5B Series Single / Double Channel Mounting Card

5B03/5B04

FEATURES

Mix and Match 5B Series I/O Module Capability
Factory Mutual (FM) Approved
Approved for Use in Class I, Division2, Groups A, B, C, and D Locations.
CE Certified: EMC Directive in Heavy Industrial Applications
1500 V rms Channel/Channel and Input/Output Isolation
Four Backplanes and Three Mounting card Options
1-, 2- channels
-25°C to +85°C Temperature Range
Single Threaded Insert for module Hold Down

APPLICATIONS

Industrial Signal Conditioning
Industrial Signal Isolation
Industrial Signal Filtering

PRODUCT OVERVIEW

To address diverse applications, the 5B Series includes a family of backplanes and mounting cards which provide a complete signal conditioning solution. The models 5B03 and 5B04, one and two channels cards, allow an economical means to handle a few signals.

FUNCTIONAL BLOCK DIAGRAM

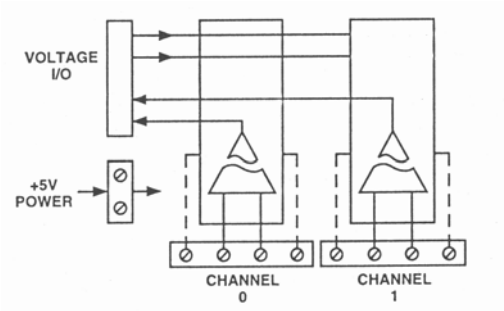


Figure 1 5B03 & 5B04 Functional Block Diagram

The backplanes provide four screw terminals per channel for all field connections. These connections satisfy all transducer inputs, process current outputs and provide transducer excitation when necessary. A cold junction temperature sensor (model AC1361) sensor is also supplied on each channel to accommodate thermocouple input modules. All 5B Series backplanes and sockets require a regulated +5VDC external power source.

Rev. 0
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GENERAL DESCRIPTION

MODELS 5B03 and 5B04 – For smaller applications, the models 5B03 and 5B04 mounting cards are available for one and two 5B Series modules respectively. These module cards may be clustered for groups of three or more signals. They are DIN rail compatible using Phoenix Universal Module UM elements.

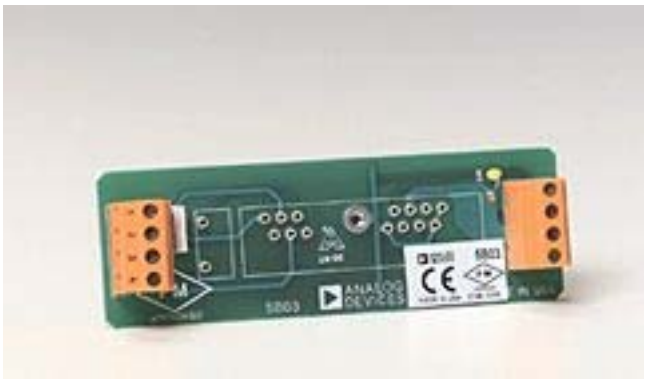


Figure 2 5B03

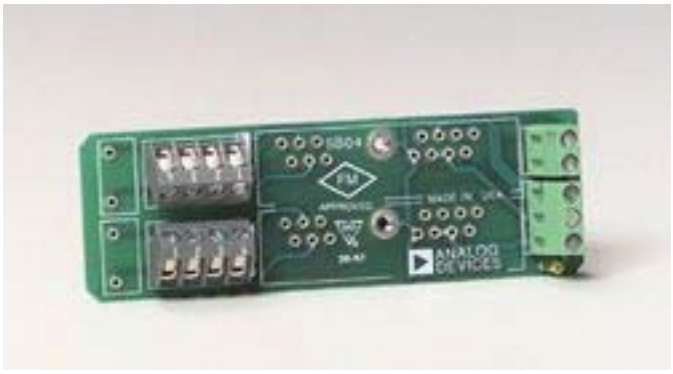


Figure 3 5B04

5B03/04 Specifications

(typical @ +25°C and V_s =+5 V dc Power)

Description	Model 5B03	Model 5B04
Number of Channels	1	2
ISOLATION		
Input-to-Output Continuous	1500 V rms, Maximum	1500 V rms, Maximum
Channel-to-Channel Continuous	N/A	1500 V rms, Maximum
MECHANICAL DIMENSIONS	4.25” x 1.365”	4.25” x 1.365”
	(105 mm x 34.7 mm)	(105 mm x 34.7 mm)
DIN Rail Mountable	Yes	Yes
WEIGHT	0.85oz. (24.0)	1.06oz. (30.2g)
Provision for Mounting AC1352 Resistor	Yes	Yes
COLD JUNCTION TEMPERATURE SENSORS		
Number provided on backplane	1	2
Type	Model AC1361	Model AC1361
Initial Accuracy @ +25°C	±0.25°C (+0.75°C, maximum)	±0.25°C (+0.75°C, maximum)
Accuracy +5°C to +45°C	±0.5°C (+0.0125°C/°C)	±0.5°C (+0.0125°C/°C)
Field I/O CONNECTOR		
Number	1	2
Type	4-screw terminals	4-screw terminals
OUTPUT SWITCH ENABLE/READ INPUTS	NO	NO
POWER SUPPLY OPTIONS		
Voltage; Operating	+5 VDC ±5%	+5 VDC ±5%
Voltage; Max Safe Limit – with modules	+6.0 VDC Max.	+6.0 VDC Max.
Current – without modules	N/A	N/A
Fuse	N/A	N/A
Environmental Temperature Range		
Rated Performance	-25°C to +85°C	-25°C to +85°C
Operating	-40°C to +85°C	-40°C to +85°C
Storage	-40°C to +85°C	-40°C to +85°C
Relative Humidity	0 to 95% @ +60°C noncondensing	0 to 95% @ +60°C noncondensing

OUTLINE DIMENSIONS

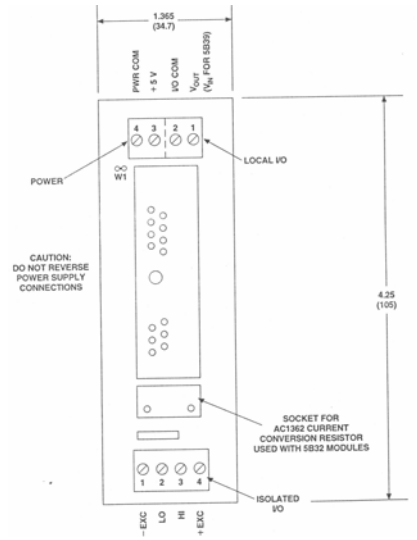


Figure 4 Outline Dimensions 5B03

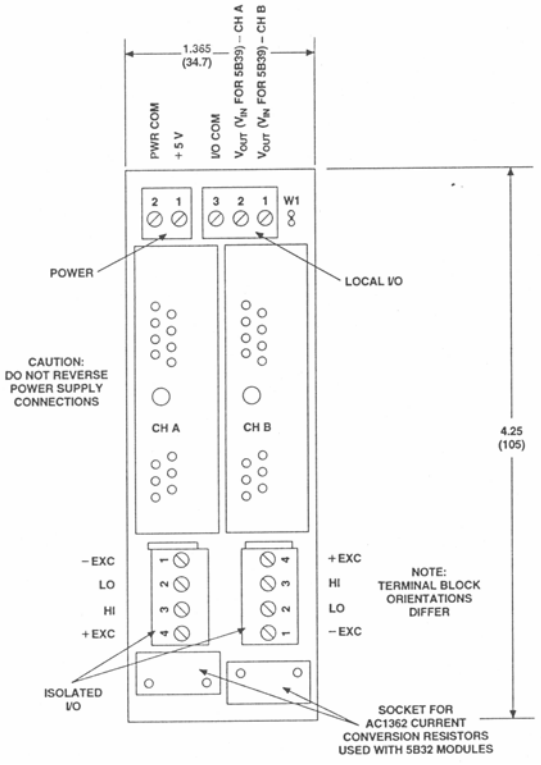


Figure 5 Outline Dimensions 5B04

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