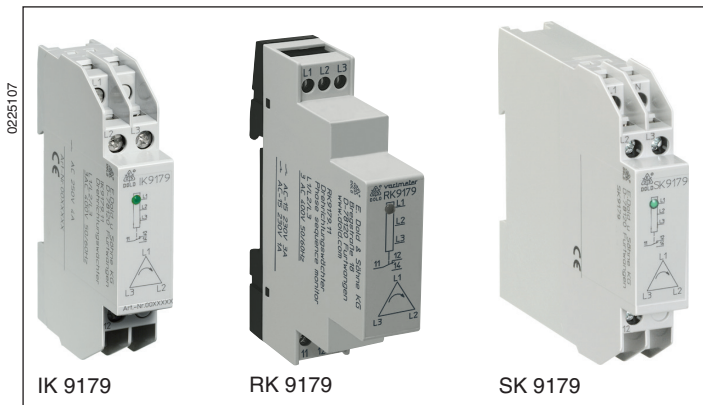


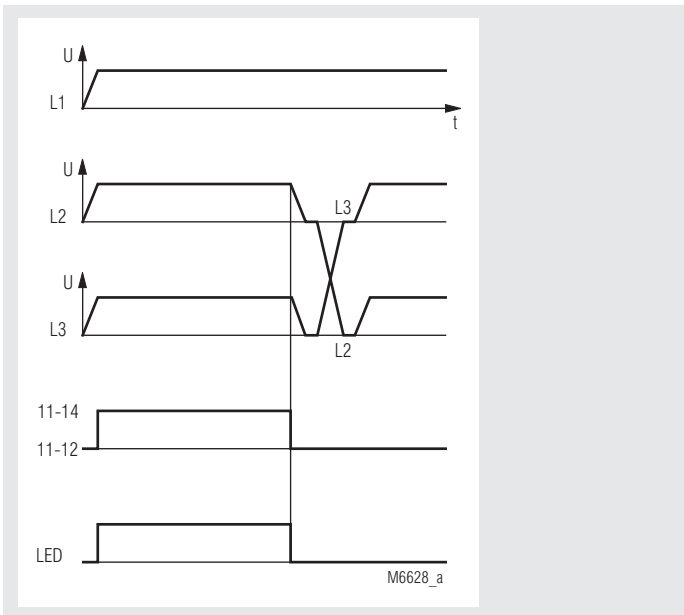
VARIMETER

Phase Sequence Monitor (Phase Sequence Relay)
 IK 9179, RK 9179, SK 9179



- According to IEC/EN 60255, DIN VDE 0435-303
- Detection of phase sequence in 3-phase systems
- Without auxiliary voltage
- Closed circuit operation
- LED indicator for phase sequence
- Output 1 changeover contact
- **Devices available in 2 enclosure versions:**
 - I- and R-model, e.g. IK 9169 with depth 61 mm or RK 9169 with depth 71 mm with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - S-model, e.g. SK 9169 depth 100 mm, with terminals at the top for cabinets with mounting plate and cable duct
- Width 17.5 mm

Function Diagram



Approvals and Markings



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, RK 9169, SK 9179: 1 changeover contact

Thermal current I_{th} : 4 A

Switching capacity

to AC 15:

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

Electrical life IEC/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 IEC/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

rated impulse voltage /

pollution degree

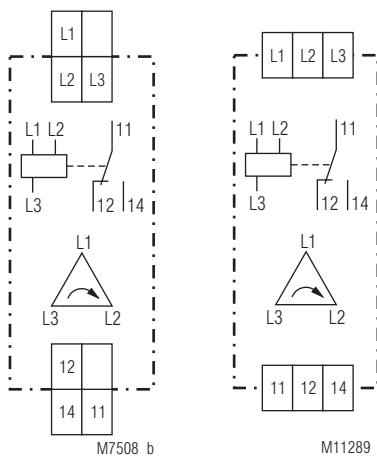
(between L1-L2-L3): 4 kV / 2

IEC 60 664-1

input/output: 4 kV / 2

IEC 60 664-1

Circuit Diagram



IK 9179, SK 9179

RK 9179

Technical Data

EMC

Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V/m	IEC/EN 61 000-4-3
Fast transients:	2 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011

Degree of protection

Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529

Housing: Thermoplastic with V0 behaviour according to UL subject 94

Vibration resistance: Amplitude 0.35 mm IEC/EN 60 068-2-6
frequency 10 ... 55 Hz

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

Terminal designation: EN 50 005

Wire connection: 2 x 2.5 mm² solid or
2 x 1.5 mm² stranded ferruled
DIN 46 228-1/-2/-3/-4

Wire fixing: Flat terminals with self-lifting
clamping piece IEC/EN 60 999-1
DIN rail IEC/EN 60 715

Mounting:

Weight

IK 9179:	60 g
RK 9179:	74 g
SK 9179:	77 g

Dimensions

Width x height x depth

IK 9179:	17.5 x 90 x 61 mm
RK 9179:	17.5 x 90 x 71 mm
SK 9179:	17.5 x 90 x 100 mm

Standard Types

IK 9179.11 3 AC 400 V 50/60 Hz

Article number: 0049182

RK 9179 3 AC 400 V 50/60 Hz

Article number: 0060273

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