



Small round relay

V23006

for direct current, neutral, monostable

- Through a large number of contact sets, versatile applications are possible
- Connection types: Solder and/or plug-in
- Open or with transparent plastic cover, dust-proof
- Accessories: Sockets, solderable, and retaining brackets
- Shockproof and vibration-resistant



Typical application area:

The relay is perfect for use in the electronics and measurement technology industry, switchgear construction, and special applications.

Contact data	V23006-A0XXX			V23006-B2XXX		V23006-G1XXX		V23006-H1XXX	
Product code block 3	A002,A004, A006	A094,A096, A032,A034	A241,A242, A191,A192	A002,A004	A094, A032,A034	A002,A004	A032,A034	A006,A008	A036,A038
Contact type	6 (NO) or 6 Changeover (CO) contacts			4 Changeover (CO) contacts, dust-proof		8 Changeover (CO) contacts, dust-proof			
Max. switching voltage	450VDC 380VAC			450VDC 380VAC		450VDC 380VAC		450VDC 380VAC	
Rated current	2A	4A	20A	2A	4A	2A	4A	2A	4A
Maximum switching power ¹⁾ These values are voltage-dependent	30W	10-160W ¹⁾	100-400W ¹⁾	30W	10-160W ¹⁾	30W	10-160W ¹⁾	30W	10-160W ¹⁾
Contact material	Silver, Gold-plated			Silver, Gold-plated		Silver, Gold-plated		Silver, Gold-plated	
Contact configuration	double contact	single contact	single contact	double contact	single contact	double contact	single contact	double contact	single contact
Operating frequency without load, maximum	20 ops./s			20 ops./s		20 ops./s		20 ops./s	
Operate / Release times (Depends on the contact spring configuration)	5...20 / 1,5...6 ms			5...20 / 1,5...6 ms		5...20 / 1,5...6 ms		5...20 / 1,5...6 ms	
Mechanical lifetime	app. 10 ⁸ ops.			app. 10 ⁸ ops.		app. 10 ⁸ ops.		app. 10 ⁸ ops.	

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Coil data

Magnetic system	neutral
Coil voltage range	6 to 220 VDC,
Maximum coil temperature	100 °C

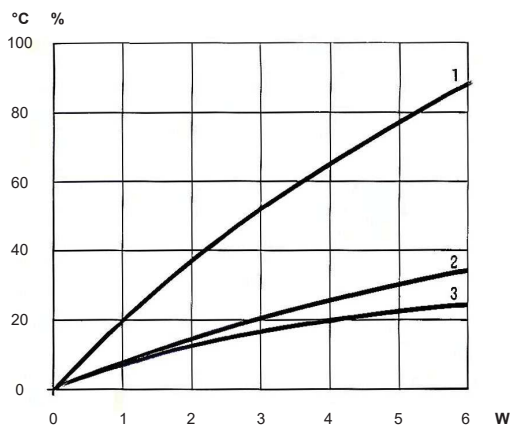
Coil variants, DC coil, monostable

"Operating voltage range at 20 °C

Minimum voltage
When using the contact spring set
(Order designation Block 3)

Coil Nr.	Rated voltage VDC	Minimum voltage					Maximum voltage VDC	Coil resistance Ω
		-A002 -A004 -A032	-A094 -A191 -A241	-A006 -A008 -A034 -A036	-A038 -A096 -A192 -A242			
006	6	3	3,9	4,6	5,6	9,5	20 ± 2	
007	6	3,9	5	—	—	12	32 ± 3,2	
008	12	5,6	7,3	8,7	10,5	17	65 ± 6,5	
010	12	7,9	10,3	—	—	23	120 ± 12	
012	24	10,8	14	16,7	20,2	31,5	220 ± 22	
016	24	14,8	19,3	—	—	42,5	400 ± 40	
017	48	18,1	23,6	28,3	34,3	52	600 ± 60	
018	48	22,4	29,2	34,9	42,3	64	900 ± 90	
019	60	28	36,5	43,8	53,1	79	1380 ± 140	
020	60	35,3	46,2	55,4	—	95	2000 ± 200	
022	110	52	68	82	100	130	4000 ± 400	
025	110	59	77	93	—	143	4800 ± 720	
026	125	75	98	117	—	187	8000 ± 1230	
014	220	119	157	189	—	284	19000 ± 2850	

Diagram for determining the coil overtemperature as a function of power consumption.



- 1 Overtemperature of the coil in °C
2 Increase in coil resistance in %
3 Reduction in power consumption in %

Coil data (continued)

The voltage limit values $U_{I t_u}$ and $U_{II t_u}$ are temperature-dependent according to the formulas:

$$U_{I t_u} = k_I \cdot U_{I 20^\circ\text{C}}$$

$$U_{II t_u} = k_{II} \cdot U_{II 20^\circ\text{C}}$$

t_u = Ambient temperature

$U_{I t_u}$ = Minimum voltage at ambient temperature t_u

$U_{II t_u}$ = Maximum voltage at ambient temperature t_u

k_I und k_{II} = Factors

t_u	20 °C	30 °C	40 °C	50 °C	60 °C	70 °C
k_I	1,0	1,04	1,08	1,12	1,16	1,20
k_{II}	1,0	0,94	0,87	0,79	0,71	0,6

Insulation data

Test voltage 1 min

coil winding / frame 1500V_{eff}

contact / frame 1500V_{eff}

contact / contact 1500V_{eff}

Insulation resistance at 500VDC > 10⁶Ω

Other data

Ambient temperature -45 to +70°C

Ingress Protection (IP) rating
DIN 40050

Dust-protected IP 30,

Connection types: Printed circuit board, connector, solder terminals

Weight:

V23006-A0XXX ca. 70g

V23006-G1XXX ca. 90g

V23006-H1XXX ca. 105g

V23006-B2XXX ca. 135g

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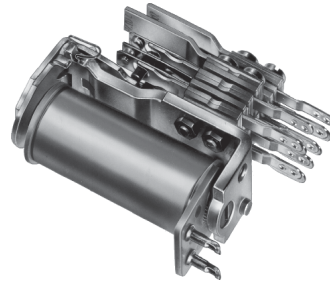
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V23006-A0★★★

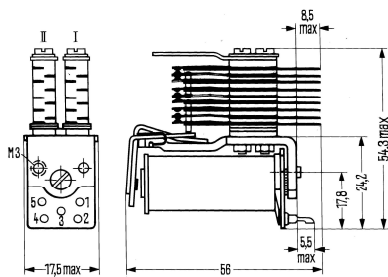
Contact spring sets with single or double contacts,
with a maximum of 6 normally open contacts or 6
changeover contacts

With individual solder terminals

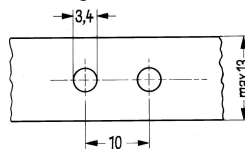
For screw mounting



Hole pattern



Mounting holes



Immersion depth of the mounting screw M3: max. 4 mm

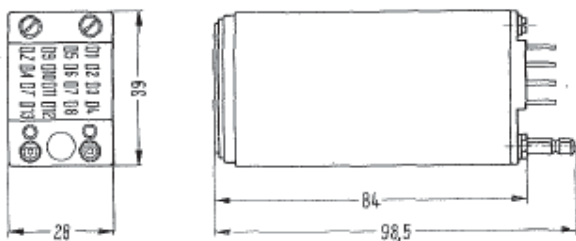
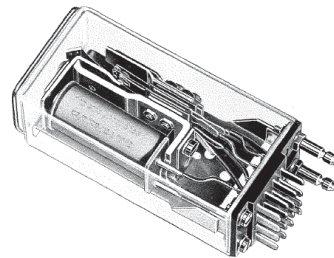
V23006-B2★★★

Contact spring sets with single or double contacts,
with a maximum of 4 changeover contact

Dust-protected

With individual solder terminals

Plug-in and for screw mounting



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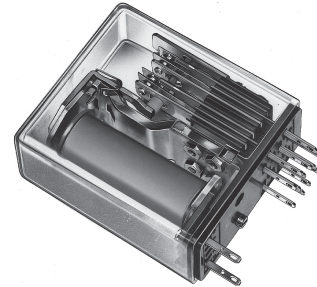
V23006-G1★★★

Contact spring sets with single or double contacts,
with a maximum of 4 changeover contact

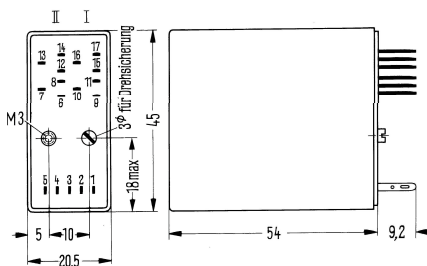
Dust-protected

With individual solder terminals

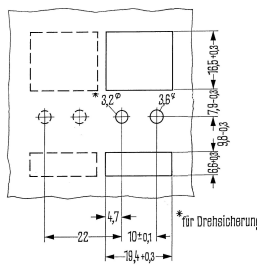
Plug-in and for screw mounting



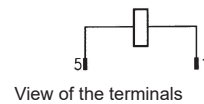
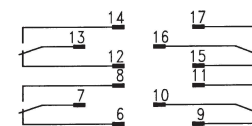
Hole pattern



Mounting holes



Pin assignment



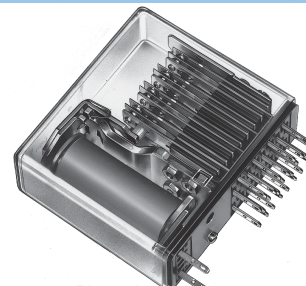
V23006-H1★★★

Contact spring sets with single or double contacts,
with a maximum of 8 changeover contact

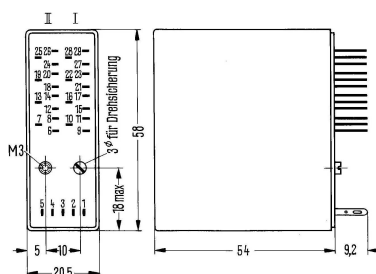
Dust-protected

With individual solder terminals

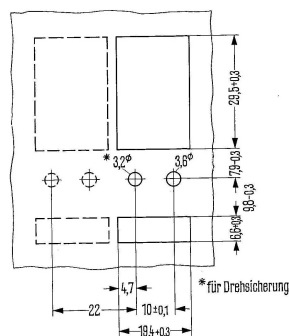
Plug-in and for screw mounting



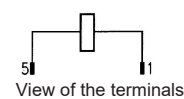
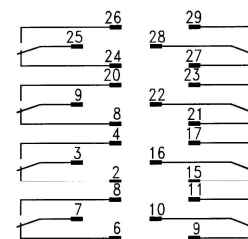
Hole pattern



Mounting holes



Pin assignment



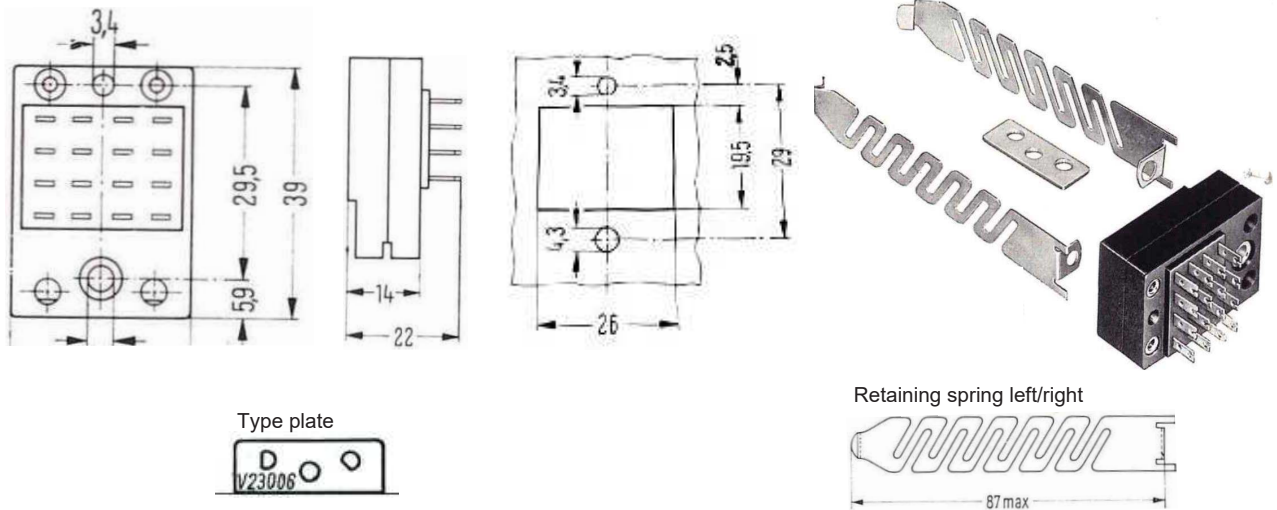
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Product code structure	Typical product code	V23006	-A0	037	-A002
V23006 Small round relay					
Version	A0 = max. 6 normally closed or 6 changeover B2 = max. 4 changeover, dust protected G1 = max. 4 changeover, dust protected H1 = max. 8 changeover, dust protected				
Coil	Coil number: Please refer to the coil variants table				
Contact spring set	Contact spring set number: Please refer to the contact data table.				

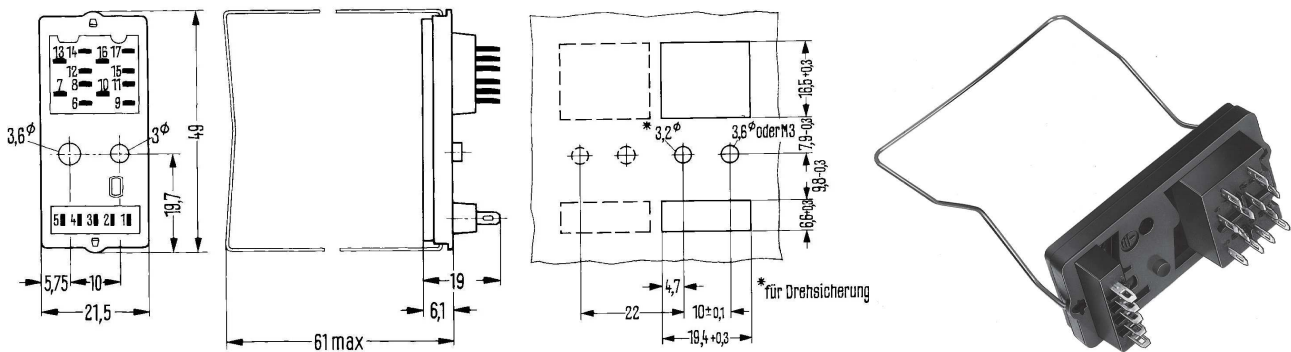
Other types available upon request

Socket for V23006-B2★★★



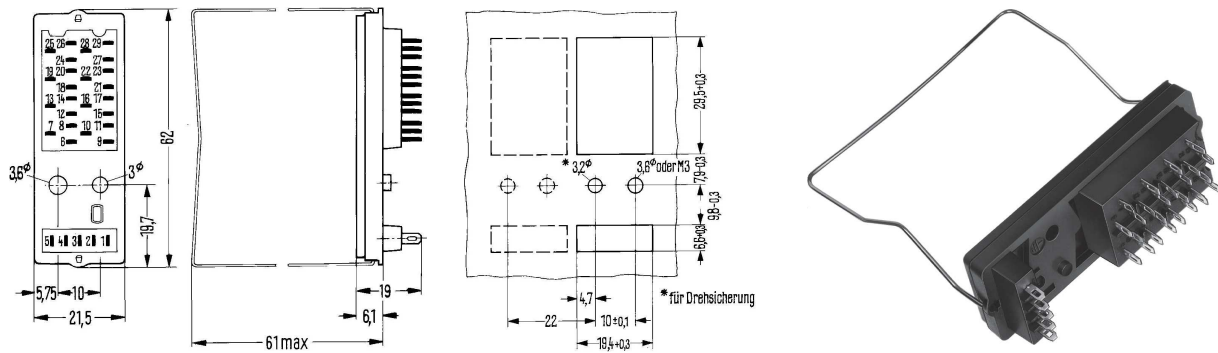
Object	Order designation	Weight: g (approximately)
Socket	V23063Z1001	9
Retaining spring right	V23063Z1020	2
Retaining spring left	V23063Z1021	2
Type plate	V2306Z1023	2
Protective cap	V23063Z1024	13

Socket for V23006-G1★★★



Object	Order designation	Weight: g (approximately)
Socket	V23006-Z1001	9
Retaining bracket	V23006-Z1003	2

Socket for V23006-H1★★★



Object	Order designation	Weight: g (approximately)
Socket	V23006-Z1002	9
Retaining bracket	V23006-Z1004	2



Kleines Rundrelais

V23006

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Nennspannung (nominal voltage) Unenn [VDC]	Betriebsspannungsbereich (operating voltage range)		Spulenleistung (coil power) [W]	Spulenwiderstand (coil resistance) [Ω]	Relais Teilenummer (relay code)
	Min. Spannung (voltage) Umin [VDC]	Max. Spannung (voltage) Umax [VDC]			

Spulendaten (Werte bei 20 °C) coil data (values at 20°C)

V23006-

15	13	33	0,27	600	V23006A0017A092
29	25	33	1,02	600	V23006A0017W288
41	34	40	1,32	900	V23006A0018V429
21	18	40	0,35	900	V23006A0018W362
52	44	93	0,40	4800	V23006A0025W362
19	16	20	1,23	220	V23006B2012A242
13	11	20	0,53	220	V23006B2012W400
122	103	185	0,56	19000	V23006B2214A032
19	16	27	0,64	400	V23006B2016A241
17	15	27	0,54	400	V23006B2016W400
21	18	33	0,55	600	V23006B2017W400
24	21	40	0,47	900	V23006B2018A032
83	70	121	0,60	8200	V23006B2227X027
2	2	3	0,51	5	V23006G1005A034
19	16	27	0,65	400	V23006G1016A034
15	13	33	0,27	600	V23006G1017A002
45	38	60	0,72	2000	V23006G1020A034
18	15	20	1,02	220	V23006H1012A008
20	17	20	1,34	220	V23006H1012A038

Andere Typen auf Anfrage.
(Other types available on request)