

## EMG 17-OV



M 3



8

with DC voltage output,  
max. = 1 A

Housing width 17.5

(IEC)	rigid	flexible		I	U
[mm <sup>2</sup> ]	solid	stranded	AWG	[A]	[V]

Connection data    0.2-4    0.2-2.5    24-12    \*    \*

\* The electrical data is determined by the power optical coupler.

Description	Input voltage	Type	Order No.	Pcs. Pkt.
<b>Power optical coupler</b> , with light indicator and input/output protection circuit, input: DC or AC voltage	5 V DC	EMG 17-OV- 5 DC/220 DC/1	<a href="#">29 54 05 7</a>	10
	12 V DC	EMG 17-OV- 12 DC/220 DC/1	<a href="#">29 54 06 0</a>	10
	24 V DC	<b>EMG 17-OV- 24 DC/220 DC/1</b>	<b><a href="#">29 54 07 3</a></b>	10
	48-60 V DC	EMG 17-OV- 60 DC/220 DC/1	<a href="#">29 54 08 6</a>	10
	110 V DC	EMG 17-OV-110 DC/220 DC/1	<a href="#">29 54 09 9</a>	10
	220 V DC	EMG 17-OV-220 DC/220 DC/1	<a href="#">29 54 10 9</a>	10
	120 V AC	EMG 17-OV-120 AC/220 DC/1	<a href="#">29 54 11 2</a>	10
	230 V AC	EMG 17-OV-230 AC/220 DC/1	<a href="#">29 54 12 5</a>	10

### Accessories

Equipment marker normal



**EMG-GKS**

**[29 47 03 5](#)**

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### Technical data

Dimensions

Width [mm] 17.5

Height [mm] 102

Length [mm] 75

**Input data** (Input)

**DC**

**AC**

Operating voltage range [V DC/V AC] ± 10% <sup>6)</sup>    5    12    24    48/60    110    220    120    230

Switching level	1 signal ("H") [V DC/V AC] $\geq$	3.4	6	10	24	33	75	38	85
	0 signal ("L") [V DC/V AC] $\leq$	2.3	3	7.5	18	27	58	15	45
Typ. input current with $U_N$ [mA]		6	6	7	6	5	5	5	5
Transmission frequency $f_{\text{limit}}$ [Hz] (ohmic load)		100	100	100	100	100	100	10	10
Input circuit		polarity protection diode, operation indicator (LED yellow)							
		surge voltage protection (only AC inputs)							
<b>Output data</b>		<b>DC load</b>							
Operating voltage range		15–220 V DC							
Max. collector/emitter reverse voltage		220 V DC							
Max. continuous load current <sup>1) 2)</sup>		1 A							
Surge current		2 A (t = 1 s)							
Voltage drop at max. load current		1.2 V							
Max. phase shift (inductive loads)		3)							
Switching time $t_{\text{in}}$	DC input	2.5 $\mu\text{s}$ /1 ms							
$t_{\text{out}}$	AC input	4 ms/35 ms							
Output circuit		polarity protection diode, surge voltage protection							
Output connection		floating, 2 conductors							
<b>General data</b>									
Insulation voltage input/output		3.5 kV <sub>rms</sub>							
Ambient temperature range		–20 °C to +60 °C							
Standards/regulations		DIN VDE 0110							
Installation position/mounting		as desired, in rows with zero spacing							
Type of connection		screw connection							

**Type of housing**

Polycarbonate fiber reinforced PC-F,

see [product-line info](#)

color: green

Torque value of terminals see [product-line info](#).The rated cross section (see [product-line info](#)) refers to untreated conductors without ferrules.

Articles printed in bold can be delivered at short notice.

**Notes:**<sup>1)</sup> See load current diagram!

The curve is also valid for inductive

loads up to  $\cos. \varphi = 0.5$ <sup>2)</sup> Recommended equipment fuse:

for coupling component with 3 A output = 5 A,

for coupling component with 1 A output = 2 A,

Fast acting fuse (FF), identification color: black as overload protection for semiconductor switch (triac, transistor)

<sup>3)</sup> For the protection of input/output circuits, inductive loads must be dampened with an effective protective circuit.<sup>4)</sup> Switch-on time:

max. one half cycle (zero voltage)

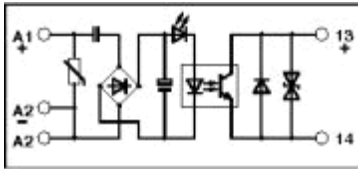
Switch-off time:

max. one half cycle (zero current)

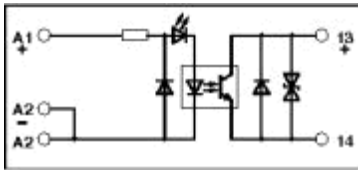
<sup>5)</sup> Not suitable for reversing circuits with synchronous motors

(special components available on request)

<sup>6)</sup> With 120 AC and 230 AC + 6 %, -15 %**Block diagram**

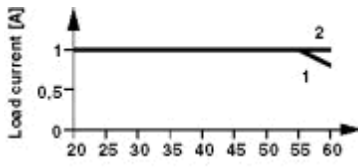


AC-Input



**Diagram**

DC-Input



- 1 Power optical couplers mounted in rows with zero spacing
- 2 Power optical couplers in rows with  $\geq 20$  mm spacing