CERTIFICATE

Product certificate
K22839/04

Issued *2021-08-15*

Replaces *K22839/03*

Thermostatic regulating valves

STATEMENT BY KIWA
With this product certificate, issued in accordance with the Kiwa Regulations for Certification, Kiwa declares that legitimate confidence exists that the products supplied by

Danfoss B.V.

as specified in this product certificate and marked with the Kiwa®-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with Kiwa evaluation guideline BRL-K14003 “Thermostatic regulating valves” dated 01-02-2012.

Ron Scheepers
Kiwa

Publication of this certificate is allowed.
Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

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Certification process consists of initial and regular assessment of:
- **quality system**
- **product**

Thermostatic regulating valves

PRODUCT SPECIFICATION

The products mentioned below belong to this technical approval-with-product certificate
Thermostatic regulating valves

- MCTV DN 15
- MCTV DN 20

Fitness for contact with drinking water

This product is approved on the basis of the requirements for hygienic aspects set in the "Regeling materialen en chemicaliën drink- en warm tapwatervoorziening" (“Materials and chemicals in the supply of drinking water and warm tap water Regulation” dated 01-07-2017; published in the Government
Gazette).
These hygienic aspects are based on two main criteria. The product shall permanently comply with:

- The product recipe approved during the assessment procedure. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa approval procedure for the hygienic aspects;
- Specific product requirements for the hygienic aspects.

The recipe and specific product requirements are laid down in the for confidentiality reasons undisclosed ‘appendix hygienic aspects’ to this certificate.

MARKING

The Kiwa®-mark products are marked with the word mark "KIWA "
Place of the mark: On the body

*) for small fittings marking with only KK is permitted

Compulsory specifications:
On the body

- Flow direction
- Nominal size (DN)
- Trade or manufactures mark

on the nut or compression fitting (if applicable)

- nominal size (DN)
- production code

Method of marking:

- Non-erasable;
- visible after assembly.

APPLICATION AND USE

Products are intended for application in circulation systems in tap water installations with a static water pressure of maximum 1.000 kPa and a maximum water temperature of 90 °C.
After regulating a pre-adjusted minimum temperature upstream will be maintained with conservation of the hydraulic balance.

RECOMMENDATIONS FOR CUSTOMERS

Check at the time of delivery whether:

- the supplier has delivered in accordance with the agreement;
- the mark and the marking method are correct;
- the products show no visible defects as a result of transport etc.

If you should reject a product on the basis of the above, please contact:

- Danfoss B.V.

and, if necessary,

- Kiwa Nederland B.V.

Consult the supplier’s processing guidelines for the proper storage and transport methods.

Appendix hygienic aspects to certificate K22839 for ‘Thermostatic Regulating Valves’

Commencing date: December 1st, 2025

Product specification
This appendix is only related to 'Thermostatic Regulating Valves' supplied by Danfoss B.V..

Composition
The 'Thermostatic Regulating Valves' are approved with the following composition:

Nr	Part	Material	Supplier	Remark
1	Body	CC499K		This material has to meet the requirements of the Composition List. In the table below, the accepted CC499K composition is given for reference.
2	Spring	SS 1.4310		This material has to meet the requirements of EN10088
3	Cone	POM		Total weight of POM per product < 5 gram.
4	Insert	Wax element MTCV		
4.1	Sleeve	EPDM		According to Kiwa BRL K17504, field of application class 3
4.2	Guide	CW725R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW725R composition is given for reference.
4.3	Cup	CW501L		This material has to meet the requirements of the Composition List. In the table below, the accepted CW501L composition is given for reference.
4.4	Piston	SS 1.4305		This material has to meet the requirements of EN10088
4.5	Grease	L641/Unisilkon		
5	Nut	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
6	O-ring	EP11/7/4 BLK	Superior Seals	Approved according Kiwa certificate K5161
7	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
8	Spring housing	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
9	Nut	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
10	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
11	Spindel	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
12	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
13	Compressive spring	SS 1.4310		This material has to meet the requirements of EN10088
14	Spring guide	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
15	Cover with scale	Ultramid A3K PA66	Plastpol	Not in contact with drinking water
16	Cover with pointer	Ultramid A3K PA66	Plastpol	Not in contact with drinking water
17	Cover	Polyethylene	Best srl	Not in contact with drinking water
18	X cone Legionella	SS 1.4404		This material has to meet the requirements of EN10088

19	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
20	Compressive spring	SS 1.4310		This material has to meet the requirements of EN10088
21	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
22	Safety nut	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
23	Cover	Polyethylene	Best srl	Not in contact with drinking water
32	O-ring	EP11/7/1 BLK	Superior Seals	Approved according Kiwa certificate K5161
33	Plug	Brass CW724R		This material has to meet the requirements of the Composition List. In the table below, the accepted CW724R composition is given for reference.
	Lubricant	Mast Unisilicon L250L	Petrol	
	Lepilo Loctite 577	Adhesive	Sigma	
	Lubricant	Dow Corning R200 100cst	Diatom	
	Sealant	Loctite 5400	Henkel AG	

Composition of the accepted brass CC499K:

Constituents	Content (% (m/m))	Impurities	Content (% (m/m))
Copper	84.0 - 88.0	Antimony	≤ 0.10
Tin	4.0 - 6.0	Sulphur	≤ 0.04
Zinc	4.0 - 6.0	Phosphorus	≤ 0.04
Lead	0.2 - 3.0	Iron	≤ 0.30
Nickel	0.1 - 0.60	Each other impurity	< 0.02

Composition of the accepted brass CW724R:

Constituents	Content (% (m/m))	Impurities	Content (% (m/m))
Copper	75.0 – 77.0	Aluminium	≤ 0.05
Zinc	Remainder	Iron	≤ 0.3
Silicon	2.7 – 3.5	Lead	≤ 0.1
Phosphorus	0.02 – 0.10	Manganese	≤ 0.05
		Nickel	≤ 0.2
		Tin	≤ 0.3
		Each other impurity	< 0.02

Above mentioned composition as well as the mentioned recipes of the raw materials/additives are not to be changed without prior approval according to the Kiwa approval procedure for hygienic aspects.
Danfoss B.V. is always responsible for an advance notification of changes in the composition and/or in the recipe of mentioned raw materials/additives.

Criteria/requirements for the product
The criteria and requirements according to the ‘Regeling materialen en chemicaliën drink- en warm tapwatervoorziening’ (‘Materials and chemicals in the supply of drinking water and warm tap water Regulation’; published in the Government Gazette) apply to these products.

For 'Thermostatic Regulating Valves' no migration requirements are relevant.

The present appendix replaces previous versions, if any.

Kiwa Nederland B.V.

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