

Solid-state relay module - EMG 12-OV- 24DC/240AC/1 - 2948827

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 24 V DC, output: 24 - 280 V AC/max. 1 A

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

Product Features

- EMG-17-OV, short-circuit-proof with indicator LED
- Protective circuit in input and output
- RC protective circuit
- Status indicator
- Direct control with switching levels from 5 V to 230 V and up to 2 A
- Electrical isolation
- Zero voltage switch



Key commercial data

package_quantity	10
GTIN	4017918083496

Technical data

Dimensions

Width	12.5 mm
Height	75 mm
Depth	102 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Degree of protection	IP20

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	≤ 0.4

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Input data

Switching threshold "1" signal in reference to U_N	≥ 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
Type of protection	Protection against polarity reversal
Type of protection	Surge protection
Protective circuit/component	Polarity protection diode
Protective circuit/component	Varistor
Transmission frequency	10 Hz

Output data

Output nominal voltage	240 V AC
Output voltage range	24 V AC ... 280 V AC (50 Hz ... 60 Hz)
Limiting continuous current	1 A (see derating curve)
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-wire, floating
Type of protection	RC element
Protective circuit/component	RC element

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

General

Test voltage input/output	3.5 kV AC
Test voltage input/output	3.5 kV AC
Mounting position	Any
Assembly instructions	Mounted in rows with zero spacing: Horizontal/not in rows: Any
Operating mode	100% operating factor
Inflammability class according to UL 94	V0

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Technical data

General

Standards/regulations	IEC 60664
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Rated surge voltage / insulation	Basic insulation

classifications

eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504

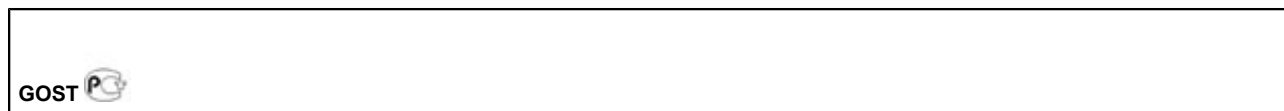
UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

approvals

GOST /

Approval details



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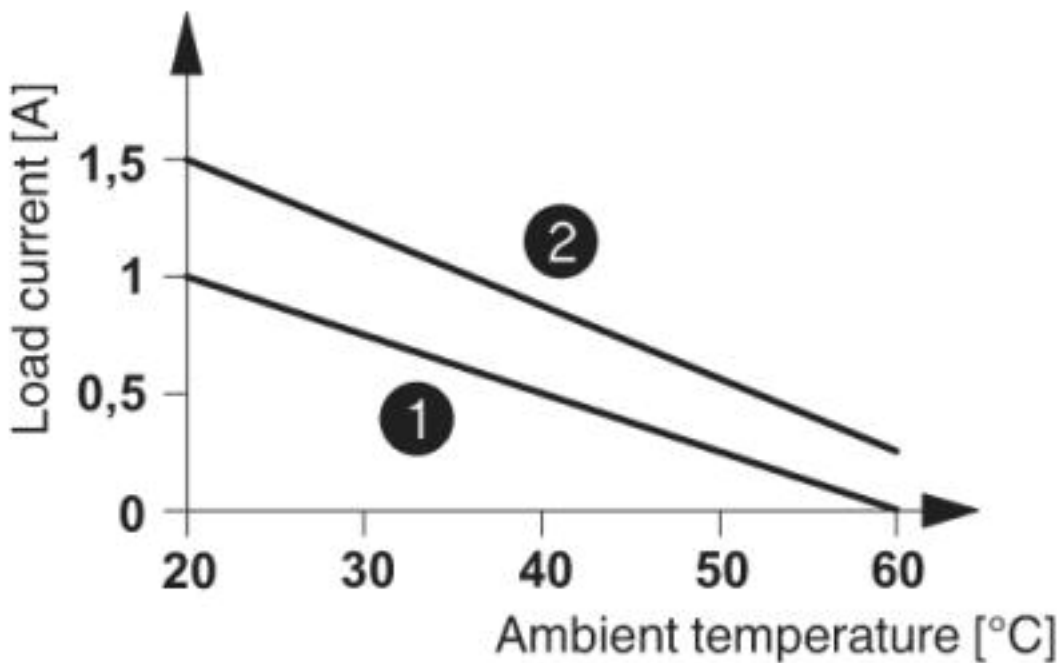
accessories

EMG-GKS 12 - 2947035



Drawings

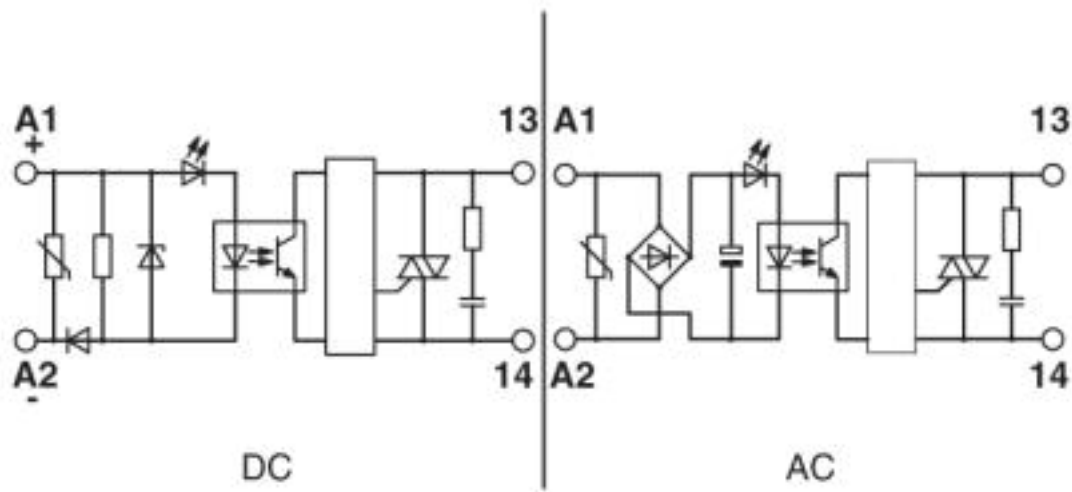
Diagram



- 1 In rows with zero spacing
- 2 stand-alone device

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Circuit diagram



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