

# EMG 12-OV- 24DC/240AC/1

Order No.: 2948827

The illustration shows version EMG 12-OV, with AC voltage output, max. 1 A



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2948827>

Power optocoupler, with light indicator and protection circuits in the input and output circuits, input: 24 V DC, output: 24-280 V AC/max. 1 A

Commercial data	
EAN	4017918083496
Pack	10 pcs.
Customs tariff	85364190
Weight/Piece	0.0481 KG
Catalog page information	Page 129 (IF-2009)

#### Product notes

WEEE/RoHS-compliant since:  
06/07/2007



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

#### Technical data

##### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
Switching threshold "0" signal in reference to $U_N$	$\leq 0.4$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$

Typical input current at $U_N$	6.8 mA
Typical response time	(max. one half cycle - zero-voltage crossing)
Typical turn-off time	(max. one half cycle - zero-current crossing)
Status display	Yellow LED
Name of protection	Polarity protection
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor
Transmission frequency	10 Hz

#### Output data

Output nominal voltage	240 V AC
Output nominal voltage range	24 V AC ... 280 V AC (50 Hz ... 60 Hz)
Limiting continuous current	1 A
Min. load current	50 mA
Leakage current	3.5 mA
Surge current	125 A (t = 10 ms)
Max. load value	$78 \text{ A}^2\text{s}$ ( $I^2 \times t$ where t = 10 ms)
Peak offstate voltage	600 V (Periodic peak reverse voltage)
Voltage drop at max. limiting continuous current	$\leq 1.5 \text{ V}$
Output circuit	2-conductor floating
Name of protection	RC element
Protective circuit/component	RC element

#### Connection data

Type of connection	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

#### General data

Width	12.5 mm
-------	---------

Height	102 mm
Depth	75 mm
Test voltage input/output	3.5 kV AC
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Mounting position	Any
Assembly instructions	Mounted in rows with zero spacing: Horizontal/not in rows: Any
Operating mode	100% operating factor
Degree of protection	IP20
Inflammability class in acc. with UL 94 (housing)	V0
Standards/regulations	DIN VDE 0110
Rated surge voltage / insulation	Basic insulation

**Certificates / Approvals**



Certification GOST

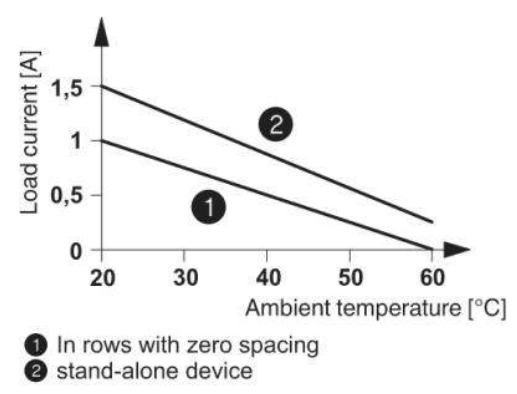
**Accessories**

Item	Designation	Description
2947035	EMG-GKS 12	Equipment marker, width 12 mm

**Marking**

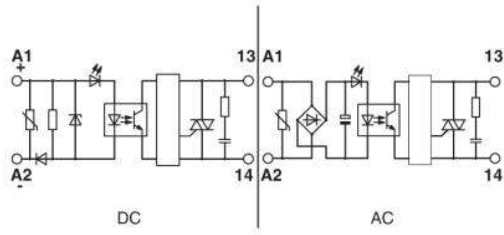
**Diagrams/Drawings**

Diagram



Circuit diagram

---



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



© 2010 Phoenix Contact  
Technical modifications reserved;