

## ZERTIFIKAT **CERTIFICATE**

No.: 968/EZ 606.00/13

Product tested Infrared Gas Monitor Certificate

holder

Mine Safety Appliances Co. 1000 Cranberry Woods

Drive

Cranberry Township, PA

16066 **USA** 

Type designation PrimaX IR Manufacturer see certificate holder

forming the basis of testing

Codes and standards IEC 61508 Parts 1-7:2010 EN 50270:2006 EN 50402:2005+ A1:2008 + AC:2009 EN 60079-29-1:2007

> (in extracts) EN 50271:2010

Intended application

In combination with an external safety device (e.g. SUPREMA - Fire and Gas Warning System of MSA AUER GmbH) the PrimaX IR - Infrared Gas Monitor can be used for monitoring of ambient dangerous levels of hydrocarbon gas concentrations. In a HFT=0 configuration it fulfills the requirements of SIL 2 and in HFT=1 configuration the requirements of SIL 3 acc. to IEC 61508.

Specific requirements The instructions of the associated Operating Manual shall be considered. The external safety device must be suitable for the requested SIL and contain the defined measures for the detection of fault conditions.

This certificate is valid until 2018-07-15.



**Functional** Safety Type Approved

www.tuv.com ID 0600000000

The issue of this certificate is based upon an examination, whose results are documented in report-no.: 968/EZ 606.00/13 dated 2013-07-15.

The holder of a valid licence certificate for the product tested is authorized to affix the test mark shown opposite to products, which are identical with the product tested.

**TÜV Rheinland Industrie Service GmbH** 

Bereich Automation Funktionale Sicherheit Am Grauen Stein, 51105 Köln

Köln, 2013-07-15

Certification Body for FS-Products

Dipl.-Ing. Klaus Kemp