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Data sheet 6ES7124-1GA00-0AB0

*** SPARE PART*** SIMATIC SC,ELECTRONIC SUBMODULE 1 AO, 4..20MA, +/-20MA

General information	
Usable terminal block	TB 16SC
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	50 mA
Power loss	
Power loss, max.	1 W
Hardware configuration	
Slots	
• required slots	2; from 8
Analog outputs	
Number of analog outputs	1
Current output, no-load voltage, max.	16 V
Output ranges, current	
• 0 to 20 mA	Yes
• 4 mA to 20 mA	Yes
Connection of actuators	
• for current output two-wire connection	Yes
Load impedance (in rated range of output)	
• with current outputs, max.	600 Ω; at common-mode voltage 2 V, max. 500 ohms; at common-mode voltage 0 V, max. 600 ohms; idle test
• with current outputs, inductive load, max.	1 mH
Destruction limits against externally applied voltages and currents	
• Voltages at the outputs towards MANA	15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20)
• Current, max.	50 mA; DC
Cable length	
• shielded, max.	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
• Resolution (incl. overrange)	S7 representation: 0 mA to 20 mA, 4 mA to 20 mA; S5 representation: 12 bit, 12 bit

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• Resolution with overrange (bit including sign), max.	12 bit
• Conversion time (per channel)	5 ms
Settling time	
• for resistive load	0.1 ms
• for inductive load	0.5 ms

Errors/accuracies	
Linearity error (relative to output range), (+/-)	0.06 %
Temperature error (relative to output range), (+/-)	0.01 %/K
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.1 %
Operational error limit in overall temperature range	
• Current, relative to output range, (+/-)	1 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to output range, (+/-)	0.7 %
Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency	
• Common mode interference (UCM < Vss AC (50 Hz)), min.	30 dB

Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Substitute values connectable	No

Potential separation	
Potential separation analog outputs	
• between the channels and backplane bus	No; Optocoupler
• between the channels and the power supply of the electronics	No

Permissible potential difference	
between reference point of load and QV-(UCM)	2 V DC / 2 Vpp AC

Isolation	
Isolation tested with	1 500 V AC

Dimensions	
Width	20 mm
Height	64 mm
Depth	51 mm

Weights	
Weight, approx.	25 g

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