

NETWORK SIGNAL SEPARATOR

AKS-08

**WARRANTY.** The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complaint can be found on the website: [www.fif.com.pl/reklamacje](http://www.fif.com.pl/reklamacje)



Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



**Purpose**

The AKS-08 analog separator is a device for converting an analog control signal from one form to another with additional galvanic separation between the input and output signals.

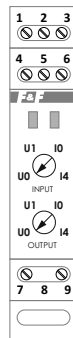
**Features**

- \* Conversion of analogue input signal to analog output signal (mA→V, V→mA, mA→mA, V→V)
- \* High processing speed - capable of transmitting signals up to 100 Hz
- \* Galvanic separation (min 1 kV) between analog input and output
- \* Optical control of input and output signals correctness

**Application**

- \* Securing costly automation components (PLCs, inverters, regulators, etc.) from overvoltage that may appear on signal lines.
- \* Adaptation of analog signal levels to the capability of controllers or regulators, for example it is possible to connect a sensor with current output to a PLC with only analog voltage inputs.
- \* Increasing analog transmission range, for example analog voltage signal, which is very susceptible to interference, can be converted to a robust 4÷20 mA signal. In this form it can be sent, for example, through the factory hall to be then converted back to the voltage signal form with the second converter.

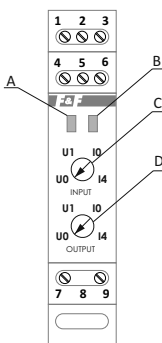
**Description of the leads**



- 1 -- +24 V DC power supply
- 2, 3 -- 0V power supply
- 4 -- input signal +
- 5, 6 -- input signal -
- 7 -- output signal +
- 9 -- output signal -

**Attention!**  
Terminal 2 must be connected to terminal 5.

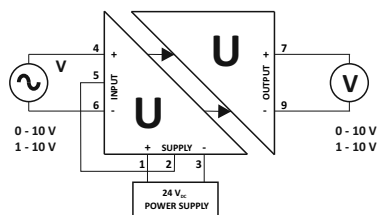
**Description of the device**



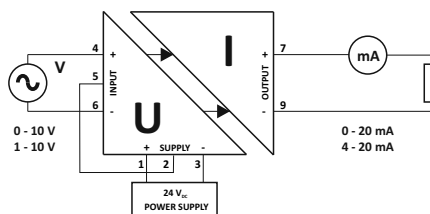
- A - input signal control
- B - output signal control
- C - input signal type selector switch  
 U0: 0÷10 V voltage  
 U1: 1÷10 V voltage  
 I0: 0÷20 mA current  
 I4: 4÷20mA current
- D - output signal type selector switch  
 U0: 0÷10 V voltage  
 U1: 1÷10 V voltage  
 I0: 0÷20 mA current  
 I4: 4÷20mA current

**Operating modes**

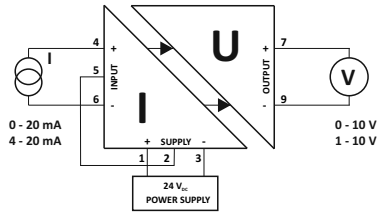
**Voltage-to-voltage conversion**



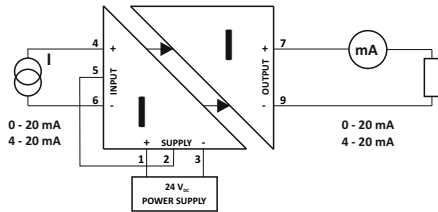
**Voltage-to-current conversion**



### Current-to-voltage conversion



### Current-to-current conversion



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### LED indication

LEDs A and B indicate the state of the input and output signals.

LED A	
OFF	No input signal or signal below minimum value
ON	Correct input signal (according to preset range)
Flashing	Input level exceeded (too high voltage or current)

LED B	
OFF	No output signal (no voltage or no current flow)
ON	Correct output signal (according to preset range)
Flashing	Output overload in voltage mode

### Assembly

1. Turn off the power.
2. Install the module on the rail in the distribution box.
3. Connect the power supply wires according to the wiring diagram.
4. Turn on the power.

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### Technical data

power supply	24÷30V DC
current	<100mA
power consumption	<2W
input	
voltage mode	3kΩ
current mode	50Ω
output	
voltage mode	
output voltage	0÷10V
current load	0÷50mA
current mode	
output current	0÷20mA
output voltage	0÷24V
load resistance	0÷1000Ω
working temperature (non-condensing)	-15÷50°C
terminal	2.5mm <sup>2</sup> screw terminals
tightening torque	0.4Nm
dimensions	1 module (18mm)
mounting	on TH-35 rail
protection level	IP20



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