AK-SC255
Product Release Information
Software Release Version R02.101 (AK-SC255) - **R version only**

October 2009

R version R02.101 AK-SC 255 software is released today for field upgrade.
Version 5.6 of the remote commissioning software tool (AKA65) is recommended.

Software name	WIN 255 filename	Firmware	Replaces
R02.101 (R version)	VR02_101.exe	VR02_101.csi, mai	VR02_085.csi

Requirements:
AKA65 software version 5.6 / AK255 Boot Loader version 6.1
For EKC / AK Modbus support use AK-SC255 baseboard H/W revision V1.5 and above.

Summary of changes / description:
R02.101 is a (major) software update for the AK-SC255 controller and is recommended for all users wishing to enhance system functionality based on **table 1**.

Upgrading your AK-SC255
Always backup original database prior to performing upgrade.
To upgrade AK-SC255 software, it is recommended that this process is done in incremental (release software) steps. **Ensure that your AK-SC255 has been upgraded to 6.1 Boot loader first**. Use AK255 Code downloader 4.1 and bootloader 6.1. Refer to the new 'AK-SC255 Upgrade procedure' document (USCO.EI.RF0.A1.22.003 / 521U0112) for full upgrade options

Please view the AK-SC255 Support web page for current software updates & documentation:
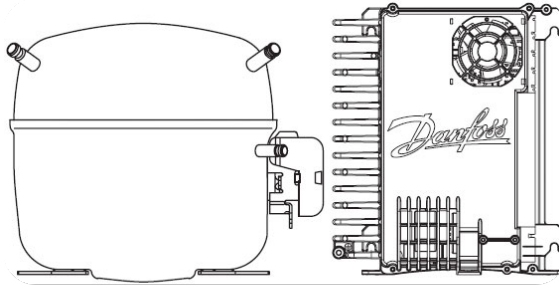*http://portal.danfoss.net/sites/ak2sc255/default.aspx*

Introduction

AK-SC255 software update R02_101 offers new features, functionality and minor bug fixes. Table 1 reflects the content of R02_101 software release.

Table 1

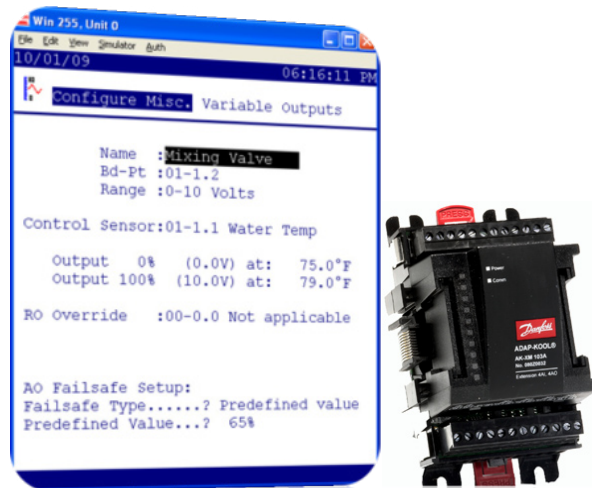| Type	New feature / functionality
Enhancement	Lennox HVAC controller support
Enhancement	Add an outside air sensor per condensing group
Enhancement	Make sure AKA65 is compatible with MS VISTA
Fix	In the 9/25/07 ver of V02.070 (E & R), Sensor Type Percent 10V works like Percent 5V.
Enhancement	Add alternate screen color theme for outdoor use.
Fix	Navigation issues with 255 and AK2-303
Enhancement	Need to be able to read the Presscon "Phasefail temp sensor"
Fix	Heat Reclaim bugs fixes needed
Enhancement	Increase Condenser Delta T max value
Fix	R401A conversion is still -3 'F off.
Fix	When doing holiday schedules on the 55 or 255, pages jump to the next screen constantly.
Fix	Dropleg PSI does not appear in the Sensor Adjustment screen...
Enhancement	Add option to use NTC sensors (EKS211)
Enhancement	Increase high temp cutout (R version)
Enhancement	Generic device copy routines copy only generic params, should also do "AK255 questions".
Fix	P0 Optimization screen should show % in float and need MMI change...
Fix	NTP (Network Time Protocol) shoud not prevent 6-minute clock sync from occuring...
Fix	P0 optimization screen minute counters incrementing too quickly
Fix	255 Shutdown schedule command to EKC414A1 not working correctly
Fix	Hot Gas Defrost Issues with Compressors on Split Suction groups and Auto Rotation.
FIx	Front panel LED Stops on Ack when config'd to Stop on Clear.
Fix	Defrost get's stuck ON if during the defrost period, the ref ckt relay is manualed off. Also if both ref ckt and fan are man off
Fix	Cleared Alarm Detail - Time Stamp issue
Enhancement	SAL (Site Alarm Logger) - add Boot Loader version to the info screen
Fix	HVAC Dehumidification Min fan Speed with VO/VLT does not go below 50%
Enhancement	XM103A Analog Input Analog Output support
Enhancement	Support of new .mai (Master Application Image) file format
Enhancement	Danfoss SLV variable speed compressors

Danfoss SLV variable speed compressor support

The AK-SC255 now provides support for the Danfoss SLV variable speed compressors (refer to edf table 2). Utilizing the Modbus network, easy communication is possible, allowing key operational data to be viewed and accessed.

AK XM103A Analog Input / Output module

The new XM 103A provides both analog input and outputs, providing a streamline solution for variable control needs. The AK-SC255 R02_101 now provides full support for this new module.

Support for .mai (Master Application Image)

To further improve the ease and speed of updating system software, a new system file format has been made available. Known as *mai* (Master Application Image), it is a single file that combines the Application code, EDF's, Device list & HTML files. The combining of all the key system files facilitates an easy upgrade process and is new for R02_101 and beyond.

Bootloader 6.1 is required along with a CPU card of version 1.2 or above (see document USCO.EI.RF0.A1.22.003 / 521U0112 for further details)
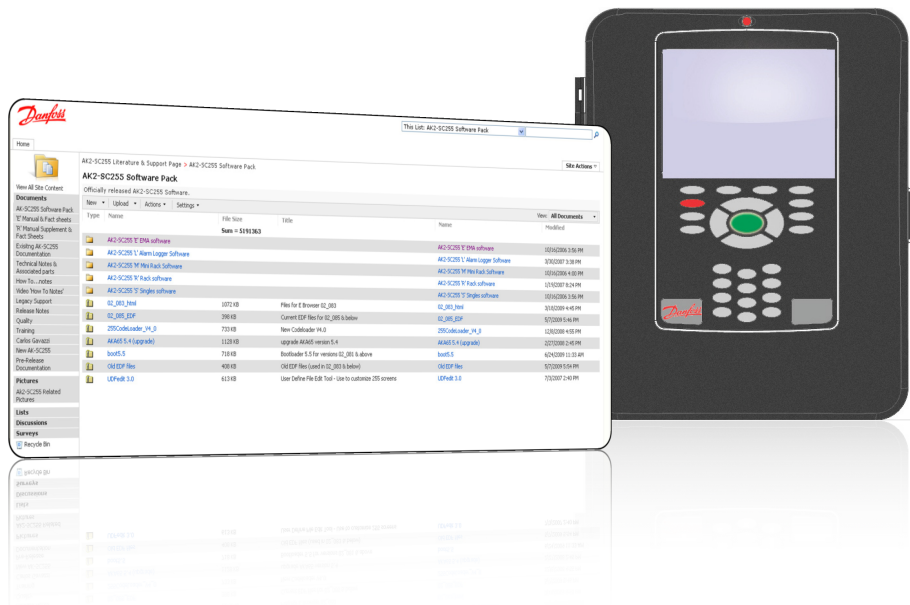
XML Open interface

Version R02_101 further enhances the range of XML commands available within the AK-SC255. Utilizing an open XML data exchange interface, allows external parties to access system parameters and operational data. The XML structure is fully supported by detailed documentation, which is available from DE-US upon request

AK-SC255 Support Intranet site

For the very latest documentation, how to tips, technical bulletins and software visit the AK-SC255 Support site

http://portal.danfoss.net/sites/ak2sc255/default.aspx

Supported controllers (based on R02_101 software)
Table 2 (note this table also contains devices for the AK-SC255 E version)

Model	Part #	Software Revision	Notes
EKC 201	084B7068	V1.2x	
EKC 201	084B7505	V2.0x	
EKC 201	084B7508	V2.0x	
EKC 201	084B7510	V2.0x	
EKC 201	084B7512	V2.0x	
EKC 202A	084B8521	V1.2x	
EKC 202A	084B8531	V1.2x	
EKC 202A2	084B8524	V2.0x	
EKC 202A2	084B8535	V2.0x	
EKC 202B	084B8522	V1.2x	
EKC 202B	084B8532	V1.2x	
EKC 202C	084B8523	V1.1x, 1.2x	
EKC 202C	084B8533	V1.2x	
EKC 202D	084B8536	V2.0x, V2.1	
EKC 202D	084B8537	V2.0x, V2.1x	
EKC 202D1	084B8554	V1.3, 1.4	Epta controller
EKC 204A	084B8520	V1.9x, V2.0x, V2.1x	1.9x has 9 application selections, 2.0x has 10 application selections
EKC 204A1	084B8534	V2.0x	10 application .edf files (A-J)
EKC 204A2	084B8535	V2.0x	10 application .edf files (A-J)
EKC 204A2	084B8524	V2.0x	10 application .edf files (A-J)
EKC 301	084B7514	V2.0x	
EKC 301	084B7515	V2.0x	
EKC 301	084B7516	V2.0x	
EKC 301	084B7518	V2.0x	
EKC 312	084B7250	V1.2x	
EKC 315A	084B7085	V1.3x	
EKC 315A	084B7086	V1.3x	
EKC 316A	084B7088	V1.2x	
EKC 326	084B7082	V1.6x	
EKC 326A	084B7252	V1.0x	
EKC 347	084B7067	V1.0x	
EKC 361	084B7060	V1.5x	
EKC 367	084B7083	V1.2x	
EKC 368	084B7079	V1.6x	
EKC 414A	084B8002	V1.1x	
EKC 414A1	084B8011	V1.0x	
EKC 414C1	084B8010	V1.2x, V1.3x	
EKC 514B1	084B8009	V1.1x, V1.2x	
AK-CC 450	084B8022	V1.3x	7 application selections to support multi app functions- A-G) (i.e 84B8022.edf (app o61=1), 84B8022.edf (app o61 = 2).....
AK-CC 450	084B8023	V1.3x	7 application selections to support multi app function s- A-G) (i.e 84B8022.edf (app o61=1), 84B8022.edf (app o61 = 2).....
AK-CC 550	084B8020	V1.2x	10 application selections to support multi app function s- A-J) (i.e 84B8020.edf (app o61=1), 84B8020.edf (app o61 = 2).....

Supported controllers (based on R02_101 software)
Table 2 Cont..

Model	Part #	Software Revision	Notes
AK-CC 550	084B8021	V1.2x	10 application selections to support multi app function s- A-J) (i.e 84B8020.edf (app o61=1), 84B8020.edf (app o61 = 2).....
AK-CC 550	084B8030	V1.1x	
AK-CC 550	084B8029	V1.1x	
AK-CC 550	084B8030	V1.1x	
AK-CC 550	084B8024	V1.2x	0 application selections to support multi app function s- A-J) (i.e 84B8024.edf (app o61=1), 84B8024.edf (app o61 = 2)..... Anytek screw connections
AK-CC 303A	080Z0121	V1.2x, V1.3x	
AK-CC 303AR	080Z0122	V1.2x, V1.3x	
AK-CC 303US	080Z0124	V1.2x, V1.3x,V1.4	
AK-CC 750	080Z0122a	V5.0x, V5.1x	
AK-CC 750	080Z0121a	V5.0x, V5.1x	
AK-CH 650	080Z0132	V1.0x, V1.1x, V1.2x	
AKC CONTROLLERS			
AKC-114A	084B6171	V1.2x, V1.5x	
AKC-114B	084B6033	V1.0x, V1.1x, V1.2x, V1.3x	
AKC-115A	084B6173	V1.2x, V1.5x	
AKC-116A	084B6175	V1.5x	
AKC-111A	084B6039	V2.0x	
2nd PARTY CONTROLLERS			
Distech - Stat - RTX-12	DT0012x	V003x	HVAC EC Stat RTX-12
Carlo Gavazzi	EM24-AV0, EM24-AV5, EM24-AV6, EM24-AV9 edf		Modbus Power meter
S5+9000	199Z9000		
3rd PARTY CONTROLLERS			
Lennox	Lennox	V1.0x	
Guard-636	199Z9099	V6.0x	
TX-CC02	199Z9008	V4.50x	
Carrier	Carrier V1.0x		
Munters	Mun-168-F12 V1.0x		
SLV Compressor			
SLV230-4321	105N4321	V1.2x	Modbus SLV compressor
SLV230-4325	105N4325	V1.2x	Modbus SLV compressor
SLV230-4327	105N4327	V1.2x	Modbus SLV compressor