



SIMATIC ET 200SP, ANALOG OUTPUT MODULE, AQ 4XU/I STANDARD, FITS TO BU-TYPE A0, A1, COLOR CODE CC00, MODULE DIAGNOSIS, 16BIT, +/-0,3%

General information	
Usable BaseUnits	BU type A0, A1
Color code for module-specific color identification plate	CC00
Product function	
I&M data	Yes
Engineering with	
STEP 7 TIA Portal can be configured/integrated as of version	V11 SP2 / V13
STEP 7 can be configured/integrated as of version	V5.5 SP3 / -
PROFIBUS as of GSD version/GSD revision	GSD Revision 5
PROFINET as of GSD version/GSD revision	V2.3 / -
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
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.	150 mA

<b>Power losses</b>	
Power loss, typ.	1.5 W
<b>Address area</b>	
Address space per module	
Address space per module, max.	8 byte
<b>Analog outputs</b>	
Number of analog outputs	4
Voltage output, short-circuit current, max.	45 mA
Cycle time (all channels), min.	5 ms
<b>Output ranges, voltage</b>	
0 to 10 V	Yes ; 15 bit
1 to 5 V	Yes ; 13 bit
-5 to +5 V	Yes ; 15 bit incl. sign
-10 to +10 V	Yes ; 16 bit incl. sign
<b>Output ranges, current</b>	
0 to 20 mA	Yes ; 15 bit
-20 to +20 mA	Yes ; 16 bit incl. sign
4 to 20 mA	Yes ; 14 bit
<b>Connection of actuators</b>	
for voltage output two-wire connection	Yes
for voltage output four-wire connection	Yes
for current output two-wire connection	Yes
<b>Load impedance (in rated range of output)</b>	
with voltage outputs, min.	2 k $\Omega$
with voltage outputs, capacitive load, max.	1 $\mu$ F
with current outputs, max.	500 $\Omega$
with current outputs, inductive load, max.	1 mH
<b>Destruction limits against externally applied voltages and currents</b>	
Voltages at the outputs	30 V
<b>Cable length</b>	
Cable length, shielded, max.	1000 m ; 200 m for voltage output
<b>Errors/accuracies</b>	
Linearity error (relative to output range), (+/-)	0.03 %
Temperature error (relative to output range), (+/-)	0.0050 %/K
Crosstalk between the outputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to output area), (+/-)	0.05 %
<b>Operational limit in overall temperature range</b>	

Voltage, relative to output area, (+/-)	0.5 %
Current, relative to output area, (+/-)	0.5 %
<b>Basic error limit (operational limit at 25 °C)</b>	
Voltage, relative to output area, (+/-)	0.3 %
Current, relative to output area, (+/-)	0.3 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes
<b>Alarms</b>	
Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
Diagnostics	Yes
Monitoring the supply voltage	Yes
Wire break	Yes
Short circuit	Yes
Overflow/underflow	Yes
<b>Diagnostics indication LED</b>	
Monitoring of the supply voltage (PWR-LED)	Yes ; Green LED
Channel status display	Yes ; Green LED
for module diagnostics	Yes ; Green/red LED
<b>Galvanic isolation</b>	
<b>Electrical isolation channels</b>	
between the channels	No
between the channels and the backplane bus	Yes
between the channels and the supply voltage of the electronics	Yes
<b>Permissible potential difference</b>	
between different circuits	75 V DC/60 V AC (base isolation)
<b>Isolation</b>	
Isolation checked with	707 V DC (type test)
<b>Ambient conditions</b>	
<b>Ambient temperature in operation</b>	
horizontal installation, min.	0 °C
horizontal installation, max.	60 °C
vertical installation, min.	0 °C
vertical installation, max.	50 °C
<b>Dimensions</b>	
Width	15 mm
<b>Weights</b>	
Weight, approx.	31 g

