S800 I/O

Product Data Sheet

AI835A 3BSE051306R1

Thermocouple analog input module

DIFFERENTIAL INPUTS	LINEAR INPUT RANGE	THERMOCOUPLE TYPES	A/D RESOLUTION
8	**–30 to +75 mV**	**B, C, D, E, J, K, L, N, R, S, T, U**	**15 bits**

ABB AI835A 3BSE051306R1 is an eight-channel differential thermocouple and millivolt input module for S800 I/O. Each channel can be configured for a supported thermocouple characteristic or a linear signal between –30 and +75 mV, with 15-bit A/D conversion.

01 TECHNICAL DATA

Differential inputs	8
Linear input range	–30 to +75 mV
Thermocouple types	B, C, D, E, J, K, L, N, R, S, T, U
A/D resolution	15 bits
Input impedance	Greater than 1 MΩ
CJ sensor connection	Channel 8; four-wire Pt100
Maximum field cable length	600 m
Maximum error	0.1%
Temperature drift	Typical 5; maximum 7 ppm/°C
Common-mode rejection	120 dB at 50/60 Hz

ABB S800 I/O Modules and Termination Units 3BSE020924-600 A; model-specific specification sections.

02 ADDITIONAL PRODUCT DATA

Normal-mode rejection	Greater than 60 dB at 50/60 Hz
Rated insulation voltage	50 V
Dielectric test voltage	500 V AC
Power dissipation	1.6 W
Modulebus consumption	75 mA at 5 V; 50 mA at 24 V

03 PRODUCT FUNCTION

Channel 8 can serve as a four-wire Pt100 cold-junction reference for the other seven channels, or remain a normal measuring channel when a separate reference arrangement is used. Input wire-break monitoring, group isolation and module self-calibration help maintain temperature measurement integrity across the connected field circuits.

04 SYSTEM COMPATIBILITY

Choose the cold-junction method before assigning channel 8. A four-wire Pt100 can provide a local or remote reference, while a fixed reference temperature may be configured; channel 8 remains available for measurement when it is not assigned to cold-junction sensing.

05 REFERENCE

ABB S800 I/O Modules and Termination Units 3BSE020924-600 A; model-specific specification sections.

AMIKON PRODUCT SUPPORT

+86-18020776786 INFO@AMIKON.CN **AMIKONG.COM**