



Compact and powerful

Suction control

Up to 4 compressors in a variety of combinations:

- Single step
- Variable speed
- Digital scroll
- Stream (4 cylinder)
- Multi step with unloader valves

Condenser control

- Step control of up to 4 fans
- Speed control

Optimised control algorithms and factory settings

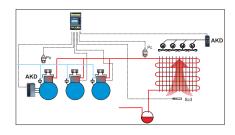
- Low and high suction pressure safety
- High condensing pressure safety
- Automatic compressor and fan control override functions to avoid high pressure cut out
- Smart settings and gain scheduling based on Danfoss refrigeration know-how
- Pump down on last compressor to reduce start/stops at low load

Energy saving features

- Night setback via Digital input or network
- Floating condensing pressure control
- Suction pressure optimisation

Graphical user interface with

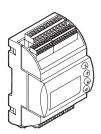
- Multi language support
- Overview screens
- Wizard programming
- Celsius or Fahrenheit / Bar or Psi



Application	Description	
	Single step Single step compressors of same size	
	Speed on lead Speed compressor of one size single step compressors of another size	
***************************************	Digital scroll on lead Digital scroll of one size single step compressors of another size	
	Stream 4 cyl. on lead Stream 4 cyl. of on size single step compressors of another size	
■ 煮 ■ 歳	Multistep compressors Multistep compressors with same no. of unloader valves and of same size	



Technical data



Features	Description	Description		
C	24 V a.c. ± 15 % 50/60 Hz, 17 VA			
Supply voltage	24 V d.c. (20-60 V), 17 VA			
4 analog Input	Pressure measuring: Ratiometric pressure transmitter type AKS 32R 1-5 volt pressure transmitter type AKS 32 0-20 (4-20) mA pressure transmitter type AKS 33			
	Temperature measurement Pt 1000 ohm/0 °C NTC - 86 K from digital scroll/stream			
8 digital input	From contact function E.g. to: Start/stop of regulation Monitoring of safety circuits General alarm function			
	5 pcs. SPST (5 A): AC-1: 5 A (ohmic)	5 pcs. SPST (5 A): AC-1: 5 A (ohmic)		
	5 pcs. SPST (5 A): AC-15: 2 (inductive)	5 pcs. SPST (5 A): AC-15: 2 (inductive)		
Relay output to capacity control	1 pc. Solid State PWM for scroll -unload	Imax. = 0.5 A		
		Leak<1.5 mA		
2 Voltage output	0-10 V d.c. Ri = 1kohm			
Display output	For type MMIGRS2			
Data communication	Modbus for AK-SM 850			
	-20 – 60 °C, During operations			
Environments	-40 – 70 °C, During transport			
	20 – 80 % Rh, not condensed			
	No shock influence/vibrations			
Enclosure	IP 40			
Weight	0.2 kg			
Mounting	DIN-rail			
Connection terminals	max. 2.5 mm ² multi core			
Approvals	EU Low Voltage Directive and EMC demands re CE-marking complied with LVD tested acc. EN 60730-1 and EN 60730-2-9 EMC-tested acc. EN61000-6-2 and 3			

Ordering

Туре	Description	Code no.
AK-PC 351	24 V AC/20-60 V DC, LCD, RS485, 1SSR S	080G0289

Approvals

EU Low Voltage Directive and EMC demands CE-marking complied with LVD tested acc. EN 60730-1 and EN 60730-2-9 EMC-tested acc. EN61000-6-2 and 3.

Samples and related products

For samples and related products, please contact your local Danfoss representative.

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