SIEMENS

SIMATIC S7-200 SMART, analog I/O SM AM06, 4 AI/2 AO, 0..10 V, 0..5 V, 0/4..20mA, +/-5 V, +/-2.5 V, 12 bit resolution or 4...20 mA, +/-10 V 11 bit resolution

General information	
Product type designation	SM AM06, AI 4x12 bit, AQ 2x11 bit
CiR - Configuration in RUN	
Reparameterization possible in RUN	No
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V; -15 / +20 %
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, typ.	60 mA
from backplane bus 5 V DC, typ.	80 mA
Power loss	
Power loss, typ.	2 W
Analog inputs	
Number of analog inputs	4
Input ranges	
● Voltage	Yes; ±10V, ±5V, ±2.5V
● Current	Yes; 0 to 20 mA
● Thermocouple	No
● Resistance thermometer	No
● Resistance	No
Input ranges (rated values), voltages	
● -10 V to +10 V	Yes
— Input resistance (-10 V to +10 V)	9 MΩ
● -2.5 V to +2.5 V	Yes
— Input resistance (-2.5 V to +2.5 V)	9 MΩ
● -5 V to +5 V	Yes
— Input resistance (-5 V to +5 V)	9 MΩ
Input ranges (rated values), currents	
● 0 to 20 mA	Yes
— Input resistance (0 to 20 mA)	250 Ω
Analog outputs	
Number of analog outputs	2; Current or voltage
Output ranges, voltage	
● -10 V to +10 V	Yes
Output ranges, current	
● 0 to 20 mA	Yes
Load impedance (in rated range of output)	
● with voltage outputs, min.	1 kΩ

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● with current outputs, max.	500 Ω

Analog value generation for the inputs

Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	12 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit
● Interference voltage suppression for interference frequency f1 in Hz	10 / 50 / 60 / 400 Hz

Smoothing of measured values	
● parameterizable	Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time
● Step: None	Yes; 1x
● Step: low	Yes; 4x
● Step: Medium	Yes; 16x
● Step: High	Yes; 32x

Analog value generation for the outputs

Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	11 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit
● Resolution in isochronous mode (including overrange)	voltage mode: 10 bit + sign bit, current mode: 10 bit

Interrupts/diagnostics/status information

Diagnostics function	Yes

Diagnoses	
● Monitoring the supply voltage	Yes
● Wire-break	Yes
● Short-circuit	Yes

Diagnostics indication LED	
● for status of the inputs	Yes
● for status of the outputs	Yes

Degree and class of protection

IP degree of protection	IP20

Standards, approvals, certificates

CE mark	Yes

Dimensions

Width	45 mm
Height	100 mm
Depth	81 mm

Weights

Weight, approx.	173.4 g

last modified:	11/11/2021