

Data sheet

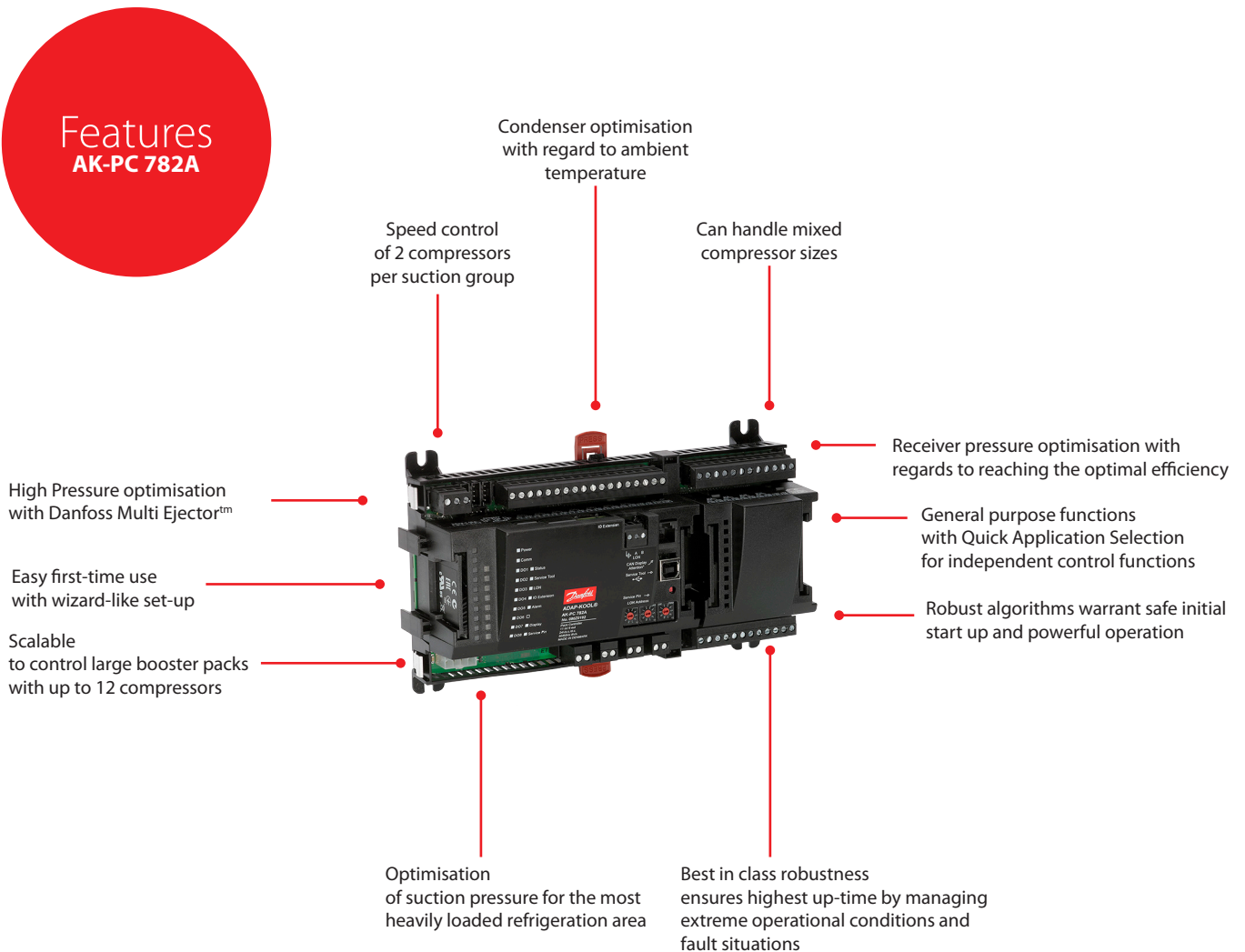
# CO<sub>2</sub> booster pack controller AK-PC 782A

**The flexible AK-PC 782A pack controller delivers highest efficiency.**

AK-PC 782A is a powerful and flexible controller that provides precise regulation, improved efficiency, and enhanced user friendliness for pack control in transcritical CO<sub>2</sub> booster packs.

The controller flexibility and efficiency makes it the obvious choice for all sizes of packs in all climates.

## Features AK-PC 782A



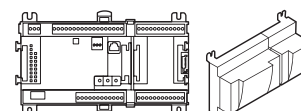
## Facts

- One controller for the entire CO<sub>2</sub> booster pack
- High pressure control
- Danfoss Multi Ejector™ control
- Parallel compressor control
- Heat recovery functions
- Floating receiver pressure control
- Built in RS485 Lon communication
- Oil system pressurisation and flow management

# Technical data and ordering

## AK-PC 782A, Capacity controller

### Technical data



Features	Description	
Supply voltage	24 V DC / AC $\pm$ 20%	
Power consumption	8 V A	
Analogue inputs	Pt 1000 ohm / 0 °C	Dissolution: 0.1 °C Accuracy: $\pm$ 0.5 °C
	Pressure transmitter type AKS 32R / AKS 2050 / AKS 32 (1 – 5 V)	Dissolution 1 mV Accuracy $\pm$ 10 mV Max. connection of 5 pressure transmitters on one module
	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 AC / DC	OFF : U < 2 V ON: U > 10 V
	High voltage 0 / 260 V AC	OFF : U < 24 V ON: U > 80 V
Relay outputs SPDT	AC-1 (ohmic)	5 A
	AC-15 (inductive)	3 A
Solid state outputs	U	Min. 24 V - Max. 230 V Low and high voltage must not be connected to the same output group
	Can be used for loads that are frequently cut in and out e.g. unloaders, solenoid valve	Max. 240 V AC, Min. 48 V AC - Max. 0.5 A Leak < 1 mA Max. 1 AKV
Ambient temperature	During transport	-40 – 70 °C
	During operation	-20 – 55 °C, 0 – 95% RH (non condensing) - No shock influences / vibrations
Enclosure	Material	PC / ABS
	Enclosure	IP10, 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

### Ordering

Type	Language	Code no.
AK-PC 782A	English, German, French, Italian, Dutch, Spanish, Portuguese, Danish, Finnish, Russian, Czech, Polish, Chinese	080Z0192

### Ordering Accessory - Extension modules and survey for inputs and outputs

Type	Analog inputs	ON / OFF outputs		ON / OFF supply voltage (DI signal)		Analog outputs	Stepper outputs	Module with switches	Code no.
	For sensors, pressure transmitters	Relay (SPDT)	Solid state	Low voltage (max. 80 V)	High voltage (max. 260 V)	0 - 10 V d. c.	For valves with step control	For override of relay outputs	
Controller	11	4	4	–	–	–	–	–	–
AK-XM 101A	8	–	–	–	–	–	–	–	080Z0007
AK-XM 102A	–	–	–	8	–	–	–	–	080Z0008
AK-XM 102B	–	–	–	–	8	–	–	–	080Z0013
AK-XM 103A	4	–	–	–	–	4	–	–	080Z0032
AK-XM 204A	–	8	–	–	–	–	–	–	080Z0011
AK-XM 204B	–	8	–	–	–	–	–	x	080Z0018
AK-XM 205A	8	8	–	–	–	–	–	–	080Z0010
AK-XM 205B	8	8	–	–	–	–	–	x	080Z0017
AK-XM 208C	8	–	–	–	–	–	4	–	080Z0023

### Software

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

EKA 163B	Display unit	084B8574
EKA 164B	Display unit with operation buttons	084B8575
MMIGRS2	Graphic display with operation	080G0294

### Miscellaneous

AK-CM 102	Communication modules for controllers where modules cannot be connected continuously	080Z0064
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