

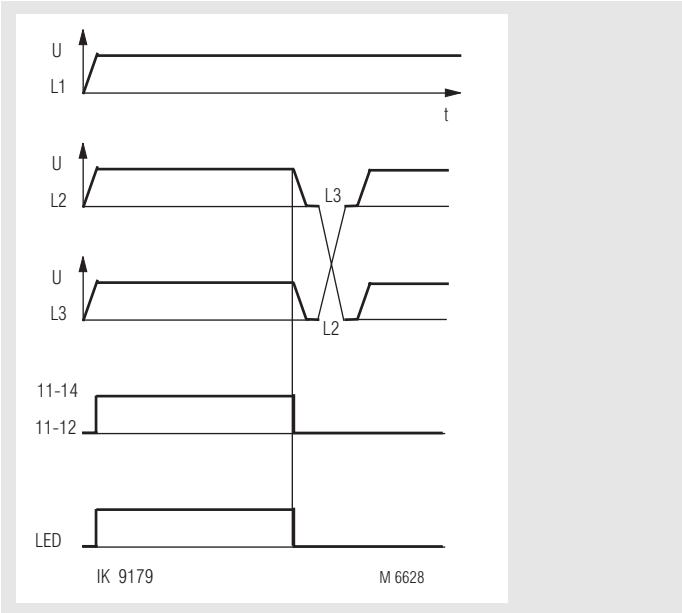
## Phase sequence monitor (Phase sequence relay) IK 9179, SK 9179 varimeter

0225107



- According to IEC 255, EN 60255, VDE 0435 part 303
- **Devices available in 2 enclosure versions:**
  - I-model, e.g. IK 9179, depth 61 mm  
with terminals at the bottom for installations systems and industrial distribution systems according to DIN 43 880
  - S-model, e.g. SK 9179, depth 100 mm  
with terminals at the top for cabinets with mounting plate and cable duct
- Detection of phase sequence in 3-phase systems
- Without auxiliary voltage
- Closed circuit operation
- LED indicator for phase sequence
- Output 1 changeover contact
- Width 17,5 mm

### Function diagram



### Approvals and marking



### Applications

Detection of phase sequence in 3-phase systems. Disable start of motors with fixed direction of rotation in the case of wrong phase sequence

### Indicators

LED: on, when output relay active (contact 11-14 closed)

### Technical data

#### Input

**Nominal voltage  $U_N$ :** 3 AC 400 V  
**Voltage range:** 0,8 ... 1,1  $U_N$   
**Nominal frequency:** 50 / 60 Hz  
**Frequency range:** 45 ... 65 Hz

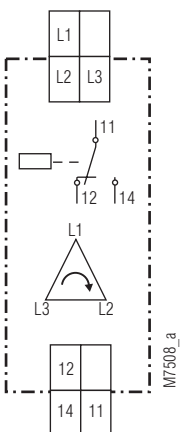
#### Output

**Contact:** IK 9179.11, SK 9179: 1 changeover contact  
**Thermal current  $I_{th}$ :** 4 A  
**Switching capacity**  
to AC 15:  
NO contact: 3 A / AC 230 V EN 60 947-5-1  
NC contact: 1 A / AC 230 V EN 60 947-5-1  
**Electrical life** EN 60 947-5-1  
to AC 15 at 1 A, AC 230 V: typ. 300 000 switching cycles  
**Short-circuit strength**  
**max. fuse rating:** 4 A gL EN 60 947-5-1  
**Mechanical life:**  $\geq 30 \times 10^6$  switching cycles

### General data

**Operating mode:** Continuous operation  
**Temperature range:** - 20 ... + 60°C  
**Clearance and creepage distances**  
overvoltage category /  
contamination level  
(between L1-L2-L3): 4 kV / 2 IEC 60 664-1  
input/output: 4 kV / 2 IEC 60 664-1

### Circuit diagram



## Technical data

### EMC

Electrostatic discharge:	8 kV (air)	EN 61 000-4-2
HF irradiation:	10 V/m	EN 61 000-4-3
Fast transients:	2 kV	EN 61 000-4-4

### Surge voltages between

wires for power supply:	2 kV	EN 61 000-4-5
between wire and ground:	4 kV	EN 61 000-4-5

Interference suppression: Limit value class B EN 55 011

**Degree of protection:** Housing: IP 40 EN 60 529  
Terminals: IP 20 EN 60 529

**Housing:** Thermoplastic with V0 behaviour according to UL subject 94

**Vibration resistance:** Amplitude 0,35 mm EN 60 068-2-6  
frequency 10 ... 55 Hz

**Climate resistance:** 20 / 060 / 04 EN 60 068-1

**Terminal designation:** EN 50 005

**Wire connection:** 2 x 2,5 mm<sup>2</sup> solid or  
2 x 1,5 mm<sup>2</sup> stranded ferruled  
DIN 46 228

**Wire fixing:** Flat terminals with self-lifting  
clamping piece EN 60 999

**Mounting:** DIN rail EN 50 022

### Weight

IK 9179: 60 g

SK 9179: 77 g

## Dimensions

### Width x height x depth

IK 9179: 17,5 x 90 x 61 mm

SK 9179: 17,5 x 90 x 100 mm

## Standard type

IK 9179.11 3 AC 400 V 50/60 Hz

Article number: 0049182 stock item

SK 9179.11 3 AC 400 V 50/60 Hz

Article number: 0051576

- Output: 1 changeover contact
- Nominal voltage  $U_N$ : 3 AC 400 V
- Width: 17,5 mm

## Ordering example

IK 9179 .11 3 AC 400 V 50/60 Hz



Nominal frequency  
Nominal voltage  
Contact  
Type