

◆SIL 认证

热电阻 SIL3



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385203611

Product tested:	WZ Series Thermal Resistance and Transmitter	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Type Designation:	WZ Series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	WZ Series Thermal Resistance and Transmitter can convert the temperature input signal of any temperature terminal within the temperature measurement range (- 200 °C ~ + 600 °C) into the corresponding 4 ~ 20mA current output signal, and can be used to trigger the action of safety instrument function.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Assessment Report TASH-231020698-R02.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



PCA-140

2023-12-04

Date of Issue

Ivan Huang, Certification representative

The validity of this certificate: Max. 3 years from the date of issue.

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Certificate.- No.: TA 385203611

Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Thermal Resistance and Transmitter	Series: WZ (WZP, WZC)	V4.0 (HW) PCB (AD7.820.213, AD7.820.214); V3.0 (SW)

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the proof test interval is 2 years;
- the MTTR (Mean Time To Repair) used for each component is 8 hours;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD ($T_i=2years$)
WZ series	1001 configuration	35	25	350	43	90.5	89.1	3.80E-04
	1002 configuration	35	25	350	43	90.5	89.1	3.81E-05

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-231020698-R02).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

This certificate does not imply compliance with European Directive and does not allow for provision of a CE marking.



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CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385203606

Product tested:	WR Series Thermocouple and Transmitter	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Type Designation:	WR Series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	The WR Series Thermocouple and Transmitter with 4-20mA 2-wire interface will measure temperature within the stated safety accuracy.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Assessment Report TASH-231020698-R01.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD. and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



2023-12-04

Date of Issue

[Signature]

Ivan Huang, Certification representative

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Certificate.- No.: TA 385203606

Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Thermocouple and transmitter	Series: WR (WRN, WRM, WRE, WRF, WRC, WRP, WRQ, WRR)	V4.0 (HW) PCB (AD7.820.213, AD7.820.214); V3.0 (SW)

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the proof test interval is 2 years;
- the MTTR (Mean Time To Repair) used for each component is 8 hours;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	$\lambda_{sd}(\text{FITs})$	$\lambda_{su}(\text{FITs})$	$\lambda_{dd}(\text{FITs})$	$\lambda_{du}(\text{FITs})$	SFF(%)	DC(%)	PFD ($T_i=2\text{years}$)
WR series	1001 configuration	24	30	331	39	90.8	89.5	3.44E-04
	1002 configuration	24	30	331	39	90.8	89.5	3.44E-05

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-231020698-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

This certificate does not imply compliance with European Directive and does not allow for provision of a CE marking.



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双金属温度计 SIL3



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385203612

Product tested: WSS Series Bimetallic Thermometers and Transmitter
Applicant: Anhui Tiangkang (Group) Shares Co., Ltd.
No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Manufacturer: Anhui Tiangkang (Group) Shares Co., Ltd.
No. 20 South Renhe Road. Tianchang, Anhui P.R. China

Type Designation: WSS Series (Refer to appendix 1)
Systematic Capability: SC3 (SIL 3 Capable)
Safety integrity Level: Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0
SIL 3 Capability in 1oo2 configuration HFT=1;
It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1
Standard(s) / Product - Certification Basis: IEC 61508 Parts 1-7:2010
Safety Function: WSS Series Bimetallic Thermometers and Transmitter can indicate any temperature in the temperature measurement range (- 80 °C ~ + 600 °C) with local pointer, and convert the input signal of temperature terminal into corresponding 4 ~ 20mA current output signal or electric contact switch signal, which is used to trigger the action of safety instrument function.
Application Restrictions: The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.
Comments: The issue of this certificate is based upon an examination, whose results are documented in Assessment Report TASH-231020698-R03.

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



2023-12-04
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030941-23-1

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Certificate.- No.: TA 385203612

Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Bimetallic Thermometers and Transmitter	WSS	V4.0 (HW) PCB (AD7.820.213, AD7.820.214); V3.0 (SW)

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the proof test interval is 2 years;
- the MTTR (Mean Time To Repair) used for each component is 8 hours;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD ($T_i=2years$)
WSS series	1001 configuration	80	22	413	48	91.5	89.6	4.24E-04
	1002 configuration	80	22	413	48	91.5	89.6	4.26E-05

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-231020698-R03).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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温度变送器 SIL3



CERTIFICATE OF CONFORMITY

Certificate - No.: TA 385234408

Product tested:	SBWZ & SBWR series Temperature Transmitter	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road, Tianchang, Anhui, P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road, Tianchang, Anhui, P.R. China
Type Designation:	SBWZ & SBWR series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	The function of the SBWZ & SBWR series Temperature Transmitters is convert the input signal of temperature terminal into corresponding 4 ~ 20mA current output signal or electric contact switch signal, which is used to trigger the action of safety instrument function.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Evaluation Report TASH-230412891-R01.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



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2023-07-27

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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
SBWZ & SBWR series Temperature Transmitter	Series: SBWZ & SBWR	V4.0 (HW) V3.0 (SW)

Safety Function details

SF1, high trip and when the signal acquisition equipment has signal range monitoring capability SF2, low trip and when the signal acquisition equipment has signal range monitoring capability
High trip & Low trip: when the measured pressure is higher/Lower than the safety threshold, the safety instrument function will be triggered.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTR_{DD} (Mean Time To Restoration) used for each component is 8 hours;
- the MRT_{DU} (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	SF	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD (TI=2years)
SBWZ & SBWR series	SF1	1oo1 configuration	11.00	194.04	25.45	9.14	96.18	73.57	8.04E-5
	SF2	1oo2 configuration	11.00	194.04	25.45	9.14	96.18	73.57	2.80E-6

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-230412891-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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压力表 SIL3



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234407

Product tested:	Pressure Gauge	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road, Tianchang, Anhui, P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road, Tianchang, Anhui, P.R. China
Type Designation:	YB,YC,YE,YM,YN,YP,YX,Y series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type A Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1, 2, 4:2010		
Safety Function:	The function of the YB,YC,YE,YM,YN,YP,YX,Y series Pressure Gauges is can indicate any pressure in the pressure measurement range with local pointer.		
Application Restrictions	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Evaluation Report TASH-230412890-R01.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD. and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Pressure Gauge	Series: YB,YC,YE,YM,YN,YP,YX,Y series	V4.0 (HW)

Safety Function details

The function of the YB,YC,YE,YM,YN,YP,YX,Y series Pressure Gauges is can indicate any pressure in the pressure measurement range with local pointer.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTR_{DD} (Mean Time To Restoration) used for each component is 8 hours;
- the MRT_{DU} (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	λ_s (FITs)	λ_{dd} (FITs)	λ_{du} (FITs)	SFF(%)	DC(%)	PFD (T _r =2years)
See report	1001 configuration	102	413	48	91.5	89.6	4.24E-04
	1002 configuration	102	413	48	91.5	89.6	4.26E-05

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-230412890-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

This certificate does not imply compliance with European Directive and does not allow for provision of a CE marking.



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TASH-CP-005-F01, Rev.02

压力变送器 SIL3



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385213748_rev.01

Product tested: TK-3051C Series Pressure Transmitter

Applicant: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road.
Tianchang, Anhui P.R. China

Manufacturer: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road.
Tianchang, Anhui P.R. China

Type Designation: TK-3051C Series (Refer to appendix 1)

Systematic Capability: SC3 (SIL 3 Capable)

Safety integrity Level: Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0
SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H
It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1

Standard(s) / Product - Certification Basis: IEC 61508 Parts 1-7:2010

Safety Function: TK-3051C Series Pressure Transmitter with 4-20mA 2-wire interface will measure pressure within the stated safety accuracy.

Application Restrictions: The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.

Comments: The issue of this certificate is based upon an examination, whose results are documented in Assessment Report TASH-240607636-R01.

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



2024-07-12
Date of Issue

Ivan Huang, Certification representative

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031666-23-1

ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | CERTIFIKAT | 证书 | 인증서

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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
TK-3051C Series Pressure Transmitter	Series: TK-3051C	V4.0 (HW) V3.0 (SW)

Safety Function details

SF1, high trip and when the signal acquisition equipment has 4 ~ 20mA signal range monitoring capability
 SF2, low trip and when the signal acquisition equipment has 4 ~ 20mA signal range monitoring capability
 High trip & Low trip: when the measured pressure is higher/Lower than the safety threshold, the safety instrument function will be triggered.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTR_{DD} (Mean Time To Repair) used for each component is 8 hours;
- the MRT_{DU} (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	SF	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD (TI=2years)
TK-3051C series	SF1 & SF2	1oo1 configuration	15	180	35.5	10.4	95.7	77.3	7.12E-4
		1oo2 configuration	15	180	35.5	10.4	95.7	77.3	2.6E-5

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-240607636-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:
 - Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234428

Product tested:	Level Switch	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Type Designation:	TKWL-1900, TKWL-2100 series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	The TKWL-1900, TKWL-2100 series Level Switch indicates, by means of an electronic analog output, whether the level of a process medium is above or below the switching point.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Evaluation Report TASH-230412889-R02.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD. and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Level Switch	Series: TKWL-1900, TKWL-2100 (for details, see report)	V4.0 (HW) V3.0 (SW)

Safety Function details

SF1, high trip and when the signal acquisition equipment has signal range monitoring capability;
SF2, low trip and when the signal acquisition equipment has signal range monitoring capability;
High trip & Low trip: when the measured pressure is higher/Lower than the safety threshold, the safety instrument function will be triggered.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTRDD (Mean Time To Restoration) used for each component is 8 hours;
- the MRTDU (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	$\lambda_{sd}(\text{FITs})$	$\lambda_{su}(\text{FITs})$	$\lambda_{dd}(\text{FITs})$	$\lambda_{du}(\text{FITs})$	SFF(%)	DC(%)	PFD (TI=2years)
See page 1	1oo1 configuration	11.05	195.04	101.45	18.50	94.33	84.58	4.87E-4
	1oo2 configuration	11.05	195.04	101.45	18.50	94.33	84.58	2.85E-5

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-230412889-R02).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234427

Product tested:	Level Transmitter	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Type Designation:	TKWL-1600, TKWL-1100, TKWL-1300, TKWL-1400, TKWL-1700, TKWL-130, UHZ-50, UHZ-50/S series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	The TKWL-1600, TKWL-1100, TKWL-1300, TKWL-1400, TKWL-1700, TKWL- 130, UHZ-50, UHZ-50/S series Level Transmitters, with 4-20mA interface, will measure level within the stated safety accuracy.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Evaluation Report TASH-230412889-R01.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Level Transmitter	Series: TKWL-1600, TKWL-1100, TKWL-1300, TKWL-1400, TKWL-1700, TKWL-130, UHZ-50, UHZ-50/S (For details, see report)	V4.0 (HW) V3.0 (SW)

Safety Function details

SF1, high trip and when the signal acquisition equipment has signal range monitoring capability;
SF2, low trip and when the signal acquisition equipment has signal range monitoring capability;
High trip & Low trip: when the measured pressure is higher/Lower than the safety threshold, the safety instrument function will be triggered.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTRDD (Mean Time To Restoration) used for each component is 8 hours;
- the MRTDU (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD (TI=2years)
See page 1	1oo1 configuration	11.05	195.04	101.45	18.50	94.33	84.58	4.87E-4
	1oo2 configuration	11.05	195.04	101.45	18.50	94.33	84.58	2.85E-5

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-230412889-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234426

Product tested:	Flow Transmitter	Applicant:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
		Manufacturer:	Anhui Tiankang (Group) Shares Co., Ltd. No. 20 South Renhe Road. Tianchang, Anhui P.R. China
Type Designation:	TK1100, TK2100, TK3100, TK4100, TK 5100, TKRSL series (Refer to appendix 1)		
Systematic Capability:	SC3 (SIL 3 Capable)		
Safety integrity Level:	Type B Element/ SIL 2 Capability in 1oo1 configuration HFT=0 SIL 3 Capability in 1oo2 configuration HFT=1; Route 1H It is suitable to be used in safety function loop according to the description defined in safety manual and appendix 1		
Standard(s) / Product - Certification Basis:	IEC 61508 Parts 1-7:2010		
Safety Function:	The TK1100, TK2100, TK3100, TK4100, TK 5100, TKRSL series Flow Transmitters, with 4-20mA output, will measure flow within the stated safety accuracy.		
Application Restrictions:	The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.		
Comments:	The issue of this certificate is based upon an examination, whose results are documented in Evaluation Report TASH-230412888-R01.		

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



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Appendix 1

The product versions used for the assessment are the following:

Product	Model	Version number
Flow Transmitter	Series: TK1100, TK2100, TK3100, TK4100, TK5100, TKRSL	V4.0 (HW) V3.0 (SW)

Safety Function details

SF1, high trip and when the signal acquisition equipment has signal range monitoring capability;
SF2, low trip and when the signal acquisition equipment has signal range monitoring capability;
High trip & Low trip: when the measured pressure is higher/Lower than the safety threshold, the safety instrument function will be triggered.

Hypothesis and calculation results

Hypothesis taken into account are the following:

- the mode of operation is either "Low demand", which means less than 1 trip demand each year;
- the TI (Proof Test Interval) is 2 years;
- the MTTRDD (Mean Time To Restoration) used for each component is 8 hours;
- the MRTDU (Mean Repair Time) used for each component is 8 hours;
- CPT (Coverage of Proof test) is 80% according to safety manual;
- PTD (Proof Test Duration, Online) is 8 hours;
- MT (Mission Time) is 20 years;
- failure rates are considered constant and do not take into account early life and end-of-life failures;

Model	SF	Component architecture	$\lambda_{sd}(FITs)$	$\lambda_{su}(FITs)$	$\lambda_{dd}(FITs)$	$\lambda_{du}(FITs)$	SFF(%)	DC(%)	PFD (TI=2years)
See page 1	SF1 & SF2	1oo1 configuration	11.00	194.04	25.45	9.14	96.18	73.57	8.04E-5
		1oo2 configuration	11.00	194.04	25.45	9.14	96.18	73.57	2.80E-6

Conditions and limits

Use of the product must comply with the terms of use in order to preserve SIL3 properties. These rules are reminded in the section 9.1 of the assessment report (ref: TASH-230412888-R01).

Acceptable environmental constraints and design lifetime for the product are stated in the following document:

- Safety manual

These elements must be checked for each integration of the product, as well as during the operation and maintenance phases.

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TÜV AUSTRIA (SHANGHAI) CO., LTD.
Certification Body



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234547

Product tested: Butterfly Valve Applicant: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road, Tianchang,
Anhui, P.R. China

Manufacturer: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road, Tianchang,
Anhui, P.R. China

Type Designation: TKQD Series

Systematic Capability: SC3 (SIL 3 Capable)

Safety integrity Level: Type A Element/ SIL 2 Capability in 1oo1 configuration HFT=0
SIL 3 Capability in 1oo2 configuration HFT=1; Route 2H
It is suitable to be used in safety function loop according to the description
defined in safety manual and appendix 1

Standard(s) / Product -
Certification Basis: IEC 61508 Parts 1,2,4:2010

Safety Function: Open or Close on demand.

Application Restrictions: The unit must be properly designed into a Safety Instrumented Function per
the Safety Manual requirements.

Comments: The issue of this certificate is based upon an examination, whose results are
documented in Assessment Report TASH-231122217-R03

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD. and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



2023-11-29
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Appendix 1 of Certificate No. TA 385234547

The use of the product Butterfly Valve series must obey the required rules to maintain the SIL Capable properties. These rules are stated in the section 1 of the Assessment Report reference TASH-231122217-R03

The product versions of hardware components used for the assessment are the following:

Component	Model
Butterfly Valve	TKQD Series

Assessed documents for the present certification are defined in the Appendix 1 of the Assessment Report reference to TASH-231122217-R03

Acceptable environmental constraints and design lifetime for the product are stated in the safety Manual (Ref.: TK/QES.4-07). These elements have been checked.

The certified Safety Function(s) of Butterfly Valve series are the following:

- SF1: Open on demand.
- SF2: Close on demand.

Hypothesis used for mode of operation is the following:

The mode of operation is "Low demand", which means less than 1 trip demand each year;

			Calculation hypothesis		Intermediate results				Final results	
Type	Component architecture	Safety function	Tests intervals	MTTR	Detected Safe failure rate	Undetected Safe failure rate	Detected dangerous failure rate	Undetected dangerous failure rate	SIL Capability	Probability of Failure on Demand
Same to the Mode I	1001 configuration	SF1(open on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.19E-07	SIL2	9.64E-04
	1001 configuration	SF2(close on demand)	12months	24 h	0.00E+00	0.00E+00	0.00E+00	2.19E-07	SIL 2	9.64E-04
	1002 configuration	SF1(open on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.19E-07	SIL 3	9.74E-05
	1002 configuration	SF2(close on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.19E-07	SIL 3	9.74E-05

The Safety Integrity Level of the safety function using the Butterfly Valve series have been calculated as been toked into account of the characteristics of the complete system supporting the safety function.

The validity of this certificate: Max. 3 years from the date of issue.

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TÜV AUSTRIA (SHANGHAI) CO., LTD.
Certification Body



CERTIFICATE OF CONFORMITY

Certificate.- No.: TA 385234546

Product tested: Ball Valve Applicant: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road, Tianchang,
Anhui, P.R. China

Manufacturer: Anhui Tiankang (Group) Shares Co., Ltd.
No. 20 South Renhe Road, Tianchang,
Anhui, P.R. China

Type Designation: TKQQ Series

Systematic Capability: SC3 (SIL 3 Capable)

Safety integrity Level: Type A Element/ SIL 2 Capability in 1oo1 configuration HFT=0
SIL 3 Capability in 1oo2 configuration HFT=1; Route 2H
It is suitable to be used in safety function loop according to the description
defined in safety manual and appendix 1

Standard(s) / Product -
Certification Basis: IEC 61508 Parts 1,2,4:2010

Safety Function: Open or Close on demand.

Application Restrictions: The unit must be properly designed into a Safety Instrumented Function per
the Safety Manual requirements.

Comments: The issue of this certificate is based upon an examination, whose results are
documented in Assessment Report TASH-231122217-R02

According to the below stated assessment report(s), the specified product complies with the applicable requirements of the mentioned standard(s).

This Certificate of Conformity has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an approved laboratory, the consequent review of the test report by TÜV AUSTRIA (SHANGHAI) CO., LTD, and assessment of the instruction manual, product or the production process of this product by TÜV AUSTRIA (SHANGHAI) CO., LTD. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification evaluation in order for the report and therefore this associated certificate to remain valid. Furthermore the General Conditions for a Certificate of Conformity on a national or international Standard concerning a specified product are valid.



2023-11-29

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Ivan Huang, Certification representative

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Appendix 1 of Certificate No. TA 385234546

The use of the product TKQQ series Ball Valve must obey the required rules to maintain the SIL Capable properties. These rules are stated in the section 1 of the Assessment Report reference TASH-231122217-R02

The product versions of hardware components used for the assessment are the following:

Component	Model
Ball Valve	TKQQ Series

Assessed documents for the present certification are defined in the Appendix 1 of the Assessment Report reference to TASH-231122217-R02

Acceptable environmental constraints and design lifetime for the product are stated in the safety Manual (Ref.: TIANKANG/SM01-2023 (A/0)). These elements have been checked.

The certified Safety Function(s) of TKQQ series Ball Valve are the following:

- SF1: Open on demand.
- SF2: Close on demand.

Hypothesis used for mode of operation is the following:

The mode of operation is "Low demand", which means less than 1 trip demand each year;

			Calculation hypothesis		Intermediate results				Final results	
Type	Component architecture	Safety function	Tests intervals	MTT R	Detected Safe failure rate	Undetected Safe failure rate	Detected dangerous failure rate	Undetected dangerous failure rate	SIL Capability	Probability of Failure on Demand
Same to the Model	1oo1 configuration	SF1 (open on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.17E-07	SIL2	9.56E-04
	1oo1 configuration	SF2 (close on demand)	12months	24 h	0.00E+00	0.00E+00	0.00E+00	2.17E-07	SIL 2	9.56E-04
	1oo2 configuration	SF1 (open on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.17E-07	SIL 3	9.66E-05
	1oo2 configuration	SF2 (close on demand)	12months	24h	0.00E+00	0.00E+00	0.00E+00	2.17E-07	SIL 3	9.66E-05

The Safety Integrity Level of the safety function using the TKQQ series Ball Valve have been calculated as been taken into account of the characteristics of the complete system supporting the safety function.

The validity of this certificate: Max. 3 years from the date of issue.

Any alteration or duplication of this document in parts is subject to approval by TÜV AUSTRIA (SHANGHAI) CO., LTD.

The holder of this document is advised that the information contained hereon reflects the certification body's findings on the date of issue and within the limits of the applicant's instructions, if any.

TÜV AUSTRIA (SHANGHAI) CO., LTD.
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<http://cn.tuvaustria.com>

e-mail: office@cn.tuvaustria.com

TASH-CP-005-F01, Rev.01

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◆CE 认证

热电偶



CERTIFICATE

Certificate - No.: 23-IS-1931-TAT-23-EMC-4939

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Thermocouple
Type/Model(s)	: # WR; WRN; WRNK; WRNB; WRE; WRPF # # WRR; WRP; WRN(B)-74S-TH02H/TH02F #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No : 23-IS-1931-CN-230080-02

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA-TÜRK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit ŞIRANLI

After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TÜRK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

热电阻



CERTIFICATE

Certificate - No.: 23-IS-1930-TAT-23-EMC-4938

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Thermal Resistance
Type/Model(s)	: # WZ; WZP; WZPK; WZPB; WZP(B)-74S-TH02H/TH02F #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No : 23-IS-1930-CN-230080-01

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit ŞİRANLI



After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

双金属温度计



CERTIFICATE

Certificate - No.: 23-IS-1932-TAT-23-EMC-4940

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Bimetallic Thermometer
Type/Model(s)	: # WSSX; WSS; WSSN; WSSP #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No : 23-IS-1932-CN-230080-03

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit SİRANLI

After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

温度变送器



CERTIFICATE

Certificate - No.: 23-IS-1935-TAT-23-EMC-4943

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Temperature Transmitter
Type/Model(s)	: # SBWZ; SBWR #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference : 23-IS-1935-CN-230080-06
Technical File No

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit ŞİRANLI



After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

压力变送器



CERTIFICATE

Certificate - No.: 23-IS-1937-TAT-23-EMC-4945

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Pressure Transmitter
Type/Model(s)	: # TK-3051 Series #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No : 23-IS-1937-CN-230080-08

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit ŞIRANLI

After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacture or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

压力表



CERTIFICATE

Certificate - No.: 23-IS-1933-TAT-23-EMC-4941

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Pressure Gauge
Type/Model(s)	: # Y; YB; YM; YE; YX; YN; YP #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No	: 23-IS-1933-CN-230080-04
Issue Date	: 26.10.2023
Expiry Date	: 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit SİRANLI



After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.

CRT-AUD-103 Certificate of
Conformity EMC
Revision: 01 Date: 09.03.2020
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All testing inspection and surveillance activities were carried out in accordance with the QM system of
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液位计



CERTIFICATE

Certificate - No.: 23-IS-1934-TAT-23-EMC-4942

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Manufacturer	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Product	: Liquid Level Meter
Type/Model(s)	: # UHZ-50/C; UHZ-50/UB; UHZ-50/D; UHZ-50/S #
Assessment Performed	: Assesses for compliance with Annex-I Essential Requirements of Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/30/EU Electromagnetic Compatibility Directive EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

This Certificate is issued on a voluntary basis according to 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directive. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No	: 23-IS-1934-CN-230080-05
Issue Date	: 26.10.2023
Expiry Date	: 25.10.2028

The certificate is valid as long as the standards and legislation are current and yearly annual audit is performed satisfactory.

For and on behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Umit SİRANLI



After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in points 2, 3, 4 and 5 of Annex II for serial production is under responsibility of the manufacturer.



CERTIFICATE

Certificate - No.: 23-IS-1936-TAT-23-LVD&EMC-4944

Applicant	: ANHUI TIANKANG (GROUP) SHARES CO., LTD. No. 20th South Renhe Road, Tianchang City, Anhui, China
Equipment	: Electromagnetic Flowmeter
Type/Model(s)	: # TK1100; TK1200; TK1300; TK1400; TK1600 #
Assessment Performed	: Assesses for compliance with Annex-I Principal Elements of the Safety Objectives for Electrical Equipment Designed For Use Within Certain Voltage Limits of the Low Voltage Directive 2014/35/EU and Annex-I Essential Requirements of the Electromagnetic Compatibility Directive 2014/30/EU.
Standard(s) / Certification Basis	: 2014/35/EU Low Voltage Directive, 2014/30/EU Electromagnetic Compatibility Directive EN 61010-1:2010/A1:2019 EN IEC 61326-1:2021 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021

This Certificate is issued on a voluntary basis according to 2014/35/EU Low Voltage Directive & 2014/30/EU Electromagnetic Compatibility Directive. It conforms that the equipment complies with Annex-I requirements of the directives. It refers only to the sample and its technical file submitted for conformity assessment.

Reference Technical File No : 23-IS-1936-CN-230080-07

Issue Date : 26.10.2023

Expiry Date : 25.10.2028

The certificate is valid as long as the standards and legislation are current and annual audit is performed with satisfactory results.

For and behalf of
TÜV AUSTRIA TURK Belgelendirme
Eğitim ve Gözetim Hizmetleri Ltd. Şti.
Emrah Ümit ŞİRANLI



After preparation of the necessary technical documentation as well as the declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

This Certificate has been granted to the applicant based on the results of testing performed by the applicant/manufacturer or an accepted laboratory and the consequent review of the test report by TÜV AUSTRIA TURK. Revisions to the referenced certification basis or any change of the design, materials, components or processing may require the repetition of all or some of the qualification tests in order for the test report and therefore this associated certificate to remain valid. To fulfill the obligations laid down in Annex II of 2014/30/EU EMC & Annex III of 2014/35/EU LVD for serial production is under responsibility of the manufacturer.