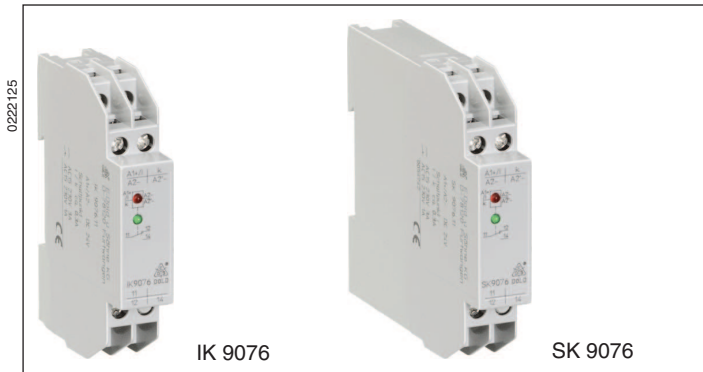
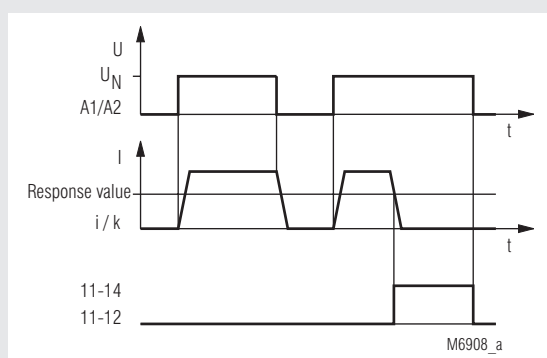


## VARIMETER Valve Monitor IK 9076, SK 9076



- According to IEC/EN 60 255, DIN VDE 0435-303
- Current monitor
- Detection of wire breakage
- Fixed switching points
- For DC 24 V
- Energized on trip
- Green LED display for operating voltage
- Red LED display for contact position
- **Devices available in 2 enclosure versions:**
  - IK 9076:** depth 59 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
  - SK 9076:** depth 98 mm, with terminals at the top for cabinets with mounting plate and cable duct
- Width 17.5 mm

### Function Diagram



### Approvals and Marking



### Application

For monitoring valves.

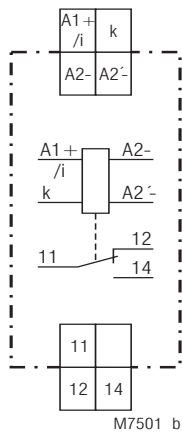
### Indicators:

Upper LED: on, when operating voltage is supplied  
Lower LED: on, when the output relay is activated

### Note

IK/SK 9076 has no polarity safeguard!

### Circuit Diagram



IK 9076.11, SK 9076.11

### Technical Data

#### Input

<b>Nominal voltage <math>U_N</math>:</b>	DC 24 V
<b>Voltage range:</b>	0.85 ... 1.2 $U_N$
<b>Nominal consumption:</b>	0.35 W
<b>Switching points (fixed):</b>	Setting value    max. continuous current
	0.3 ... 0.7 A *    1.5 A
	0.2 ... 0.4 A    0.9 A
	0.15 ... 0.3 A    0.5 A
	0.05 ... 0.1 A    0.25 A
	* Suitable e.g. for 24 W / 1 A valves

#### Permissible

<b>measuring current:</b>	1.5 A at an ambient temperature of 55°C
	2.2 A at an ambient temperature of 35°C
<b>Maximum overload:</b>	8 A, up to 3 s

#### Output

##### Contacts

IK 9076.11, SK 9076.11:	1 changeover contact
<b>Operate/release time:</b>	100 ms / 20 ms
<b>Thermal current <math>I_{th}</math>:</b>	4 A
<b>Switching capacity to AC 15</b>	
NO contact:	3 A / AC 230 V    IEC/EN 60 947-5-1
NC contact:	1 A / AC 230 V    IEC/EN 60 947-5-1
<b>Electrical life:</b>	IEC/EN 60 947-5-1
to AC 15 at 1 A, AC 230 V:	1.5 x 10 <sup>5</sup> switching cycles
<b>Short circuit strength</b>	
<b>max. fuse rating:</b>	4 A gL    IEC/EN 60 947-5-1
<b>Mechanical life:</b>	≥ 10 <sup>8</sup> switching cycles

## Technical Data

### General Data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range:</b>	- 20 ... + 55°C	
<b>Clearance and creepage distances</b>		
rated impuls voltage/ pollution degree:	4 kV / 2	IEC 60 664-1
<b>EMC</b>		
Electrostatic discharge:	6 kV (contact)	IEC/EN 61 000-4-2
HF irradiation:	10 V / m	IEC/EN 61 000-4-3
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	1 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
HF-wire guided:	10 V	IEC/EN 61 000-4-6
Interference suppression:	Limit value class B	EN 55 011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
<b>Housing:</b>	Thermoplastic with V0 behaviour according to UL subject 94	
<b>Vibration resistance:</b>	Amplitude 0.35 mm, frequency 10 ... 55 Hz IEC/EN 60 068-2-6	
<b>Climate resistance:</b>	20 / 055 / 04 IEC/EN 60 068-1	
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3/-4	
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1	
<b>Mounting:</b>	DIN rail IEC/EN 60 715	
<b>Weight</b>		
IK 9076:	56 g	
SK 9076:	75 g	

### Dimensions

#### Width x height x depth

IK 9076:	17.5 x 90 x 59 mm
SK 9076:	17.5 x 90 x 98 mm

## Standard Types

IK 9076.11 DC 24 V < 0.3 A

Article number:	0051708
• Output:	1 changeover contact
• Nominal voltage $U_N$ :	DC 24 V
• Operate time:	< 0.3 A
• Width:	17.5 mm

SK 9076.11 DC 24 V < 0.3 A

Article number:	0054742
• Output:	1 changeover contact
• Nominal voltage $U_N$ :	DC 24 V
• Operate time:	< 0.3 A
• Width:	17.5 mm

## Connection Example

