

EMG 10-OV



M 3



8

with DC voltage output,
max. = 1 A

Housing width 10.0

	(IEC)	rigid	flexible	I	U	
	[mm ²]	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.
Power optical coupler , with light indicator and input/output protection circuit, input: DC or AC voltage	5 V DC	EMG 10-OV- 5 DC/24 DC/1	29 44 20 3	10
	12 V DC	EMG 10-OV- 12 DC/24 DC/1	29 44 21 6	10
	24 V DC	EMG 10-OV- 24 DC/24 DC/1	29 44 22 9	10
	48-60 V DC	EMG 10-OV- 60 DC/24 DC/1	29 44 23 2	10
	110 V DC	EMG 10-OV-110 DC/24 DC/1	29 44 24 5	10
	220 V DC	EMG 10-OV-220 DC/24 DC/1	29 44 25 8	10
	120 V AC	EMG 10-OV-120 AC/24 DC/1	29 44 26 1	10
	230 V AC	EMG 10-OV-230 AC/24 DC/1	29 44 27 4	10

Accessories

Equipment marker narrow  **EMG-SGKS** [29 47 58 5](#) 50

Technical data

Dimensions

Width [mm] 10
 Height [mm] 102
 Length [mm] 75

Input data (Input)

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

Switching level	1 signal ("H") [V DC/V AC] \geq	4.1	7	12	23	47	97	58	104
	0 signal ("L") [V DC/V AC] \leq	3.3	5	8	16	31	68	53	70
Typ. input current with U_N [mA]		4	4	5	5	4	4	4	4
Transmission frequency f_{grenz} [Hz] (ohmic load)		500	500	500	500	500	500	10	10

Input circuit
operation indicator (LED yellow), polarity protection diode,
RC element (only AC inputs)

Output data**DC load**

Operating voltage range	5–36 V DC
Max. collector/emitter reverse voltage	45 V DC
Max. continuous load current ^{1) 2)}	1 A
Surge current	2 A (t = 1 s)
Voltage drop at max. load current	< 1 V
Max. phase shift (inductive loads)	3)
Switching time t_{in} DC input	0.1 ms/0.2 ms
t_{out} AC input	25 ms/25 ms

Output circuit
pol. protection diode
Output connection
floating, 2 conductors

General data

Insulation voltage input/output	3.5 kV _{rms}
Ambient temperature range	–20 °C to +50 °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:

¹⁾ See load current diagram!

The curve is also valid for inductive loads up to $\cos. \varphi = 0.5$

²⁾ 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)

³⁾ For the protection of input/output circuits, inductive loads must be dampened with an effective protective circuit.

⁴⁾ Switch-on time:

max. one half cycle (zero voltage)

Switch-off time:

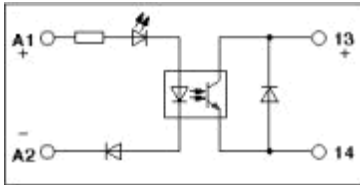
max. one half cycle (zero current)

⁵⁾ Not suitable for reversing circuits with synchronous motors

(special components available on request)

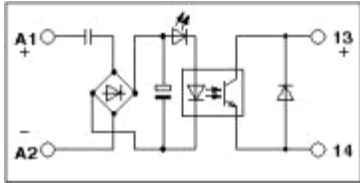
⁶⁾ With 120 AC and 230 AC + 6 %, -15 %

Block diagram



DC input

DC-Input



AC input

Diagram

AC-Input

