

Control modules

UNIcon sensor control module for pressure



The sensor control module for pressure measures and displays the pressure, for instance in refrigeration circuits. Depending on the desired setpoint and control range, the sensor control module generates 0-10 V to control the EC fan or, for example, a frequency inverter.

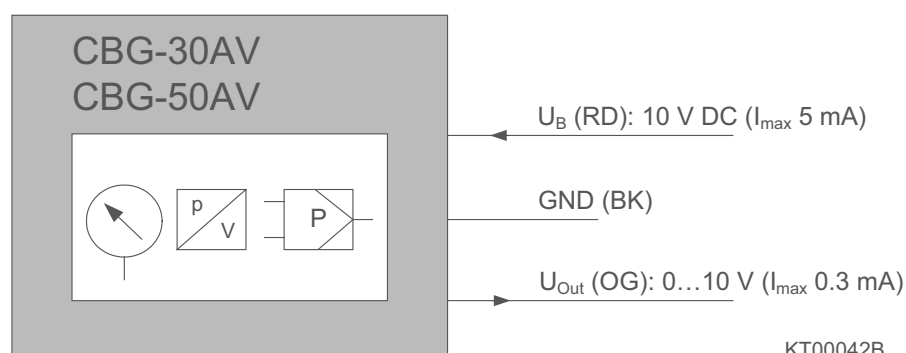
The sensor control module is supplied with 10 V DC from the fan or frequency inverter that it controls. No additional supply voltage is required.

Input for sensors or speed settings through



Pressure sensor and control intelligence are combined in one device

Connection diagram



KT00042B
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Equipment/properties:

Analog pressure display for measured actual value:

Device versions for 0-30 bar and 0-50 bar are available
Display of the system pressure also without energy supply
A second scale shows the pressure in PSI

Setting of the desired system pressure by integrated potentiometer:

Version 0-30 bar: Setpoint 6-21 bar settable
Version 0-50 bar: Setpoint 10-35 bar settable

Setting of the desired control range by integrated potentiometer:

Version 0-30 bar: Control range 3-9 bar settable
Version 0-50 bar: Control range 5-15 bar settable

Extended, 3-wire cable approx. 2 m:

1 x output 0-10 V: for controlling EC fans, frequency inverters, other devices
1 x supply with 10 V DC: From the connected EC fan, frequency inverter, other device
1 x GND

Application/Function

The sensor control module is screwed through a female thread with the Schrader valve directly onto the refrigerant circuit on the condenser outlet.

Under the influence of pressure, an integrated elastic tube spring measuring element deforms. The measured pressure can be read immediately.

Through a Hall sensor, the deformation is transmitted non-contact and wear-free to the integrated control electronics. An automatic alignment with the measured value is made through the facility of being able to set the desired pressure in the plant with a potentiometer on the unit. The consequential 0-10 V signal controls connected EC fans, frequency inverters or other devices.

Information

Motor protection

Fcontrol, lcontrol

UNIcon

Acontrol, Ucontrol, Dcontrol

Transformer

System components

Appendix

UNIcon sensor control module for pressure 10VDC						
Type	Article no.	Minimum ambient temperature °C	Maximum ambient temperature °C	Set value range	Protection class	Weight kg
CBG-30AV	320039	-20	60	6...21 bar	IP65	0.17
CBG-50AV	320040	-20	60	10...35 bar	IP65	0.17

Suitable for all refrigerants except NH₃