



ENGINEERING SAFETY CONSULTANTS

The Global Provider of Functional Safety Expertise and Technical Consultancy

Certificate of Conformity to IEC 61508 Safety Integrity Level (SIL) 2

Functional Safety of Safety-Related Programmable Electronic Systems

The **Base₂, Communications Controller Unit 3 (CCU3)** (function is to provide an interface between the Tyco MX Fire Panels and a Host PLC) has been assessed and is considered capable for use in a low demand Safety Function up to SIL 2 with respect to random failure rate and architectural constraint.

The assessment was based on the assumptions, data provided, and recommendations given in:

- **ESC Ltd Report: D153_FM001 rev.2;**
- **Renewal Letter from Base₂, signed by Grant Hodson, General Manager, Dated: 18/06/2019.**

The product was assessed against the following failure mode:

- Failure to process (From Com1/Com3 or Com3/Com1) Serial Data (e.g. Rs 422/435/485) Between Tyco MX Fire Panels And A Host Computer/PLC.

The assessment was carried out to determine compliance with IEC 61508 with regards to:

- Random Hardware Failure with Predicted PFD <1.1 E-3 (assuming a 1 year proof test and average repair time of 168 hrs);
- Architectural Constraint (Type B, SFF >90%, <99%).

Managing Director: Kenneth G L Simpson
Member of the IEC 61508 committee
Assessment Date: May 2015
Renewal Date: July 2019, valid to July 2021
Certificate: D153_CT001 rev. 2

ENGINEERING SAFETY CONSULTANTS LTD
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