

C E R T I F I C A T E



of Conformity
Low Voltage Directive 2006/95/EC

Registration No.: AN 50192707 0001

Report No.: 14705379 001

Holder: Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.11 Zhangjia Road, Changhe Town
Cixi, Zhejiang 315326
P.R. China

Product: Temperature Control
(Thermostat)

Identification: Type Designation: KSD301
Serial No.: n.a.
Remark: Issued in conjunction with TÜV Rheinland
license R 50192704 0001.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2006/95/EC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.

Certification Body



Date 17.06.2011

J. Kroel
Dipl.-Ing. J. Kroel

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50192704

Blatt Page
0001

Ihr Zeichen Client Reference
W.Y.

Unser Zeichen Our Reference
ZC10-WCJ- 14705379 001

Ausstellungsdatum
17.06.2011

Date of Issue
(day/mo/yr)

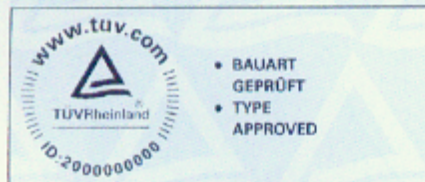
Genehmigungsinhaber License Holder

Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.11 Zhangjia Road, Changhe Town
Cixi, Zhejiang 315326
P.R. China

Fertigungsstätte Manufacturing Plant

Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.11 Zhangjia Road, Changhe Town
Cixi, Zhejiang 315326
P.R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60730-1:2000+A1+A2+A12+A13+A14+A16
EN 60730-2-9:2010

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Temperatur-Regler (Thermostat)

Type Designation : KSD301
Rated Voltage : AC 250V; 50/60Hz
Rated Current : 1)16A 2)10A
Features of Automatic Action : Type 1.C
Operating Temperature : 1)40°C to 160°C
2)40°C to 170°C
Number of Automatic Cycles : 1)100,000 2)100,000
Kind of Sensing Element : Bi-metal
Circuit Disconnection : Micro-interruption
Ambient Temperature Limits of
Switch Head : T210
Protection Against Electric Shock: For Incorporation in
Class I Equipment
Rated Impulse Withstand Voltage : 2500V
Pollution Degree : 2

5

The labelling requirements acc. to EU Directive 2001/95
have to be observed for distribution within the EEA.

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ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. J. Kroel

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50192704

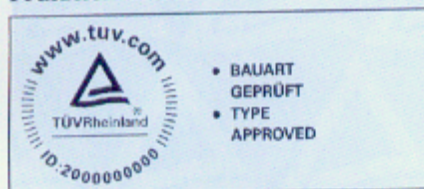
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0002

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
W.Y.	ZC10-WCJ- 14705379 002	29.11.2011 (day/mo/yr)

Genehmigungsinhaber License Holder
Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.388 Ning feng North Road,
Changhe Town, Cixi City
Zhejiang Province 315326
P.R. China

Fertigungsstätte Manufacturing Plant
Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.388 Ning feng North Road,
Changhe Town, Cixi City
Zhejiang Province 315326
P.R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60730-1:2000+A1+A2+A12+A13+A14+A16
EN 60730-2-9:2010

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Temperatur-Regler (Thermostat) ®

as page 0001

Change

Address of License Holder : See above

Address of Factory : See above

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
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Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50192704

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0003

Ihr Zeichen Client Reference
W.Y.

Unser Zeichen Our Reference
ZC10-ZHB- 14705379 003

Ausstellungsdatum
24.07.2014

Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder
Ningbo Tongbao Huashuo Temp.
Controller Co., Ltd.
No.388 Ning feng North Road,
Changhe Town, Cixi City
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P.R. China

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Zhejiang Province 315326
P.R. China

Prüfzeichen Test Mark



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 2000000000

Geprüft nach Tested acc. to

EN 60730-1:2011

EN 60730-2-9:2010

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Temperature Control (Thermostat)

as page 0001-0002

Change

Test Requirement : See above

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
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Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



James Li



TÜVRheinland®
DIN CERTCO



TÜVRheinland®

Certificate No. R 50192704 0001

Our Reference ZC10-WCJ-14705379 001

Appendix No. 1

Constructional Data Form (CDF) for Temperature Sensing Controls

Page 1 of 2

License holder: Ningbo Tongbao Huashuo Temp. Controller Co., Ltd.

Full address: No.11 Zhangjia Road, Changhe Town, Cixi, Zhejiang 315326, P. R. China

Factory: Ningbo Tongbao Huashuo Temp. Controller Co., Ltd.

Full address: No.11 Zhangjia Road, Changhe Town, Cixi, Zhejiang 315326, P. R. China

Type or Model Number: KSD301

Kind of device: Thermostat

General information/rated values:

Type reference	KSD301	
☒ Operating temperature	40°C -160°C	40°C -170°C
☐ Reset temperature		
Feature of automatic action	Type 1. C	
Manufacturing deviation	±4°C	
Drift	±0.2°C	
Rated voltage	250V	250V
Nature of supply	~	
Frequency	50/60Hz	50/60Hz
Rated current	☒ Substantially resistive load:	16A
	☐ Resistive or/and inductive load:	---
	☐ Specific Load:	---
	☐ Other:	---
Ambient temperature limits of the switch head	T210	
Temperature limits of the mounting surface	T210	
Contact material	AgNi(10)/Cu	
Number of cycles of actuation (M) for each manual action	---	
Number of automatic cycles (A) for each automatic action	100 000	100 000
Disconnection (Micro Full) or Micro interruption	Micro-interruption	Micro-interruption
Pollution degree	2	
IP Code (degree of protection)	IP00	

TÜV Rheinland Group

Chengjun Wang

License holder

Date 2011-06-13 Signature

Name

Company Stamp and Signature



TÜVRheinland®
DIN CERTCO



TÜVRheinland®

Certificate No. R 50192704 0001

Our Reference ZC10-WCJ-14705379 001

Appendix No. 1

Constructional Data Form (CDF) for Temperature Sensing Controls

Page 2 of 2

Degree of protection against electrical shock from outside when mounted according to documentation

According to final installation

EMC requirements (immunity) for integrated control and incorporated control

☐ Claimed

☒ Not claimed

Terminals /connection:

Type reference	KSD301
Type of terminal	Flat Quick-connector: 4.8x0.5; 4.8x0.8; 6.3x0.8
Terminal designation	---
Type of conductor	Prepared conductor with female tab
Max. number of conductors per terminal	1
Tightening torque [Nm]	---
Material/plating of the terminal	Stainless steel SUS430
Max. temperature of terminal declared by manufacturer	230°C

Insulating parts:

Part	Material name	Manufacturer	Material group
Ceramic	# 95	Yalong Fine Ceramic Goods Factory	Category D
Base	PT 301	GUILIN CONINST ELECTRICAL & ELECTRONIC MATERIAL CO LTD	UL 94 V-0

Critical components:

Part	Type designation	Manufacturer	Specification	Approval
Sensing element	BH-2	NEOMAX MATERIALS CO., LTD.	Bi-metal	No
Contact	AgNi(10)/Cu	Ningbo Kehua Electrical Copper Material Factory	---	No

Remark:

1. Thermostat KSD301 has two rating combinations: 250V, 16A, 40°C -160°C, 100 000; 250V, 10A, 40°C -170°C; 100 000, each of them was validated on three samples independently and it deemed the result was ok.
2. The size of tab may be optional as below: 4.8x0.5, 4.8x0.8 or 6.3x0.8.

TÜV Rheinland Group

Chengjun Wang

License holder

Date 2011-06-13 Signature

Name

Company Stamp and Signature

