

# IEG 45-3LA/400/21

## Voltage indication module

### INTERFACE

Data sheet  
104160\_en\_00

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## 1 Description

Correct invoicing on the basis of a measuring instrument can only be ensured if the three phases L1, L2, and L3 are available.

IEG 45-3LA/400/21 voltage indication modules are used for monitoring, for example, on a tariff changing board. These modules indicate all three phases with high-accuracy reading, even in case of reverse voltages.

These modules also have a floating PDT contact, thereby offering the convenience of voltage monitoring through remote querying.

## 1.1 Function

L1 failure: Glow lamp 1 does not light up, relay drops

L2 failure: Glow lamp 2 does not light up, relay drops

L3 failure: Glow lamp 3 does not light up, relay drops

Failure of two phase conductors: No glow lamps light up, relay drops

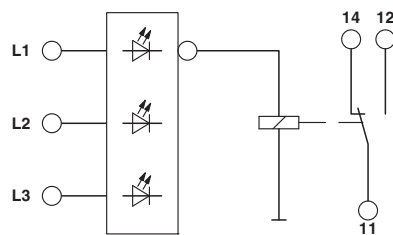


Figure 1 Circuit diagram



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This data sheet is valid for all products listed on the following page:

## 2 Ordering data

Description	Type	Order No.	Pcs./Pkt.
Voltage indication module, with relay contact output, SPDT, 400 V AC operating voltage	IEG 45-3LA/400/21	2963268	5

## 3 Technical data

General data	
Ambient temperature range	-20°C ... +40°C
Rated insulation voltage according to EN 50178	300 V
Pollution degree according to EN 50178	2
Surge voltage category according to EN 50178	3, basic insulation
Mounting position	Any
Installation	Can be aligned without spacing
Width	45 mm
Height	47.5 mm
Length	75 mm

Connection data	
Conductor cross-section, solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, stranded	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, AWG	24 - 12
Stripping length	8 mm
Connection method	Screw connection

Input	
Operating voltage $U_N$ (phase conductor/phase conductor)	400 V AC $\pm 10\%$
Operating voltage range	0.93 ... 1.1 x $U_N$ (at 20°C)
Indication range	$\geq 100$ V AC
Indication elements	Glow lamp (green cover)
Current consumption of each light indicator at $U_N$	
L1	5.3 mA
L2	5.3 mA
L3	7.9 mA

Relay output	
Contact type	Single contact, SPDT
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A
Output fuse	6.3 A (fast-blow)
Maximum interrupting rating (ohmic load)	
At 24 V DC	144 W
At 250 V AC	1500 VA
Mechanical service life	2 x 10 <sup>7</sup> cycles, approximately

Conformance/approvals	
Conformance	CE-compliant

Conformance with EMC Directive 2004/108/EC	
Noise immunity according to	EN 61000-6-2
Noise emission according to	EN 61000-6-4

Conformance with Low Voltage Directive (LVD) 2006/95/EC	
Electronic equipment according to	EN 50178