

ENGINEERING  
TOMORROW



March 2021 | Danfoss Cooling & Sensing Solutions

# TECH INSIDER



## Introduction

Danfoss Tech Insider keeps you well informed on the latest news and updates in Danfoss Cooling and Sensing Solutions. The content is intended to give a quick overview of core technical news and updates in our product portfolio, including links to relevant documentation and more information.

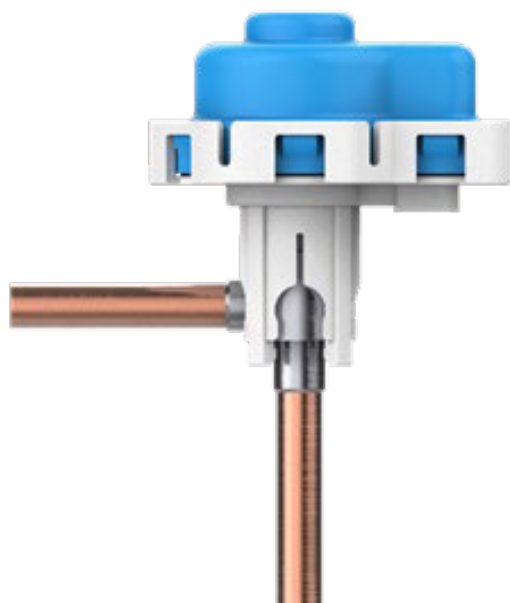
Danfoss Tech Insider is sent out, on a monthly basis, to ensure you are always up to date with the latest innovations and changes made to Danfoss products and solutions.

We hope you will enjoy reading Danfoss Tech Insider!

## Table of Contents

New Electric Expansion Valve ETS 5M .....	3
Thermostatic Expansion Valves TUA/TUAE for New A2L Refrigerants .....	4
Introduction of New High Temperature SVA Stop Valves .....	5
Water Regulating Valve, Type WVFX 32–40 - New Setting Section .....	7
Contactors and Motor Starters: Discontinuation of Motor Control Gear (MCG) Portfolio.....	8
Webinars live & on-demand .....	9
Details for Additional Information.....	9

## New Electric Expansion Valve ETS 5M



We are pleased to announce the release of the new ETS 5M range, which is an important addition and completion to the already existing portfolio of electric expansions valves, ETS.

With many years of experience within electric expansion valves the new range of ETS 5M offers high reliability and precise solutions for expansion and flow control in a wide range of refrigeration and air conditioning systems. The valve design uses uni-polar drives, and different control solutions exist that are compatible with uni-polar drives.



### Typical applications:

- VRF/Multi-split air conditioning systems
- IT cooling
- Domestic heat pumps
- Bus /Transport application
- Other commercial OEM applications

### Key Features:

- Enables energy efficiency of the system
- Low flow noise
- Precision flow control with high resolution
- Compact and lightweight
- Power saving design
- Proven know-how and high reliability
- Wide range for all common and new refrigerants
- Bi-flow for heat pump applications

### Available product codes

#### ETS 5M Valves

Code Nr.	Description	Qty per format*
034G6202	5M20 H 14X14 ODM	Multi pack 20
034G6203	5M24 H 14X14 ODM	Multi pack 20
034G6204	5M13 L 14X14 ODM	Multi pack 20
034G6205	5M13 U 14X14 ODF	Industrial 40
034G6206	5M13 U 14X14 ODF	Multi pack 20
034G6207	5M17 L 14X14 ODM	Multi pack 20
034G6208	5M17 H 14X14 ODM	Multi pack 20
034G6209	5M20 L 14X14 ODM	Multi pack 20
034G6210	5M20 L516X516 ODM	Industrial 40
034G6211	5M20 L516X516 ODM	Multi pack 20
034G6212	5M24 L 14X14 ODM	Multi pack 20
034G6213	5M24 H 516X516 ODM	Multi pack 20

L, H, U in the table description refers to the connection type

\*I-pack codes are estimated to be available in end Q2 2021.

## ETS 5M Coils

Code Nr.	Description	Qty per format*
034G3801	5M coil 1.5M 5 pin	Multi pack 20
034G3802	5M coil 2.7M 5 pin	Multi pack 20
034G3804	5M coil 1.0M 6 pin	Multi pack 20
034G3805	5M coil 0.7M /I-pack	Industrial 40
034G3806	5M coil 0.7M	Multi pack 20
034G3807	5M coil 2.7M I-pack	Industrial 24
034G3808	5M coil 2.7M	Multi pack 20

Product information: Danfoss store: [ETS 5M](#)

\*I-pack codes are estimated to be available in end Q2 2021.

## Thermostatic Expansion Valves TUA/TUAE for New A2L Refrigerants

Danfoss is now introducing a limited program of new TUA/TUAE thermostatic expansion valves for use with A2L refrigerants R454C, R455A, R1234yf, R1234ze(E) and R454A.

The new T2/TE2 valves may be used in any general application for these refrigerants within the below-mentioned evaporating temperature range.

### Product specifications

Charge range: -40 °C/+10 °C (-40 °F/+50 °F)

Factory setting: 4 °C (7.2 °F)

Refrigerant	Multipack	Type	Connection
R454C	068U3948	TUA	1/4 x 1/2
	068U3950	TUAE	
	068U3949	TUA	6 x 12
	068U3951	TUAE	
R455A	068U3952	TUA	1/4 x 1/2
	068U3954	TUAE	
	068U3953	TUA	6 x 12
	068U3955	TUAE	
R1234yf	068U3956	TUA	1/4 x 1/2
	068U3958	TUAE	
	068U3957	TUA	6 x 12
	068U3959	TUAE	
R1234ze(E)	068U3960	TUA	1/4 x 1/2
	068U3961	TUAE	
	068U3962	TUA	6 x 12
	068U3964	TUAE	
R454A	068U3963	TUA	1/4 x 1/2
	068U3965	TUAE	
	068U3966	TUA	6 x 12
	068U3970	TUAE	

Apart from the suitability for the new refrigerants, the general features of these new TUA/TUAE variants are identical to those of other standard TUA/TUAE valves. Specifications other than those mentioned above, e.g. OEM adapted versions with fixed orifice/setting, are available upon request.

For easy sizing of the TUA/TUAE valves you can either use [Coolselector®2](#) (download) or [Coolselector®2](#) (online)

## Introduction of New High Temperature SVA Stop Valves

The new Top Complete is developed for high temperature applications and is, with the improved specification, approved for temperatures up to 190°C (374°F) and pressures up to 65 bar (943 psi).

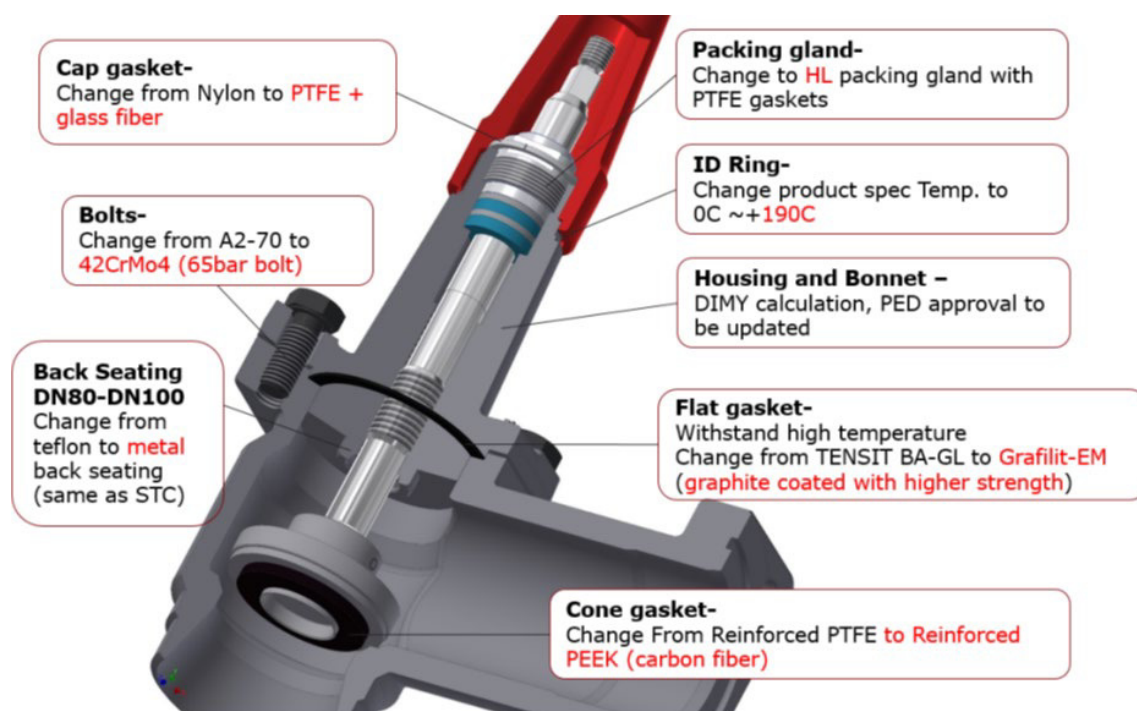
The new variant is called SVA-65BT and comes in a TLP surface coating without any colour painting.

It will be released together with separate part numbers for high temperature gaskets.

At the same time, we have upgraded the PED specifications for the 65 bar parts program housings in the same sizes, to offer a similar higher temperature limit for the housings.

With these improvements you will be able to combine an SVA-65BT Top Complete with the matching 65 bar valve housing to get a complete high temperature, high pressure stop valve.

Details of the change are demonstrated below.



The new part codes for both the Top Complete and valve housing are as follows.

### Affected products

	New Code	Description
1	<b>148B6804</b>	Top Complete SVA-65BT 50 cap
2	<b>148B6805</b>	Top Complete SVA-65BT 65 cap
3	<b>148B6806</b>	Top Complete SVA-65BT 80 cap
4	<b>148B6807</b>	Top Complete SVA-65BT 100 cap
5	<b>148B6808</b>	High temperature gasket 50
6	<b>148B6809</b>	High temperature gasket 65
7	<b>148B6810</b>	High temperature gasket 80
8	<b>148B6811</b>	High temperature gasket 100



Top Complete



High Temperature Gasket



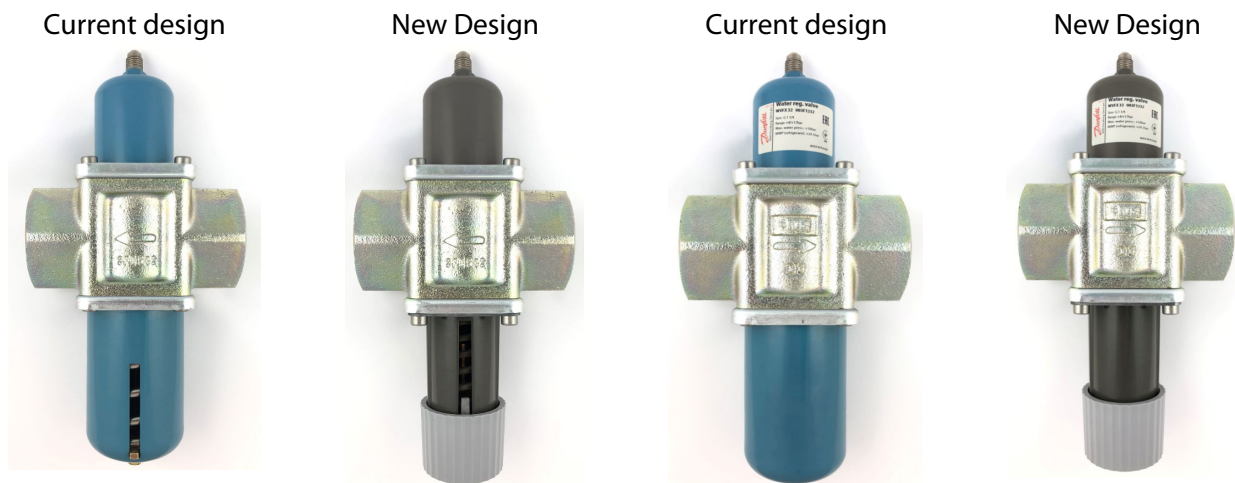
65 bar housing approved for 200 °C

Product group	Sales code	Description	Specifications
Housing SVL 50-100	<b>148B6637</b>	SVL 50 ANSI VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6617</b>	SVL 50 ANSI VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6627</b>	SVL 50 DIN VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6647</b>	SVL 50 DIN VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6618</b>	SVL 65 ANSI VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6638</b>	SVL 65 ANSI VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6628</b>	SVL 65 DIN VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6648</b>	SVL 65 DIN VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6619</b>	SVL 80 ANSI VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6639</b>	SVL 80 ANSI VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6629</b>	SVL 80 DIN VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6649</b>	SVL 80 DIN VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6620</b>	SVL 100 ANSI VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6640</b>	SVL 100 ANSI VALVE HOUSING STR PS65	65 bar, 200 C
	<b>148B6630</b>	SVL 100 DIN VALVE HOUSING ANG PS65	65 bar, 200 C
	<b>148B6650</b>	SVL 100 DIN VALVE HOUSING STR PS65	65 bar, 200 C



## Water Regulating Valve, Type WVFX 32-40 - New Setting Section

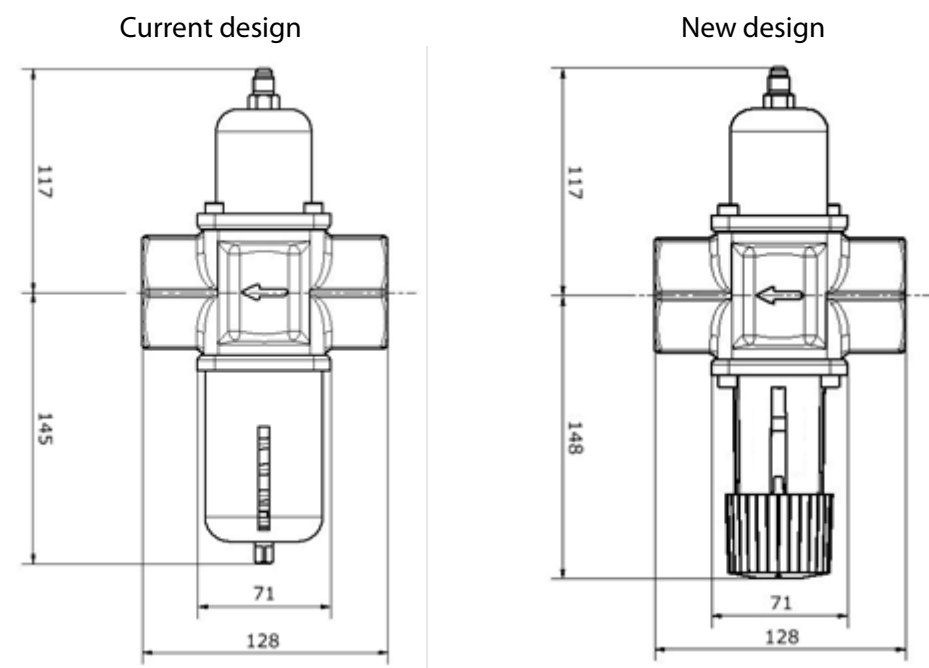
In order to integrate large pressure-operated water valves with other Danfoss WVFX products, the setting section design already used in WVFX 10-25, AVTA, and FJVA will be implemented in WVFX 32-40. Deliveries of the first parts with the new design will start by the end of March 2021.



The new setting section will be equipped in a setting knob what will make setting the valve fast and simple. To integrate the valve with other Danfoss water regulating valves, the bellows element will be painted in gray, the same as the new setting section.

Function and technical specs, including opening curve, valve offset, Kv flow ratio, pressure drops, allowable temperature range, and setting range will not be changed.

### Dimensions



### Affected products:

- 003F1232 WVFX 32 water valve G 1 1/4 in. 4-17 bar
- 003F1240 WVFX 40 water valve G 1 1/2 in. 4-17 bar

For more information, please visit our Danfoss Product Store or contact your local sales representative. Calculation can be done through: [Coolselector®2](#) (download) or [Coolselector®2](#) (online)

## Contactors and Motor Starters: Discontinuation of Motor Control Gear (MCG) Portfolio

Danfoss will stop delivering Ci-tronic products as per December 2021.

The following products will be phased-out:

- Soft-start Controllers type MCI/TCI
- Electronic Contactors type ECI/RCI
- Analogue Power Controllers type ACI
- Accessories for the above

Danfoss Drives will be able to offer replacement code numbers for some of the soft starters. You can see the full list below.

Phased-out product						Replacement MCD 100 (DRIVES)
Code no.	Product Description	Type	Line Voltage	Control Voltage	Max. Load	Code No.
037N0037	Motor Controller	MCI 15	230 V AC	24 - 480 V AC/DC	15 Amp	175G4004
037N0038	Motor Controller	MCI 25	230 V AC	24 - 480 V AC/DC	25 Amp	175G4007
037N0039	Motor Controller	MCI 15	400 V AC	24 - 480 V AC/DC	15 Amp	175G4005
037N0040	Motor Controller	MCI 25	400 V AC	24 - 480 V AC/DC	25 Amp	175G4008
037N0041	Motor Controller	MCI 15	600 V AC	24 - 480 V AC/DC	15 Amp	175G4006
037N0042	Motor Controller	MCI 25	600 V AC	24 - 480 V AC/DC	25 Amp	175G4009
037N0050	Thermal Protection	UP 62-90				037N0052
037N0073	Motor Controller	MCI 3	230 V AC	24-480 V AC/DC	3 Amp	175G4000
037N0074	Motor Controller	MCI 3	400 V AC	24-480 V AC/DC	3 Amp	175G4001
037N0084	Motor Controller	MCI 3	440 V AC	24-480 V AC/DC	3 Amp	175G4002
037N0075	Motor Controller	MCI 3	600 V AC	24-480 V AC/DC	3 Amp	175G4003

The deadline for placing orders (last time buy) is June 30th, 2021 with requested delivery date no later than December 2021.

Orders placed after June 30th, 2021 will only be accepted if stock is available.

We apologize for any inconvenience this issue may cause you. If you have any questions not addressed here, please contact your Danfoss sales representative.



## Webinars live & on-demand

### Cold Rooms webinar: Refrigerant choices A1, A2L & A3

- [Wednesday 31<sup>st</sup> March 2021 at 9:00 – 9:45 and 15:00 – 15:45 CET](#)

### Cold Room webinar series:

- On-demand: [Cold room webinar series | Danfoss](#)

## Details for Additional Information

### UK/IE

[Cooling United Support Hub](#)

[Support Made Easy](#)

customerservice.uk@danfoss.com

Customer Service UK tel: 0330 808 6888

customerservice.ie@danfoss.com

Customer Service IE tel: 1 800 816 868

### Denmark

[Cooling United Support Hub](#)

[Support Made Easy](#)

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### Norway

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[Support Made Easy](#)

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### Sweden

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### Finland

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