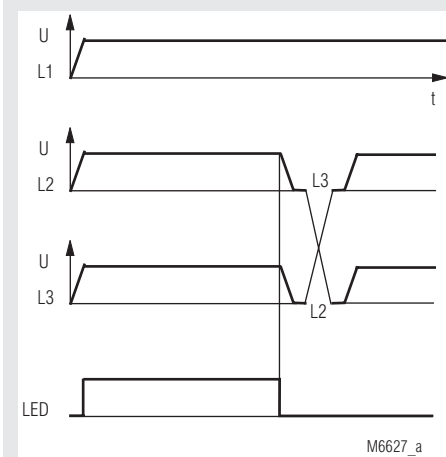


VARIMETER Phase Sequence Indicator IK 9178, SK 9178



- According to IEC/EN 60 255-1
- Indication of phase sequence in 3-phase systems
- Without auxiliary supply
- LED indicator for phase sequence
- Devices available in 2 enclosure versions:
 - IK 9178: depth 59 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - SK 9178: depth 98 mm, with terminals at the top for cabinets with mounting plate and cable duct
- Width 17.5 mm

Function Diagram



Approvals and Markings



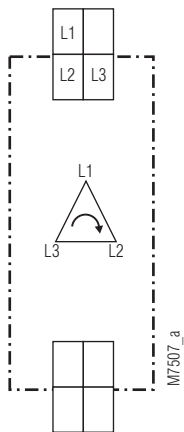
Applications

Indication of phase sequence in 3-phase systems

Indicators

LED: on when phase sequence is right

Circuit Diagram



IK 9178, SK 9178

Connection Terminals

Terminal designation	Signal description
L1, L2, L3	Mains connections

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

General Data

Operating mode:	Continuous operation	
Temperature range:		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 60 °C	
Altitude:	< 2,000 m	
Clearance and creepage distances		
rated impulse voltage / pollution degree (between L1-L2-L3):	4 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation		
80 MHz ... 2.7 GHz:	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:	1 kV	IEC/EN 61 000-4-5
between wire and ground:	2 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
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	DIN 46 228-1/-2/-3/-4	
Cross section:	2 x 0.6 ... 2.5 mm ² solid or 2 x 0.28 ... 1.5 mm ² stranded ferruled	
Stripping length:	10 mm	
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1	
Fixing torque:	0.8 Nm	
Mounting:	DIN rail IEC/EN 60 715	
Weight		
IK 9178:	50 g	
SK 9178:	69 g	

Dimensions

Width x height x depth

IK 9178:	17.5 x 90 x 59 mm
SK 9178:	17.5 x 90 x 98 mm

Standard Type

IK 9178	3 AC 400 V	50/60 Hz
Article number:	0049102	
• Nominal voltage U_N :	3 AC 400 V	
• Width:	17.5 mm	
SK 9178	3 AC 400 V	50/60 Hz
Article number:	0054760	
• Nominal voltage U_N :	3 AC 400 V	
• Width:	17.5 mm	