

Printed circuit board relay, monostable

OA 5671, 5681; OA 5672, 5682



- according to IEC/EN 61 810-1, IEC/EN 60 255, IEC 60 664-1
- compact size, small height (at horizontal model)
- OA 5671 / 5681 horizontal mounting
- OA 5672 / 5682 vertical mounting
- OA 5671 and OA 5672 for continuous currents to 10 A or as option with twin contact with 5 μ m Au
- OA 5681 and OA 5682 for continuous currents to 16 A
- OA 5672 as option with 7 mm or 10 mm pin distance
- Clearance and creepage distances, Contact-coil \geq 8 mm
- For continuous operating temperature to 110°C
- Voltage range 0,7 U_N ... 2,2 U_N
- Solder line proof
- Approval: UL



Technical data

Relay type	OA 5671, OA 5672	OA 5681, OA 5682
1. 0 Relay coil		
1. 1 Nominal voltage	DC V	6 ... 110 (others on request)
1. 2 Nominal consumption	W	0,53
2. 0 Contacts		
2. 1 Contact arrangement ¹⁾	1 changeover contact	
2. 2 Contact material	AgCdO + 0,2 μ m Au; (AgNi 0,15 + 5 μ m Au) ⁴⁾ AgCdO + 0,2 μ m Au	
2. 3 Rated insulated voltage	AC V	250
Switching voltage min./max.	DC V, AC V	12 / 250, 380 (\approx 100mV / \approx 60 V) ⁴⁾
2. 4 Limiting continuous current I_{th}	A	10 ⁵⁾
Switching current min./max.	A	10 mA ⁷⁾ / 16 (1 mA / 0,3 A) ⁴⁾
2. 5 Switching power min./max.	VA	4 / 2 500 (1 mVA / 7 VA) ⁴⁾
Switching power min./max.	W	35 ... 300 ⁶⁾ (1mW / 7 W) ⁴⁾
2. 6 Switching capacity to IEC/EN 60 947-5-1 AC 15	AC V/A	NC: 230 / 5 NO: 230 / 10
DC 13	DC V/A	NC: 24 / 1 NO: 24 / 1
2. 7 Electrical life ³⁾ at AC 250 V, I_{th} (OA/OW) switching cycles	approx. 0,3 x 10 ⁶ / ca. 0,15 x 10 ⁶ approx. 0,2 x 10 ⁶ / approx. 0,1 x 10 ⁶	
2. 8 Switching frequency max. switching cycles / s	20	
2. 9 Response time / Release time	ms	7 / 3
2.10 Contact force NO / NC	cN	25 / 12
3. 0 Other		
3. 1 Mechanical life switching cycles	approx. 30 x 10 ⁶	
3. 2 Temperature range	°C	- 40 ... + 110
3. 3 Degree of protection, housing	IP43	IEC/EN 60 529
3. 4 Housing material	Thermoplast V0 to UL 94	
3. 5 Vibration resistance	\leq 10 g, up to 100 Hz IEC/EN 60 068-2-6	
3. 6 Climate resistance	40 / 110 / 04 (Climate category); A/B/D IEC/EN 60 068-1	

¹⁾ NO and NC on request

²⁾ max. 4 s or 10 % ED

³⁾ at 0,5 s On, 3,5 s Off

⁴⁾ Values for twin contact with 5 μ m Au

⁵⁾ see operating voltage limit curve

⁶⁾ see limit curve for arc free operation

⁷⁾ Typical values

Technical data

3. 8 Insulation according to IEC 60 664-1, EN 50 178

Rated insulation voltage	AC V	250
Contamination level		3
Overvoltage category		III
Test voltage contact-coil (1 min)	AC kV eff.	≥ 4
contact-contact (1 min)	AC kV eff.	≥ 1,5
Transient volt. contact-coil (1,2 - 50 μs)	kV	≥ 6
Clearance and creepage distances as per IEC/EN 60 730, IEC/EN 60 335		
contact-coil	mm	≥ 8

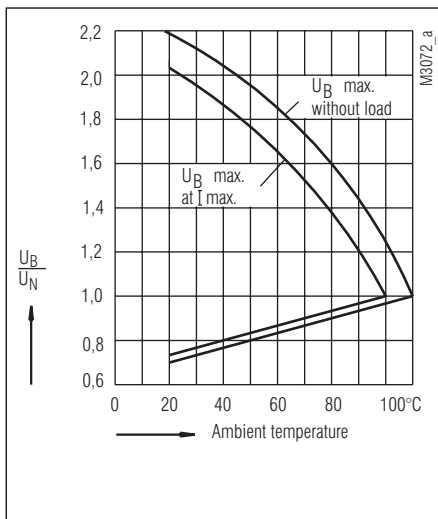
3. 9 Weight	g	17	17
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Standard variants

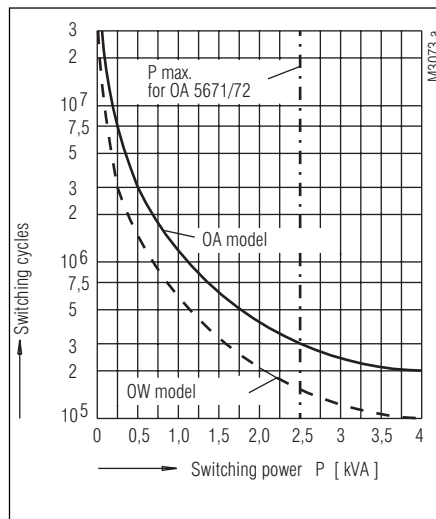
U _N ¹⁾	Voltage range	Resistance at 20°C	Design version							
			10 A			16 A		10 μm Au		
			OA 5671	OA 5672 7 mm	OA 5672 10 mm	OA 5681	OA 5682	OA 5671	OA 5672 7 mm	OA 5662 10 mm
DC V	DC V	Ω								
6	4,2 ... 13,2	70	001	046	821	851	881	031	076	061
12	8,4 ... 26,4	280	003	048	822	852	882	033	078	063
15	10,5 ... 33,0	420	004	049	823	853	883	034	079	064
20	14,0 ... 44,0	750	005	050	824	854	884	035	080	065
24	16,8 ... 52,8	1 100	006	051	825	855	885	036	081	066
48	33,6 ... 105,6	4 500	010	055	829	859	889	040	085	070
60	42,0 ... 132,0	7 000	011	056	830	860	890	041	086	071
110	77,0 ... 242,0	23 000	012	057	831	861	891	042	087	072

¹⁾ other nominal voltages on request

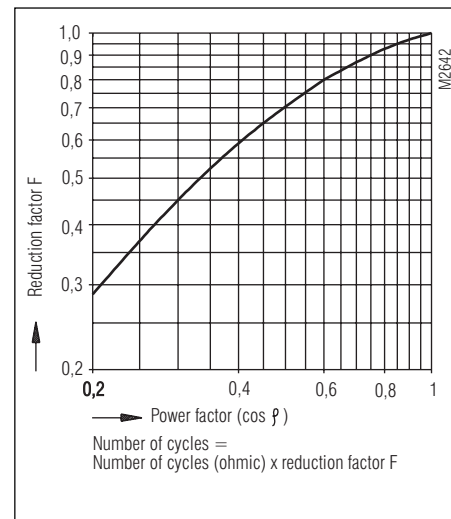
Characteristics



Operating voltage limit curve

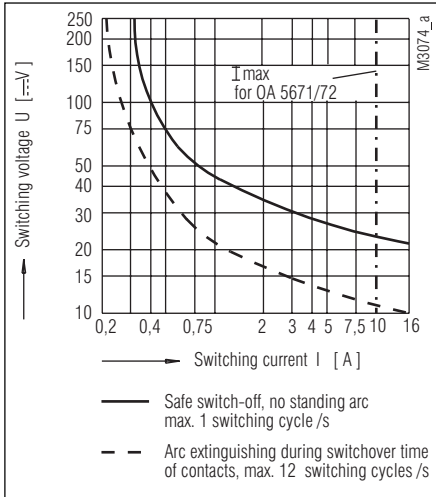


Contact service life (at $t_u = 20^\circ\text{C}$)



Reduction factor for inductive loads

Characteristics



Ordering example

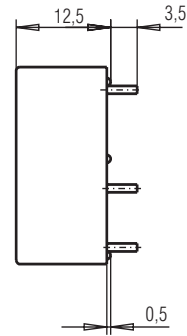
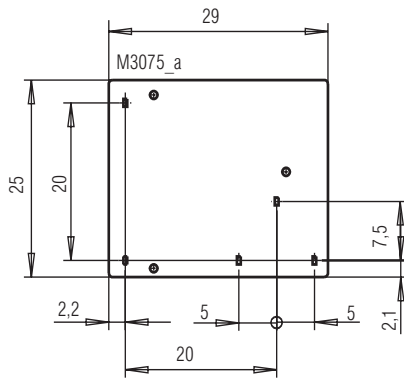
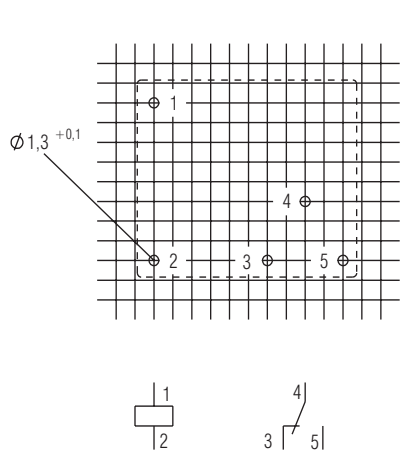
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- Design version
- Contact arrangement
1 changeover contact
- Mounting
1 = horizontal
2 = vertical
- Degree of protection
A = IP 43 (solder line proof)

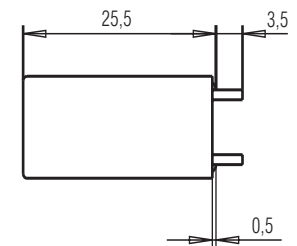
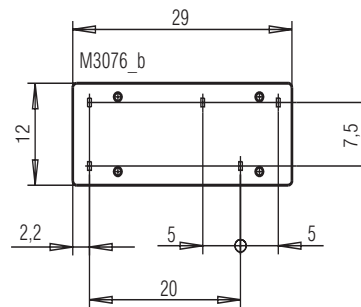
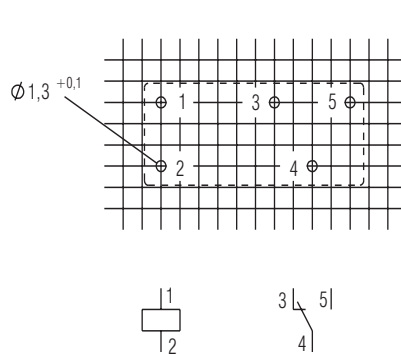
Limit curve for arc-free operation

Dimensions, pin configuration, connection diagrams

OA 5671
10 mm pin distance



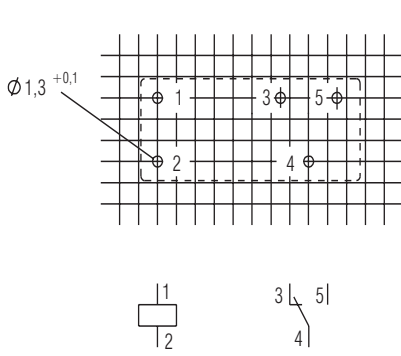
OA 5672
10 mm pin distance



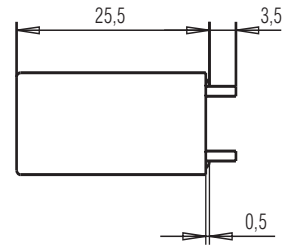
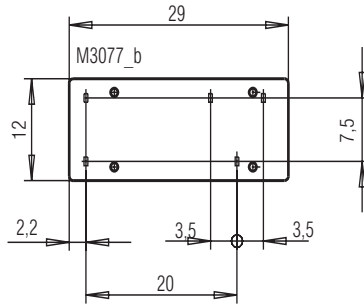
Connection for basic grid dimensions 2,5 mm as well as 2,54 mm according to IEC/EN 60 097 and IEC 60 326 average

Dimensions, pin configuration, connection diagrams

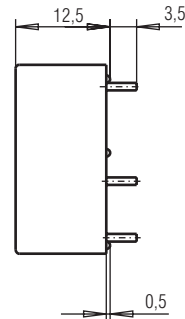
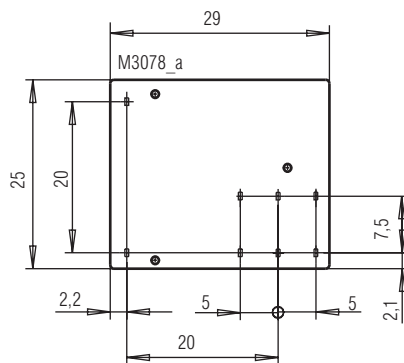
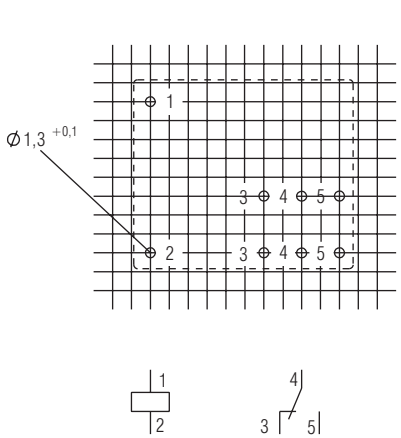
OA 5672
7 mm pin distance



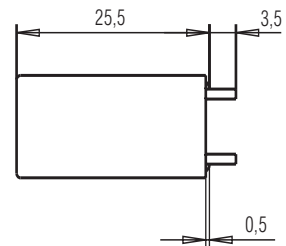
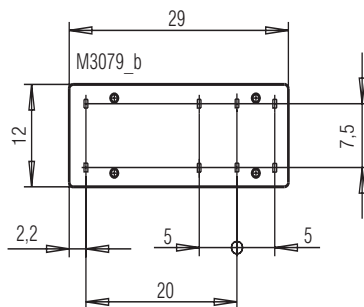
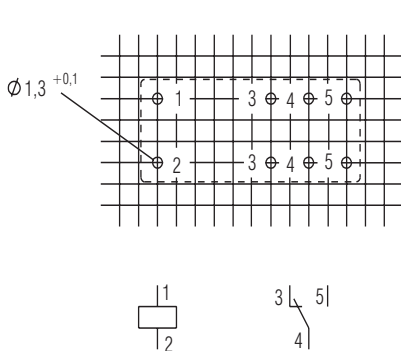
OA 5672



OA 5681



OA 5682



Connection for basic grid dimensions 2,5 mm as well as 2,54 mm according to IEC/EN 60 097 and IEC 60 326 average