

ENGINEERING
TOMORROW



November 2024 | Danfoss Climate Solutions for cooling

TECH INSIDER



Introduction

Danfoss Tech Insider keeps you updated with the latest news on the cooling and industrial products portfolios from Danfoss Climate 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

Release of Production for AK-XM 204A-B Expansion Modules with New Software Version 2.02	3
Small Capacity Solenoid Valve EVL is Ready for Sale.....	4
Discontinuation of the NSK/XSK/YSK Pressure Transmitter Program	5
Alsmart Software Release: Library Package and Chiller-Heat Pump Application Template	5
Alsmart and Alsmart Design Release: AS-CX06Pro+, AS-UI Snap-on, AS-XP05+ and Alsmart Design New Version.	6
StoreView Web (SvW) Release 3.2.1	6
Introduction of CHV-140B Parts Program DN 15-100 for Industrial CO ₂ Applications.....	7
Phase Out of Capacity Controller AK-PC 710, Display EKA 166 and Monitoring Controller AK-LM 350	8
Release of EKE 3470P Pump and Level Controller.....	8
Videos on YouTube	9
Details for Additional Information.....	10

Release of Production for AK-XM 204A-B Expansion Modules with New Software Version 2.02



The production of AK-XM 204A-B with new software version 2.02 has been released.

Due to an end of life of the micro controller previously used on board of our AK-XM 204A-B extension modules and to avoid consequently the risk of a production stop, we have introduced an alternative microcontroller which has led to a new software, while maintaining the same functionality of the products.

The introduction of the new software version 2.02 is also the resolution of the two previously announced issues that were identified regarding the random malfunctioning of AK-XM 204B with the latest PV versions when connected to our AK-PC 7xx Pack Controllers.

Issues were found to be related to timing issues in the I2C communication protocol and with the initialization sequence of the modules.

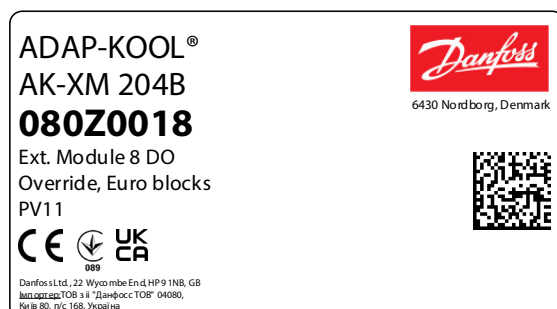
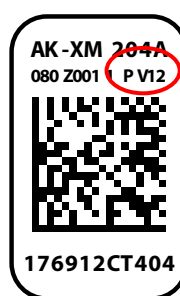
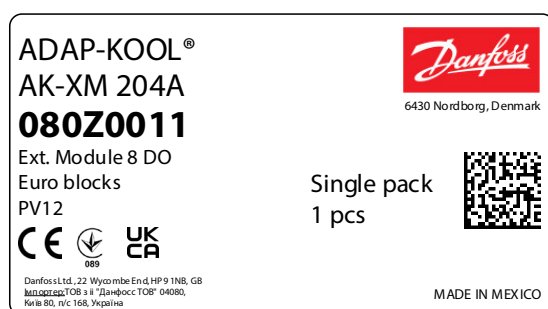
Product equipped with the new software version 2.02 will also present a new product version.

Affected products

Here below the list of affected products with the new product version accordingly:

Part number	Object description
080Z0011 PV 12	AK-XM 204A ext. module 8 DO
080Z0018 PV 11	AK-XM 204B ext. module 8 DO

New product version is visible in the label on the backside of the module and on the packaging label as for example in the picture here below:



The availability of the new software version 2.02 is also providing a definitive solution to Pack manufacturers impacted by the possible malfunctioning due to the use of extension modules with previous product version as follow:

Part number	Object description
080Z0018 PV 10	AK-XM 204B ext. module 8 DO

For Pack manufactures we aim to recall products with that specific previous product version from their stock and/or at their production facility, for us to rework the units uploading the new software version 2.02 (rework for uploading the new software can only be done at our ELC production in Denmark).

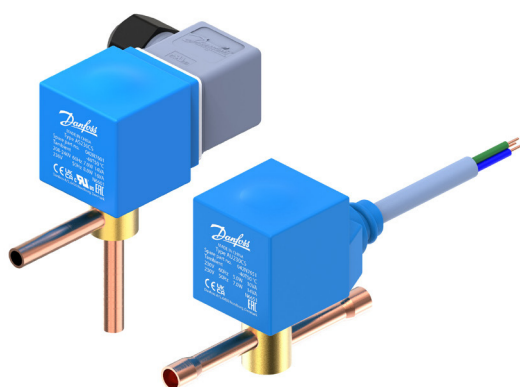
In this regard we ask to follow the procedure of an official Danfoss Compliant/product Recall.

If Pack units already installed and operational in the field and equipped with AK-XM 204B with that specific previous product version, assume that those units will continue to work correctly for the time being.

Then in time, those modules might be substituted with new modules equipped with software version 2.02.

The AK-XM 204A-B with new software version 2.02 will be available in stock from week 45/2024.

Small Capacity Solenoid Valve EVL is Ready for Sale



Small capacity solenoid valve EVL is ready for sale.

EVL is a direct-operated solenoid valve for liquid, suction, and hot gas lines with common fluorinated refrigerants.

There are two capacities, $K_v = 0.1 \text{ m}^3/\text{h}$ and $K_v = 0.17 \text{ m}^3/\text{h}$. Suitable for general refrigerants, including flammable refrigerants.

EVL has straight and angle ways to cover different system pipe designs. Simple and fast mounting of clip-on/off coil.

For detailed technical information, please refer to the [Datasheet](#).

Ordering information

Type	Connection			Opening differential pressure with standard coil (bar)		Kv	Code no.
	Inlet x Outlet	(in)	(mm)	Min. OPD	Max. OPD Gas (AC)	m^3/h	
EVL 2.0 AW	ODMXODM	1/4	6.35	0	31	0.12	032F8800
EVL 2.0 AW	ODMXODM	1/4	6.35	0	28	0.17	032F8801
EVL 2.0 SW	ODMXODM	1/4	6.35	0	31	0.12	032F8802
EVL 2.0 SW	ODMXODF	1/4	6.35	0	31	0.12	032F8803
EVL 2.0 SW	ODFXODF	1/4	6.35	0	31	0.12	032F8804

Discontinuation of the NSK/XSK/YSK Pressure Transmitter Program

Danfoss is going to discontinue the NSK/XSK/YSK pressure sensor program for HVAC applications.

Danfoss has over the last years evolved our pressure sensor program, and the time is right for discontinuing our old range of pressure sensors.

We already have the pressure sensor DST P110 in our program and start of 2025 our new DST P070 will be launched.

We are confident that the new products range of HVAC sensors will serve you better than the product range we are discontinuing.

Among new features are total error band with better accuracy, better temperature resistance both during operation but also when soldering the sensor into the application. Furthermore, the pressure sensor DST P110 can be customized to your requirements.

For more information, please contact your Account Manager or Danfoss Customer Service.

Alsmart Software Release: Library Package and Chiller-Heat Pump Application Template



We would like to inform you that a libraires package and Chiller-Heat Pump application template have been released, with the intention to support software application development on Alsmart controller platform.

Key advantages

- Free to use and easy to be incorporated in project development in Alsmart Design
- Compatibility with Alsmart Design 1.04.x and above
- Help guide included for each library package
- Easy customization of Chiller-Heat Pump template to build-up dedicated projects
- User Guide available for Chiller-Heat Pump template

Affected products

- Alsmart Controllers AS-CX06

The new Libraries package and the Chiller-Heat Pump template are available for download in [Danfoss Partner Portal](#). Please [register for Partner Portal here](#). For more information, please contact your local Danfoss sales representative.

Learn more about Alsmart® [in our webinar here](#)

Read more about Alsmart® on our website: [HERE](#)

Alsmart and Alsmart Design Release: AS-CX06Pro+, AS-UI Snap-on, AS-XP05+ and Alsmart Design New Version

We are pleased to announce the release of the new Alsmart® Universal Controller Platform for sale.

A new Product Version PV04 of AS-CX06 Pro+ has been released as UL certification has been achieved, in addition to AS-UI Snap-on display.

The new expansion module PV01 AS-XP05+ is officially release and a new version of Alsmart Design is available with new functionalities and improvements to be matched with the new device version.

Key advantages

- CE and UL certification available on AS-CX06, AS-UI Snap-on and AS-XP05+
- Improved functionalities on Alsmart Design 1.06.0002
- New expansion module AS-XP05+ with stepper driver embedded and equipped with 17 I/Os

Affected products

Alsmart Controllers AS-CX06Pro+ (080G6000), AS-UI Snap-on (080G6016), AS-XP05+ (080G6012), Alsmart Design version 1.06.0002.

The new AS-CX06 Pro+, AS-UI Snap-on and AS-XP05+ version will be available in stocks from week 43.

The Alsmart Design version 1.06.0002 can be downloaded from [Danfoss Partner Portal](#).

Please [register for Partner Portal here](#).

Learn more about Alsmart® [in our webinar here](#)

Read more about Alsmart® on our website: [HERE](#)

StoreView Web (SvW) Release 3.2.1

Danfoss is pleased to announce that a new version of Storeview Web (SvW) is available, version 3.2.1. The main highlights of this release include improvements for usability, configuration and interface, updated support for release 4.1 of AK-SM 800A, improved stability on desktop app and various bug fixes.

Description

Version 3.2.1. does not introduce major new functionality, but the following features have been added or improved as part of the release.

Usability & Interface

- Added a banner to indicate disabled polling, improved navigation between controllers in the equipment section, introduced a compressor animation, and implemented a login screen for embedded SvW.

Configuration

- Enabled editable settings for equipment, added a database import completion message, ensured consistent button availability, and updated UI elements with the latest ETUI changes.
- Improved the Pack controller Asset detail screen.

Besides that, the following bugs have been fixed with release 3.2.1.

Graphic Editor

- Fixed issues with saving, parameter display inconsistencies, point deletion, background image limitations, and import/migration.
- Addressed text clarity, tree view functionality, and issues with the "Press to Clear" pop-up.

Configuration

- Resolved problems with Refrigeration Copy access, layout wizard behavior, device address input, time settings, and network node downloads.
- Fixed issues related to calculation deletion, scrolling, unit switching, layout display inconsistencies, pack creation without suction, and schedule selection.

Equipment

- Fixed navigation problems, display errors for device data, and errors related to specific device types.
- Resolved issues with KPI banner loading, settings button behavior, parameter display errors, graph functionality for offline controllers, and device count inaccuracies.

Other

- Addressed session control issues, dashboard device repetition, data visibility, alarm updates, information dropdown overlaps, EDF file updates, and schedule page tree view problems.
- Fixed session expiry problems, EDF update issues, schedule page errors, history module delays, data plotting inconsistencies, and security vulnerabilities.

Timing and Availability

Storeview Web (3.2.1) was released from Danfoss on October 2024 but may take up to 24 hours to take effect depending on browser versions.

Storeview Web (3.2.1) is available via browser (svw.danfoss.com) and via desktop app, available from same location. Please note that Storeview Web requires connectivity to your System Manager.

Affected products

StoreView Web supports:

- AK-SM 800 series (Recommended VG08.095 and above)
- AK-SM 800A series (Recommended R3.0.12 spk and above)

More information

More information and news about the current and future updates can be found on [Danfoss.com](https://www.danfoss.com).

Introduction of CHV-140B Parts Program DN 15-100 for Industrial CO₂ Applications



The CHV-140B parts program is now available as an extension of the SVL-140 bar portfolio, designed to meet the growing demand for industrial CO₂ applications. This addition includes check valves ranging from DN 15-100, further enhancing flexibility and scalability for CO₂ refrigeration systems.

Similar to our SVA/FIA-140B parts program introduced earlier this year, the CHV-140B now offers customers the ability to order housing and top components separately. The update also includes new inspection and repair kits, allowing for easier maintenance and an extended service life.

The CHV-140B parts program is designed to enable customers to mix and match components, allowing for customized configurations that best suit your application needs. All CHV-140B components are being UL and CRN certified, ensuring compliance and safety in all your CO₂ system installations. These kits, tailored specifically for DN 15-100, include a glyde ring and puller strap to facilitate piston service, reducing downtime and maintenance complexity.

The CHV-140B check valves and associated kits are now fully released and available for purchase.

Should you have any questions or require further technical support, please do not hesitate to contact your local Danfoss sales representative.

Phase Out of Capacity Controller AK-PC 710, Display EKA 166 and Monitoring Controller AK-LM 350

We would like to inform you that due to end of life of some components we are forced to phase out both capacity controller AK-PC 710 and display EKA 166 and monitoring controller AK-LM 350.

The affected products

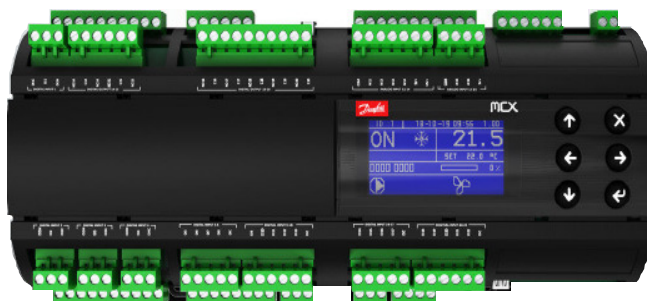
Code no.	Description
080Z0106	AK-PC 710, Controller, UK-D-F-I-NL-E
084B8578	EKA 166, Display
080Z0176	AK-LM 350, Controller, Monitoring W. COP

There is not a one-to-one replacement of these products, but you might find an alternative solution by using and configuring AK-PC 781A-B associated with the MMIGRS graphical display. Similarly, the AK-LM 350 does not have a direct replacement, but in case of customer needs or service requirements, the AK-SM820A could be used as an alternative.

There will also be the possibility of one last time buy order for AK-PC 710, EKA 166 and AK-LM 350 products.

If you need additional information, please contact your local Danfoss sales representative.

Release of EKE 3470P Pump and Level Controller



We are pleased to announce the release of the EKE 3470P pump and level controller.

This product complements our basic EKE 347 level controller, which has been on the market since 2014. Our premium EKE 3470P pump and level controller enables us to support larger ammonia systems, including CO₂ systems, and features smart pump control and safety functions.

It also offers enhanced communication capabilities for easier connectivity to PLCs and the Danfoss System Manager SM 800.

Description

The EKE 3470P pump and level controller provides a complete solution for controlling liquid levels in horizontal or vertical vessel recirculatory refrigeration systems. It is easy to set up and use. The LCD display and simple keypad combine to create a user-friendly interface for setting points and calibrations.

Features

- Select either level sensor (AKS 4100) or level switch (LLS 4000) mode to measure or detect liquid level
- Proportional-integral (PI) control of motorized valves for liquid level regulation
- Multiple pump pressure sensors can be used
- Delta pressure sensors can be used to measure both vessel and pump pressures
- Automatic pump control with a Smart Mode option
- Pump runtime hours and equalization are supported for up to three pumps
- An integrated superheat controller enables oil rectification
- Motor protection is included
- Modbus RTU and Modbus TCP/IP communication protocols are supported
- Connects to the SM 800
- Software updates and parameter saving are possible via USB

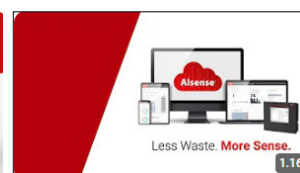
Sales code number

Sales code number	Description
080G5012	EKE 3470P Pump and Level controller

For more information, please visit Danfoss Product Store or contact your local sales representative.

Videos on YouTube

- EKE 100 configuration | Basic navigation- [LINK](#)
- EKE 100 configuration | Basic settings - [LINK](#)
- EKE 100 configuration | Configuring the valve driver- [LINK](#)
- EKE 100 configuration | Configuring the superheat controller- [LINK](#)
- EKE 100 configuration | Configuring manual valve operation- [LINK](#)
- Commercial & Industrial Heat Pumps | European Heat Pump day - [LINK](#)
- Danfoss BOCK® Plusbox | Modular and reliable condensing unit - [LINK](#)
- Danfoss BOCK® compressors | Introducing the HG series - [LINK](#)
- Danfoss introduces CO2 brazed heat exchanger dedicated for transcritical systems - [LINK](#)
- The heat exchanger of choice – next-generation operational excellence - [LINK](#)
- Alsense® by Danfoss | Optimizing food retail with smart solutions - [LINK](#)



Details for Additional Information

UK/IE

[Cooling United Support Hub](#)

[Support Made Easy](#)

customerservice.uk@danfoss.com

customerservice.ie@danfoss.com

Customer Service UK & IE tel: 0330 808 6888

Denmark

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundeservice.dk@danfoss.com

Kundeservice tel: 69 91 80 80

Norway

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundeservice.no@danfoss.com

Kundeservice tel: 23 96 71 00

Sweden

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundservice.se@danfoss.com

Kundservice tel: 010 888 7400

Finland

[Cooling United Support Hub](#)

[Support Made Easy](#)

asiakaspalvelu.fi@danfoss.com

Asiakaspalvelu puh: 0753 251 100

Estonia

klienditeenindus.ee@danfoss.com

Klienditeenindus tel: +372 6681 380

Latvia

klientuserviss.lv@danfoss.com

Klientu serviss tel: +371 6733 9166

Lithuania

klientucentras.lt@danfoss.com

Klientų centras tel: +370 5214 0043