



## II 3 G Certificate

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

4 Declaration relating to: 8109-DI-DC 8-channel DI, 24Vdc Isolated, Sinking.

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 design is fully documented in GE Intelligent Platforms Technical File Number TF8109.

7 The apparatus in normal operation provides energy-limited and ic field circuits and has energy-limited and ic 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. Note Special Condition of Safe Use (b) regarding de-energisation of Bussed Field Power.

8 The required marking of the apparatus is specified in GE Intelligent Platforms Technical File No TF8109 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 and ic field wiring parameters are:

$U_i \leq 30V$        $I_i \leq 100mA$        $P_i \leq 1W$        $L_i \leq 0mH$        $C_i \leq 0\mu F$

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 CSA and 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. The product must not be inserted onto or removed from its carrier unless either
  - i. The area in which it is installed is known to be non-hazardous, or
  - ii. The Bussed Field Power Supply has been de-energised.
- c. 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.
- d. The Bussed Field Power supply voltage must be no more than 30Vdc in order that the maximum value of  $U_o$  is not exceeded. The power supplies which provide this voltage must operate within their output current ratings.



- e. The apparatus must be used with the 8601-FT-NI, 8603-FT-FU, 8610-FT-NA, 8611-FT-FU, 8616-FT-FU, 8618-FT-MT or 8619-FT-MT field terminals.
- f. 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.
- g. A multi-core cable containing circuits classified as level of protection “ia”, “ib” or “ic” shall not contain non-intrinsically safe circuits.

Srinivas Kodagandla.....  
Technology Manager-Quality & Regulatory

Date 24th May 2013

### Revision History

Issue	Date	Remarks
1	16 <sup>th</sup> August 2011	First GE Intelligent Platforms version.
2	30 <sup>th</sup> April 2013	CENELEC marking ic added with assessment note in section 6, 7, 9 and section 14.
3	24 <sup>th</sup> May 2013	Reference to installation drawing SCI-1530 added in section 7.