

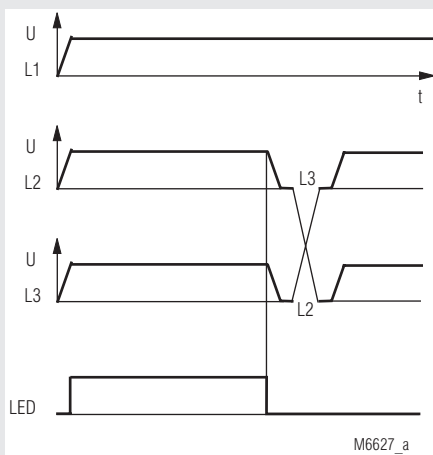
## VARIMETER Phase Sequence Indicator IK 9178, SK 9178

Translation  
of the original instructions



- According to IEC/EN 60255-1
- 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 43880
  - 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



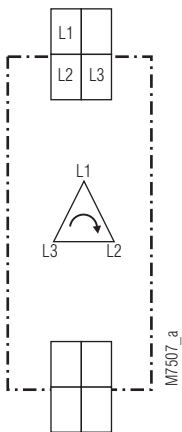
### Applications

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

<b>Nominal voltage <math>U_N</math>:</b>	3 AC 400 V
<b>Voltage range:</b>	0.8 ... 1.1 $U_N$
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Frequency range:</b>	45 ... 65 Hz

### General Data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range:</b>		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 60 °C	
<b>Altitude:</b>	< 2000 m	
<b>Clearance and creepage distances</b>		
Rated impulse voltage / pollution degree (between L1-L2-L3):	4 kV / 2	IEC 60664-1
<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation		
80 MHz ... 2.7 GHz:	10 V/m	IEC/EN 61000-4-3
Fast transients:	2 kV	IEC/EN 61000-4-4
Surge voltages		
Between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
HF wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
<b>Housing:</b>	Thermoplastic with V0 behaviour according to UL subject 94	
<b>Vibration resistance:</b>	Amplitude 0.35 mm IEC/EN 60068-2-6 frequency 10 ... 55 Hz	
<b>Climate resistance:</b>	20 / 060 / 04 IEC/EN 60068-1	
<b>Terminal designation:</b>	EN 50005	
<b>Wire connection</b>	DIN 46228-1/-2/-3/-4	
Cross section:	2 x 0.6 ... 2.5 mm <sup>2</sup> solid or 2 x 0.28 ... 1.5 mm <sup>2</sup> stranded ferruled	
Stripping length:	10 mm	
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60999-1	
<b>Fixing torque:</b>	0.8 Nm	
<b>Mounting:</b>	DIN rail IEC/EN 60715	
<b>Weight</b>		
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	