



AI202/SI, AI204/SI Analog Input Modules

The analog input modules AI202/SI and AI204/SI offer 2 or 4 high resolution analog 16 bit current input channels. Single channel isolation, high immunity to interference, as well as integrated signal filtering (delta-sigma converter) make this module particularly interesting for process technology.

Features

- 2 or 4 analog inputs
- Input current 0 mA to 20 mA
- Input impedance 75 Ω
- 16 bit resolution
- Sampling time 250 ms/channel
- Galvanic isolation between channels
- Galvanic isolation from the system
- Monitoring of internal voltages

Part type designation	Part number
AI202/SI	00012245-10
AI204/SI	00012245-00

AI202/SI, AI204/SI

Current inputs	
Quantity	2 (AI202/SI) or 4 (AI204/SI)
Input current range	0 mA to 20 mA
Input impedance	75 Ω
Digital resolution	16 bit
Value of LSB	509 nA (Vref = 2,5 V an 75 Ω)
Cross-talk attenuation	> 100 dB between the channels
Signal suppression 50 Hz/60 Hz	> 60 dB
Error at 25°C	± 0.1 %
Error in the entire temperature range	± 0.5 %
Sampling frequency	4 measurements per second/channel
Input filter	fg (3 dB) delay time 1 ms, low-pass filter: first order
Galvanic isolation between channels	500 V
Galvanic isolation from the system	500 V
Approvals/Certificates	
General	CE, UKCA, cULus
Marine	ABS, BV, DNV, KR, LR, NK, RINA
Environmental conditions	
Operating temperature	-30 °C to +60 °C
Rel. humidity operation	5 % to 95 % noncondensing
Storage temperature	-40 °C to +85 °C
Rel. humidity storage	5 % to 95 % with condensation
Pollution degree acc. IEC 60664-1	2 (noncondensing)

Order data

Part type designation	Part number	Description
AI202/SI	00012245-10	Analog input module; 2x In 20 mA; 16 bit; 0.1%; single isolated
AI204/SI	00012245-00	Analog input module; 4x In 20 mA; 16 bit; 0.1%; single isolated

Accessories

Part type designation	Part number	Description
SS-AI202/SI B+C	00012354-50	Terminal set Phoenix screw side (2x SS 35/03) with labeling strips and keying elements
KS-AI204/SI B+C	00024539-00	Terminal set cage clamp small (4x KS 35/03) with labeling strips and keying elements
SS-AI204/SI B+C	00012353-50	Terminal set Phoenix screw side (4x SS 35/03) with labeling strips and keying elements