APTER■POWER

PRODUCT TECHNICAL REFERENCE

INDUSTRIAL AUTOMATION PRODUCT

X20AT6402

Six-channel thermocouple input module

Six low-level thermocouple temperature signals

IDENTITY	VERIFIED VALUE
Manufacturer	B&R
System family	B&R X20 temperature measurement
Part number	X20AT6402
Country	Austria
HS code	8537101190

APTER POWER SALES TEAM

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2 Technical Specifications

Technical values below are limited to the named B&R product record.

PARAMETER	TECHNICAL VALUE
Inputs	6
Thermocouples	J; K; N; S; B; R
Terminal compensation	Integrated
Filtering	Configurable input filter
Resolution	Configurable
Isolation	I/O isolated from bus; channels not isolated from each other
Protection	IP20

ENGINEERING DATA SUMMARY

DATA GROUP	VERIFIED ASSIGNMENT
Installed host / carrier	X20 bus module and terminal block
Companion hardware	matching thermocouples
Field connection	shielded extension wiring
Primary system function	Acquires six thermocouple inputs
Controlled acceptance duty	Furnace-zone measurement

3 System Role and Architecture

Six low-level thermocouple temperature signals

FUNCTION 1

Acquires six thermocouple inputs

FUNCTION 2

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

FUNCTION 3

Provides terminal compensation

FUNCTION 4

Offers configurable filtering and resolution

Matched system components

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

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	X20 bus module and terminal block
Companion hardware	matching thermocouples
Field connection	shielded extension wiring
Primary system function	Acquires six thermocouple inputs
Controlled acceptance duty	Furnace-zone measurement

4 Applications and Engineering Context

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

TECHNICAL NOTE

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

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	X20AT6402 / X20AT6402 recorded
Physical interface	X20 bus module and terminal block
Companion check	matching thermocouples
Functional proof	Acquires six thermocouple inputs
Application test	Furnace-zone measurement

5 Engineering 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.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
FC-USI-0001-V1-0	Related industrial automation product	View FC-USI-0001-V1-0 page
CC-PAOH01	Related industrial automation product	View CC-PAOH01 page
SC-UCNN11	Related industrial automation product	View SC-UCNN11 page
MU-TSIM12	Related industrial automation product	View MU-TSIM12 page
CC-TUIO31	Related industrial automation product	View CC-TUIO31 page
10311-2-1	Related industrial automation product	View 10311-2-1 page
SPA-ZC-402	Related industrial automation product	View SPA-ZC-402 page
SPA-ZC-400	Related industrial automation product	View SPA-ZC-400 page

MANUFACTURER SOURCE RECORD

B&R official product data sheet

B&R product data

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