



产品认证证书

证书编号: CSFS17.00171

申请人名称、地址

丹东通博电器(集团)有限公司
辽宁省丹东市振兴区黄海大街10号

制造商名称、地址

丹东通博电器(集团)有限公司
辽宁省丹东市振兴区黄海大街10号

生产厂名称、地址

丹东通博电器(集团)有限公司
辽宁省丹东市振兴区黄海大街10号

产品商标



产品名称和系列、型号、规格

UQK(S)-100 系列浮球液位控制器

认证依据标准

IEC 61508-1:2010, IEC 61508-2:2010

上述产品符合下述自愿性产品认证实施规则的要求:

SITIiAs-RJ03-02 A/0 《功能安全产品认证实施规则》,

特发此证。

产品相关信息详见附件。

认证模式

型式试验

发证日期: 2017年10月25日 有效期至: 2022年10月25日

首次发证日期: 2017年10月25日

本证书在有效期内的有效性依据发证机构监督的符合结果予以保持,
本证书的具体信息可通过发证机构官方网站查询。



批准人(所长):

日期: 2017年10月25日

上海仪器仪表自控系统检验测试所有限公司

地址: 中国·上海 上海市漕宝路103号 邮编: 200233

电话: 021-64516350 传真 021-64849355 网址 www.sitiias.com.cn



产品认证证书附件

证书编号: CSFS17.00171

产品名称: 浮球液位控制器

型号规格: UQK(S)-100 系列, 包括 UQK101、UQK102、UQK103、UQK104、UQK1011、UQK1012、UQK105、UQK(S)101、UQK(S)102、UQK(3)103、UQK(S)104、UQK(S)1011、UQK(S)1012、UQK(S)105

描述: UQK(S)-100 系列浮球液位控制器, 属于两位式的物位仪表。当液位到达高、低极限位置时, 控制器内电触点接通, 可控制信号报警装置报警或启停电动泵。
安全功能为: 控制开关触点的接通或者断开。

依据标准: IEC 61508-1:2010 Functional safety of electrical/electronic/ programmable electronic safety-related systems – Part 1:General Requirements
IEC 61508-2:2010 Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 2: Requirements for electrical/ electronic /programmable electronic safety-related systems

安全完整性等级 (SIL) : 根据 IEC 61508:2010, UQK(S)-100 系列浮球液位控制器属于 A 类安全相关组件, 其 HFT(硬件故障裕度)=0 时, 在低要求模式下, 安全完整性等级达到 SIL2。

λ_{SU}	λ_{SD}	λ_{DU}	λ_{DD}	λ_{TOTAL}	SFF	$PFD_{avg}(T1=1Y)$
0	0	64	320	384	83.3%	2.80×10^{-4}
说明: 失效率的单位为 FIT, 1FIT=1×10 ⁻⁹						

其他说明: 用户需按使用说明书的要求对产品进行日常检查和定期检查。

备注:

编号为 J17-009-RZ-CJ 报告是本证书的组成部分。本证书仅对与认证文件和样品一致的产品有效。认证文件等由 SITIAs 保存。

上海仪器仪表自控系统检验测试所有限公司

2017 年 10 月 25 日



PRODUCT CERTIFICATION

No. : CSFS17. 00171

NAME AND ADDRESS OF THE APPLICANT

Dadong top Electronics Instrument(Group)Co., Ltd.
Huanghai Street 10#, Zhenxing District, Dandong City

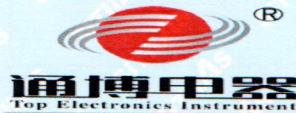
NAME AND ADDRESS OF THE Manufacturer

Dadong top Electronics Instrument(Group)Co., Ltd.
Huanghai Street 10#, Zhenxing District, Dandong City

NAME AND ADDRESS OF THE FACTORY

Dadong top Electronics Instrument(Group)Co., Ltd.
Huanghai Street 10#, Zhenxing District, Dandong City

Product Trademark



NAME, MODEL AND SPECIFICATION

UQK(S)-100 series float level controllers

THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS

IEC 61508-1:2010, IEC 61508-2:2010

**This is to certify that the above mentioned products have met
the requirement of certification rules :**

SITIAs-RJ03-02 A/0: Implemented rules for certification of functional safety products
Product information detailed in the attachment

CERTIFICATION MODE

Type test


Date of Issued: Oct. 25, 2017

Date of expiry: Oct. 25, 2022

Date of original certification: Oct. 25, 2017

Validity of this certificate is subject to positive result of the regular follow up inspection
by issuing certification body until the expiry date. Specific information of this certificate
can be found by this certificate issuing agency official website.



Authorized by (President) :  **DATE:** Oct. 25, 2017

**Shanghai Inspection and Testing Institute of
Instrumentation and Automation Systems Co., Ltd.**

Address: 103 Caobao Road Shanghai, P.R. of China, 200233
Tel: 86 21 64516350 Fax: 86 21 64849355 Website: www.sitiias.com.cn



PRODUCT CERTIFICATION ATTACHMENT

No. : CSFS17.00171

Product:

float level controller

Model :

UQK101、UQK102、UQK103、UQK104、
UQK1011、UQK1012、UQK105、UQK(S)101、
UQK(S)102、UQK(3)103、UQK(S)104、
UQK(S)1011、UQK(S)1012、UQK(S)105

Description:

UQK (S) -100 series float level controller, belonging to the two-position level meter. When the liquid level reaches the high and low limit position, the controller electrical contact is connected, can control the signal alarm device alarm or start and stop the electric pump.

The safety function is to control the opening or disconnection of the switch contacts.

Standards:

IEC 61508-1:2010 Functional safety of electrical/electronic/ programmable electronic safety-related systems – Part 1:General Requirements

IEC 61508-2:2010 Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 2: Requirements for electrical/ electronic /programmable electronic safety-related systems

Safety

Integrity

Level (SIL) :

According to IEC 61508: 2010, UQK (S) -100 series float level controller belongs to class A safety related components, its HFT (hardware fault margin) = 0, in low demand mode, the safety integrity level to SIL2.

λ_{SU}	λ_{SD}	λ_{DU}	λ_{DD}	λ_{TOTAL}	SFF	$PFD_{avg}(T_1=1Y)$
0	0	64	320	384	83.3%	2.80×10^{-4}
Note: The failure rate unit is FIT, 1FIT= 10^{-9} .						

Other

explanation:

Proof test and routine inspection should be performed according to User Manual.

Note: Test Report Number J17-009-RZ-CJ is integral parts of this certificate. This Certificate is valid for products compatible with the documents and samples approved by SITIiAs. The documents and sample are kept by SITIiAs.

Shanghai Inspection and Testing Institute of
Instrumentation and Automation Systems Co.,Ltd.

Oct. 25, 2017