MODULE DIAGNOSIS

General information	
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
Product function	
I&M data	Yes
Engineering with	
STEP 7 TIA Portal configurable/integrated as of version	V11 SP2 / V13
STEP 7 configurable/integrated as of version	V5.5 SP3 / -
PROFIBUS as of GSD version/GSD revision	GSD as of Revision 5
PROFINET as of GSD version/GSD revision	V2.3 / -
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	60 mA ; without load
Power loss	
Power loss, typ.	1 W

Address area	
Address space per module	
Address space per module, max.	1 byte
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes
Response threshold, typ.	2.8 to 5.2 A
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
with resistive load, max.	2 A
on lamp load, max.	10 W
Load resistance range	
lower limit	12 Ω
upper limit	3400 Ω
Output current	
for signal "1" rated value	2 A
for signal "0" residual current, max.	0.1 mA
Output delay with resistive load	
"0" to "1", max.	50 μ s
"1" to "0", max.	100 μ s
"0" to "1", typ.	50 μ s
"1" to "0", typ.	100 μ s
Parallel switching of 2 outputs	
for uprating	No
for redundant control of a load	Yes
Switching frequency	
with resistive load, max.	100 Hz
with inductive load, max.	2 Hz
on lamp load, max.	10 Hz
Total current of the outputs	
Max. current per module	8 A
Total current of the outputs (per module)	
horizontal installation	
up to 40 °C, max.	8 A
up to 50 °C, max.	6 A
up to 60 °C, max.	4 A
vertical installation	

up to 40 °C, max.	6 A
up to 50 °C, max.	4 A
up to 60 °C, max.	4 A
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
Monitoring the supply voltage	Yes
Wire-break	Yes
Short-circuit	Yes
Diagnostics indication LED	
Monitoring the supply voltage (PWR-LED)	Yes ; green PWR LED
Channel status display	Yes ; Green LED
for module diagnostics	Yes ; green/red DIAG LED
Galvanic isolation	
Galvanic isolation channels	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between different circuits	75 V DC/60 V AC (base isolation)
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Operating temperature	
horizontal installation, min.	0 °C
horizontal installation, max.	60 °C
vertical installation, min.	0 °C
vertical installation, max.	50 °C
Dimensions	
Width	15 mm
Weights	
Weight, approx.	30 g
Status	Aug 4, 2014