

Certificate of Compliance

Element / Product / Subsystem

Holder: Siemens AG, Karlsruhe, Germany

Compliant Item(s): ULTRAMAT 6 1K, 2P, 2R, 3K

Intended Application: Gas detector for the process industry

Basis of testing: IEC 61508:2010
IEC 61511:2003

Assessment include(s):

- ☐ Management of function safety
- ☒ Hardware requirements
- ☒ Reliability requirements (proven in use)
- ☒ Software requirements
- ☒ Basic safety
- ☒ User documentation

Functional Safety Data:

Safety function:	See report				
Route:	2H, 2s				
Mode:	Low demand / Demand mode				
Type:	B				
HFT:	0				
Model:	1K	2P	2R	3K	
SD failure rate:	0	0	0	0	FIT
SU failure rate:	53	106	53	106	FIT
DD failure rate:	668	1336	733	1401	FIT
DU failure rate:	235	469	336	570	FIT
Safe failure fraction:	75%	75%	70%	72%	
Diagnostic coverage:	74%	74%	69%	71%	
Fit for use in Safety Integrity Level:	SIL 2	SIL 2	SIL 2	SIL 2	
Fit for use in Spurious Trip Level®:	STL 3	STL 3	STL 3	STL 3	

Results:

Risknowlogy certifies that the above Compliant Item(s) meets the requirements of the Basis of Testing for the selected assessment(s). The Risknowlogy report 100.178.3 is an integral part of this certificate.

Date: 2014-09-16



dr.ir. Michel Houtermans
Certifier

