SIEMENS

Data sheet

6ES7332-5HB01-0AB0



SIMATIC S7-300, Analog output SM 332, isolated, 2 AO, U/I; resolution 11/12 bits, 20-pole, Removing/inserting with active backplane bus possible

Figure similar	
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Supply voltage Load voltage L+ • Rated value (DC) 24 V • Rated value (DC) 24 V • Rated value (DC) 24 V • Reverse polarity protection Yes Input current 60 mA Power loss 90 Power loss, typ. 3 W Analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage - • 0 to 10 V Yes • 10 V to 5 V Yes • 10 V to 10 V Yes • 10 V to 20 mA Yes • 20 mA to 20 mA Yes • 20 mA to 20 mA Yes • 4 mA to 20 mA Yes Load impedicance (in rated range of output) - <th>2 80 10000 1 000</th> <th></th>	2 80 10000 1 000	
• Rated value (DC) 24 V • Reverse polarity protection Yes Input current from load voltage L+ (without load), max. 135 mA from backplane bus 5 V DC, max. 60 mA Power loss Power loss Power loss, typ. 3 W Analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit protection Yes Voltage output, short-circuit protection Yes 0 utput ranges, woltage - • 0 to 10 V Yes • 10 to 10 V Yes • 0 to 10 V Yes • 0 to 10 V Yes • 10 V to +10 V Yes • 0 to 20 mA Yes Output ranges, current - • 0 to 20 mA Yes • 10 V to +10 V Yes • 20 m Ato +20 mA Yes • 10 with voltage outputs, min. 1 kΩ • with outputs, max. 500 Ω • with current outputs, inductive load, max. 1 µF • with current outputs, inductive load, max. 10 mH Cable length - <td>Supply voltage</td> <td></td>	Supply voltage	
• Reverse polarity protection Yes Input current 15 mA from backplane bus 5 V DC, max. 60 mA Power loss 60 mA Power loss, typ. 3 W Analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit protection Yes Output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage 0 to 10 V • 0 to 10 V Yes • 10 to 20 mA Yes • 10 to 20 mA Yes • 20 and to +20 mA Yes • and to page outputs, spin. 1 kΩ • with outge outputs, min. 1 kΩ • with outge outputs, max. 50 0 Ω • with outgen outputs, max. 50 0 Ω • with outgen outputs, max. 200 m Analog youtputs, max. 200 m Analog youtputs, max. 000 m	Load voltage L+	
Input currentfrom load voltage L+ (without load), max.135 mAfrom backplane bus 5 V DC, max.60 mAPower loss.90 mAPower loss, typ.3 WAnalog outputs2Number of analog outputs2Voltage output, short-circuit protectionYesVoltage output, short-circuit protectionYesCurrent output, no-load voltage, max.18 VOutput ranges, voltage9• 0 to 10 VYes• 10 v to 5 VYes• 10 v to 5 VYes• 10 v to 10 VYes• 0 to 20 mAYes• 0 to 20 mAYes• 0 to 20 mAYes• 0 to 20 mAYes• 0 to 40 coll make1 kD• 0 to 20 mAYes• 0 to 20 mAYes• 0 to 20 mAYes• 0 to 10 KYes• 0 to 10 KYesLoad impedance (in tated range of output)• with voltage outputs, max.10 mH• with current outputs, max.200 mAnalog value generation for the outputsIntegration and conversion time/resolution per channel• Resolution with overrange (bit including sign), max.12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit• Conversion time (per channel)0.8 ms </td <td> Rated value (DC) </td> <td>24 V</td>	 Rated value (DC) 	24 V
from load voltage L+ (without load), max. 135 mA from backplane bus 5 V DC, max. 60 mA Power loss 9 Power loss. 3W Analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage 0 0 0 0 10 V Yes Yes Output ranges, voltage Yes 0 Voltage outputs, short-circuit current, max. 0 0 0 10 V Yes Yes 0 0 to 10 V • 0 Yes 0 0 to 20 mA Yes Yes Load impedance (in rated range of output) Yes Load impedance (in rated range of output) 1 kΩ with current outputs, inductive load, max. 1 μF o shielded, max. 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel • Resolution w	 Reverse polarity protection 	Yes
from backplane bus 5 V DC, max. 60 mA Power loss 3 W Analog outputs 3 W Analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage - • 0 to 10 V Yes • 10 V to 5 V Yes • 10 V to 10 V Yes • 10 V to 410 V Yes • 0 to 20 mA Yes • 10 V to 410 V Yes • 0 to 20 mA Yes • 10 V to 420 mA Yes • 20 mA to +20 mA Yes Load impedance (in rated range of output) - • with voltage outputs, max. 10 kf • with current outputs, max. 500 Ω • with current outputs, max. 500 Ω • with current outputs, max. 10 mH Cable length • • shielded, max. 200 m Analog value generation for the outputs • Conversion time/resolution per channel • Resolution with overrange (bit including si	Input current	
Power loss Power loss, typ. 3 W Analog outputs 2 Number of analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage • • 0 to 10 V Yes • 10 to 5 V Yes • 10 to 5 V Yes • 10 to 20 mA Yes • 0 to 20 mA Yes • 0 to 20 mA Yes • 20 mA to +20 mA Yes • 20 mA Yes • 20 mA Yes Load impedance (in rated range of output) • • with voltage outputs, min. 1 kΩ • with ourrent outputs, capacitive load, max. 1 μF • with ourrent outputs, inductive load, max. 10 mH Cable length • • shielded, max. 200 m Analog value generation for the outputs • Aralog value generation for the outputs • Resolution with overrange (bit including sign), max.	from load voltage L+ (without load), max.	135 mA
Power loss, typ. 3 W Analog outputs	from backplane bus 5 V DC, max.	60 mA
Analog outputs 2 Number of analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage - • 0 to 10 V Yes • 1 V to 5 V Yes • -10 V to +10 V Yes Output ranges, current - • 0 to 20 mA Yes • -20 mA to +20 mA Yes • -20 mA to +20 mA Yes -20 mA to +20 mA Yes Load impedance (in rated range of output) - • with voltage outputs, nin. 1 kΩ • with voltage outputs, inductive load, max. 1 µF • with current outputs, inductive load, max. 10 mH Cable length - • shielded, max. 200 m Analog value generation for the outputs 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit • for resistive load 0.2 ms • for inductive load 0.3 ms	Power loss	
Number of analog outputs 2 Voltage output, short-circuit protection Yes Voltage output, short-circuit current, max. 25 mA Current output, no-load voltage, max. 18 V Output ranges, voltage • 0 to 10 V • 0 to 10 V Yes • 10 to 5 V Yes • 10 to 5 V Yes • 10 to 20 mA Yes • 20 mA to +20 mA Yes • 20 mA to 20 mA Yes • 4 mA to 20 mA Yes • with voltage outputs, capacitive load, max. 1 µF • with voltage outputs, min. 1 kΩ • with voltage outputs, max. 500 Ω • with voltage outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length 10 mH Cable length 10 mH • Shelded, max. 200 m Analog value generation for the outputs 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time 0.2 ms • for resistive load 0.2 ms • for inductiv	Power loss, typ.	3 W
Voltage output, short-circuit protectionYesVoltage output, short-circuit current, max.25 mACurrent output, no-load voltage, max.18 VOutput ranges, voltage-• 0 to 10 VYes• 1 V to 5 VYes• 1 V to 5 VYes• 10 V to +10 VYesOutput ranges, current-• 0 to 20 mAYes• 20 mA to 20 mAYes• 20 mA to 20 mAYesLoad impedance (in rated range of output)• with voltage outputs, min.1 kΩ• with voltage outputs, capacitive load, max.1 μF• with voltage outputs, inductive load, max.10 mHCable length-• shielded, max.200 mAnalog value generation for the outputs12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit• Conversion time (per channel)0.8 msSettling time0.2 ms• for resistive load3.3 ms• for inductive load3.3 ms• for inductive load0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)Errors/accuracies-	Analog outputs	
Voltage output, short-circuit current, max.25 mACurrent output, no-load voltage, max.18 VOutput ranges, voltage9• 0 to 10 VYes• 1 V to 5 VYes• -10 V to +10 VYes• 0 to 20 mAYes• 20 mA to +20 mAYes• 20 mA to +20 mAYes• 4 mA to 20 mAYes• with voltage outputs, min.1 k Ω • with voltage outputs, capacitive load, max.1 µF• with current outputs, inductive load, max.10 mHCable length500 Ω • shielded, max.200 mAnalog value generation for the outputs• Resolution with overrange (bit including sign), max.12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit• Conversion time (per channel)0.8 ms• Settling time0.2 ms• for resistive load0.2 ms• for inductive load0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)Errors/accuracies0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	Number of analog outputs	2
Current output, no-load voltage, max.18 VOutput ranges, voltageYes $0 to 10 V$ Yes $1 V to 5 V$ Yes $-10 V to +10 V$ YesOutput ranges, currentYes $0 to 20 mA$ Yes $-20 mA to +20 mA$ Yes $-4 mA to 20 mA$ Yeswith voltage outputs, min.1 k Ω $*$ with voltage outputs, capacitive load, max.1 µF $*$ with voltage outputs, capacitive load, max.10 mHCable length200 mAnalog value generation for the outputs \bullet shielded, max.200 mAnalog value generation for the outputs \bullet conversion time/resolution per channel \bullet Resolution with overrange (bit including sign), max.12 bit; $\pm 10 V$, $\pm 20 mA$, $1 V$ to $5 V$: 11 bit \pm sign; $0 V$ to $10 V$, $0 mA$ to $20 mA$, $1 V$ to $5 V$: 11 bit \pm sign; $0 V$ to $10 V$, $0 mA$ to $20 mA$, $1 V$ to $5 V$: 11 bit \pm sign; $0 V$ to $10 V$, $0 mA$ to $20 mA$, $1 2$ bit \bullet for resistive load $0.2 ms$ \bullet for resistive load $0.2 ms$ \bullet for inductive load $0.5 ms$; $0.5 ms$ (1 mH); $3.3 ms$ (10 mH)Errors/accuracies	Voltage output, short-circuit protection	Yes
Output ranges, voltage Yes 0 to 10 V Yes 1 V to 5 V Yes -10 V to +10 V Yes Output ranges, current Yes 0 to 20 mA Yes -20 mA to +20 mA Yes 4 mA to 20 mA Yes with voltage outputs, min. 1 kΩ • with voltage outputs, capacitive load, max. 1 μF • with voltage outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit • Conversion time (per channel) 0.8 ms Setting time 0.2 ms • for resistive load 0.2 ms • for capacitive load 0.3 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	Voltage output, short-circuit current, max.	25 mA
• 0 to 10 V Yes • 1 V to 5 V Yes • 10 V to +10 V Yes Output ranges, current • 0 to 20 mA Yes • 20 mA to +20 mA Yes • 20 mA to +20 mA Yes • 20 mA to 20 mA Yes • 20 mA to 20 mA Yes • 20 mA to 20 mA Yes Load impedance (in rated range of output) • with voltage outputs, min. 1 k Ω • with voltage outputs, capacitive load, max. 1 μ F • with voltage outputs, max. 500 Ω • with current outputs, max. 10 mH Cable length • shielded, max. 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 1 2 bit • Conversion time (per channel) 0.8 ms Settling time • for resistive load 0.2 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracles	Current output, no-load voltage, max.	18 V
$\begin{array}{c c c c c c c } & Yes & Yes & \\ \hline \begin{timesmalimits}{llllllllllllllllllllllllllllllllllll$	Output ranges, voltage	
• -10 V to +10 V Yes Output ranges, current • • 0 to 20 mA Yes • -20 mA to +20 mA Yes • -20 mA to +20 mA Yes • 4 mA to 20 mA Yes Load impedance (in rated range of output) • • with voltage outputs, capacitive load, max. 1 μF • with voltage outputs, capacitive load, max. 10 mH Cable length - • shielded, max. 200 m Analog value generation for the outputs 200 m Analog value generation for the outputs 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Setting time • for resistive load • for capacitive load 0.2 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	• 0 to 10 V	Yes
Output ranges, current • 0 to 20 mA Yes • 0 to 20 mA Yes • -20 mA to +20 mA Yes • 4 mA to 20 mA Yes • 4 mA to 20 mA Yes Load impedance (in rated range of output) * • with voltage outputs, capacitive load, max. 1 μF • with voltage outputs, capacitive load, max. 500 Ω • with current outputs, max. 500 Ω • with current outputs, max. 10 mH Cable length * • shielded, max. 200 m Analog value generation for the outputs * • Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit • Conversion time (per channel) 0.8 ms Settling time • • for resistive load 0.2 ms • for inductive load 0.3 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies *	• 1 V to 5 V	Yes
• 0 to 20 mA Yes • -20 mA to +20 mA Yes • 4 mA to 20 mA Yes Load impedance (in rated range of output) * • with voltage outputs, min. 1 kΩ • with voltage outputs, capacitive load, max. 1 μF • with current outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time 6 for capacitive load • for resistive load 0.2 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	• -10 V to +10 V	Yes
• -20 mA to +20 mA Yes • 4 mA to 20 mA Yes Load impedance (in rated range of output) with voltage outputs, min. 1 kΩ with voltage outputs, capacitive load, max. 1 μF with current outputs, max. 500 Ω with current outputs, inductive load, max. 10 mH Cable length shielded, max. 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA; 12 bit Conversion time (per channel) 0.8 ms Settling time for resistive load of capacitive load of capacitive load of max; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	Output ranges, current	
• 4 mA to 20 mAYesLoad impedance (in rated range of output)1 kΩ• with voltage outputs, min.1 kΩ• with voltage outputs, capacitive load, max.1 μ F• with current outputs, max.500 Ω• with current outputs, inductive load, max.10 mHCable length200 m• shielded, max.200 mAnalog value generation for the outputsIntegration and conversion time/resolution per channel• Resolution with overrange (bit including sign), max.12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit• Conversion time (per channel)0.8 msSettling time0.2 ms• for resistive load0.2 ms• for capacitive load0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)Errors/accuracies	• 0 to 20 mA	Yes
Load impedance (in rated range of output) with voltage outputs, min. with voltage outputs, capacitive load, max. µF with current outputs, max. 500 Ω with current outputs, inductive load, max. 10 mH Cable length shielded, max. 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel Resolution with overrange (bit including sign), max. Conversion time (per channel) Settling time for resistive load odd odd	 -20 mA to +20 mA 	Yes
• with voltage outputs, min. 1 kΩ • with voltage outputs, capacitive load, max. 1 μF • with current outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length 200 m • shielded, max. 200 m Analog value generation for the outputs 200 m Integration and conversion time/resolution per channel 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time 0.2 ms • for resistive load 3.3 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies Errors/accuracies	• 4 mA to 20 mA	Yes
• with voltage outputs, capacitive load, max. 1 μF • with current outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length 200 m • shielded, max. 200 m Analog value generation for the outputs 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time 0.2 ms • for capacitive load 3.3 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	Load impedance (in rated range of output)	
• with current outputs, max. 500 Ω • with current outputs, inductive load, max. 10 mH Cable length • shielded, max. • shielded, max. 200 m Analog value generation for the outputs 10 mH Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. • Conversion time (per channel) 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time • for resistive load • for capacitive load 0.2 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies Errors/accuracies	 with voltage outputs, min. 	1 kΩ
 with current outputs, inductive load, max. 10 mH Cable length shielded, max. 200 m Analog value generation for the outputs Integration and conversion time/resolution per channel Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit Conversion time (per channel) 0.8 ms Settling time for resistive load o.2 ms of or inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies 	 with voltage outputs, capacitive load, max. 	1 μF
Cable length 200 m Analog value generation for the outputs 200 m Integration and conversion time/resolution per channel 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time 0.2 ms • for resistive load 3.3 ms • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	 with current outputs, max. 	500 Ω
• shielded, max.200 mAnalog value generation for the outputsIntegration and conversion time/resolution per channel• Resolution with overrange (bit including sign), max.• Resolution with overrange (bit including sign), max.• Conversion time (per channel)• Conversion time (per channel)• Settling time• for resistive load• for capacitive load• for inductive loa	 with current outputs, inductive load, max. 	10 mH
Analog value generation for the outputs Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time • for resistive load • for capacitive load • for inductive load	Cable length	
Integration and conversion time/resolution per channel • Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time • for resistive load • for capacitive load • for inductive load • for inductive load • for inductive load • for inductive load • for sistice load • for inductive load • for inductive load • for inductive load • for inductive load	 shielded, max. 	200 m
 Resolution with overrange (bit including sign), max. 12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit Conversion time (per channel) 8 ms Settling time for resistive load for capacitive load for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies 	Analog value generation for the outputs	
10 V, 0 mA to 20 mA: 12 bit • Conversion time (per channel) 0.8 ms Settling time • for resistive load • for capacitive load • for inductive load • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	Integration and conversion time/resolution per channel	
Settling time • for resistive load • for capacitive load • for inductive load • for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)	Resolution with overrange (bit including sign), max.	
for resistive load 0.2 ms ofor capacitive load 3.3 ms ofor inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	 Conversion time (per channel) 	0.8 ms
for capacitive load 3.3 ms for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	Settling time	
• for inductive load 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH) Errors/accuracies	for resistive load	0.2 ms
Errors/accuracies	 for capacitive load 	3.3 ms
	 for inductive load 	0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)
Operational error limit in overall temperature range	Errors/accuracies	
	Operational error limit in overall temperature range	

 Voltage, relative to output range, (+/-) 	0.5 %
 Current, relative to output range, (+/-) 	0.6 %
Basic error limit (operational limit at 25 °C)	
 Voltage, relative to output range, (+/-) 	0.4 %
 Current, relative to output range, (+/-) 	0.5 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
Diagnostic alarm	Yes; Parameterizable
Diagnoses	
 Diagnostic information readable 	Yes
Diagnostics indication LED	
 Group error SF (red) 	Yes
Potential separation	
Potential separation analog outputs	
 between the channels 	No
 between the channels and backplane bus 	Yes
 Between the channels and load voltage L+ 	Yes
 between the channels and the power supply of the electronics 	Yes
Isolation	
Isolation tested with	500 V DC
connection method / header	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	220 g
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