

B&R - X20 System**X20AI4222**

Analog Voltage Input Module

Technical specifications

Analog inputs	4 differential voltage inputs
Input range	± 10 V
Digital converter resolution	± 12 -bit (13-bit including sign)
Conversion time	400 μ s for all inputs
Conversion procedure	SAR
Input impedance	20 M Ω
Permissible input signal	Maximum ± 30 V
Input protection	Protection against wiring with supply voltage
Input filter	Third-order low-pass, 1 kHz cutoff
Common-mode range	± 12 V
Common-mode rejection	70 dB at DC and 50 Hz
Overload digital value	Configurable
Electrical isolation	Channel isolated from bus; channels not isolated from one another
Required terminal block	X20TB12, ordered separately

Documented role

B&R X20AI4222 is a four-channel differential ± 10 V analog input module with 13-bit conversion and 400 microsecond acquisition for the X20 System.

Documented applications

- Four-channel ± 10 V sensor and transducer acquisition
- Analog feedback measurement from drives or machine devices
- Distributed voltage monitoring in X20 control stations

Selection and installation checks

X20AI4222 is a four-channel ± 10 V input module and does not provide current-input mode; verify differential wiring, ± 12 V common-mode range, scaling, overload handling, X20TB12, and saved channel mapping before replacement.