



Uppgiftslämnaren reserverar sig för eventuella fel i produktinformationen eller felaktigt registrerade uppgifter och förbehåller sig rätten att korrigera och/eller komplettera produktinformation utan föregående avisering

1 GRUNDDATA

Varubeskrivning

Gasfyllda radiatortermostater för montering på Danfoss ventiler med RA-hals.

Övriga upplysningar

Klassificeringar

ETIM ›	-EC010064 -
BK04 ›	
BSAB ›	
UNSPSC ›	

Leverantörsuppgifter

Företagsnamn

Danfoss AB

Organisationsnummer

5560523903

Adress

Industrigatan 5

Hemsida

se.varme.danfoss.com

Miljökontaktperson

Namn

Anders Gustavsson

Telefon

013-25 85 86

E-post

anders.gustavsson@danfoss.com

2 HÅLLBARHETSARBETE

Företagets certifiering

- ISO 9000
- ISO 14000

3 INNEHÅLLSDEKLARATION

Kemisk produkt	Nej
Omfattas varan av RoHS-direktivet	Nej
Innehåller produkten tillsatt nanomaterial, som är medvetet tillsatta för att uppnå en viss funktion	Nej
Varans vikt	0,164 - 0,228 kg

Vara / Delkomponenter

Koncentrationen har beräknats på hela varan

Ingående material /komponenter	Vikt-% i komponent	CAS-nr (alt legering)	EG-nr (alt legering)	Vikt % i produkt	Kommentar
Glue PET-foil, acrylid adhesive				1%	
Slide lac Bonderite L GP				1%	
Grease Molykote PG-75				1%	
1-Butene		106-98-9	203-449-2	<1%	
n-butan (innehållande 0,1% butadien (203-450-8))		106-97-8	203-448-7	<1%	
Polyetersulfon, Polyethersulfone, PES		Övrigt, polymer		<1%	
Polykarbonat, PC		25037-45-0	Saknas	<1%	
Poly(thiophenylene), PPS, Poly(phenylene sulfide), polyphenylene sulfure		9016-75-5		1 - 2,5%	
Polyamid (PA)		Övrigt, polymer		1 - 2,5%	
PBT plast (Polybutylentereftalat)		26062-94-2	Saknas	25 - 35%	
ABS plast		9003-56-9		15 - 20%	
Zink alloy Z410		Övrigt, metaller	EN 12844	0%	
Mässing CW452K (CuSn6), Pb 0,02%		Övrigt, metaller		5 - 10%	
Steel. spring wire EN10270-1		Övrigt. metaller	EN 10270-1	8 - 12%	
Stål EN 1.3505, C,Si,Mn,Cr (100Cr6, 2S135, 535A99, 52100)		Övrigt, metaller		<1%	
Steel band 1.0873 DC06		Övrigt. metaller		20 - 25%	
Olegerat stål EN 1.0338, DC04 (RRSt14, CR1, FeP04, SS1147 Svartplåt)		Övrigt, metaller		1 - 2,5%	

Del av materialinnehållet som är deklarerat

Särskilt farliga ämnen

Varan innehåller INTE några ämnen med särskilt farliga egenskaper (Substances of very high concern, SVHC-ämnen) som finns med på kandidatförteckningen i en koncentration som överstiger 0,1 vikts-%

Utgåva av kandidatförteckningen som har använts

2018-06-27 00:00:00

Övrigt

Hänsyn har inte tagits till iBVDs redovisningskrav vid redovisning av ingående ämnen.

4

RÅVAROR

Återvunnet material

Innehåller varan återvunnet material: Nej

Träråvara

Träråvara ingår i varan: Nej

5

MILJÖPÅVERKAN

Finns en miljövarudeklaration framtagen enligt EN15804 eller ISO14025 för varan

Ej angivet

Finns annan miljövarudeklaration

Ej angivet

6

DISTRIBUTION

Beskrivning av emballagehantering för distribution av varan

Inget system för återtagande av eller återvinning av förpackning. Produkten ligger i papperskartong.

7

BYGGSCHEDET

Ställer varan särskilda krav vid lagring?

Ja

Förvaras inomhus vid max temperatur 50 grader Celsius

Ställer varan särskilda krav på omgivande byggvaror?

Nej

8

BRUKSSKEDET

Finns skötsel­anvisningar/skötsel­råd?	Ja
Finns en energimärkning enligt energimärkningsdirektivet (2010/30/EU) för varan?	Ej relevant

9

RIVNING

Kräver varan särskilda åtgärder för skydd av hälsa och miljö vid rivning/demontering?	Nej
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10

AVFALLSHANTERING

Omfattas den levererade varan av förordningen (2014:1075) om producentansvar för elektriska och elektroniska produkter när den blir avfall?	Nej
---------------------------------------------------------------------------------------------------------------------------------------------	-----

Är återanvändning möjlig för hela eller delar av varan?	Nej
---------------------------------------------------------	-----

Är materialåtervinning möjlig för hela eller delar av varan?	Ja
--------------------------------------------------------------	----

Alla metalledlar kan smältas ned och återanvändas. Alla plastdelar kan malas ned och återanvändas som nytt råmaterial

Är energiåtervinning möjlig för hela eller delar av varan?	Nej
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Har leverantören restriktioner och rekommendationer för återanvändning, material- eller energiåtervinning eller deponering?	Ja
-----------------------------------------------------------------------------------------------------------------------------	----

Alla metalledlar kan smältas ned och användas som nytt råmaterial.
Alla plastdelar kan antingen malas ned och användas som nytt råmaterial eller brännas för att ge energi.

När den levererade varan blir avfall, klassas den då som farligt avfall?	Nej
--------------------------------------------------------------------------	-----

Avfallskod (EWC) för den levererade varan	Ej angivet
-------------------------------------------	------------

RSK-nummer	Eget Artikel-nr	GTIN
481 90 54	013G2990	5702420048116
481 90 55	013G2992	5702420048123
481 90 56	013G2970	5702420048147
481 90 57	013G2972	5702420048154
481 90 58	013G2977	5702420048161
481 90 59	013G2978	5702420048178

Produktdatablad RA2000__keym_energy_VDTBD307.pdf

Prestandadeklaration

Säkerhetsblad

Miljövarudeklaration

Skötselansvisning

Övriga bifogade dokument

-RA2000 sensors BVB-assessment 2016-09-30.pdf

Datablad

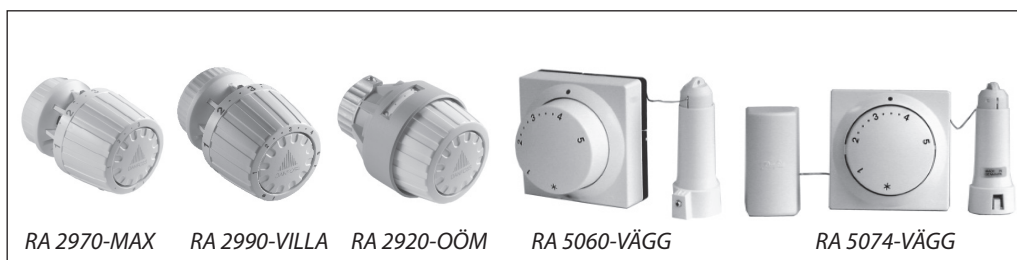
Regulatordelar RA 2000

Användning



027

Certifierade enligt
EN 215



RA 2000 är självverkande proportionalregulatorer med litet P-band. De gasfyllda termostaterna ger en markant bättre reglering än andra existerande givarprinciper vilka reagerar upp till 70% långsammare än RA 2000. Gratisvärme utnyttjas på så sätt maximalt och övertemperatur efter nattsänkning är minimal.

Radiatortermostat RA 2000 används för automatisk reglering av värmeavgivningen från radiatorer och konvektorer. Regulatordelar i olika utförande gör termostaten anpassad för installationer där möbler och gardiner annars skulle försämra reglerfunktionen. Tekniska data uppfyller kraven i EN 215-1.

Samtliga termostater finns med kapillär-rörsförbunden givare. Det tunna och smidiga kapillär-röret, 2 m långt, är upprullat runt temperaturgiva-rens bulb, endast erforderlig längd dras ut.

- RA 2990 och 2992-VILLA för installation där temperaturbegränsning ej krävs, t.ex. i villa.
- RA 2970 och 2972-MAX för installation i hyreshus, kontor m.m. Temp. begränsad till ca 21 °C rumstemp.
- RA 2920 och 2922-OÖM med förstärkt skydd mot åverkan.
- RA 5060 och 5074-VÄGG med separat givare och inställningsdel.

MAX- och VILLA-modellerna har den nyut-vecklade snäpp-kopplingen som underlättar monteringen väsentligt. Genom ett tryck på termostaten utlöses snäpp-mekanismen och termostaten är monterad. MAX-modellen har en låsning som säkrar termostaten mot demontering. VILLA-modellen kan demonteras och har en täckplatta på låsningsmekanismens plats.

Beställningsnummer och data

Typ	Utförande	Inställnings- område	Kapillär-rörs- längd	Best nr	RSK nr
RA 2990 VILLA	Inbyggd givare	7-28 °C ²⁾	-	013G2990	481 90 54
RA 2992 VILLA	Separat givare	7-28 °C ²⁾	0-2 m ¹⁾	013G2992	481 90 55
RA 2970 MAX	Inbyggd givare	7-21 °C ⁴⁾	-	013G2970	481 90 56
RA 2978 MAX	Inbyggd givare	7-22 °C ⁴⁾	-	013G2978	481 90 59
RA 2977 MAX	Inbyggd givare	7-23 °C ⁴⁾	-	013G2977	481 90 58
RA 2972 MAX	Separat givare	7-21 °C ⁴⁾	0-2 m ¹⁾	013G2972	481 90 57
RA 2920 OÖM	Inbyggd givare	7-28 °C ²⁾	-	013G2920	481 90 60
RA 2922 OÖM	Separat givare	7-28 °C ²⁾	0-2 m ¹⁾	013G2922	481 90 61
RA 5062 VÄGG ⁷⁾	Separat givare och inställn.del	10-30 °C ²⁾⁵⁾	2 m	013G5062³⁾	481 84 51
RA 5065 VÄGG ⁷⁾	Separat givare och inställn.del	10-30 °C ²⁾⁵⁾	5 m	013G5065³⁾	481 84 52
RA 5068 VÄGG ⁷⁾	Separat givare och inställn.del	10-30 °C ²⁾⁵⁾	8 m	013G5068³⁾	481 84 53
RA 5074 VÄGG ⁷⁾	Sep. givare och sep. inställn.del	10-30 °C ²⁾	2+2 m	013G' ") &⁶⁾	481 84 68

- 1) Termostat med lös givare levereras med kapillär-röret upprullat på temperaturgivarens bulb. Vid montage dras endast erforderlig längd ut.
- 2) Samtliga termostater kan min. och max. begränsas inom det angivna temperatur-området.
- 3) Fjärrinställningstermostaterna levereras med adapter till RA-ventiler.
- 4) Rumstemperatur vid normala inbyggnadsförhållanden. OBS! Kalibreringen påverkas av tilloppstemperaturen med 0,7 °C/30 °C.
- 5) Fjärrinställningstermostatens temperaturområde 10-30 °C kan ändras till 11-33 °C eller 3-23 °C.
- 6) Lev med adapter till RA.
- 7) K_v-värden vid olika p-band, se flik 15, Tabeller och diagram.

Energimärkning



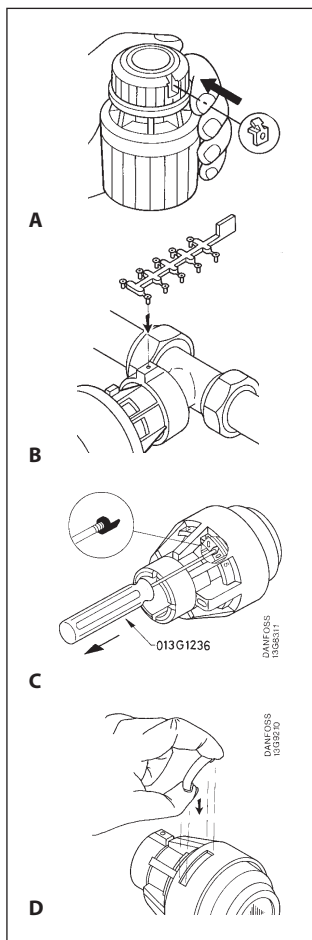
Manufacturer: **Danfoss A/S**
Model: **RA 2990**
Registration number: **10036-20110321**



Information: www.tell-online.eu

A Label of EUnited Valves
European Valve Manufacturers Association

Tillbehör



RA 2920/22-OÖM inställningsskala kan döljas med en täckplatta, vilket minskar risken för oönskade ingrepp. Täckplattan monteras i kåpens ruta.

Mejselset

Danfoss mejselset innehåller:

- En 2 mm insexmejsel som används till montering av RA 2920/22-OÖM och 5060-VÄGG.
- Skruvmejsel med specialgänga till:
 - montering av begränsningspinne, för låsning och begränsning av inställningsområdet på RA 2920/22-OÖM.
 - deaktivering av plomberingsmekanism för RA-snäpp.

(A) *Plomberingsmekanism för RA-VILLA*
Plomberingsmekanismen monteras i låsringen istället för täckplattan. Mekanismen aktiveras när termostatdelen är monterad, och kan bara demonteras med Danfoss special-verktyg.

(B) *Plomberingsplugg till låsskruv för RA 2920/22-OÖM*

Plomberingspluggen monteras i låsskruvens sexkantshål så att inte oönskad demontering kan ske.

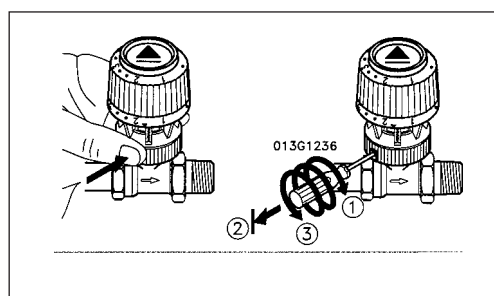
(C) *Begränsningspinne för RA 2920/22-OÖM*

Begränsningspinne till RA 2000, utförandet är sådant att inställningen på termostaten kan ändras med hjälp av Danfoss specialverktyg (termostaterna levereras med 2 st begränsningspinnar).

(D) *Täckplatta för inställningsskala*

Benämning	Anmärkning	Best nr
Adapter till RA 5060	För RAVL-ventil 26 mm hals	013G5192
Adapter till RA 5060	För RAV-ventil 34 mm hals	013G5193
Kompaktadapter RA 5060	För RA-ventil	013G5190
Begränsningspinnar	Till RA 2990/2992 (30 st)	013G1215
Begränsningspinnar	Till RA 2920/2922 (30 st)	013G1237
Mejslar till låsskruv/begränsning/plombering		013G1236
Packbox	(10 st/förpackning)	013G0290
Plomberingsplugg till sexkantskruv	(5 x 10 st/förpackning)	013G1232
Plomberingsmekanism	För RA-VILLA (20 st/förpackning)	013G5241
Sockel och klammer	För givare RA	013G1230
Täckplatta	För skala på RA 2920-OÖM (20 st/förpackning)	013G1672

Plombering

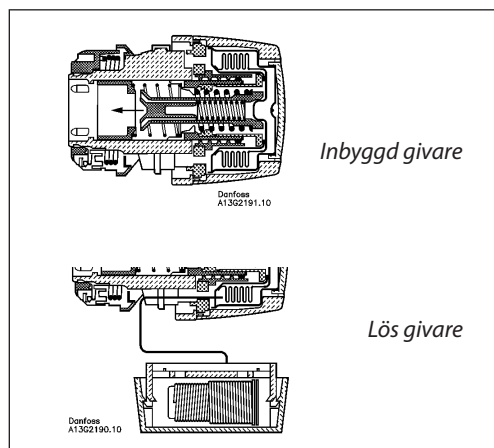


När termostatdelen är monterad trycks plomberingsmekanismen in helt.

Plomberingsmekanismen demonteras:

1. Specialskruvmejsel skruvas in i hålet
2. Drag ut skruvmejsel
3. Skruva ut skruvmejsel

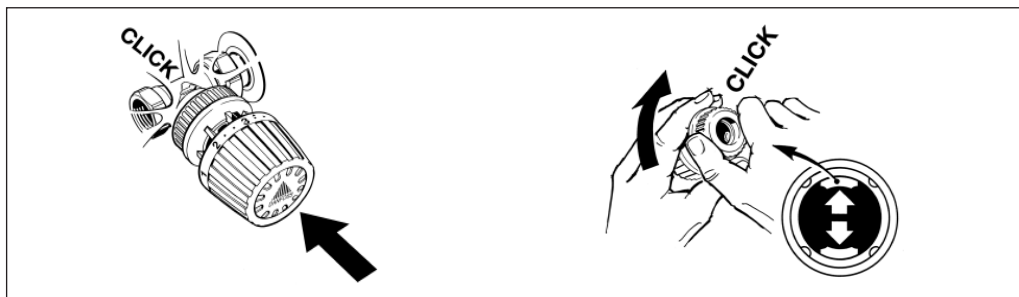
Konstruktion



Radiatortermostaten består av termostat RA 2000 och ventil RA-N eller RA-G. Delarna beställs var för sig. Ventilens packbox kan bytas under drift.

1. Inbyggd givare
2. Bälgelement
3. Inställningsvred
4. Inställningsfjäder
5. Begränsningspinne
6. Lös givare
7. Kapillärrör

Montering

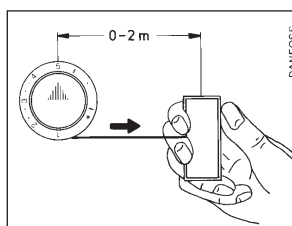
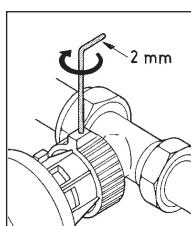


Vid montering av lös givare dras endast erforderlig längd av kapillärroret ut.

Montering av RA-VÄGG, se separat instruktion som bifogas produkten.

Termostatdelar med snäpp-koppling monteras lätt och utan verktyg: Tryck på termostatdelen på ventilhuset. En spänning medför att låsningsmekanismen utlöses vid beröring mot ventilhuset.

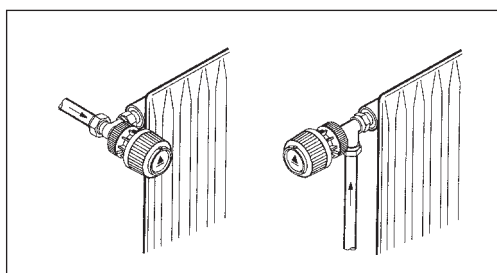
Från fabrik är låsningsmekanismen spänd och montageklar. Vid upprepat montage och demontering spänns mekanismen manuellt genom att vrida på spänningen.



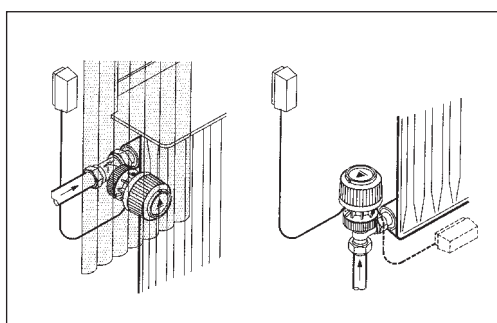
På OÖM och fjärrinställningselement dras låsskruven med en 2 mm sexkantnyckel.

Val av termostat

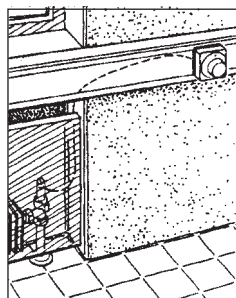
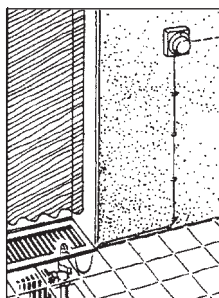
Val av termostat görs enligt nedan:
Termostatens givare ska alltid kunna känna rumstemperaturen



Termostat med inbyggd givare
En radiatortermostat med inbyggd givare bör användas på en radiator där rumsluften kan cirkulera förbi termostaten.



Termostat med lös givare
En radiatortermostat med lös givare bör användas när termostaten monteras lodrät uppåt, eller när termostaten monteras på radiator där gardiner, möbler, breda fönsterbänkar eller drag påverkar inställningen.
I svårbedömda inbyggnadsförhållanden bör alltid en radiatortermostat med lös givare användas.
Fjärrinställningstermostat



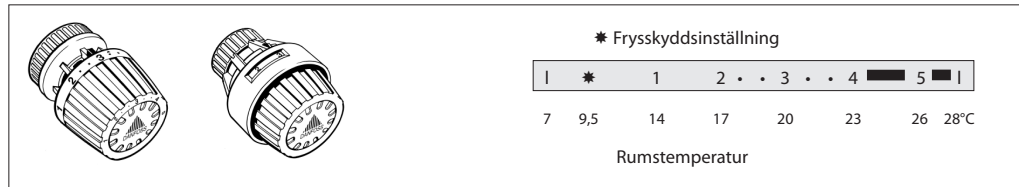
Fjärrinställningstermostaten används när en radiator eller en konvektor är monterad så att det omöjliggör en inställning av temperaturen.
Fjärrinställningstermostaten har givaren och inställningsdelen sammanbyggda. Därför ska fjärrinställningstermostaten monteras där en enkel inställning kan göras och givaren även kan registrera rumstemperaturen.

Inställning

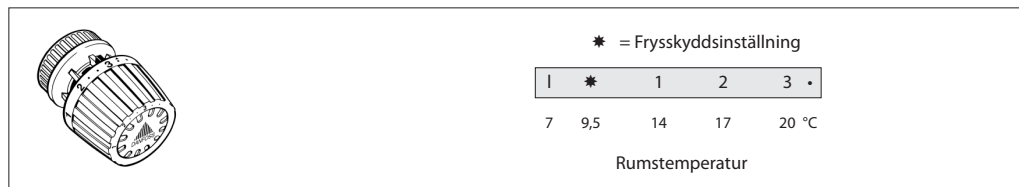
Temperaturen som motsvarar termostatsens inställningsiffror framgår av temperaturskalorna nedan. De angivna värdena är vägledande, på grund av att den uppnådda temperaturen ofta kan vara

påverkad av bl a inbyggnadsförhållanden. Temperaturskalorna är angivna i europeisk standard vid 2 K P-band. Normalt fås en rumstemperatur på ca 20 °C vid inställning 3.

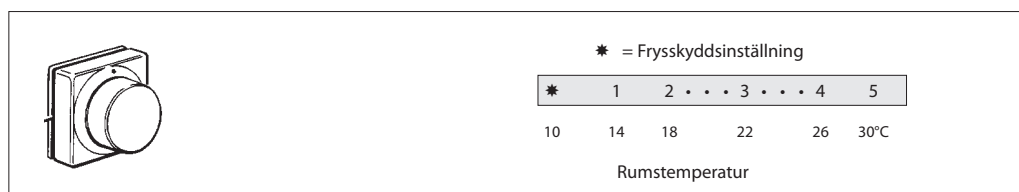
RA 2990, RA 2992-VILLA
RA 2920, RA 2922-OÖM



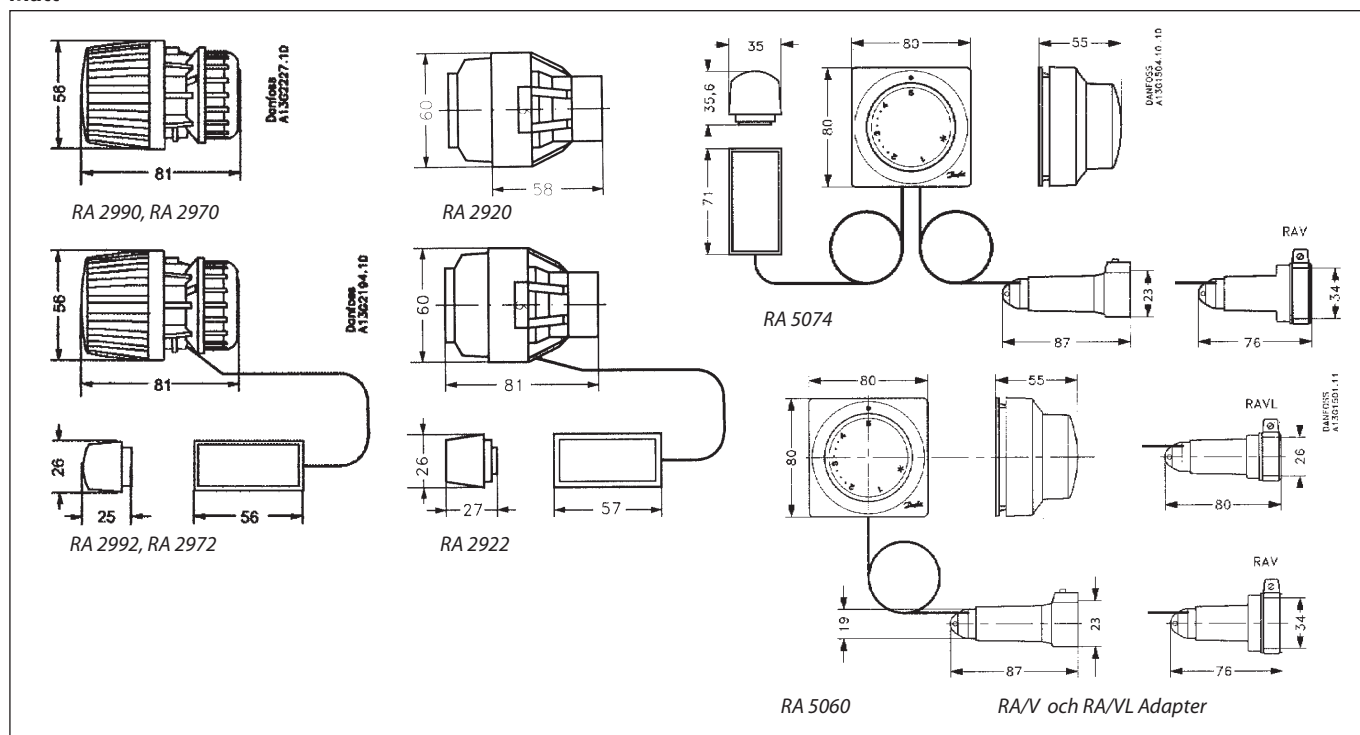
RA 2970, RA 2977,
RA 2978, RA 2972-MAX



RA 5062, RA 5065,
RA 5068, 5074-VÄGG



Mått



Danfoss AB

S-581 99 Linköping
Industrigatan 5
Tfn 013-25 85 00
Fax 013-13 01 81
www.danfoss.se

Danfoss tar ej på sig något ansvar för eventuella fel i kataloger, broschyrer eller annat tryckt material. Danfoss förbehåller sig rätt till (konstruktions) ändringar av sina produkter utan föregående avisering. Det samma gäller produkter upptagna på inbestående order under förutsättning att redan avtalade specifikationer ej ändras.

Byggvarubedömningen's guideline and information requirements for assessment of product, Version 2016-1.

These guidelines describe what information that Byggvarubedömningen requires for assessment of articles and chemical products. Information about the article or chemical product can be provided in this document, alternatively refer to another documentation in which the corresponding information is given.

1. Product information

Product

Product name:	Radiator thermostat	
Article No.: <i>Specify the type of number, for example RSK, E number, EAN, GTIN or supplier's article number. This should also be stated on the application.</i>	013G2970; 013G2972; 013G2977; 013G2978; 013G2990; 013G2992	
Product description: <i>On application, please attach a product data sheet or similar documentation.</i>	Self-acting radiator valve thermostats for ambient temperature control in rooms having water based heating systems.	
Type of product:	<input type="checkbox"/> Chemical product	<input checked="" type="checkbox"/> Article
Date (year, month, day) of preparation/revision:	2016-09-30	

Supplier/Manufacturer

Supplier:	Danfoss	
Manufacturer if other than the supplier: <i>Voluntary information</i>		
Supplier contact:	Anders Gustavsson	
Address:	Danfoss AB SE 58199 Linköping	
E-mail:	anders.gustavsson@danfoss.com	
Phone number:	+46 1325 8586	

Supporting documentation

Has a declaration of performance, in line with the Swedish Construction Products Regulation, been prepared for the product?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, attach the declaration of performance with the application</i>		
Is the article/product an electronic product and covered by the RoHS-directive (2011/65/EU)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, attach an "EU Declaration of Conformity", or alternatively another certificate that attests that the product corresponds to the requirements according to the RoHS-directive (2011/65/EU), together with the application</i>		
If the article/product is an electronic product that is covered by an exemption according to RoHS-directive (2011/65/EU), specify which exemption and date (year, month, day) when the exemption expires if time-limited:	Exemptions according to RoHS: Date:	

2. Declaration of contents:

Does the product or any of its subcomponents, if it is a composite product, contain substances with particularly hazardous properties (Substances of Very High Concern, SVHC-substances), which are included in the Candidate List at a concentration above 0.1 weight%?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, specify which substances in Table 1.</i>		
State the date (year, month, day) for control the Candidate List.	Date:	2016-09-30
The concentration is calculated at component level established on the principle "once a product, always a product" principle. The Candidate List is available at: http://echa.europa.eu/sv/candidate-list-table .		

Specify the total content of the article or the chemical product, **on delivery**, in Table 1, or alternatively attach other documentation that provides the corresponding information. For instructions, please refer to the "Declaration of contents, BVB's declaration requirements, 2016-1", which is found at the end of this document.

Table 1, Contents of included substances and material (declaration of content in accordance with requirements)

Included substances and material	EG No./CAS No. (alternatively alloy)	Weight % (of entire product)	When applicable, state for which subcomponent	Weight% (of substance in subcomponent)	Comments (state eventual application of non-harmonized classifications)
Steel	1.0338	1-2.5%			
Steel	1.0873	20-25%			
Steel	1.3505	<1%			
Steel, spring wire	EN 10270-1	8-12%			
Stainless steel	1.4435	1-2.5%			
Tin bronze	CW452K	5-10%			
Zinc alloy	Z410	1-15%			
Plastic	ABS	15-20%			
Plastic	PBT, 30%GF	25-35%			
Plastic	PA, 0-35%GF	1-2.5%			
Plastic	PPS, 40%GF	1-2.5%			
Plastic	PC	<1%			
Plastic	PES	<1%			
Gas, N-Butane	106-97-8	<1%	Charging media		
Gas, 1-Buten	106-98-9	<1%	Charging media		
Grease	Molykote PG-75	<1%			
Slide lac	Bonderite L GP	<1%			
Glue (tape)	PET-foil, acrylid adhesive	<1%			

Are all substances reported in percentages down to 0.01% in Table 1? <i>(enable assessment with regard to the Recommended level)</i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If not, does the report fulfill the instructions for the Accepted level, which is described in "Declaration of contents, BVB's declaration requirements, 2016-1", which is found at the end of this document</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If any deviations from BVB's reporting requirements exist, specify these in the comments in Table 1, or alternatively here.	Other comments:	

If the chemical composition differs after application, then the content of the applied product is given in Table 2. This applies to chemical products. If the content is unchanged, no information needs to be provided in the table.

Table 2, Contents for applied products (full content in accordance with declaration requirements)

Included substances and material	EG No./CAS No.	Weight% (of the applied product)	Comments (state any application of non-harmonized classifications)
If any deviations from BVB's reporting requirements exist, specify these in the comments in Table 2, or alternatively here.	Other comments:		

Nanomaterial

Does the product contain any nanomaterial that has been purposefully added to achieve a specific function? <i>Information regarding whether nanomaterial has been added to achieve a specific function must be stated, but has no impact on the assessment.</i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, specify the material.</i>	Material:	

3. Recycled raw material

Does the product contain recycled material?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, fill in Table 3.</i>		

If the product consists of recycled materials specify the material and the percentages of the total weight of the product, in Table 3, Recycled materials.

Table 3, Recycled material

Material	Percentage (%) of the total product's weight	Percentage (%) of the recycled material that has not reached the consumer level, such as production waste, etc. (pre-consumer)	Percentage (%) of the recycled material that has reached the consumer level (post-consumer)	Comments

If wood raw material is included

Can the product be ordered with sustainability certificates for the wood raw material? <i>E.g.: FSC and PEFC</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Explain if the certificate does not cover all of the wood raw material:		
<i>If yes, attach a certificate/assurance that the product can be ordered with a sustainability certificate together with the application.</i>		
<i>If no, state the country where the wood raw material was harvested.</i>	Country of harvest:	
Is the wood species or origin in the CITES appendix for endangered species?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

4. The production phase

Has an Environmental Product Declaration (EPD) been prepared?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, enclose the EPD (Environmental Product Declaration) or other environmental product declaration together with the application.</i>		

5. Distribution of the completed product

Describe the management of packaging for the distribution of the product <i>State whether any system for taking back or recycling packaging or any other specific return system is used.</i> <i>Specify the packaging material used and which system of producer responsibility for packaging the supplier is affiliated to.</i> <i>Enter the proportion of recycled material, if any, included in the packaging.</i>	Description of the packaging: No system for taking back or recycling of packaging. All products are in cardboard box.
Other information:	

6. Construction and usage phase

Are there any special requirements such as storage conditions etc. for the product during storage?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<i>If yes, describe:</i> To be stored indoor and at max temperature at 50°C			
Are there any special requirements for adjacent building products because of this product?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
<i>If yes, describe:</i>			
Are there any operating/care instructions for the product?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
<i>If yes, attach the documentation with the application.</i>			
Is the product energy labelled in accordance with the Energy Labelling Directive (2010/30/EU)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Not relevant
<i>If yes, state class (G to A, A+, A++, A+++):</i>	Class:		

7. Waste management

Does the product require special measures to protect health and the environment in conjunction with demolition/dismantling?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, describe:</i>		
Is the product covered by the WEEE-directive 2012/19/EU (Swedish ordinance (2014:1075) on Producer Responsibility for electrical and electronic products when it becomes waste?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is it possible to re-use all or parts of the product? (can the product be reused within the product's expected lifetime)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, describe:</i>		
Is material recycling possible for all or parts of the product when it becomes waste?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, describe:</i> All metal parts can be re-melted and used as new raw material All plastic parts can be re-grinded and used as new raw material		
Is energy recycling possible for all or parts of the product when it becomes waste?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the supplier have any restrictions and recommendations for reuse, material- or energy recycling or disposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, specify which:</i> All metal parts can be re-melted and used as new raw material All plastic parts can either be re-grinded and used as new raw material or burned to give energy		
When the supplied product becomes waste, is it classified as hazardous waste?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, specify the waste code:</i> The Swedish waste ordinance (2011:927) https://www.notisum.se/rnp/sls/lag/20110927.htm	Waste code:	

8. Indoor environment

Has the product a critical moisture condition: <i>Information regarding whether critical moisture conditions leading to microbial growth apply for the material/product should be stated, but will not impact the assessment.</i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, specify which:</i>		
Is the product intended for use indoors?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, has emission data been produced for volatile organic compounds?</i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, attach the report/certificate together with the application.</i>		
<i>If no, is there any motivation for why emission data for volatile organic compounds is not relevant for the product?</i>	Motivation: Mechanical product without any emission	
Is the product a chemical product intended for indoor use?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>If yes, has emission data been produced for volatile organic compounds?</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<i>If yes, attach the report/certificate together with the application.</i>		
<i>If no, is there any motivation for why emission data for volatile organic compounds is not relevant for the product?</i>	Motivation: Mechanical product without any emission	

Certificate of substance content and concentrations version. 4.0

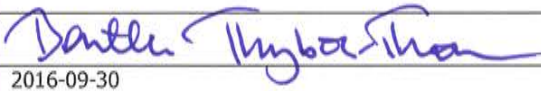
This certificate is required for the Recommended assessment level for chemical contents. This page should be printed to be signed and uploaded separately in PDF-format in connection with the application.

Certificate of declaration of substance content

For the products specified below, with their stated article numbers, the following is certified: <i>Choose whether to certify alternative A or B.</i>	
A <input type="checkbox"/>	It is hereby certified that concentrations of the included substances down to 0.01 weight% have been reported, and that cadmium and mercury do not occur in the product. or: The substances included are reported in line with the instructions for the Declaration of Contents, BVB's reporting requirements 2016-1, and correspond to the reporting requirements for the Recommended level.
B <input checked="" type="checkbox"/>	It is hereby certified that concentrations of the included substances down to 0.1 weight% have been reported, and that cadmium and mercury do not occur in the product. or: The substances included are reported in line with the instructions for the Declaration of Contents, BVB's reporting requirements 2016-1, and correspond to the reporting requirements for the Accepted level.
For the products specified below, with their stated article numbers, the following is certified: <i>Choose whether to certify alternative C or D.</i>	
C <input checked="" type="checkbox"/>	It is hereby certified that the specified product/s do not contain specifically indicated substances and groups of substances in accordance with Table 4, Specifically indicated substances. These have not been added during production and have not been formed through reactions between the substances in the product.
D <input type="checkbox"/>	Unfortunately, we have to notify that the specified products contain specifically indicated substances in accordance with Table 4, Specifically indicated substances. Some of these substances have been added or been formed during reaction between the substances in the product, please see the Declaration of Contents.

Table 4, Specifically indicated substances

Substance group/Substance	Examples of properties
1. Arsenic and its compounds ¹	Toxic, Environmentally hazardous
2. Brominated flame retardants	Potentially PBT/vPvB, PBT/vPvB
3. PFOA (perfluorooctanoic acid)	Persistent, bioaccumulative, probable reproductive toxicity
4. PFOS (perfluorooctanesulfonates)	Potentially PBT/vPvB, PBT/vPvB
5. Organotin compounds	Potentially PBT/vPvB, PBT/vPvB, Toxic, Environmentally hazardous
6. Biocidal product applied on products (surface treatments) to provide a disinfectant or anti-bacterial effect.	Toxic, Environmentally hazardous

<i>Product identification: (designation and article number)</i>	013G2970; 013G2972; 013G2977; 013G2978; 013G2990; 013G2992
<i>State reference (name and version/date) that contains the actual Declaration of Contents:</i>	
<i>Person responsible for making declaration:</i>	Benthe Thyboe-Thomsen R&D Director
<i>Signature:</i>	
<i>Place and date (year, month, day):</i>	2016-09-30

¹ Arsenic, or arsenic compounds, are not permitted to be added to the product. Contamination of used raw materials is not permitted to exceed 10 mg/kg. The concentration limit is set based on regulatory requirements for soil quality to ensure that accepted products do not raise background concentrations through their use or disposal (for example; sludge from sewage treatment works Swedish Ordinance 1998:944, Section 20). The same concentration limits are found in the Swedish Environmental Protection Agency's general guidelines for less sensitive land use (MKM).

Declaration of contents, BVB's declaration requirements, 2016-1

A complete declaration of contents in accordance with the instructions should be made for both products and chemical products. For products, minimum concentrations have to be reported as a weight% for the entire product. The contents can be provided in other documentation, if the reporting instructions are complied with, or alternatively supplemented so that they are in compliance. Reporting requirements for the Accepted level correspond to the requirements for "e-BVD2015".

For the Accepted and Recommended levels, classified substances are needed to be reported in the documentation if concentrations exceed limits (weight%) in accordance with *Table 5, Classified substances*. Those substances that are not included in Table 5 must be reported when concentrations of $\geq 2\%$ occur.

Material and substance contains can be provided in intervals. Examples of accepted intervals are: $\leq 1\%$, 1-2.5%, 2.5-10%, 10-25%, 25-50%, 50-75%, 75-100%. In occasion of large intervals, state the reason for the variance and describe what materials/substances increase or decrease in proportion if the product, for example, comes in different sizes.

If classification is applied that is not covered by harmonized classification, this information requires to be reported in the comments column for that substance.

Table 5, Classified substances

Hazard class	Reporting limit	
	Accepted	Recommended
Carcinogenic categories 1A and 1B (H350)	$\geq 0.1\%$	$\geq 0.01\%$
Carcinogenic category 2 (H351)	$\geq 1\%$	$\geq 0.1\%$
Mutagenic categories 1A and 1B (H340)	$\geq 0.1\%$	$\geq 0.01\%$
Mutagenic category 2 (H341)	$\geq 1\%$	$\geq 0.1\%$
Reproductive toxicity, categories 1A and 1B (H360)	$\geq 0.3\%$	$\geq 0.03\%$
Reproductive toxicity, category 2 (H361)	$\geq 2\%$	$\geq 0.3\%$
Reproductive toxicity effects on or through breastfeeding (H362)	$\geq 0.3\%$	$\geq 0.03\%$
Endocrine disruptors ^{1, 2}	$\geq 0.1\%$	$\geq 0.01\%$
PBT and/or vPvB ³	$\geq 0.1\%$	$\geq 0.01\%$
Skin sensitizers (H317)	$\geq 1\%$	$\geq 0.1\%$
Respiratory sensitizers (H334)	$\geq 0.2\%$	$\geq 0.02\%$
Hazardous to aquatic environments, chronic category 1 (H410)	$\geq 2\%$	$\geq 0.25\%$
Ozone depleting substances (EUH 059 and H420)	$\geq 0.1\%$	$\geq 0.01\%$
Acute toxicity category 1 (H300, H310, H330, H301, H311 and/or H331)	$\geq 0.1\%$	$\geq 0.01\%$
Acute toxicity category 2 (H300, H310, H330, H301, H311 and/or H331)	$\geq 1\%$	$\geq 0.1\%$
Acute toxicity category 3 (H300, H310, H330, H301, H311 and/or H331)	$\geq 2\%$	$\geq 1\%$
Pure or compounds of cadmium (Cd)	$\geq 0.01\%$	$\geq 0.001\%$
Pure or compounds of lead (Pb)	$\geq 0.1\%$	$\geq 0.01\%$
Pure or compounds of mercury (Hg)	Contamination ≥ 2.5 mg/kg (ppm) of active additives must always be reported.	
¹ Endocrine disruptors (EDS list)	$\geq 0.1\%$	$\geq 0.01\%$
² Endocrine disruptors (SIN list)		$\geq 0.01\%$
³ PBT, vPvB (SIN list)	$\geq 0.1\%$	$\geq 0.01\%$
Candidate List	$\geq 0.1\%^*$	$\geq 0.01\%$
Other classifications or unclassified substances and material	$\geq 2\%$	$\geq 2\%$

*Substances on the Candidate List have to be reported at component level.

Descriptions of material

Substances should be reported with their CAS- or EC number. Exemptions for certain material can be performed in accordance with the following instructions.

Metals should always be reported together with their alloy number. Alternatively, substances comprising more than 0.01% of the alloy has to be specified in the documentation.

Plastics and rubber materials should be reported together with their name so that it is clearly which monomers that are included, for example, acrylonitrile butadiene styrene (ABS), polyethylene (PE), etc. Additives that have not formed polymers should always be reported in accordance with Table 5 (for example pigments, plasticizers, stabilizers, etc.). BVB always requires that compounds used as plasticizers is declared for PVC plastics ($\geq 2\%$).

Plastics/polymers with descriptions in line with the following list are accepted without specification of monomers.

- Polycarbonate (pertains to bisphenol A based polycarbonates)
- Polyester (monomers must be specified for halogenated polyesters)
- Polyurethane (monomers must be specified for halogenated polyurethanes)
- Fiberglass reinforced epoxy resin laminates FR4 (pertains to tetrabromobisphenol A based polymers)

Other materials with the following descriptions are accepted without clarification or detailed description of their components as the materials normally consist of:

- Glass
- Concrete

Examples of designations of plastics/polymers and other material descriptions that require further clarification are:

- Dispersion polymerization
- Copolymer
- Thermoplastic elastomers (TPE)
- Thermoplastics
- MS polymers
- Mineral fillers

References can be given for composite products to other products (subcomponents) that have been assessed in BVB's system and which have been provided with a BVB ID.

Complex products can be referred to another product (subcomponent), which are estimated in BVB's systems and provided with BVB ID.