



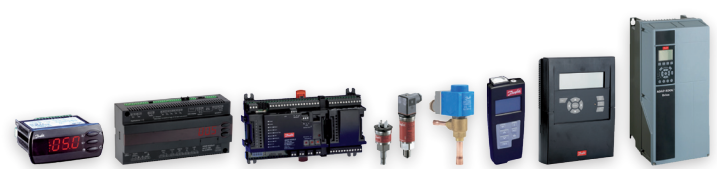
Danfoss introduces the fully flexible ADAP-KOOL® case controller AK-CC 750

The AK-CC 750 offers highly efficient adaptive routines for each cabinet and cold room installation, guaranteeing food quality and significant energy savings.

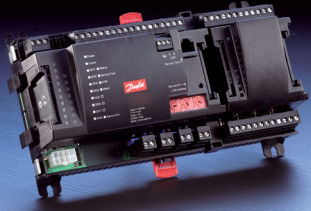
The AK-CC 750 case controller is a complete regulating unit. Combined with sensors and valves this unit performs complete evaporation control of refrigeration appliances and freezer rooms within commercial refrigeration.

The AK-CC 750 can replace all other automatic controls containing, for instance, day and night thermostats, defrost, fan control, rail heat control, alarm functions, light control, thermo valve control, solenoid valve etc.

The case controller is equipped with data communication and is operated via a PC.



Danfoss ADAP-KOOL® offers a totally flexible system for all food retailers featuring a wide range of adaptive products



AK-CC 750 main characteristics

- Multi evaporator controller (1-4 evaporators)
- Preset applications for electronic and thermostatic expansion valves and different defrost methods
- Full energy optimisation functions (dew point, fans, defrost, blinds etc.)
- Remote display connections (up to 4 displays)
- Flexible I/O configuration
- Easy application selection for fast configuration
- Built in RS 485 LON communication



The AK-CC 750 case controller ensures outstanding performance and reduced running costs....



Energy optimisation

- **Adaptive superheat via the AKV electronic expansion valve**
Optimum utilisation of evaporator at all load conditions:
Precondition for major energy savings via optimised suction pressure and floating condensing pressure control
- **Adaptive defrost**
Intelligent defrost skip based on performance monitoring of evaporator
- **Dew point pulsing of rail heat**
Pulsing of rail heat according to the actual load condition
- **Pulsing of fans**
Pulsing of fans at thermostat cut out



Food quality / HACCP compliance

- **Modulating temperature control**
Accurate temperature control
- **Measuring accuracy**
Factory calibration guarantees a better measuring accuracy than required in the EN 12830 and EN 13485 standards without subsequent calibration on site (Pt 1000 ohms sensor)
- **Product temperature**
Separate product temperature for compliance with EN 12830 and EN 13485
- **Case cleaning**
Case cleaning function for documentation of case cleanings carried out according to HACCP procedures



Service and commissioning

- **Easy performance check**
Provides vital info for performance check
- **Versatile controller**
 - A single controller covering several applications
 - Flexible IO configuration
 - Built-in LON communication
- **Fast and easy commissioning**
 - Preset setup for fast start-up
 - Only 5 settings required

Technical data and ordering

Supply voltage	24 V a.c. +/- 20%	
Power consumption	12 VA	
Analogue inputs	Pt 1000 ohm /0°C	Dissolution: 0.1°C Accuracy: +/- 0.5°
	Pressure transmitter type AKS 32R / AKS 32 (1-5 V)	Dissolution 1 mV Accuracy +/- 10 mV Max. connection of 5 pressure transmitters on one module
	Voltage signal 0-10 V	
	Contact function (On/Off)	On at R < 20 ohm Off at R > 2K ohm (Gold plated contacts not necessary)
On/off supply voltage inputs	Low voltage 0/80 V a.c./d.c.	Off: U < 2 V On: U > 10 V
	High voltage 0/260 V a.c.	Off: U < 24 V On: U > 80 V
Relay outputs SPDT	AC-1 (ohmic)	5 A
	AC-15 (inductive)	3 A
	U	Min. 24 V Max. 230 V Low and high voltage must not be connected to the same output group
	Fuse	5 A (F)
Solid state outputs	Can be used for loads that are frequently cut in and out e.g. decompression, rail heating, fans and AKV valve	Max. 240 V a.c. , Min. 48 V a.c. Max. 0.5 A, Leak < 1 mA Max. 1 AKV
Ambient temperature	During transport	-40 to 70°C
	During operation	-20 to 55°C , 0 to 95% RH (non condensing) No shock influences/vibrations
Enclosure	Material	PC/ABS
	Enclosure	IP 10 , VBG 4
	Mounting	For mounting on wall or DIN rail
Weight with screw terminals	Modules in 100-/200-/controller series	Approx. 200 g/500 g/600 g
Approvals	Complies with EU low voltage directive and EMC requirements	LVD tested according to EN 60730 EMC tested Immunity according to EN 61000-6-2 Emission according to EN 50081-1
	UL file number	E166834

For additional information - please consult the product manual (RS8EM) or contact your local Danfoss sales company.

Ordering AK-CC 750

Type	Language	Code No.
AK-CC 750	English, German, French, Italian, Dutch	080Z0121
	English (UK), Spanish, Portuguese, English (US)	080Z0122
	English (UK), Danish, Swedish, Finnish	080Z0125

Ordering accessories

Extension modules and survey for inputs and outputs

Type	Analog inputs	On/off outputs		On/off supply voltage (DI signal)		Module with switches	Code No. with screw terminals
	For sensors, pressure transmitters etc.	Relay (SPDT)	Solid state	Low voltage (max. 80 V)	High voltage (max. 260 V)	For override of relay outputs	
Controller	11	4	4	-	-	-	-
AK-XM 101A	8						080Z0007
AK-XM 102A				8			080Z0008
AK-XM 102B					8		080Z0009
AK-XM 204A		8					080Z0006
AK-XM 204B		8				x	080Z0016
AK-XM 205A	8	8					080Z0005
AK-XM 205B	8	8				x	080Z0015

Software

AK-ST 500	Software for operation of AK controllers	080Z0161
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Remote displays

EKA 163B	Display unit	080B8574
EKA 164B	Display unit with operation buttons	080B8575

Miscellaneous

Trafo (AK-PS 075)		080Z0053
Display cable - 2 meters		084B7298
Display cable - 6 meters		084B7299

The flexible case controller AK-CC 750



Case controller
AK-CC 750



Extension modules
AK-XM 101A
AK-XM 204
AK-XM 205A



Remote displays
EKA 163B
EKA 164B

The optimum solution for your business...

Other products from Danfoss ADAP-KOOL®



Compressor and
Condenser Controls



Speed Control of
Compressor and Condenser



Evaporator Controls



Wireless Temperature
Monitoring



System Management