

# EMG ...-DIO .../LP

## Lamp testing modules

### INTERFACE

Data sheet  
101174\_en\_01

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## 1 Description

Lamp test circuits, which decouple signals in isolation, should be implemented using two module versions:

- The diodes are connected in pairs and can be freely wired to the anode
- The anode of each diode pair is connected to a common connection point

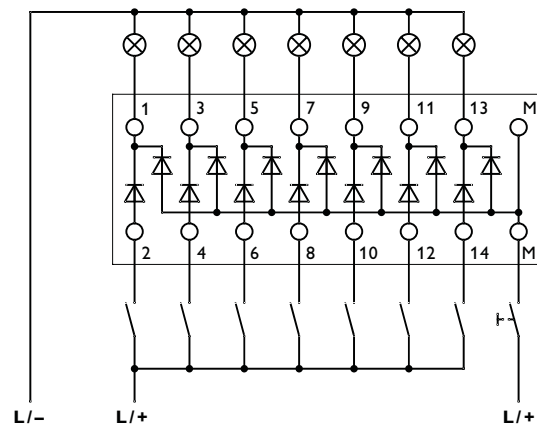


Figure 1 Lamp test circuit (EMG 45-DIO14M/LP)



#### NOTE:

Please note that there is no isolation between the individual diode paths within a module.



Make sure you always use the latest documentation.  
It can be downloaded at [www.phoenixcontact.net/download](http://www.phoenixcontact.net/download).



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

## 2 Ordering data

### Lamp testing modules

Description	Housing width	Type	Order No.	Pcs./Pkt.
<b>Lamp testing modules, 2 diodes each with common cathode:</b>				
4-pair version, for individual wiring	45 mm	EMG 45-DIO 8E/LP	2954798	5
7-pair version, with common control	45 mm	EMG 45-DIO14M/LP	2950132	5
8-pair version, for individual wiring	90 mm	EMG 90-DIO 16E/LP	2954808	5
16-pair version, with common control	90 mm	EMG 90-DIO 32M/LP	2954785	5

### Accessories

Description	Type	Order No.	Pcs./Pkt.
Device marking label	EMG-GKS 12	2947035	50

## 3 Technical data

### General data

Ambient temperature range	-20°C ... +50°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
Height	55 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> ... 2.5 mm <sup>2</sup>
Conductor cross-section, AWG	24 - 12
Stripping length	8 mm
Connection method	Screw connection

### Diode data

	EMG 45-DIO 8E/LP, EMG 90-DIO 16E/LP	EMG 45-DIO14M/LP, EMG 90-DIO 32M/LP
Maximum operating voltage U <sub>max</sub>	250 V AC	250 V AC
Peak reverse voltage per diode	1300 V	1300 V
Reverse current per diode	≤ 5 μA	≤ 5 μA
Conducting-state voltage per diode	0.8 V, approximately	0.8 V, approximately
Conducting-state current per diode		
With single load	0.7 A	0.7 A
With simultaneous load	0.4 A	0.2 A

### Conformance/approvals

Conformance	CE-compliant
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### Conformance with Low Voltage Directive (LVD) 2006/95/EC

Electronic equipment according to	EN 50178
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## 4 Circuit diagram

### 4.1 Lamp testing module, can be wired individually

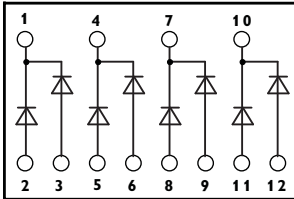


Figure 2 EMG 45-DIO 8E/LP

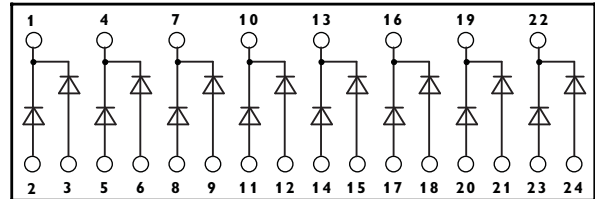


Figure 3 EMG 90-DIO 16E/LP

### 4.2 Lamp testing module, negative polarity

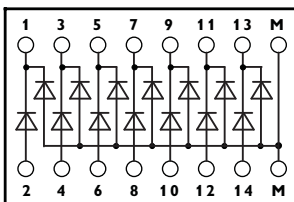


Figure 4 EMG 45-DIO14M/LP

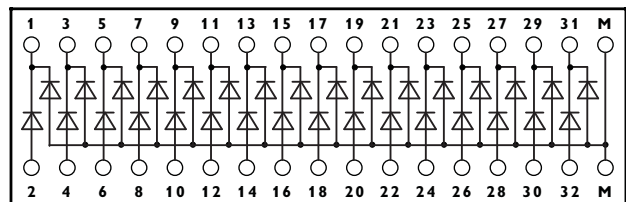


Figure 5 EMG 90-DIO 32M/LP