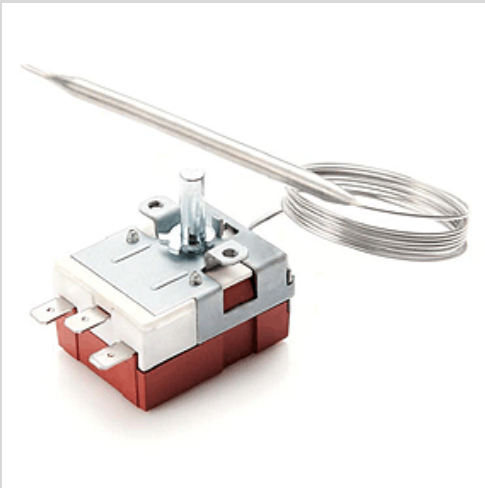




Capillary Thermostat

TS - Series



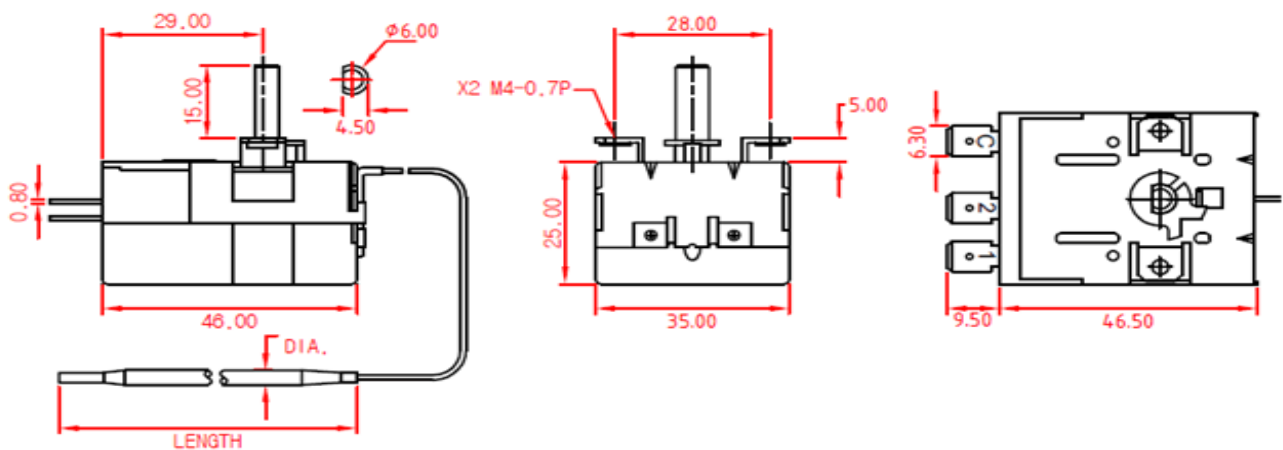
Features

This is the most representative product, and most widely used among liquid-expanding products. Various specifications can be changed as the customers' demands.

Application

- Fridge, freezer, hot and cool dispenser, air conditioner.
- All sorts of cooking equipment such as fryers, electric oven, microwave, waffle maker, sauna, water bed, ATM machine etc.

Temperature Range	: MIN -30°C ~ MAX +320°C
Max Ambient Temp. For Body	: Max Ambient Temp. for Body 120°C
Electric Rating	: 20A/250VAC
Switch Circuit	: Single Pole Double Throw (SPDT), Single Pole Single Throw (SPST)
Mounting Bracket	: M4 fixed bracket (28mm from center to center)
Direction Of Terminal	: 90°, Straight
NetWeight	: 75g
Capillary Length	: Stainless, Standard 1000mm
Type Of Knob	: R type / B type (optional)
Stuffing Bolt	: PT1/4", M12, M14 (optional)



RAINBOW ELECTRONICS CO.,LTD.

303-204 Bucheon Techno-park Ssangyong III #36-1, Samjeong-dong Ojeong-gu, Bucheon-city, Gyeonggi-do, Korea 421-742

<http://www.rainbowelec.co.kr>



Manual for RAINBOW capillary thermostats

REV.07 / 20191128

It is called "Mechanical or Capillary thermostat" which maintains the desired temperature for the various heating or cooling appliances. It consists of a sensing bulb to detect temperature and a switch to cut in and cut off the electric power. Be sure to mind this manual for the most suitable application and for your safety.

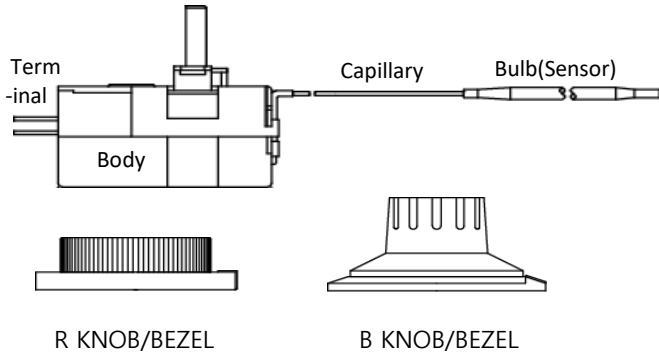
◀SPECIFICATION▶

1. Temperature range to be controlled covers from -30c to 320c. Our catalogue and website (www.rainbowelec.co.kr) will provide more information on the proper temperature range for each appliance.
2. The electric rating (30A/250VAC, 20A/250VAC is shown on each label of the part.
3. Max ambient temperature of the thermostat body is 120°C
4. Not over 120% from high end tempreaure is allowed on the bulb temperature
(Not over 105% is recommanded for thermostat higher than 300c for safety)

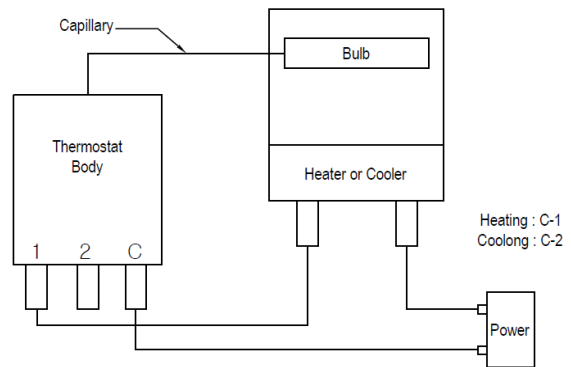
◀Caution & Notice ▶

1. Please mind this instructions before installing a thermostat to your equipment and contact the supplier for any question or doubt.
2. Use it in allowed electric rating for your safety.
3. Carefulness is required to handle bulb and capillary to prevent breaking.
4. Do not bend the capillary less than 5mm radius
5. A damaged bulb can make fail the desired temperature.
6. Thermostat body should be installed away from heating source. The higher ambient temperature can affect its normal function.
7. Sensing bulb should be installed in or close to heating source. Otherwise it can be out of the allowed tolerance.
8. Install the thermostat so that no pressure is applied to the body of the thermostat.
Excessive pressure on the body may cause malfunction.
9. Terminals deformation is not allowed for safety.
10. Refund or replacement is not accepted for voluntary fixing or modifying.
11. Applying the supplied parts with the thermostat.
12. Warranty : 2 years from purchasing or A year from installing any appliance.

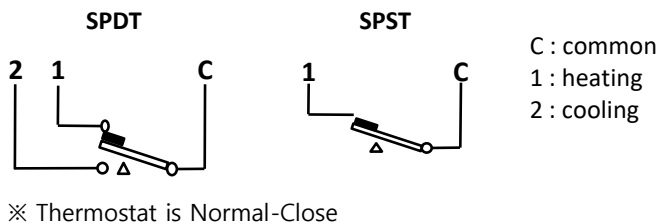
◀Part▶



◀Installation▶



◀Diagram▶



Please contact us when you occur question.

◀Contact us▶

Add: 303-204, 397, Seokcheon-ro, Ojeong-gu,
Bucheon-city, Gyeonggi-do, Korea 14449
TEL : 032-624-2288
FAX : 032-624-2299
Web : www.rainbowelec.co.kr

Registration Certificate

This is to certify that
the Quality Management Systems of

RAINBOW ELECTRONICS CO., LTD.

have been assessed by AK Registrars and registered
against the requirements of

ISO 9001:2015 / KS Q ISO 9001:2015

SCOPE OF REGISTRATION

Design, Development, Production and Servicing of Thermostat, Thermometer

Sites Registered: Head Office: 303-204, 397, Seokcheon-ro, Ojeong-gu, Bucheon-si,
Gyeonggi-do, Korea,
Factory of China: 18, Huanghe Road, The Economic Development
Zone, Laixi, Qingdao, Shandong Province, China

Certificate Number: AK13QM1211

Date of Original Registration: 16/05/2005 Expiry Date: 15/05/2018

Issue Date: 12/07/2013



Jim Chul Choi

Chief Executives, AK Registrars



KAB mark granted from KAB verifies that AK Registrars is registered as an QMS accreditation body(Reg. No. KAB-QC-41).
IAF mark is granted to the member of Multilateral Recognition Arrangement of IAF.

This certificate is the property of AK Registrars and must be returned on request

This Certificate has been issued by AK Registrars, 112-ho, 169-31, Gasan digital 2-ro, Geumcheon-gu, Seoul, Korea 153-803

CERTIFICATE OF COMPLIANCE

Certificate Number 20150731-E173663
Report Reference E173663-20150730
Issue Date 2015-JULY-31

Issued to: RAINBOW ELECTRONICS CO LTD
303-204 Bucheon Techno-park Ssangyong III
36-1 Samjeong-dong Ojeong-gu
Bucheon-si Gyeonggi-do 421-742 KOREA

**This is to certify that
representative samples of**

COMPONENT - TEMPERATURE-INDICATING AND -
REGULATING EQUIPMENT

USR Component – Capillary-Operated Temperature
Regulating Thermostat, Models RMT; followed by -000
through -350; followed by SF or CF; maybe followed by DL
or DU.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 873, Temperature-Indicating and –Regulating
equipment

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance
capabilities and are intended for use as components of complete equipment submitted for investigation rather
than for direct separate installation in the field. The final acceptance of the component is dependent upon its
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50336575

Blatt *Page*
0002

Ihr Zeichen *Client Reference*
J.M.Y.

Unser Zeichen *Our Reference*
ZKR1-HSP-50036677 001

Ausstellungsdatum *Date of Issue*
26.04.2016
(day/mo/yr)

Genehmigungsinhaber *License Holder*
RAINBOW ELECTRONICS CO., LTD.
(Bucheon Techno-Park Ssangyong 3rd)
303-204,
Seokcheonro, 397 Ojeong-Gu,
Bucheon-Si, Gyeonggi-Do, 14449
Rep. of Korea

Fertigungsstätte *Manufacturing Plant*
QINGDAO RAINBOW ELECTRONICS CO., LTD.
18 HUANGHE ROAD,
ECONOMIC&TECHNICAL DEVELOPMENT
ZONE, LAIXI CITY, QINGDAO,
P.R. China

Prüfzeichen *Test Mark*



Regular Production
Surveillance
Safety
Type Approved

www.tuv.com
ID 1419033842

Geprüft nach *Tested acc. to*
EN 60730-2-9:2010

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Temperature Control Thermostat

continued from page 0001

Rated Voltage : AC 250V 50/60Hz
Rated Current : 20A (Resistive)
Action Type : Type 1.C
Operating Cycles : 100,000 (Automatic)
Construction : Incorporated Control
Disconnection : Micro-interruption
Ambient Temperature : T120
Operating Temperature : -30°C to 320°C
Rated Impulse Voltage : 2500V
Pollution Degree : 2

Remark : The protection against electric shock
has to be maintained by building in.

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.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



TagSun Park

Declaration of Conformity – RoHS



RAINBOW ELECTRONICS CO.,LTD.

#303-204 BUCHEON TECHNOPARTK III, 36-1,
SAMJUNG-DONG, OJUNG-KU, BUCHEON-CITY,
KYUNGGIDO, KOREA 421-742
TEL : 032-624-2288 FAX : 032-624-2299

REF. NO. : RES-1605-RoHS
DATE 9-May-16
PAGE 1
REV. NO. 9

Certificate of conformance to the 2011/65/EU(RoHS) European directive related to the restriction of dangerous substances in the electrical and electronics equipments

1. Application field and aim

This Quality Document applies to our delivered products as below except when the contractual specification of our customer expressly state that they contain or can contain the dangerous substances specified in this European directive.

This document complies with the requirements of the customers asking to RAINBOW ELECTRONICS CO., LTD. to take her stand on the European directive 2011/65/EU(RoHS).

2. Applied Items

1) THERMOSTAT TS-XXXX TS-XXXX-C
PTSC-XXXX PTSC-XXXC DCTC-XXXX DCTC-XXXC
ITS-XXXXL LTS-XXXX
VTS-XXXX VTS-XXXC
TSR-XXXXSF TSR-XXXXSF-C TSR-XXXXSF/HC TSR-XXXXSF/HC-C
RNTS-XXXX RNTS-XXXX-C
RST-XXXX RST-XXXX/HC RST-XXXX-C RST-XXXX/HC-C
(XXX Designate temperature range up to 350°C)

3) THERMOMETER TMRB- , TMSA- , TMRC-
(Temperature range : -40°C ~ 40°C / 0°C ~ 120°C)

Rainbow Electronics Co., Ltd. states to be in conformance to the 2011/65/EU(RoHS) European directive related to the restriction of use of dangerous substances in the electrical and electronic devices.

The above products do not contain material that exceed maximum on table.

Materials	Maximum Value
Lead(Pb)	1,000 ppm
Mercury(Hg)	1,000 ppm
Cadmium(Cd)	100 ppm
Hexavalent Chromium(Cr(VI))	1,000 ppm
Polybrominated Biphenyls(PBBs)	1,000 ppm
Polybrominated diphenyl ethers(PBDEs)	1,000 ppm

Representative name : JongMin Yoon

Representative E-mail : danny.yoon@rainbowelec.co.kr

Signature:

Date : 2016. 05. 09.