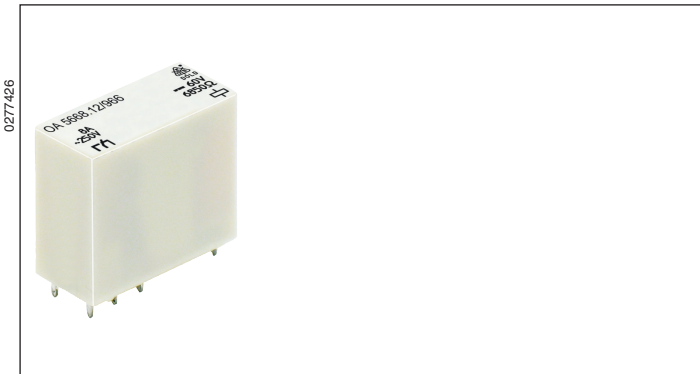


PCB relays

Printed circuit board relay monostable OA / OW 5668



- Acc. to DIN EN 61810-1, DIN EN 60664-1
- Clearance and creepage distances:
contact - coil ≥ 8 mm
- High dielectric strength ≥ 4 kV
- High mechanical service life
- High temperature range - 40 ... + 75°C
- As option wash proof RT III

Application

- Control technique
- Interface

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	approx. 0.5
1.11 Voltage range	U_N	0,7 ... 2,0
1.3 Holding power (at 0.5 x U_N)	W	approx. 0.13
2.0 Contacts		
2.1 Contact arrangement		2 changeover contacts, optionally 2 NO or 2 NC
2.2 Contact material		AgSnO ₂ + 0.2 μ m Au on request; AgNi + 0.2 μ m Au, AgNi + 5 μ m Au
2.3 Rated insulation voltage	AC V	250
Switching voltage min./max.	V	AC/DC 10 / DC 250, AC 400 V (AC/DC 100 mV / 60 V) ⁴⁾
2.4 Limiting continuous current I_{th}	A	2 x 5 (s. see operating voltage limit curve)
Switching current min./max.	A	10 mA ³⁾ 2 x 8 together or 1 x 10 (1mA / 0.3 A) ⁴⁾
2.5 Switching power min./max.	VA	2 x 3 / 2 000 together or 1 x 2 500 (1mVA / 7 VA) ⁴⁾
Switching power min./max.	W	2 x 30 / 160 together or 1 x 200 (1mW / 7 W) ^{2) 4)}
2.6 Switching capacity to IEC/EN 60947-5-1		
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 1 s On, 1 s Off (see contact service life)
at AC 230 V, 6 A cos $\varphi = 1$	switching cycles	1.5 x 10 ⁵
2.8 Switching frequency max.	switching cycles / s	20
2.9 Response time / Release time	ms	typically 12 / typically 5
2.10 Contact force	cN	≥ 10 / ≥ 8
3.0 Other		
3.1 Mechanical life	switching cycles	$\geq 50 \times 10^6$
3.2 Temperature range	°C	- 40 ... + 75 mounted without distance ($I_{th} = 2 \times 5$ A)
3.3 Degree of protection		Solder line proof RT II as option wash proof RT III
3.5 Vibration resistance		10 ... 55 Hz; 0,35 mm ampl.; max 5 g IEC/EN 60068-2-6
3.6 Climate resistance		40 / 075 / 04 (climate category); A/B/D IEC/EN 60 068-1

¹⁾ I on / I off

²⁾ see limit curve for arc-free operation

³⁾ Typical values

⁴⁾ Values for AgNi -Contacts + 5 μ m Au

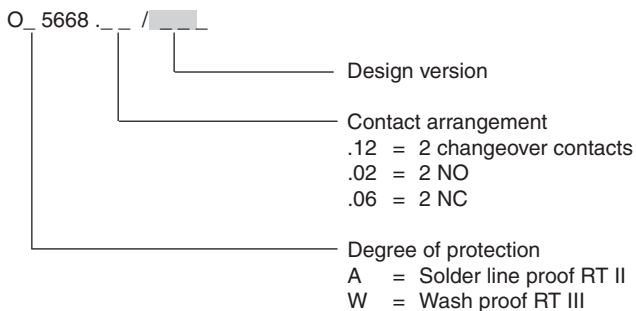
Technical Data

3.8	Insulation acc. to IEC 60664-1, EN 50178		
	Rated insulation voltage	AC V	250
	Pollution degree		2
	Overvoltage category		III
	Test voltage		
	contact-coil (1 min)	AC kV eff.	≥ 4
	contact-contact (1min)	AC kV eff.	≥ 2.5
	Transient voltage		
	contact-coil (1.2 - 50 μs)	kV	≥ 6
	Clearance and creepage distances		
	contact-coil	mm	≥ 8
3.9	Weight	g	35
4.0 Packing			
4.1	on cardboard in slipcase	piece	56
4.2	in case package	piece	280
5.0 Solder method			
5.1	Solder method /-temperature /-duration	°C / s	Wave soldering / 260 / 5

Design versions

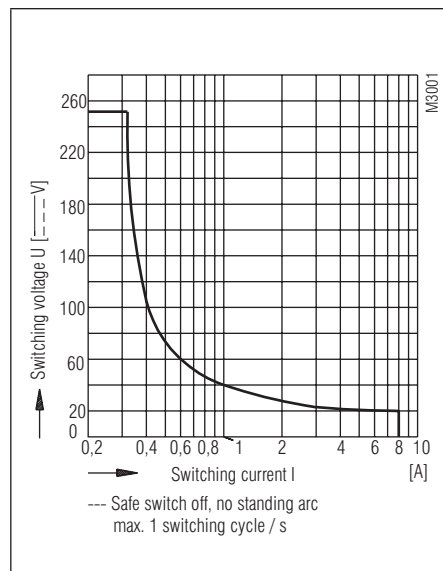
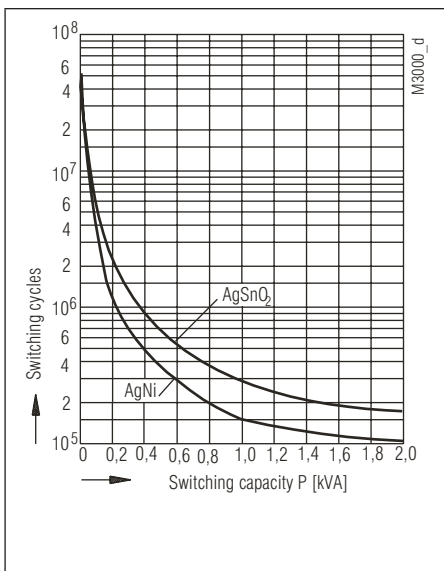
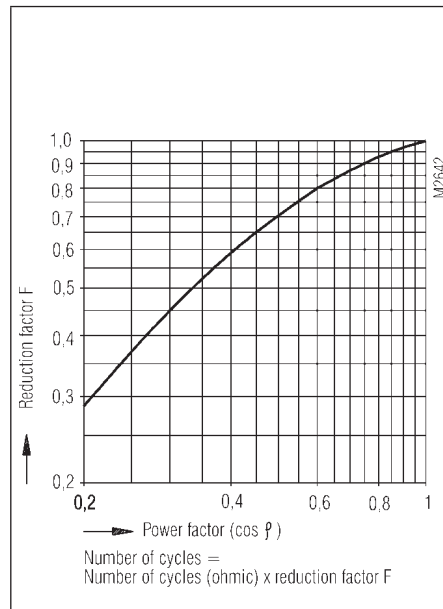
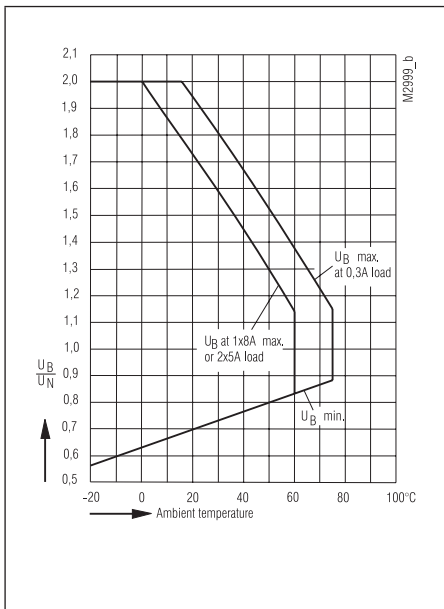
U _N DC V	Voltage range DC V	Resistance at 20°C Ω	Design version OA / OW	
			.12	.02
5	3.7 ... 9.5	50	941	571
6	4.5 ... 11.4	70	942	572
12	9.0 ... 22.8	270	943	573
20	15.0 ... 38.0	820	948	578
24	18.0 ... 45.6	1 100	944	574
48	35.0 ... 91.2	4 400	945	575
60	44.0 ... 114.0	6 850	946	576
110	80.0 ... 209.0	20 000	947	577

Ordering example

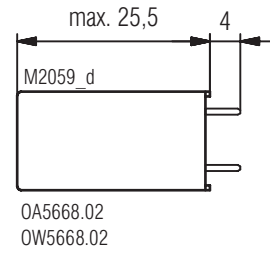
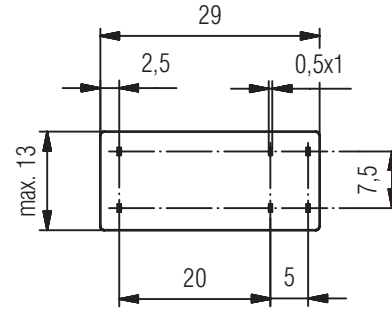
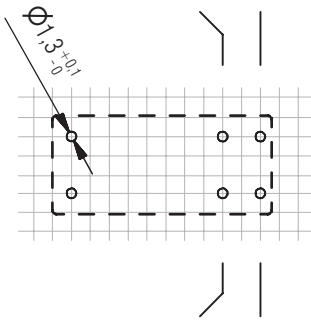
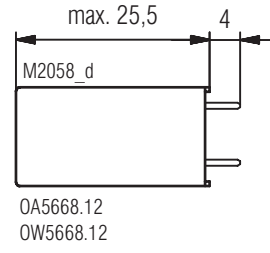
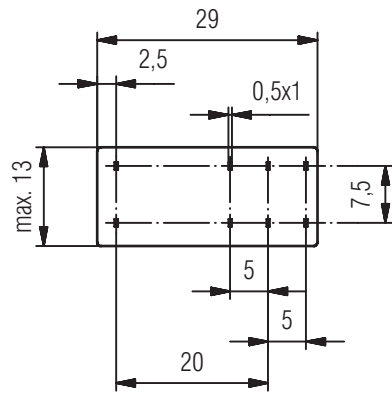
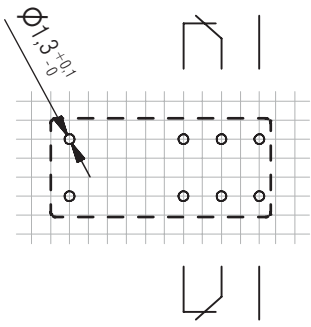


Note

For the use and processing of our PCB relays, please refer to the **application and processing instructions** at www.dold.com

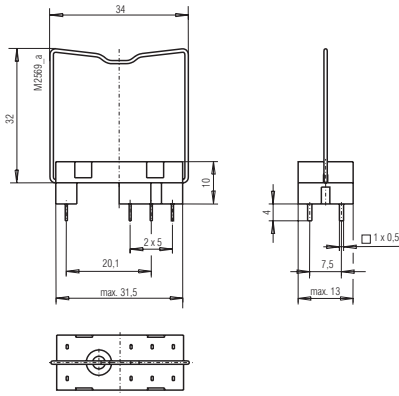


Drilling plan (solder side)



Connection for basic grid divisions 2.5 mm as well as 2.54 mm according to IEC/EN 60097 and IEC 60326 average

Relay socket incl. fixing clip



Relay socket ET 1415.021 Fixing clip ET 1415.025

Article number:: 0034769

Fixing clip (wire):
Article number: 0034770

Fixing clip (plastic):
Article number: 0047726

Packing: 100 Stück

Function modules

ET1415.913: DC 24 V, with free-wheel diode and green LED
Article number: 0056828

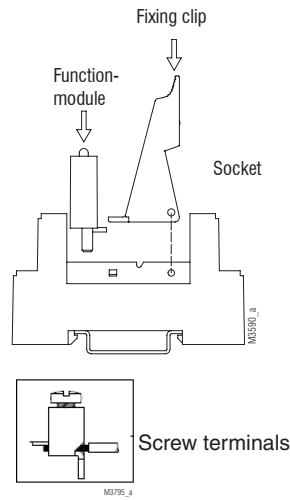
ET1415.911: DC 24 V, with free-wheel diode and red LED
Article number: 0055909

ET1415.912: AC/DC 24 V, with varistor and green LED
Article number: 0055910

ET1415.924: DC 60 V, with free-wheel diode and red LED
Article number: 0062552

Packing: 20 pieces

Socket ET 1415.041 incl. fixing clip - Screw terminals -



Article number:: 0055571

Temperature range: - 25 ... + 70 °C

Clearance and creepage distance

Rated impulse voltage /
degree of protection

Input / output: 6 kV / 2 IEC 60664-1

Output / output: 4 kV / 2 IEC 60664-1

Overvoltage category: III

Degree of protection: IP 20 IEC/EN 60529

Wire connection

Solid / stranded: 0.5 - 2.5 mm² (20-14 AWG)

Sleeved end: 0.14 - 2.5 mm² (26-14 AWG)

Stripping length 7 mm

Wire fixing: Screw terminals

Mounting: DIN-rail IEC/EN 60715

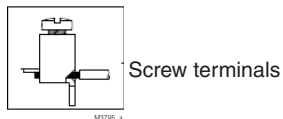
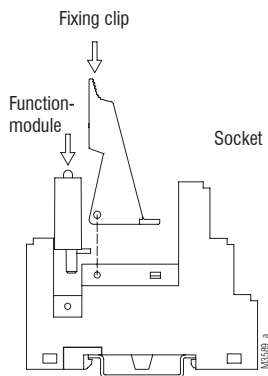
Weight: Approx. 38.5 g

Packing: 10 pieces

Dimensions

Width x height x depth: 15.8 x 75 x 69.0 mm

Socet ET 1415.044 incl. fixing clip - Screw terminals -



- Incl. safe separation between coil and contacts according to DIN EN 60947-1, DIN EN 61140

Article number: 0059274

Temperature range: - 25 ... + 70 °C

Clearance and creepage distance

Rated impulse voltage / degree of protection

Input / output: 6 kV / 2 IEC 60664-1

Output / output: 4 kV / 2 IEC 60664-1

Overvoltage category: III

Degree of protection: IP 20 IEC/EN 60529

Wire connection

Solid / stranded: 0.5 - 2.5 mm² (20-14 AWG)

Sleeved end: 0.14 - 2.5 mm² (26-14 AWG)

Stripping length 7 mm

Wire fixing: Screw terminals

Mounting: DIN-rail IEC/EN 60715

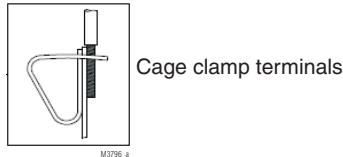
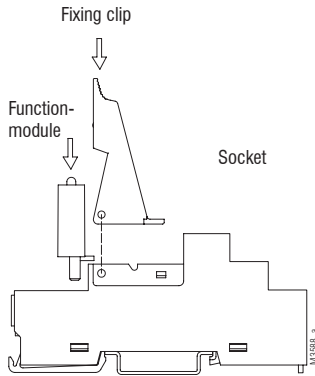
Weight: Approx. 43.5 g

Packing: 10 pieces

Dimensions

Width x height x depth: 15.8 x 75 x 75.0 mm

Socet ET 1415.047 incl. fixing clip - Cage clamp terminals -



Article number: 0059270

Temperature range: - 25 ... + 70 °C

Clearance and creepage distance

Rated impulse voltage / degree of protection

Input / output: 6 kV / 2 IEC 60664-1

Output / output: 4 kV / 2 IEC 60664-1

Overvoltage category: III

Degree of protection: IP 20 IEC/EN 60529

Wire connection

2 x Solid / stranded: 0,5 - 1,5 mm² (20-16 AWG)

2 x Sleeved end: 0,14 - 1,5 mm² (26-16 AWG)

Stripping length 11 mm

Wire fixing: Cage clamp terminals

Mounting: DIN-rail IEC/EN 60715

Weight: Approx. 42.0 g

Packing: 10 pieces

Dimensions

Width x height x depth: 15.8 x 97 x 75.5 mm

