

Printed circuit board relay, monostable

OA 5651, 5652, 5661, 5662, 5692



- acc. to DIN EN 61 810-1, DIN EN 60 664-1
- compact size, small height (horizontal model)
- OA 5651, 5661 horizontal models
- OA 5652, 5662, 5692 vertical models
- different pin configurations and pin arrangements
- clearance and creepage distances contact-coil ≥ 8 mm
- solder line proof
- Approvals: 



OA 5651
OA 5661



OA 5652
OA 5662
OA 5692

Technical data

Relay type	OA 5651, OA 5652 OA 5661, OA 5662, OA 5692		
1. 0 Relay coil			
1. 1 Nominal voltage	DC V	6, 12, 15, 20, 24, 48, 60 (others on request)	
1. 2 Nominal consumption	W	0,48	
2. 0 Contacts			
2. 1 Contact arrangement	1 changeover contact ¹⁾		
2. 2 Contact material	AgNi 10 + 0,2 μ m Au or AgSnO ₂ + 0,2 μ m Au		
2. 3 Rated insulation voltage	AC V	250	
Switching voltage min./max.	AC V	10 / 400	
2. 4 Limiting continuous current I_{th}	A	8 (see operating voltage limit curve)	
Switching current min./max.	A	10 mA ⁴⁾ / 10 ²⁾	
2. 5 Switching power min./max.	VA	4 / 2000	
Switching power min./max.	W	30 ... 250 (see limit curve for arc-free operation)	
2. 6 Switching capacity			
to IEC/ EN 60 947-5-1	AC 15	AC V/A	NC: 230 / 1 NO: 230 / 3
	DC 13	DC V/A	NC: 24 / 1 NO: 24 / 1
to UL 508	B150		
2. 7 Electrical life	at 1 s On, 1 s Off (see contacts service life)		
AC 250 V, 8 A cos $\varphi = 1$	switching cycles	> 2 x 10 ⁵ AgNi 10	> 3 x 10 ⁵ AgSnO ₂
2. 8 Switching frequency max.	switching cycles / s	20	
2. 9 Response time / Release time	ms	typically 5 / typically 7	
2.10 Contact force NO / NC	cN	> 25 / >10; > 10 ³⁾ / >8 ³⁾	
3. 0 Other			
3. 1 Mechanical life	switching cycles	30 x 10 ⁶	
3. 2 Temperature range	°C	- 40 ... + 80	
3. 3 Degree of protection, housing	IP40, connections: IP 00 IEC/EN 60 529		
3. 4 Housing material	Thermoplast		
3. 5 Vibration resistance	≥ 4 g, to max. 100 Hz IEC/EN 60 068-2-6		
3. 6 Climate resistance	40 / 080 / 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 OA 5651, OA 5652

⁴⁾ Typical values

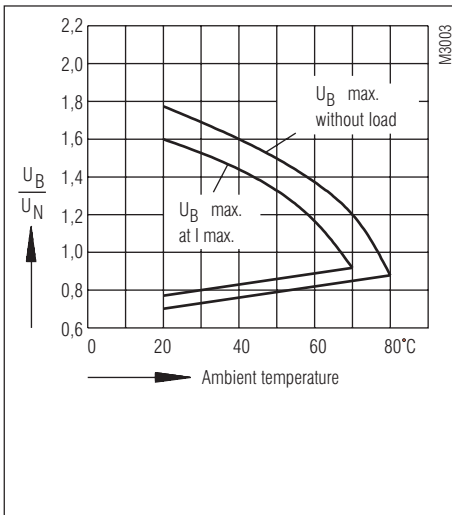
Technical data

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
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	13

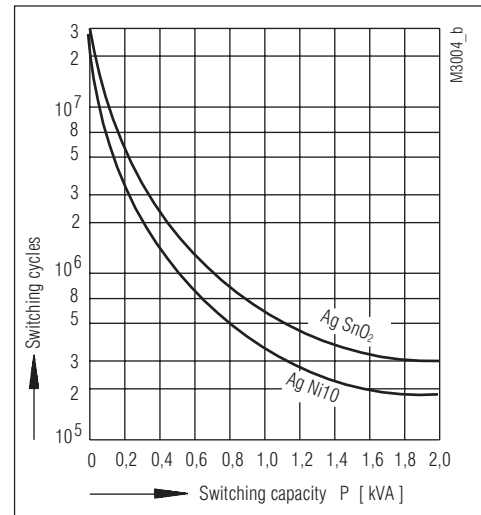
Standard variants

			Design version									
U _N DC V	Voltage range DC V	Resistance at 20°C Ω	AgNi10-contacts + 0,2 μm Au					AgSnO ₂ -contacts + 0,2 μm Au				
			OA 5651	OA 5652	OA 5661	OA 5662	OA 5692	OA 5651	OA 5652	OA 5661	OA 5662	OA 5692
6	4,2 ... 10,8	80	621	635	285	270	411	651	665	323	328	432
12	8,4 ... 21,6	330	622	636	286	271	412	652	666	324	329	433
15	10,5 ... 27,0	475	623	637	291	272	413	653	667	321	330	434
20	14,0 ... 36,0	880	624	638	287	273	414	654	668	325	331	435
24	16,8 ... 43,2	1 200	625	639	288	274	415	655	669	326	332	436
48	33,6 ... 86,4	4 700	626	640	289	275	416	656	670	327	333	437
60	42,0 ... 108,0	7 250	627	641	293	276	417	657	671	322	334	438

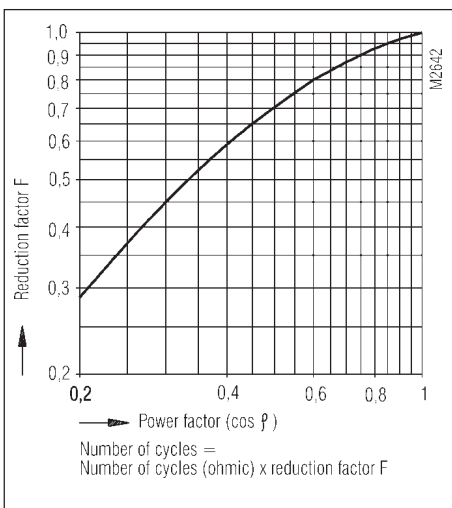
Characteristics



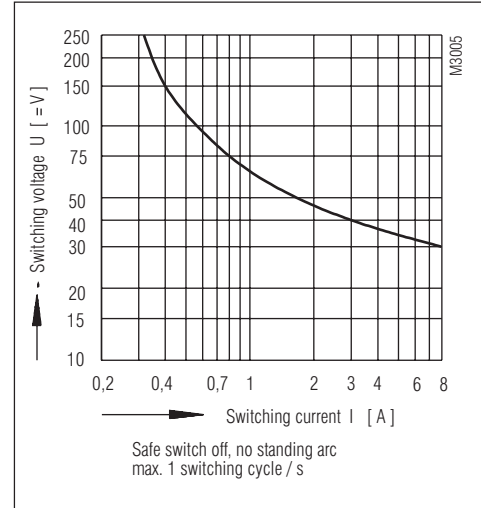
Operating voltage limit curve



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



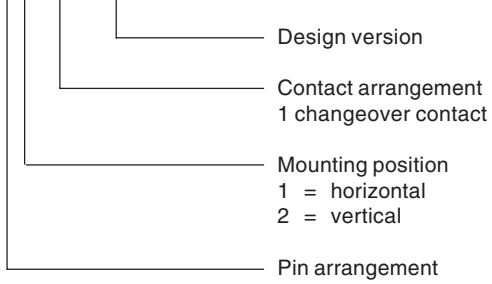
Reduction factor for inductive loads



Limit curve for arc-free operation
(at $t_v = 20^\circ\text{C}$)

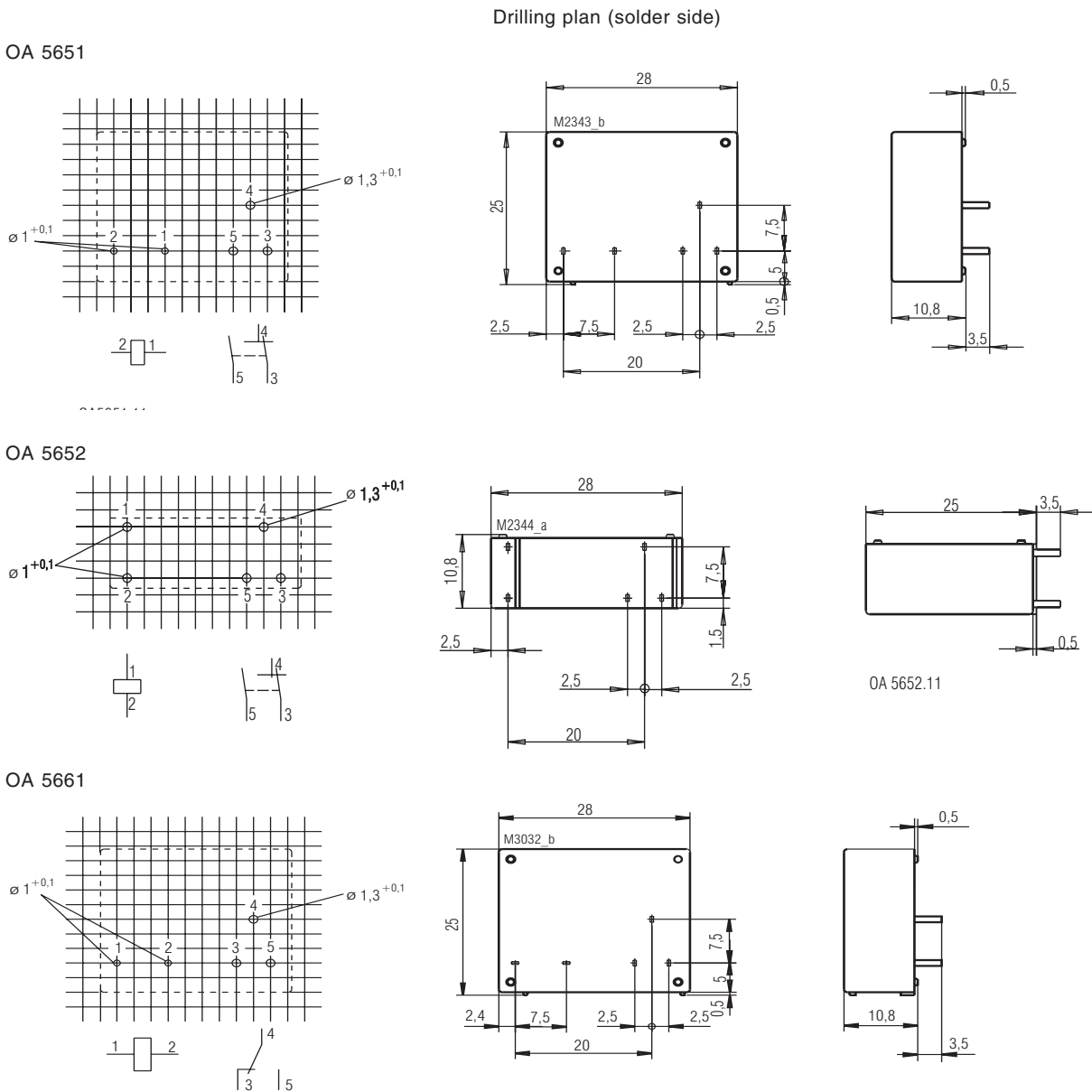
Ordering example

OA 56 .11 / _ _ /61*)



*) /61 cURus approval

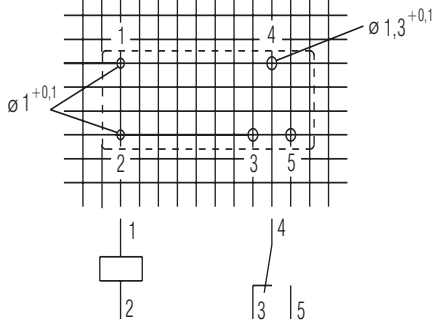
Dimensions, pin configuration, connection diagrams



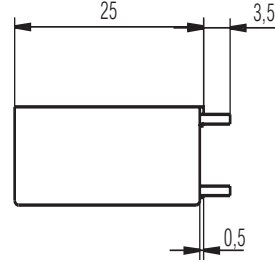
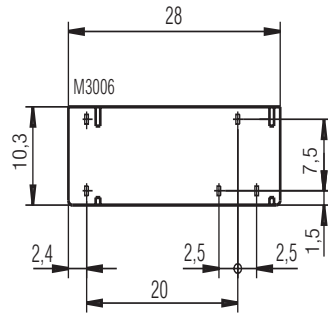
Connection for basic grid dimensions 2,5 mm as well as 2,54 mm according to IEC/EN 60 097 and IEC 60 326 average

Dimensions, pin configuration, connection diagrams

OA 5662

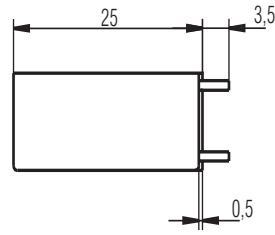
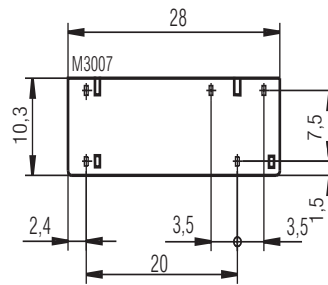
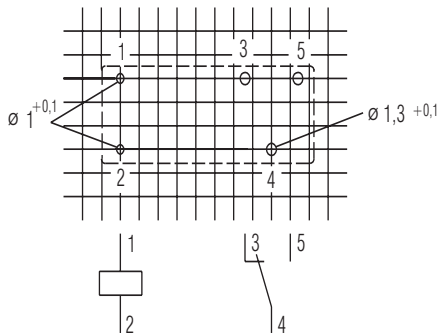


Drilling plan (solder side)



OA 5662.11

OA 5692



OA 5692.11

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