



# Certificate of Compliance to IEC 61508

**FM Approvals**  
**Certifies herewith that the**

*IPES Flame Detector*  
 Model IPES-IR3  
 (Safety Manual [IPES])

Electrostandart-Pribor  
 No. 35/2, Slavy Avenue  
 Saint Petersburg 192286  
 RUSSIAN FEDERATION

**Complies with the relevant requirements of standards listed below:**

Standards	Description	Compliance
IEC 61508-1 1999	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems- General Requirements	Part 1
IEC 61508-2 2000	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems	Part 2
IEC 61508-3-2000	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems- Software Requirements	Part 3

And therefore

**IS DECLARED "FIT FOR USE" IN A SIL 3, 2, 1**  
**1oo1 Low Demand SAFETY APPLICATION**

Model	SIL	PFD	SFF	λS	λDD	λDU
Analog Output	3	1.03 X 10 <sup>-5</sup>	99%	2.97E-7	2.89E-7	8.28E-9
Relay Output	2	1.67 X 10 <sup>-5</sup>	97%	2.51E-7	2.38E-7	1.43E-8

*This certificate is subject to conditions of use presented in*

*FM Approval Report Identification: 3036930*

*Approval Granted:*



*Member of the FM Global Group*

*J.E. Marquedant*  
 J.E. Marquedant  
 Group Manager  
 FM Approvals  
 1151 Boston-Providence Turnpike  
 Norwood, MA 02062

3036930-IPES-IR3