

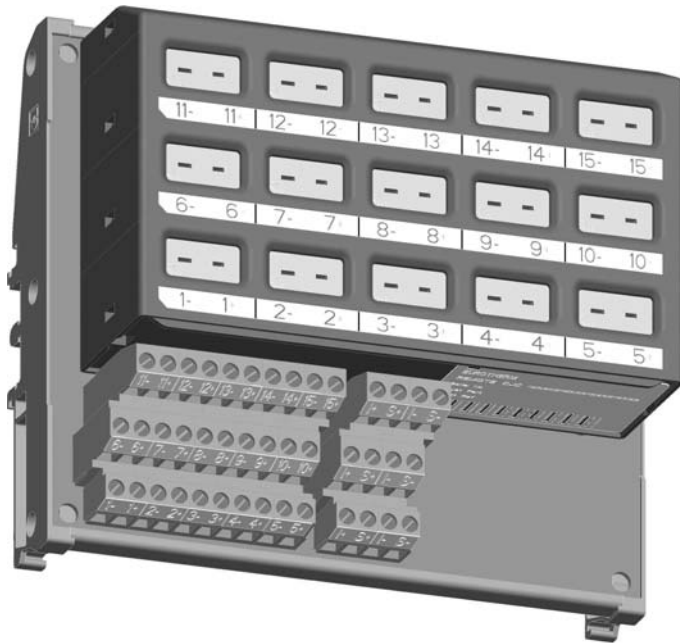
Remote CJC Block

1. Introduction

The Remote CJC Block is a DIN rail mounted unit consisting of three rows of five miniature sockets providing for the connection of up to 15 thermocouples of any type (J, K, N, R, S, T, etc). The sockets are arranged in three rows of 5, each row containing its own reference 4-wire Pt100 RTD sensor. The unit is also fitted with three sets of terminal blocks allowing the Remote CJC block to be wired to any field instrumentation that requires improved thermocouple measurement accuracy and which supports the use of Remote CJC.

Copper wire is used to make the interconnections between the Remote CJ Block and the field instrumentation, allowing significant cost savings to be achieved compared with thermocouple or thermocouple compensating cable, particularly for long runs.

Once the unit has been installed and wired, overall system configuration and calibration should be carried out, prior to use, in accordance with the instructions supplied with the field instrumentation.



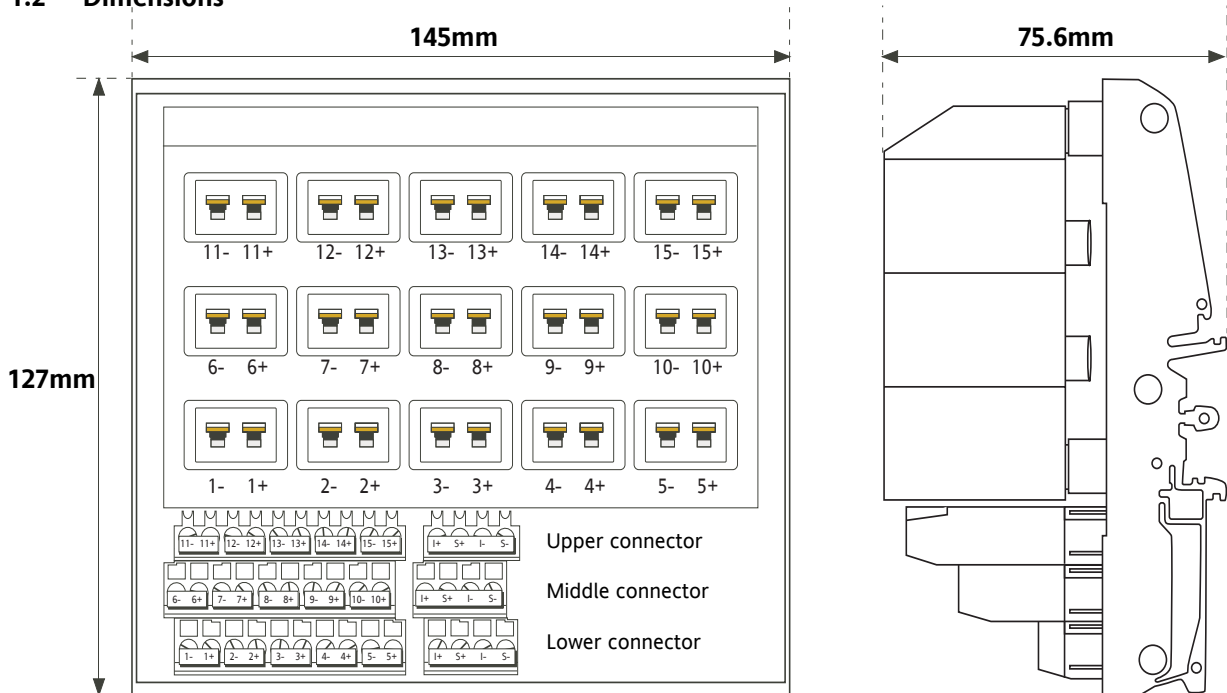
1.1 Screw Terminals

Maximum wire size = 4.13mm² (11AWG)

Minimum wire size = 0.081mm² (28AWG)

Design torque = 0.35Nm.

1.2 Dimensions



1.3 Wiring

- Plug thermocouples into the applicable input sockets. Thermocouples can be of any type and can be mixed in any system. Note: the sockets on the Remote CJC Block are copper but accept the compensating type plugs fitted to the thermocouples.
- Wire the outputs from the block, in copper wire, to corresponding inputs on the instrument.
- Connect the RTD output to a corresponding input channel on the field instrument.

1.4 Configuration

Configure the instrument in accordance with the manufacturer's instructions (see also references below).

1.5 Calibration

When installation of the Remote CJC Unit is complete, it is recommended that the overall calibration of the system be checked. This should be done by connecting a thermocouple calibration source to each channel in turn. If calibration adjustment is required on any one or all channels refer to the manufacturer's instructions for the instrument in use (see also references below).

1.6 Safety and EMC

This instrument is intended for industrial temperature measurement and control applications within the requirements of the European Directives on Safety and EMC.

The information contained in these instructions is subject to change without notice. While every effort has been made to ensure the accuracy of the information, your supplier shall not be held liable for errors contained herein.

Warning: The safety and EMC protection can be seriously impaired if the unit is not used in the manner specified. The installer must ensure the safety and EMC of the installation.

Unpacking and storage. If on receipt, the packaging or unit is damaged, do not install but contact your supplier. If being stored before use, protect from humidity and dust in an ambient temperature range of -20°C to +70°C.

Service and repair. This instrument has no user serviceable parts. Contact your supplier for repair.

Cleaning. A cloth, moistened with a small amount of detergent, may be used to clean the unit. Solvents (e.g. Iso-propyl alcohol (IPA)) must not be used because they harm the housing material.

Personnel. Installation must only be carried out by suitably qualified personnel

Wiring. It is important to connect the unit in accordance with the data in this sheet. Wiring must comply with all local wiring regulations, i.e. UK, the latest IEE wiring regulations, (BS7671), and USA, NEC Class 1 wiring methods.

Warning: Do not connect AC supply to any terminals on this unit

Conductive pollution. Electrically conductive pollution i.e. carbon dust, MUST be excluded from the enclosure in which the unit is installed. To secure a suitable atmosphere in conditions of conductive pollution, fit an air filter to the air intake of the enclosure. Where condensation is likely, include a thermostatically controlled heater in the enclosure.

Installation Requirements for EMC. Refer to EMC Installation Guide, Part no. HA025464, for general guidance on installation and wiring practices for EMC. This guide can be downloaded from www.eurotherm.co.uk.

1.7 Specification

Measurement accuracy typical

Static at 25°C $\leq \pm 0.2^\circ\text{C}$ error (after overall system calibration)

0 to 50°C $\leq \pm 0.3^\circ\text{C}$ error (after overall system calibration)

Start up time at ambient 2 minutes

Isolation <math>< 30\text{V RMS}</math> or <math>< 60\text{Vdc}</math>

1.8 References

6100A/6180A Recorder User Guide Part No. HA028910

Mini8 Controller Engineering Manual Part No. HA028581

EMC Installation Guide, Part no. HA025464

The above handbooks can be downloaded from www.eurotherm.co.uk.



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Declaration of Conformity

Manufacturer's name:	Eurotherm Limited
Manufacturer's address:	Faraday Close, Worthing, West Sussex, BN13 3PL, United Kingdom
Product type:	Remote Cold Junction Compensation
Models:	Remote CJC Block
Safety specification:	EN61010-1: 2001
EMC emissions specification:	EN61326-1: 1997 Class A (including amendments A1, A2 and A3)
EMC immunity specification:	EN61326-1: 1997 Industrial locations (including amendments A1, A2 and A3)

Eurotherm Limited hereby declares that the above products conform to the safety and EMC specifications listed. Eurotherm Limited further declares that the above products comply with the EMC Directive 2004/108/EC, and also with the Low Voltage Directive 2006/95/EC.

Signed: Mark Green

Dated: 14/08/09

Signed for and on behalf of Eurotherm Limited.

Mark Green
(VP (acting) R&D)





Restriction of Hazardous Substances (RoHS)						
Product group		Remote CJ Block				
Table listing restricted substances						
Chinese						
限制使用材料一览表						
产品	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
远程冷端补偿集块	X	O	O	O	O	O
O	表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。					
X	表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。					
English						
Restricted Materials Table						
Product	Toxic and hazardous substances and elements					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Remote CJC block	X	O	O	O	O	O
O	Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.					
X	Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.					
Approval						
Name:		Position:		Signature:		Date:
Martin Greenhalgh		Quality Manager		<i>Martin Greenhalgh</i>		17 th August 2007