ENGINEERING
TOMORROW

Danfoss

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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

AK-SM 800A Series: Software Release 3.2 Including Security updates 3
EKE 1P: Release of New Software Version 2.14 and Production Resumed 4
EKC 315A, EKC 361 and EKC 366 Controllers' Phase-Out and Possible Replacement 5
KoolProg Version 4.8.0.x: Maintenance Release Update 5
Optyma Light Commercial A14 Codes Wiring Diagram Change 6
Videos on YouTube 7
Details for Additional Information 7

AK-SM 800A Series: Software Release 3.2 Including Security updates

Danfoss announces a new software release of the ADAP-KOOL™ System Manager 800A series. Software Package 3.2 is now available for download from **ADAP-KOOL support site.** The software is highly recommended for all customers and includes security updates, new functionality, and bug fixes.

NOTE: Software Package 3.2 requires that Danux 4.1.4.011.193 is installed.



Software Release 3.2 (package ID 3.2.6) details

Security updates

- Internal firewall updated for improved Wi-Fi security
- Vulnerability updates

New feature highlights

- Improved Modbus communications with MCX based devices
- 3rd party Modbus device support (Refrigeration and Utility meters)
- Centrica Gateway / wireless PAN Meter-sensor support

Defect fixes / update highlights

- SM 800A (SvB5) graphic editor bug
- Digital Compressor fix
- Enhance customized control for MCX
- Alarms - XML - Send XML ACK msg when alarm is acknowledged
- XML function causing reset - Fix
- Alarm config Local UI – Alarm rooting fix

Software Installation

Perform a unit backup and check for any open alarms before proceeding with update.

Step 1 - if system **does not** already have Danux 4.1.4.011.193.

- Using StoreView Browser 5 / StoreView Web select OS update and proceed with Danux upgrade
- Allow a few minutes to pass with the new OS installed

IMPORTANT: *This file size package is large and depending on your network speed may take 10+ minutes to complete. Do not interrupt power during the OS update.*

Step 2 – update System Manager firmware (package 3.2.6.spk)

- Using StoreView Browser 5 / StoreView Web or local USB Flash drive, select OS update and proceed software upgrade. *Do not interrupt power during the software update.*
- After installation is complete, review for correct system operation.

Affected products

The below table shows the list of affected products within the System Manager portfolio:

Current Portfolio – Variants **with** LON Modules:

AK-SM 820A	080Z4024
AK-SM 820A - no WiFi	080Z4025
AK-SM 850A	080Z4021
AK-SM 850A - no WiFi	080Z4022
AK-SM 880A	080Z4028
AK-SM 880A - TP78	080Z4029

New code numbers - Variants **without** LON Modules:

AK-SM 820A	080Z40**4**4
AK-SM 820A - no WiFi	080Z40**4**5
AK-SM 850A	080Z40**4**1
AK-SM 850A - no WiFi	080Z40**4**2
AK-SM 880A	080Z40**4**8

The new variants without LON module are aimed to reduce dependency on these scarce LON modules and to prepare our portfolio to transition towards Ethernet based setups.

Timing and Stock

Release 3.2 and associated Danux is immediately available via the Danfoss **ADAP-KOOL support site.**
All newly manufactured units will have Package 3.2.6 installed starting January.

EKE 1P: Release of New Software Version 2.14 and Production Resumed



A new software version for the EKE 1P code number **080G0325** has been released.

The new version 2.14 fixes the issue of the repeatedly writing on the EEPROM, which reduced the useful life of the controller.

The new software version 2.14 of the EKE 1P has been available since week 50/2022.

It´s **mandatory** to update all the EKE 1P units with SW versions earlier than 2.14.

Please, contact your local Danfoss representative to receive the needed support or for any additional information.

EKC 315A, EKC 361 and EKC 366 Controllers' Phase-Out and Possible Replacement



The existing EKC 315A, EKC 361 and EKC 366 have been phased out due to end of life of critical components.

EKE 400 is designed to be the replacement product for the EKC products in question.
EKE 400 is specifically designed to control industrial refrigeration evaporators – in small as well as large systems.
See here further details for **EKE 400.**

See affected products below and possible replacement

Products to be phased out		Replacement product	
Code number	**Description**	**Code number**	**Description**
084B7060	EKC 361 media temp. controller	**080G5004**	EKE 400 evaporator controller with HMI, 24 V AC/DC
084B7085	EKC 315A superheat controller		
084B7086	EKC 315A superheat controller		
084B7249	EKC 315A superheat controller		
084B7076	EKC 366 media temp. controller	-	***)**

***)** EKC 366 were used as electrical interface module to CVQ, electronic pilot. CVQ have been phased out in 2017 and have been replaced by CVE.

If you have any questions regarding this information, please contact your local Danfoss representative.

KoolProg Version 4.8.0.x: Maintenance Release Update

We are pleased to release an update of KoolProg Software (Ver. 4.8.0.x). We have completed several improvements, enhancements, and bug fixes to give you better and smoother experience working with KoolProg tool and our Danfoss range of electronic controllers. Below are some highlights of the updates made in version 4.8.0.x:

Key highlights of version 4.8.0.x:

- KoolProg can now support EIM 365 & AK CC 55 Single coil maintenance release.
- SFC parameter made accessible under service menu of all ERC 11X codes.



Detailed description

1. **EIM 365 Super heat controller support**
   - KoolProg can now support EIM 365 Superheat controller containing sales part code number 080G1003 with 1.50 firmware version.
2. **AK CC55 Single Coil Maintenance support**
   - Bundled AK-CC55 Single coil 084B4082,1.70 firmware version in KoolProg.
3. **Inclusion of OEM Specific code**
   - Included OEM specific code number 080G3420, PV02, ERC113D (only online support)

4. **Bug fixes:**
   - Fixed food type selection issue when KoolProg relates to AK CC55.
5. **Improvements**
   - Exposed SFC Parameter under Service menu for all ERC 11X codes

Known limitations to this release:

1. Sometimes KoolProg doesn't close communication port of PC/Laptop when MPK (Mass Programming Key) is disconnected from KoolKey. This requires KoolKey to be disconnected and connect it back.
2. MYK version below 5.01 may not support all KoolProg features for AK-CC55 controllers

The new version of KoolProg is now available for download at:
https://www.danfoss.com/en/service-and-support/downloads/dcs/koolprog/#/

We hope that you will like the experience of working with this new version of KoolProg.
For any queries, please reach out to your local Danfoss sales contact.

Optyma Light Commercial A14 Codes Wiring Diagram Change

As part of our strive for continuous improvement in our products, we have made changes in Optyma Light commercial (A14 codes) wiring.



Affected Products

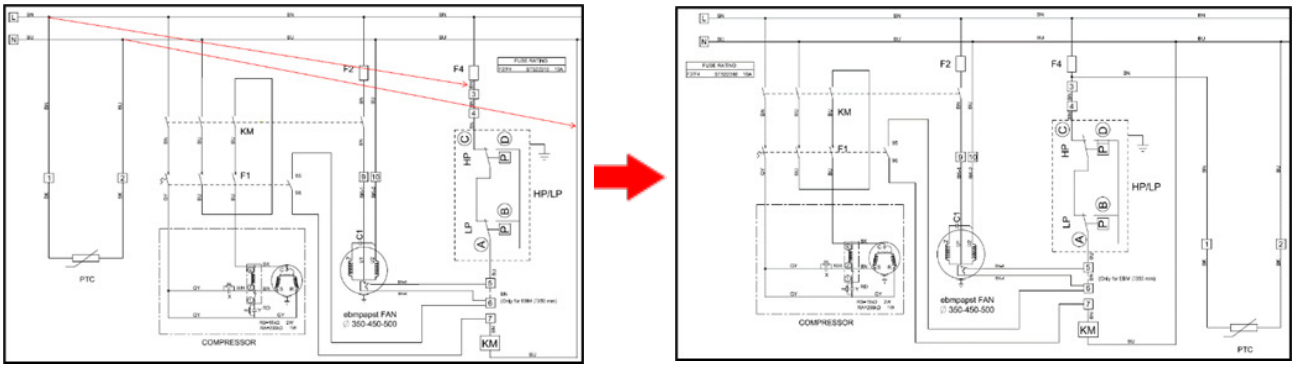
Wiring diagram for following codes will be changed:

Unit code	Description	Compressor	Unit code	Description	Compressor
114X5783	OP-LCQN068NTA14G	NTZ068	114X5791	OP-MCRN048MTA14G	MTZ028
114X5784	OP-LCQN068NTA14E	NTZ068	114X5792	OP-MCRN048MTA14E	MTZ028
114X5785	OP-LGQN096NTA14E	NTZ096	114X5793	OP-MCRN060MTA14G	MTZ036
114X5786	OP-LCQN108NTA14E	NTZ108	114X5794	OP-MCRN060MTA14E	MTZ036
114X5787	OP-LCQN136NTA14E	NTZ136	114X5795	OP-MCRN086MTA14E	MTZ050
114X5788	OP-LGQN215NTA14E	NTZ215	114X5796	OP-MCRN096MTA14E	MTZ056
114X5789	OP-MCRN038MTA14G	MTZ022	114X5797	OP-MCRN108MTA14E	MTZ064
114X5790	OP-MCRN038MTA14E	MTZ022			

Technical description & change background

As per wiring drawing the PTC is connected to the power supply however, as a quality improvement measure, we have realized that PTC should be connected to the output (load side) of a control circuit fuse to better protect it against burn in case of a short circuit. The short circuit may happen if the cable insulation is cut and there is contact between a cable and a metal part of a unit.

Changes will be made on new production units and wiring diagram will be updated.



Existing electrical connection

Changed electrical connection

Changed technical features:

- Changed internal wiring diagram for quality improvement and safety of PTC against burn in case of short circuit.
- No change in any other features or components.

Available documentation:

- Wiring diagrams are updated inside the instruction manual and available with unit.
- Instruction manual is also available at the following link: **MANUAL**

Please, contact your local Danfoss representative for more information about the impact for each product and other solutions Danfoss can offer.

Videos on YouTube

- Livestream: Cool rules – tips 'n' tricks for Com Ref **- LINK**
- How to videos:
  - Installation of LLS 4000 Liquid level switch **- LINK**





Details for Additional Information

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