Release Notes

RTD Input Module
Cat. No. 1771-IR Series C

This release note contains information on:

- series change from B to C
- revised backplane power consumption specification
- addition of agency certification
- additional information concerning table A

Series Change from Series B to Series C

The series C version of this product is marked with the CE mark, indicating that this version complies with the European Union Directives noted below.

Use the series B version of the instruction manual with this product.

European Union Directive Compliance

Installation Requirements: If this product is installed within the European Union or EEA regions, the following regulations apply.

EMC Directive

This apparatus is tested to meet Council Directive 89/336/EEC Electromagnetic Compatibility (EMC) using a technical construction file and the following standards, in whole or in part:

- EN 50081-2EMC – Generic Emission Standard, Part 2 – Industrial Environment
- EN 50082-2EMC – Generic Immunity Standard, Part 2 – Industrial Environment

The product described in this manual is intended for use in an industrial environment.

Low Voltage Directive

This apparatus is also designed to meet Council Directive 73/23/EEC Low Voltage, by applying the safety requirements of EN 61131–2 Programmable Controllers, Part 2 – Equipment Requirements and Tests.

For specific information that the above norm requires, see the appropriate sections in this manual, as well as the following Allen-Bradley publications:

- Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1
- Guidelines for Handling Lithium Batteries, publication AG-5.4
- Automation Systems Catalog, publication B111

Changes to Specifications

Changes to the specifications, Appendix A, include:

- revised backplane power consumption
- addition of agency certification
- additional explanation on the use of table A

Backplane Power Consumption and Agency Certification

Changes to the electrical circuits in the Series C 1771-IR module require an increased backplane power consumption. Use the following in place of the backplane power consumption now in the series B manual. In addition, add the Agency Certification line to the specification table.

Backplane Power Consumption	4.75W maximum, 0.95A at 5V
Agency Certification (when product or packaging is marked)	• CSA certified • CSA Class I, Division 2, Groups A, B, C, D certified • UL listed • CE marked for all applicable directives

Additional Explanation on the Use of Table A

The following information on the use of Table A further defines how to calculate maximum error. (Table A-A is reproduced here for your convenience.)

Table A
1771–IR Series B Error Summary Based on Temperatures above –200°C

RTD Type	Range	Column A	Column B
		Error @ Calibration Temperature (25°C) (over range)	Drift °C/°C or °F/°F
Copper	–200 to +260°C (–328 to +500°F)	±0.344°C/±0.564°F	±0.1306
Platinum	–200 to +870°C (–328 to 1598°F)	±0.100°C/±0.152°F	±0.0717

How to Use Table A

Modules are typically calibrated at 25°C.

- If the I/O chassis in which the 1771-IR is operating is at 25°C, column A represents the maximum error for that thermocouple type.
- If the chassis operating temperature is less than or greater than 25°C, use the formula below to calculate the maximum error.

Maximum Error = Col–A + (ΔT x Col–B)

Where: Col–A = the value from column A
ΔT = the I/O chassis operating temperature minus 25°C
Col–B = the value from column B

For Example:

If the I/O chassis is operating at 60°C, and a copper RTD is being used, then:

Maximum Error = Column A + (ΔT x Column B)
= 0.344 + [(60 – 25) x 0.1306]
= 0.344 + (35 x 0.1306)
= 0.344 + 4.571
= 4.915°C

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