X20AT6402

Six-channel thermocouple input module

Six low-level thermocouple temperature signals

PRODUCT SNAPSHOT

BRAND
B&R

FAMILY
B&R X20 temperature measurement

PART
X20AT6402

ORIGIN / HS
Austria / 8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE
+86 180 3023 5313

EMAIL
sales13@apterpower.com

WEBSITE
www.apterpower.com

PRODUCT OVERVIEW

Six low-level thermocouple temperature signals

1. Acquires six thermocouple inputs
2. Supports J, K, N, S, B and R types
3. Provides terminal compensation
4. Offers configurable filtering and resolution

SYSTEM COMPONENTS

- X20 bus module and terminal block
- matching thermocouples
- shielded extension wiring
- Automation Studio temperature configuration

TECHNICAL NOTE

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

TECHNICAL DATA

PARAMETER	VALUE
Inputs	6
Thermocouples	J; K; N; S; B; R
Terminal compensation	Integrated
Filtering	Configurable input filter

PARAMETER	VALUE
Resolution	Configurable
Isolation	I/O isolated from bus; channels not isolated from each other
Protection	IP20

ENGINEERING NOTE

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

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
1756-L55M13	Related industrial automation product	**View 1756-L55M13 page**
1756-L55M12	Related industrial automation product	**View 1756-L55M12 page**
330171-00-12-05-01-05	Related industrial automation product	**View 330171-00-12-05-01-05 page**
SDCS-PIN-H51	Related industrial automation product	**View SDCS-PIN-H51 page**
6EP1434-2BA20	Related industrial automation product	**View 6EP1434-2BA20 page**
330171-00-33-50-01-05	Related industrial automation product	**View 330171-00-33-50-01-05 page**
330171-00-12-50-01-05	Related industrial automation product	**View 330171-00-12-50-01-05 page**
NTAC-02	Related industrial automation product	**View NTAC-02 page**

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Furnace-zone measurement

Acquires six thermocouple inputs

Extruder temperature monitoring

Supports J, K, N, S, B and R types

High-temperature process acquisition

Provides terminal compensation

Thermocouple module replacement

Offers configurable filtering and resolution

PRODUCT PRECAUTIONS

1. Verify the full X20AT6402 marking and its assigned B&R X20 temperature measurement position before work.
2. Place the connected machine or process in the approved maintenance state.
3. Isolate the applicable supply and six low-level thermocouple temperature signals field energy before disconnecting conductors.
4. Record connector, conductor, address and software identities before removal.
5. Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.
6. Confirm the installed X20 bus module and terminal block and matching thermocouples against the approved project.
7. Restore power in a controlled sequence and review device, network and host diagnostics.
8. Prove the intended furnace-zone measurement function and retain the final test result.

ENGINEER FAQ

Q1 Does X20AT6402 match X20 bus module and terminal block in a Furnace-zone measurement installation?

Verify the complete X20AT6402 marking, the documented B&R X20 temperature measurement position and the installed X20 bus module and terminal block before fitting the assembly.

Q2 How should X20AT6402 be wired when it must acquires six thermocouple inputs?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for X20AT6402; then continuity-test the affected path.

Q3 Which B&R X20 temperature measurement records should be captured before removing X20AT6402?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with X20AT6402 before disconnection.

Q4 What controlled test confirms that X20AT6402 can supports j, k, n, s, b and r types?

Apply the approved field or simulated stimulus, observe the B&R X20 temperature measurement indication and confirm the intended response without bypassing the normal interlocks.

Q5 Which matching thermocouples condition should be checked when X20AT6402 reports an abnormal state?

Check the matching thermocouples supply, seating and connection first, then compare channel diagnostics with the recorded X20AT6402 baseline.

Q6 Can X20AT6402 be moved directly into Extruder temperature monitoring without validating Automation Studio temperature configuration?

No. Confirm the Automation Studio temperature configuration, revision, connection scheme and B&R X20 temperature measurement configuration before transferring X20AT6402 to that duty.

Q7 What maintenance evidence is required after X20AT6402 is used for High-temperature process acquisition?

Retain the nameplate record, corrective action, final diagnostics and a controlled high-temperature process acquisition functional-test result for X20AT6402.

Q8 How should X20AT6402 be returned to service in Thermocouple module replacement?

Restore power under control, verify provides terminal compensation, exercise the intended signal path and release X20AT6402 only after the B&R X20 temperature measurement remains in its approved operating state.

SOURCE B&R official product data sheet | B&R product data

+86 180 3023 5313 | sales13@apterpower.com | www.apterpower.com