



Inspection Certificate

Project: **Rotork IQMK3 Size 1 System-ER2 - Fire Endurance Test** Office: **Birmingham**
Client: **Fire Protection Coatings Ltd**
Address: **Units 1-3 Highway Point, 239 Torrington Avenue,
Coventry, CV4 9AP** Date: **11 November 2020**
Client's Order Number: **EO6947 (on Lloyd's Register EMEA)** Order Status: **Complete**
Inspection Dates
First: **20 October 2020** Final: **20 October 2020**

This certificate is issued to

Fire Protection Coatings Ltd., to certify that the undersigned surveyor did at their request attend at the premises of The Building Research Establishment Ltd (BRE) at Bucknalls Lane, Garston, Watford, Hertfordshire WD25 9XX for the purpose of witnessing a fire endurance test on the item listed below:

Description:

1-off (one) Rotork IQMK3 Size 1 Fireproof Actuator (ER2 intumescent epoxy coating).

Scope:

The purpose of the test as to demonstrate that the above noted actuator would continue to function after 30 minutes in a furnace simulating conditions of a hydrocarbon fire with reference to UL 1709.

1. 240/1/50 electrically operated actuator placed in a gas fired furnace. 7x 'K' Type bare wire thermocouples affixed to actuator and used to measure the chamber temperature. Conditions inside the furnace, monitored via a visual display unit that formed part of the control system, were recorded on a multi-channel data logger.
2. Witnessed operation of actuator inside furnace before commencement of test.
3. Furnace heated generally in accordance Small-Scale Test Method of UL1709: Aug 2011 representing hydrocarbon fire conditions to comply with the time/temperature heating curve of Figure 3.1
4. Witnessed actuator operation during test by means of a remote electrical control unit at 5 minute intervals for the first 20 minutes and at 1 minute intervals thereafter.
5. Actuator observed to fail to function at a time of between 31 and 32 minutes from the start of the test under the above test conditions.
6. Reviewed and endorsed FPCL Fire Test Report Number:EP415 Revision 1.1 dated 23/10/2020.

Equipment Calibration:

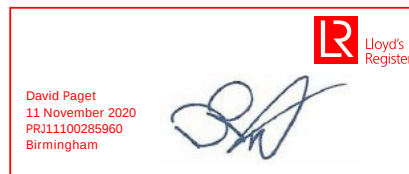
Furnace temperature measured by calibrated bare-wire type K thermocouples supplied by BRE Technical and Calibration Services.

Marking / Identification:

Actuator serial No. ZB08530202

Conclusion statement:

The controls indicated that the IQMK3 Size 1 Actuator functioned for greater than 30 minutes under the test conditions and was considered to satisfy the test acceptance criteria.



David Paget
Surveyor to Lloyd's Register EMEA
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