

Certificate of Product Approval

Certificate Number: 587Db

Issue: 01

Macron Safety Systems (UK) Ltd

Burlingham House
Hewett Road
Gapton Hall Industrial Estate
Great Yarmouth
Norfolk
NR31 0NN



is certified by BRE Global Ltd. and is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirement(s) of the standards as detailed below:

Products

Fixed gaseous fire extinguishing systems
(refer to attached appendix for details)

Standards

LPS 1230: Issue 1.2
Requirements for Fire Testing of Fixed Gaseous Fire Extinguishing Systems

This certificate and appendix is maintained and held in force through regular surveillance activities

RE Brown

Signed for BRE Global Ltd.

Robert Brown
Verifier

16 April 2021
Date of Issue

16 April 2021
Date of First Issue



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Appendix to Certificate No: 587Db Macron Safety Systems (UK) Ltd

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LPG Sapphire Fixed gaseous fire extinguishing system

Product Name	Risk	Design Concentration	Comments	LPCB Ref. No.
LPG Sapphire	Class A Standard (Solid Fires e.g. paper, wood, plastics)	6.0%	Design concentration includes 30% safety factor	587Db/01
LPG Sapphire	Class A Cables (Solid fire risks including cables)	6.1%	Confirmation that minimum safety factor is adequate	
LPG Sapphire	Class B (Liquid Fires e.g. heptane)	6.4%	Design concentration includes 30% safety factor	

Notes:

Design concentration Class A Standard and Class B = Extinguishing concentration x safety factor (minimum 1.3).

Design concentration Class A Cables System test concentration. Where this value is lower than the Class A Standard value, the Class A Standard value should be used for design purposes.

Design concentrations are as tested to LPS 1230 in BRE Test Report Number 208832 v2.

Extinguishing concentrations are as tested in BRE Test Report Number 208831 (ISO 14520-1 tests)

This system uses:

Design, Installation, Maintenance and User Manual: LPG Novec™ 1230 Total Flooding Systems (Engineered & Pre-engineered) Design Manual Reference 14a-06L Issue 5

Software Programme: TSPNovec 1230 FlowCalc Version TSP3.60b

- a) This system is suitable for storage in environmental conditions from -20° to +50°.
- b) System pressure is specified as 25 bar @ 20°C

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