

TECHNIS

26 ORCHARD DRIVE,
TONBRIDGE, KENT, TN10 4LG.

Tel: 01732 352532

david.smith@technis.org.uk

www.technis.org.uk

CERTIFICATE of RELIABILITY and FUNCTIONAL SAFETY

This is to certify that

The Extech PB-125, PB-126, PB-135, PB-136, PB-150, PB-151 range of Push Buttons provided by Pyropress Ltd, Bell Close, Plympton, Devon PL7 4JH UK. has been assessed and is considered suitable for use in a low demand safety function:

- (with hardware fault tolerance of 0) at SIL 2

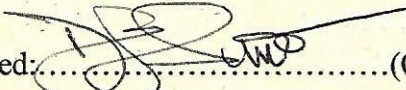
This claim is in respect of random hardware failures (route 2H), architectural constraints (ie safe failure fraction route 1H) and systematic failures (route 2H). The assessment was based on the assumptions, limitations and recommendations given in Technis Report T1132 (Issue 1.0). The product was assessed against the failure mode:

- Failure to open circuit on demand

The assessment was carried out having regard to the guidance in IEC 61508 [2010] and IEC 61511 [2016] and related guidance.

Integrity claim	SIL 2
System Type	A
Hardware Fault Tolerance	0
PFD (hazardous failure) based on the range of products (Route 1 _H)	1.9×10^{-3}
Safe Failure Fraction (Route 1 _H)	>71%
Proof Test Interval	Up to 1 year

The validity of this certificate requires that the product is used in accordance with any assumptions, limitations or intervals stipulated in the underpinning reliability/integrity report. The product build state continues to conform to the drawings and issues quoted in the underpinning reliability/integrity report. The product is used having regard to the instructions, limitations of use, intervals etc as outlined in the manufacturer's Safety Manual. The manufacturer maintains a credible level of Functional Safety Management in respect of (for example) design configuration control, procurement, manufacturing and defect analysis. The certificate will not apply to any product variation/modification or to the use of functions not addressed in the original study. It is recommended that the design, defect records and the company FSM procedure are reviewed, at least every 2 years, and should any changes have occurred since the original certification then the manufacture should contact Technis to request re-certification.

Signed:  (Certificate No T1132-243) – 6 December 2024)

Dr David J. Smith BSc, PhD, CEng, FIEE, FIQA, HonFSaRS, MIGasE

This certificate does not warrant fitness for any specific applications related purpose and is based on probabilistic and statistical assessment