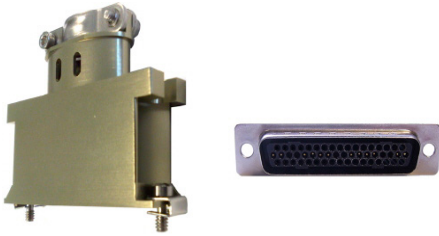


ACD/CJB/005

Cold junction block for KAD/ADC/136 (built-in sensor, straight-through backshell) - 7ch



FEATURES

- Supports seven thermocouples
- One built-in PT100 sensor (typical accuracy of $\pm 0.1^{\circ}\text{C}$)

APPLICATIONS

- Use to connect thermocouples to KAD/ADC/136 modules

DESCRIPTION

The ACD/CJB/005 cold junction block is an optional accessory for the KAD/ADC/136. Designed for mounting on a KAD/ADC/136, it is used to terminate up to seven thermocouples.

The ACD/CJB/005 comprises a Double-Density (DD) CON/KAD/012 connector and a straight-through ACD/BAC/002/B backshell.

The CON/KAD/012 includes one built-in PT100 sensor, which is used by the KAD/ADC/136 for reference junction compensation. This sensor connects to channel 0 of a KAD/ADC/136, allowing the other seven channels to be set to any mode (for example, thermocouple mode, full-bridge mode, or ICP mode).

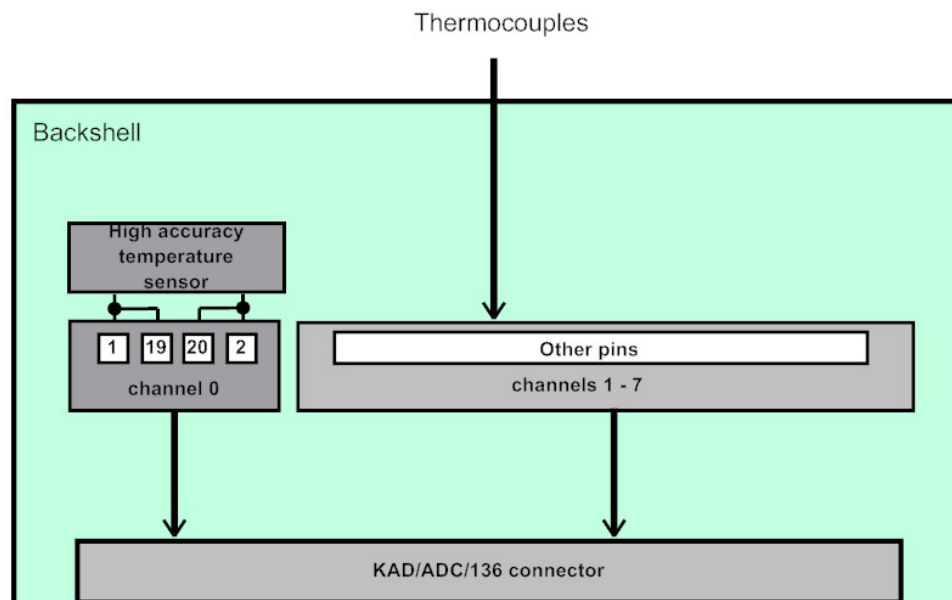


Figure 1: Block diagram of ACD/CJB/005

Specifications

TABLE 1		Mechanical specifications (ACD/BAC/002/B)				
PARAMETER	MIN.	TYP.	MAX.	UNITS	CONDITION/DETAILS	
Mass						
backshell, screw and clip	–	18	–	g		
backshell, screw and clip	–	0.63	–	oz	Design metric is grams.	
Height above chassis						
	–	48.4	–	mm	For chassis clearance including bend radius, see the ACD/BAC/002/B data sheet.	
	–	1.9	–	in.		
Dimensions						
backshell height	–	42.88	–	mm		
backshell height	–	1.68	–	in.	Design metric is millimeters.	
backshell length	–	52.85	–	mm		
backshell length	–	2.08	–	in.		
backshell width	–	12.8	–	mm		
backshell width	–	0.50	–	in.		
screw length	–	3.51	–	mm	Length of threaded insert.	
screw length	–	0.13	–	in.	Length of threaded insert.	
width of clip	–	6.35	–	mm		
width of clip	–	0.24	–	in.		
Environmental ratings					See <i>Environmental Qualification Handbook</i> .	
operating temperature	-40	–	85	°C	Chassis base/side plate temperature.	
storage temperature	-55	–	125	°C		
Finish						
backshell	–	–	–	–	Electroless nickel-plated aluminum.	
screw	–	–	–	–	Stainless steel.	
clip	–	–	–	–	Stainless steel.	

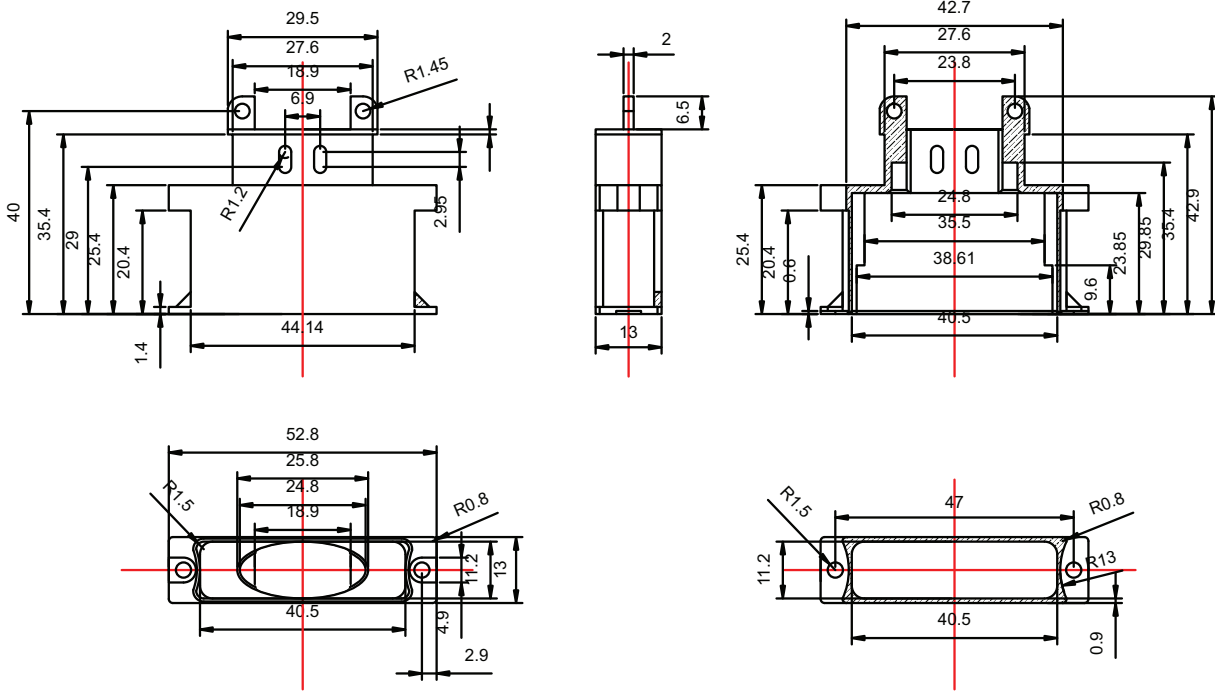


Figure 2: ACD/BAC/002/B mechanical drawing

Getting the most from the ACD/CJB/005

The ACD/CJB/005 reference junction block consists of a CON/KAD/012 connector and an ACD/BAC/002/B backshell. It has been designed for mounting on KAD/ADC/136 modules.

The CON/KAD/012 is supplied with 48 loose pin contacts. For instructions on how to insert these pins for the KAD/ADC/136, see the *KIT/001* data sheet in the *Acra KAM-500 Databook*.

When fitting the ACD/BAC/002/B, the cable (wires and pins) must be inserted through the backshell before the pins are inserted into the CON/KAD/012 connector; see the *ACD/BAC/002/B* data sheet for details.

Ordering information

PART NUMBER	DESCRIPTION
ACD/CJB/005	Cold junction block for KAD/ADC/136 (built-in sensor, straight-through backshell) - 7ch

Revision history

REVISION	DIFFERENCES	STATUS
ACD/CJB/005	First release	Recommended for new programs

Related products

MODULE	DETAILS
ACD/BAC/002/B	Nickel-plated aluminum straight-through backshell for KAD connectors
CON/KAD/012	Mating connector for KAD/ADC/136 in thermocouple mode (DD, 52-way, 1 built-in temperature sensor)
KAD/ADC/136	Flexible ADC (full/1/2-bridge, ICP, RTD thermocouple, FIR/IIR, 12.5kHz b/w) - 8ch at 50ksps

Related documentation

DOCUMENT	DETAILS
DOC/DBK/001	Acra KAM-500 Databook
DOC/HBK/002	Environmental Qualification Handbook
DOC/MAN/018	KSM-500 Databook