



II 3 G Certificate

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Document number GE10ATEX8105X Issue 2

3 European Community Declaration of Conformity for Group II Category 3 G equipment in accordance
with Directive 94/9/EC.

4 Declaration relating to: 8105-TI-TC 4-channel Thermocouple/millivolt input.

5 Assessed and Manufactured by: GE Intelligent Platforms, 2500 Austin Drive, Charlottesville, Virginia
22911, USA

6 This apparatus fulfils all the requirements for Group II, Category 3 G equipment in accordance with
Directive 94/9/EC. The design complies with EN 60079-11: 2012 & EN 60079-15:2010 (EN 60079-15:2005
for Legacy 'nL' installations). The clause 6.3.13 of EN 60079-11: 2012 is complied. The design is fully
documented in GE Intelligent Platforms Technical File Number TF8105.

7 The apparatus in normal operation provides energy-limited field circuits and has energy-limited
connections to the Railbus Power Supply. In normal operation the apparatus is incapable of producing arcs,
sparks or hot surfaces which may cause ignition and is designed to be installed and used in accordance with
standards EN 60079-14:2008 & EN 60079-25: 2010 and installation drawing no. SCI-1530.

8 The required marking of the apparatus is specified in GE Intelligent Platforms Technical File No
TF8105 and includes the distinctive community mark:



9 In addition, the marking includes the CENELEC code Ex ic nL IIC T4 and the permitted energy-
limited field wiring parameters are:

$$U_0 \leq 10.5V \quad I_0 \leq 3.6mA \quad P_0 \leq 9.45mW \quad L_0 \leq 1000mH \quad C_0 \leq 14.9\mu F$$

The CENELEC marking nL is retained for use in legacy nL installations. For new installations the product is
marked 'ic'.

10 The ambient temperature range for the apparatus is $-40^{\circ}C$ to $+70^{\circ}C$.

11 Manufacture is controlled by an ISO9001:2008 approved system, and is externally audited by FM.

12 The apparatus meets the ATEX Directive requirements for electromagnetic radiation by complying
with the EMC Directive 2004/108/EC.

13 The standards published in the Official Journal of the European Commission with reference to the
Low Voltage Directive 2006/95/EC have been used to fulfil 1.2.7 of Annex II of directive 94/9/EC to eliminate
electrical risks.

14 Special Conditions of Safe Use

- a. The apparatus must be installed in an enclosure or an environment that provides a degree of
protection not less than IP54 when used in Zone 2. The area must be no more than Pollution
Degree 2 as defined by EN 60664-1.
- b. In order to comply with the transient requirements, the voltage for this apparatus must be
provided by regulated power supply units complying with the requirements of European
Community Directives.
- c. The apparatus must be used with the 8605-FT-TC field terminals.
- d. Where the interconnecting cable utilizes part of a multi-core cable containing other intrinsically
safe circuits, then the multi-core cable shall be in accordance with the requirements of a multi-
core cable type A or B, as specified in Clause 9 of IEC 60079-25.
- e. A multi-core cable containing circuits classified as level of protection "ia", "ib" or "ic" shall not
contain non-intrinsically safe circuits.



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Revision History

Issue	Date	Remarks
1	16 th August 2011	First GE Intelligent Platforms version.
2	24 th May 2013	CENELEC marking ic added with assessment note in section 6, 7, 9 and section 14. Reference to installation drawing SCI-1530 added in section 7.