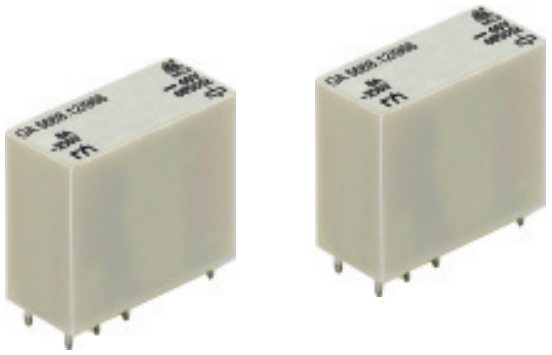
Printed circuit board relay, monostable
OA/OW 5668

- acc. to DIN EN 61 810-1, DIN EN 60 664-1
- Clearance and creepage distances, Contact-coil ≥ 8 mm
- high dielectric strength ≥ 4 kV
- high temperature range - 40 ... + 75°C
- high mechanical service life > 50 x 10^6 switching cycles
- large voltage range 0,7 U_N ... 2 U_N
- solder line proof or wash proof



OA/OW 5668

Technical data

Relay type			OA/OW 5668	
1. 0	**Relay coil**			
1. 1	Nominal voltage	DC V	5, 6, 12, 20, 24, 48, 60, 110	
1. 2	Nominal consumption	W	ca. 0,5	
2. 0	**Contacts**			
2. 1	Contact arrangement		2 changeover contacts, optionally 2 NO or 2 NC	
2. 2	Contact material		AgNi + 0,2 µm Au, optionally + 5 µm Au ($AgSnO_2$ / 0,2 µm Au on request)	
2. 3	Rated insulation voltage	AC V	2 x 250	
	Switching voltage min./max.	AC V	AC/DC 10 / DC250, AC 400 V (AC/DC 100 mV / 60 V)[5]	
2. 4	Limiting continuous current I_{th}	A	2 x 5 (see operating voltage limit curve)	
	Switching current min./max.	A	10 mA[4] 2 x 8 together or 1 x 10 (1mA / 0,3 A)[5]	
2. 5	Switching power min./max.	VA	2 x 3 / 2000 together or 1 x 2500 (1mVA / 7 VA)[5]	
	Switching power min./max.	W	2 x 30 / 160 together or 1 x 200 (1mW / 7 W)[2] [5]	
2. 6	Switching capacity			
	to IEC/EN 60 947-5-1 AC 15	AC V/A	NC: 230 / 1	NO: 230 / 2
	DC 13	DC V/A	NC: 24 / 1	NO: 24 / 1
2. 7	Electrical life			
	at AC 230 V, 6 A cos φ = 1	switching cycles	1,5 x 10^5	
2. 8	Switching frequency max.	switching cycles / s	20	
2. 9	Response time / Release time	ms	≤ 8 / ≤ 10	
2.10	Contact force NO / NC	cN	≥ 10 / ≥ 8	
3. 0	**Other**			
3. 1	Mechanical life	switching cycles	≥ 50 x 10^6	
3. 2	Temperature range	°C	- 40 ... + 75 mounted without distance (I_{th} = 2 x 5 A)	
3. 3	Degree of protection, housing (OA/OW)		IP40 / IP 67 IEC/EN 60 529 wash proof	
3. 4	Housing material		Thermoplast GF, PA	
3. 5	Vibration resistance		10 ... 55 Hz; 0,35 mm amplitude; max 5 g	
3. 6	Climate resistance		40 / 075 / 04 (Climate catgory); A/B/D IEC/EN 60 068-1	
3. 8	Insulation according to IEC 60 664-1, EN 50 178			
	Rated insulation voltage	AC V	250	
	Contamination level		2	
	Overvoltage category		III	
	Test voltage Contact-Coil (1 min)	AC kV eff.	≥ 4	
	Contact-Contact (1 min)	AC kV eff.	≥ 2,5	
	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	15	

[1] I on / I off [2] see limit curve for arc-free operation [4] Typical values [5] Values for AgNi -Contacts + 5 µm Au

Standard variants

U_N DC V	Voltage range DC V	Resistance at 20°C Ω	Design version OA / OW .12	.02
5	3,7 ... 9,5	50	941	571
6	4,5 ... 11,0	70	942	572
12	9,0 ... 22,0	270	943	573
20	15,0 ... 36,0	820	948	578
24	18,0 ... 44,0	1 100	944	574
48	35 ... 89,0	4 400	945	575
60	44,0 ...110,0	6 850	946	576
110	80,0 ...190,0	20 000	947	577

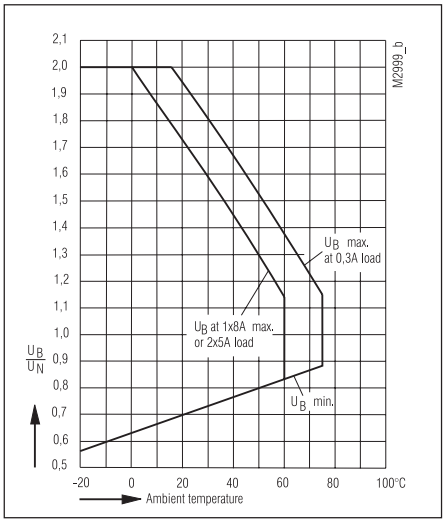
Ordering example

O_ 5668 ._ _ / _ _ _ /61*)

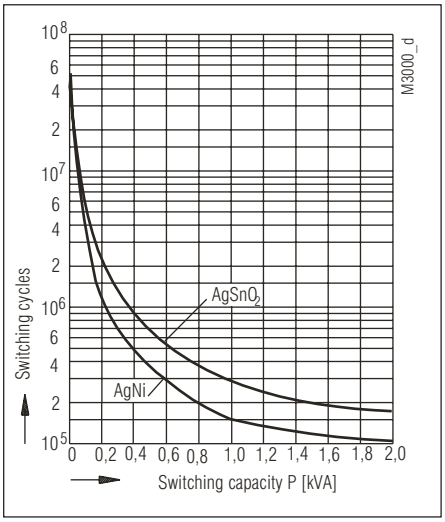
- Design version
- Contact arrangement
  .12 = 2 changeover contacts
  .02 = 2 NO
  .06 = 2 NC
- Degree of protection
  A = IP 40 (solder line proof)
  W = IP 67 (wash proof)

*) /61 cURus approval

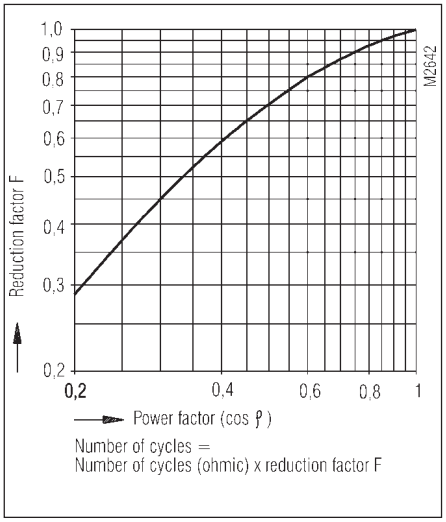
Characteristics



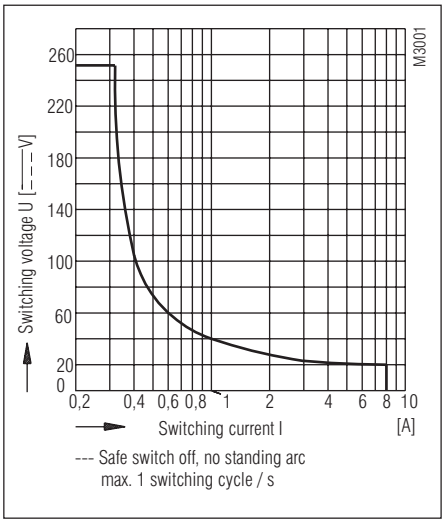
Operating voltage limit curve



Contact service life (at t_u = 20°C)



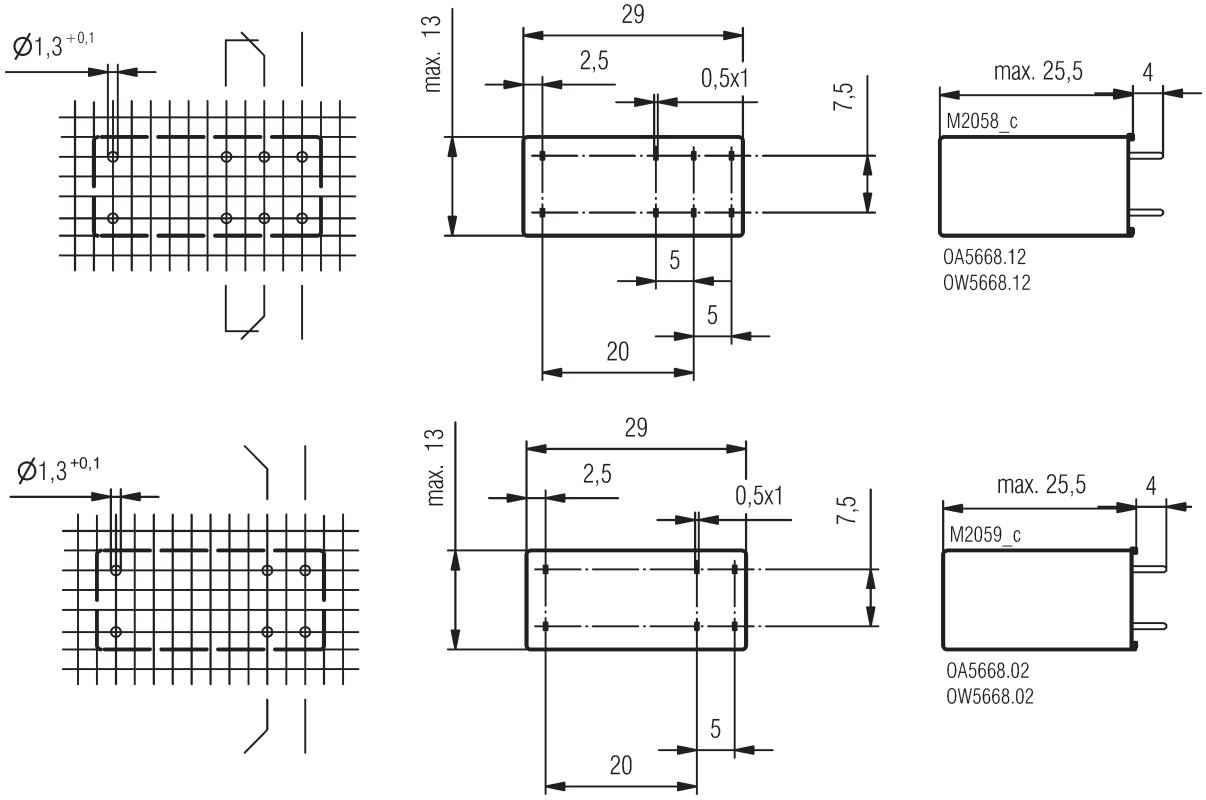
Reduction factor for inductive loads



Limit curve for arc-free operation (at t_u = 20°C)

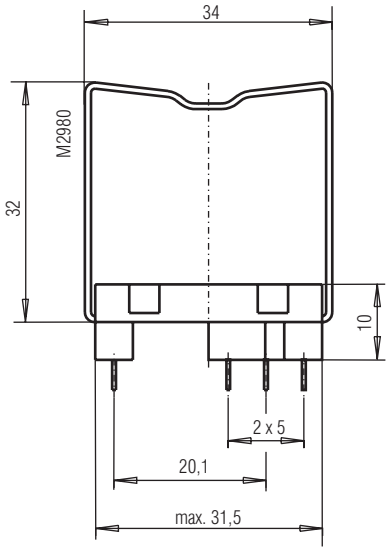
Dimensions, pin configuration, connection diagrams

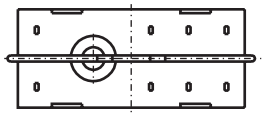
Drilling plan (solder side)

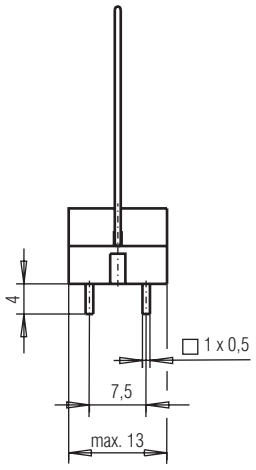


Connection for basic grid divensions 2,5 mm as well as 2,54 mm according to IEC/EN 60 097 and IEC 60 326 average

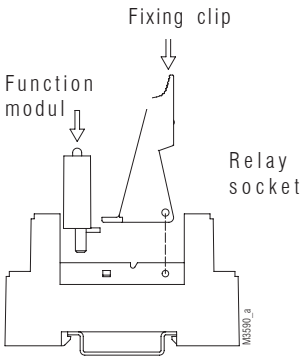
Accessories







Socket ET 1415.021 ANR 0034 769
Fixing clip ET 1415.025 ANR 0034 770 Wire
Fixing clip ET 1415.026 ANR 0047 726 Plastic



Relay socket ET 1415.041 ANR 0055571
with fixing clip WN 1415.902.790

Function modul ET 1415.911 ANR 0055909
- DC, with free-wheeling diode and red LED

Function modul ET 1415.912 ANR 0055910
- AC/DC with green LED