

X20AT6402

Six-channel thermocouple input module

INSTALLATION, INTERFACE AND VALIDATION WORKBOOK

B&R X20AT6402 is a Six-channel thermocouple input module. It performs the documented X20 System system role in the approved industrial installation.

STEP	GATE	ENGINEERING PURPOSE
01	IDENTIFY	Confirm article, host and hardware
02	ISOLATE	Secure power and stored energy
03	CONNECT	Restore documented interfaces
04	VALIDATE	Prove diagnostics and function

WORKBOOK PURPOSE

Field-ready identity, isolation, connection, commissioning and closeout records for this exact B&R article.

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X20AT6402

Installation Readiness Gate

Complete the identity, host-system and isolation checks before disturbing the installed hardware.

- 1

Confirm the complete B&R X20AT6402 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 power, signal, network, terminal and protective-ground connections before removal.
- 4

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

Pre-Work Evidence

EVIDENCE ITEM	RECORDED VALUE
Complete article marking	X20AT6402
Host / carrier	X20 System
Primary system role	Provides the documented six-channel thermocouple input module function
Acceptance boundary	Complete a controlled functional test and retain the acceptance result before production release.
Source record	B&R X20AT6402 product data

WORK AUTHORIZATION RECORD

Work order: _____

Drawing / revision: _____

Checked by: _____

Date: _____

Isolation and Access Register

CONTROL POINT	ENGINEER RECORD
Incoming supply	Isolated / proved
Stored energy	Discharged / proved
Field connections	Identified / protected
ESD control	Established / recorded

Pre-Work Documentation

DOCUMENT	ENGINEER RECORD
Connection photograph	Reference / file
Configuration backup	Reference / revision
Diagnostic baseline	Reference / result

Connection and Installation Sequence

INSTALLATION PRINCIPLE

Record thermocouple type and polarity for every channel, maintain compatible extension wire and verify cold-junction compensation before acceptance.

- 1 Verify inputs (6) against the installed project and connected hardware.
- 2 Verify thermocouples (J; K; N; S; B; R) and restore only the approved configuration.
- 3 Energize in the prescribed sequence and review module, host and network diagnostics.
- 4 Complete a controlled functional test and retain the acceptance result before production release.

Connection Record

CONNECTION GROUP	AS-FOUND / AS-LEFT RECORD	STATUS
Power / field connection	Reference / terminal	Checked
Signal / interface	Reference / connector	Checked
Ground / shield	Reference / point	Checked
Accessory / carrier	Reference / part	Checked

MODEL-SPECIFIC RELEASE LIMIT

Confirm B&R X20AT6402, X20 System host, hardware revision, terminals and connectors, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

Interface Acceptance Criteria

ACCEPTANCE ITEM	REQUIRED EVIDENCE
Identity	X20AT6402
Host match	X20 System
Connection proof	Verify thermocouples (J; K; N; S; B; R) and restore only the approved configuration.
Configuration proof	Energize in the prescribed sequence and review module, host and network diagnostics.

Commissioning and Acceptance Record

Record each controlled verification step before the equipment returns to automatic operation.

NO.	ACCEPTANCE CHECK	RESULT	RECORD
1	Article and host identity	PASS / FAIL	Initial / date
2	Mechanical installation	PASS / FAIL	Initial / date
3	Power and field wiring	PASS / FAIL	Initial / date
4	Grounding and shielding	PASS / FAIL	Initial / date
5	Configuration restoration	PASS / FAIL	Initial / date
6	Signal or power-path response	PASS / FAIL	Initial / date
7	Diagnostics and alarms	PASS / FAIL	Initial / date
8	Final functional release	PASS / FAIL	Initial / date

Engineering Notes

RECORD AREA	ENGINEER ENTRY
As-found condition	
Corrective action	
As-left configuration	
Outstanding restriction	
Release authorization	

CONTROLLED COMMISSIONING

Complete a controlled functional test and retain the acceptance result before production release.

Diagnostics and Release Log

EVENT	ENGINEERING RECORD
Initial energization	Result / observation
Interface or signal response	Result / observation
Alarm and diagnostic review	Result / observation
Functional release	Name / date

ACCEPTANCE AND RELEASE EVIDENCE

X20 System system maintenance

Restores the documented six-channel thermocouple input module function in an engineered installation.

Control-panel modernization

Preserves the approved B&R hardware identity during a controlled system upgrade.

Installed-interface verification

Confirms the documented inputs and thermocouples before process release.

Controlled recommissioning

Verifies configuration, diagnostics and field response after maintenance or replacement.

Maintenance Verification and Closeout

X20 System system maintenance

Restores the documented six-channel thermocouple input module function in an engineered installation.

Control-panel modernization

Preserves the approved B&R hardware identity during a controlled system upgrade.

Installed-interface verification

Confirms the documented inputs and thermocouples before process release.

Controlled recommissioning

Verifies configuration, diagnostics and field response after maintenance or replacement.

Related Engineering Pages

MODEL	ENGINEERING ROLE	APTER POWER PAGE
B&R 7CP474.60-1	Related industrial automation product	View B&R 7CP474.60-1 page
B&R 8I0IF109.400-2	Related industrial automation product	View B&R 8I0IF109.400-2 page
B&R 8I0IF109.400-1	Related industrial automation product	View B&R 8I0IF109.400-1 page
B&R 5ACPCI.ETH3-01	Related industrial automation product	View B&R 5ACPCI.ETH3-01 page
B&R 5AP1130.185C-000	Related industrial automation product	View B&R 5AP1130.185C-000 page
Bihl+Wiedemann BWU3274	Related industrial automation product	View Bihl+Wiedemann BWU3274 page
Bihl+Wiedemann BWU1777	Related industrial automation product	View Bihl+Wiedemann BWU1777 page
Anybus AB7000-C	Related industrial automation product	View Anybus AB7000-C page

MANUFACTURER SOURCE RECORD

B&R X20AT6402 product data
B&R product record X20AT6402

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