

X20AI4222

Four-Channel +/-10 V Analog Input Module

CONTROLLED ENGINEERING COPY

B&R X20AI4222 is a four-channel +/-10 v analog input module for the documented X20 System installation.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	X20AI4222
Manufacturer	B&R
System family	X20 System
Record scope	Installation, application and verification

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01 PRE-INSTALLATION PLAN

- 1

Confirm the complete B&R X20AI4222 marking and installed X20 System position before work.
- 2

Place the machine or process in the approved maintenance state and isolate every applicable energy source.
- 3

Record four +/-10 V differential inputs and X20TB12, terminal assignments, shielding and protective-ground connections before removal.
- 4

Use ESD controls and protect keyed connectors, terminals and exposed electronics from contamination.
- 5

Verify analog inputs (4) against the installed project and connected hardware.

MATCHED HARDWARE

- X20AI4222 with complete identity
- X20 I/O station
- four +/-10 V differential inputs and X20TB12
- Controlled commissioning and acceptance record

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	X20AI4222 recorded
Physical interface	Probe, cable and sensor matched
Functional proof	Static gap and dynamic response

02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Analog inputs	4
Signal range	+/-10 V
Input type	Differential
Converter resolution	13 bit including sign
Conversion time	400 us for all inputs
Input impedance	20 Mohm
Bus module	X20BM11 or X20BM15
Terminal block	X20TB12
Protection	IP20

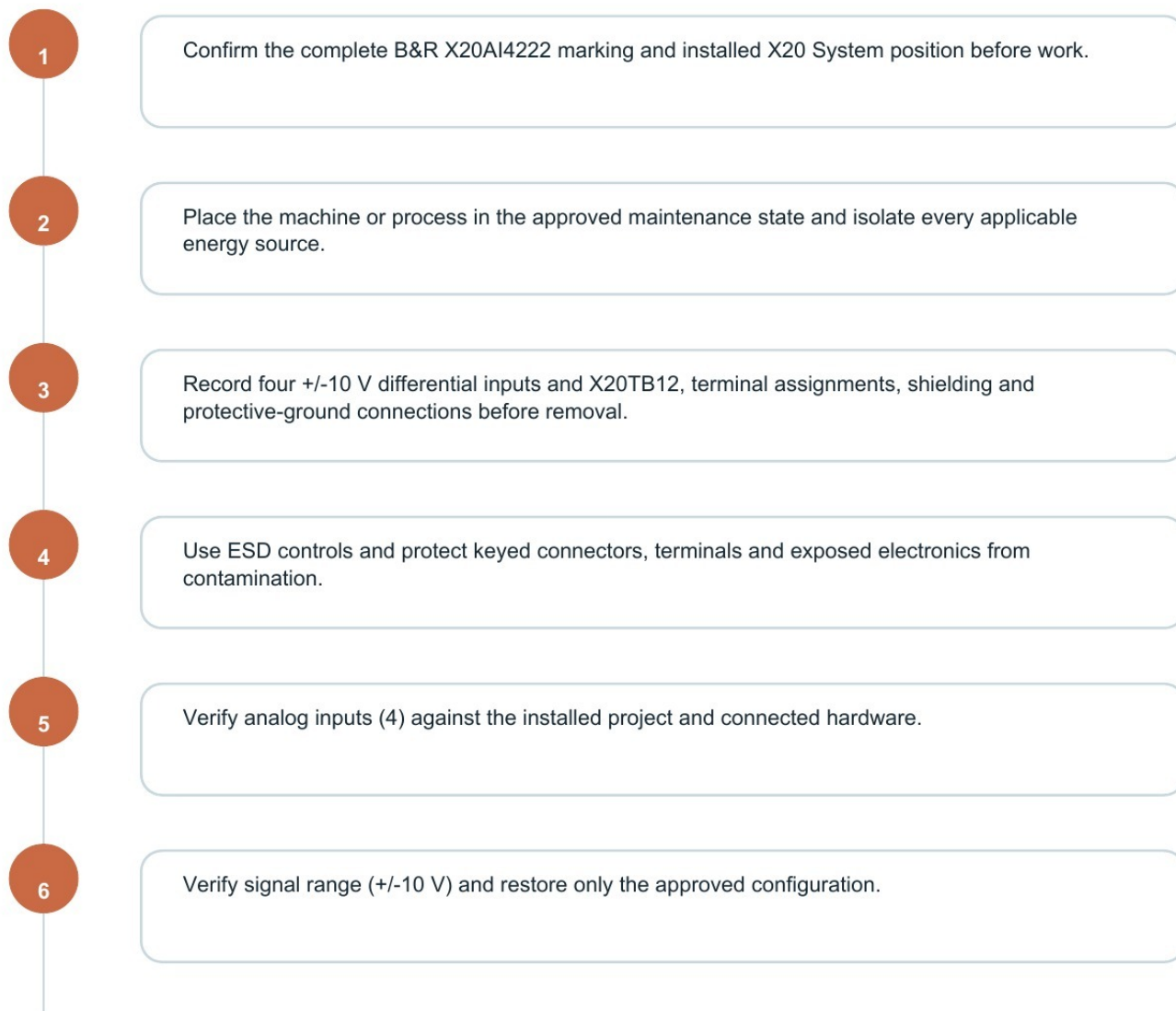
FIELD NOTE

Confirm B&R X20AI4222, X20 I/O station, four +/-10 V differential inputs and X20TB12, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

RELATED APTER POWER PAGES

129716-173-037-15-05	330851-02-000-060-10-01-05	330194-15-25-50-05	330194-05-13-50-05
330194-05-13-10-05	330194-00-07-10-05	330180-X1-05-145004-64	330906-02-12-10-12-05

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	X20AI4222
Physical interface	four +/-10 V differential inputs and X20TB12 matched
Configuration	Exact installed configuration and assignments restored
Functional proof	Controlled four-channel differential voltage acquisition response recorded

04 RETURN-TO-SERVICE RECORD

- ☐ Verify analog inputs (4) against the installed project and connected hardware.
- ☐ Verify signal range (+/-10 V) and restore only the approved configuration.
- ☐ Energize in the prescribed sequence and review module, host and network diagnostics.
- ☐ Complete a controlled four-channel differential voltage acquisition test and retain the acceptance result before production release.

VERIFICATION RECORD

PRODUCT IDENTITY	X20AI4222
INSTALLED POSITION	Documented X20 I/O station position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

FUNCTIONAL ACCEPTANCE CHECKLIST

- ☐ Confirm the exact model remains assigned to the documented host position.
- ☐ Verify every mating interface and field connection against the as-found record.
- ☐ Exercise the intended product function under controlled conditions.
- ☐ Retain the diagnostic and functional-test result before release.

SOURCE IDENTIFIERS

B&R X20AI4222 product data | Data sheet X20AI4222