Features

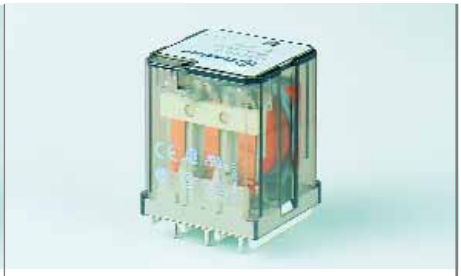
Printed circuit mount
16 A Power relay

- 2 & 3 Pole changeover contacts or NO (>3 mm contact gap)
- AC coils & DC coils
- Reinforced insulation between coil and contacts according to EN 60335-1, with 6 mm clearance & 8 mm creepage distance
- SELV coil-contact separator option
- Cadmium Free contact material options

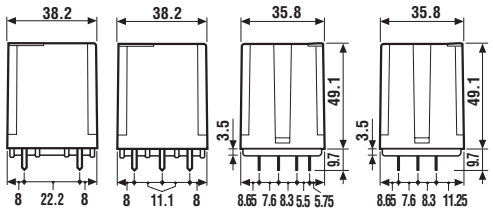
62.22 / 62.23

- 2 & 3 pole changeover contact
- PCB mount

62.22-0300 / 62.23-0300

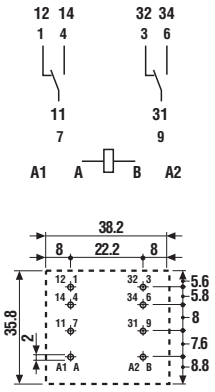


- 2 & 3 pole normally open contact (>3 mm contact gap)
- PCB mount

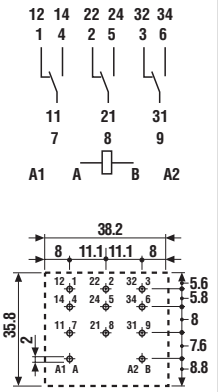


62.22 62.23 62.2x-0300

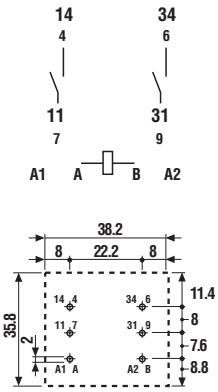
* Distance between contacts ≥ 3 mm (EN 60730-1).
** With the $AgSnO_2$ material the maximum peak current is 120 A - 5 ms (NO contact).



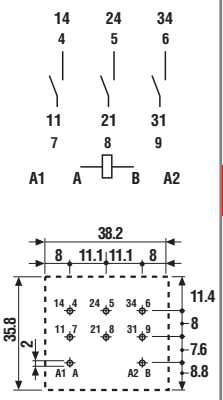
62.22
Copper side view



62.23
Copper side view



62.22 - 0300
Copper side view



62.23 - 0300
Copper side view

Contact specification					
Contact configuration		2 CO (DPDT)	3 CO (3PDT)	2 NO (DPST-NO), >3 mm*	3 NO (3PST-NO), >3 mm*
Rated current/Maximum peak current	A	16/30**		16/30**	
Rated voltage/Maximum switching voltage	V AC	250/400		250/400	
Rated load AC1	VA	4,000		4,000	
Rated load AC15 (230 V AC)	VA	750		750	
Motor rating (230/400 V AC)	kW	0.8/—	0.8/1.5	0.8/—	0.8/1.5
Breaking capacity DC1: 30/110/220 V	A	16/0.6/0.4		16/1.1/0.7	
Minimum switching load	mW (V/mA)	1,000 (10/10)		1,000 (10/10)	
Standard contact material		AgCdO		AgCdO	
Coil specification					
Nominal voltage (U_N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 - 400			
	V DC	6 - 12 - 24 - 48 - 60 - 110 - 125 - 220			
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3		3/3	
Operating range	AC	(0.8...1.1)U_N		(0.85...1.1)U_N	
	DC	(0.8...1.1)U_N		(0.85...1.1)U_N	
Holding voltage	AC/DC	0.8 U_N/0.6 U_N		0.8 U_N/0.6 U_N	
Must drop-out voltage	AC/DC	0.2 U_N/0.1 U_N		0.2 U_N/0.1 U_N	
Technical data					
Mechanical life AC/DC	cycles	$10 \cdot 10^6/30 \cdot 10^6$		$10 \cdot 10^6/30 \cdot 10^6$	
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$		$100 \cdot 10^3$	
Operate/release time	ms	10/10		20/4	
Insulation between coil and contacts (1.2/50 µs)	kV	6		6	
Dielectric strength between open contacts	V AC	1,500		2,500	
Ambient temperature range	°C	–40...+70		–40...+50	
Environmental protection		RT I		RT I	
Approvals (according to type)		CE ABS B SP PG IRAM Lloyd's Register RINA S cULus VDE			

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Features

Plug-in mount/Faston 187
16 A Power relay

- Plug-in (92 series sockets) or Faston 187 (4.8x0.5 mm) with optional mounting adaptors
- 2 & 3 Pole changeover contacts or NO (>3 mm contact gap)
- AC coils & DC coils
- UL Listed (certain relay/socket combinations)
- LED, mechanical indicator & test button options
- Reinforced insulation between coil and contacts according to EN 60335-1, with 6 mm clearance & 8 mm creepage distance
- SELV coil-contact separator option
- Cadmium Free contact material options
- Sockets and accessories

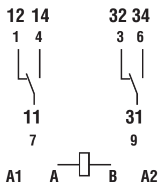
* Distance between contacts ≥ 3 mm (EN 60730-1).
** With the $AgSnO_2$ material the maximum peak current is 120 A - 5 ms (NO contact).

62.32 / 62.33

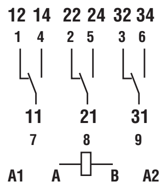
- 2 & 3 pole changeover contact
- Plug-in / Faston 187

62.32-0300 / 62.33-0300

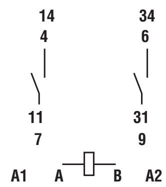
- 2 & 3 pole normally open contact (>3 mm contact gap)
- Plug-in / Faston 187



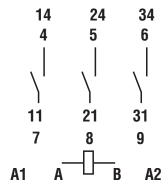
62.32



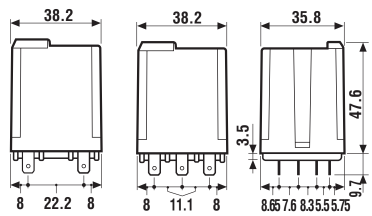
62.33



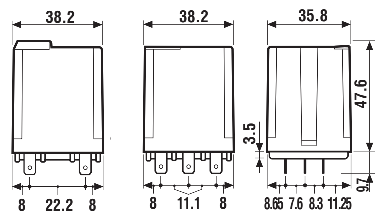
62.32-0300



62.33-0300



62.32 62.33



62.320-00 62.33-0300

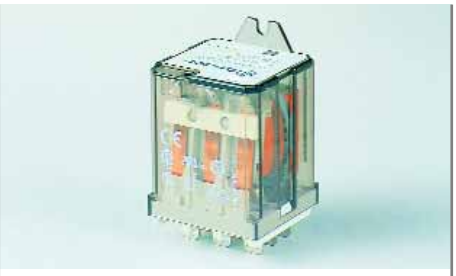
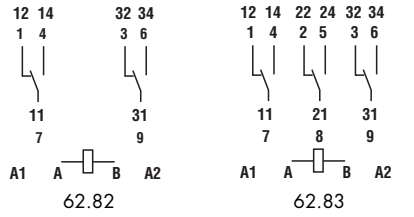
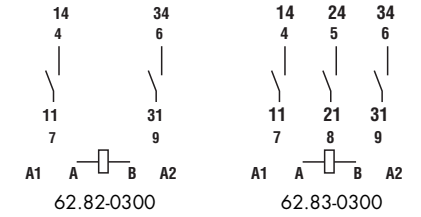
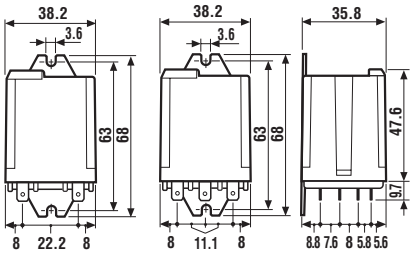
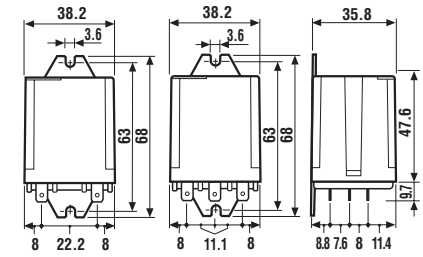
		62.32	62.33	62.32-0300	62.33-0300
Contact specification					
Contact configuration		2 CO (DPDT)	3 CO (3PDT)	2 NO (DPST-NO), >3 mm*	3 NO (3PST-NO) 3 mm*
Rated current/Maximum peak current	A	16/30**		16/30**	
Rated voltage/Maximum switching voltage	V AC	250/400		250/400	
Rated load AC1	VA	4,000		4,000	
Rated load AC15 (230 V AC)	VA	750		750	
Motor rating (230/400 V AC)	kW	0.8/—	0.8/1.5	0.8/—	0.8/1.5
Breaking capacity DC1: 30/110/220 V	A	16/0.6/0.4		16/1.1/0.7	
Minimum switching load	mW (V/mA)	1,000 (10/10)		1,000 (10/10)	
Standard contact material		AgCdO		AgCdO	
Coil specification					
Nominal voltage (U_N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 - 400			
	V DC	6 - 12 - 24 - 48 - 60 - 110 - 125 - 220			
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3		3/3	
Operating range	AC	$(0.8...1.1)U_N$		$(0.85...1.1)U_N$	
	DC	$(0.8...1.1)U_N$		$(0.85...1.1)U_N$	
Holding voltage	AC/DC	$0.8\ U_N/0.6\ U_N$		$0.8\ U_N/0.6\ U_N$	
Must drop-out voltage	AC/DC	$0.2\ U_N/0.1\ U_N$		$0.2\ U_N/0.1\ U_N$	
Technical data					
Mechanical life AC/DC	cycles	$10 \cdot 10^6/30 \cdot 10^6$		$10 \cdot 10^6/30 \cdot 10^6$	
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$		$100 \cdot 10^3$	
Operate/release time	ms	10/10		20/4	
Insulation between coil and contacts (1.2/50 μs)	kV	6		6	
Dielectric strength between open contacts	V AC	1,500		2,500	
Ambient temperature range	°C	–40...+70		–40...+50	
Environmental protection		RT I		RT I	
Approvals (according to type)					

Features

Flange mount/Faston 250
16 A Power relay

- Faston 250 (6.3x0.8 mm) termination Flange or optional mounting adaptors
- 2 & 3 Pole changeover contacts or NO (>3 mm contact gap)
- AC coils & DC coils
- LED, mechanical indicator & test button options
- Reinforced insulation between coil and contacts according to EN 60335-1, with 6 mm clearance & 8 mm creepage distance
- SELV coil-contact separator option
- Cadmium Free contact material options

* Distance between contacts ≥ 3 mm (EN 60730-1).
** With the $AgSnO_2$ material the maximum peak current is 120 A - 5 ms (NO contact).

	62.82 / 62.83	62.82-0300 / 62.83-0300
		
	• 2 & 3 pole changeover contact • Flange mount / Faston 250	• 2 & 3 pole normally open contact (>3 mm contact gap) • Flange mount / Faston 250
	 62.82 62.83	 62.82-0300 62.83-0300
	 62.82 62.83	 62.82-0300 62.83-0300

62

Contact specification					
Contact configuration		2 CO (DPDT)	3 CO (3PDT)	2 NO (DPST-NO), >3 mm*	3 NO (3PST-NO), >3 mm*
Rated current/Maximum peak current	A	16/30**		16/30**	
Rated voltage/Maximum switching voltage	V AC	250/400		250/400	
Rated load AC1	VA	4,000		4,000	
Rated load AC15 (230 V AC)	VA	750		750	
Motor rating (230/400 V AC)	kW	0.8/—	0.8/1.5	0.8/—	0.8/1.5
Breaking capacity DC1: 30/110/220 V	A	16/0.6/0.4		16/1.1/0.7	
Minimum switching load	mW (V/mA)	1,000 (10/10)		1,000 (10/10)	
Standard contact material		AgCdO		AgCdO	
Coil specification					
Nominal voltage (U_N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 - 400			
	V DC	6 - 12 - 24 - 48 - 60 - 110 - 125 - 220			
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3		3/3	
Operating range	AC	(0.8...1.1)U_N		(0.85...1.1)U_N	
	DC	(0.8...1.1)U_N		(0.85...1.1)U_N	
Holding voltage	AC/DC	0.8 U_N/0.6 U_N		0.8 U_N/0.6 U_N	
Must drop-out voltage	AC/DC	0.2 U_N/0.1 U_N		0.2 U_N/0.1 U_N	
Technical data					
Mechanical life AC/DC	cycles	10 · 10^6/30 · 10^6		10 · 10^6/30 · 10^6	
Electrical life at rated load AC1	cycles	100 · 10^3		100 · 10^3	
Operate/release time	ms	10/10		20/4	
Insulation between coil and contacts (1.2/50 µs)	kV	6		6	
Dielectric strength between open contacts	V AC	1,500		2,500	
Ambient temperature range	°C	–40...+70		–40...+50	
Environmental protection		RT I		RT I	
Approvals (according to type)		CE ABS BV SP DNV GL IRAM LR RINA S cULus VDE			

Ordering information

Example: 62 series power relay + Faston 250 (6.3x0.8 mm), rear flange mount, 2 NO (DPST-NO), 12 V DC coil.

								A	B	C	D		
6	2	.	8	2	.	9	.	0	1	2	.	0	3	0	0

Series

Type
2 = PCB
3 = Plug-in
8 = Faston 250 (6.3x0.8 mm) with rear flange mount

No. of poles
2 = 2 pole
3 = 3 pole

Coil version
8 = AC (50/60 Hz)
9 = DC

Coil voltage
see coil specifications

A: Contact material
0 = Standard AgCdO
4 = $AgSnO_2$

B: Contact circuit
0 = CO (nPDT)
3 = NO (nPST), ≥ 3 mm contact gap
5 = CO (nPDT) + additional physical separator between coil and contacts (for SELV applications)
6 = NO (nPST), ≥ 3 mm contact gap + additional physical separator between coil and contacts (for SELV applications)

D: Special versions
0 = Standard
5 = Top flange mount
6 = Rear flange mount
7 = Top 35 mm rail mount
8 = Rear 35 mm rail mount
9 = Type 62.82/83 without rear flange mount

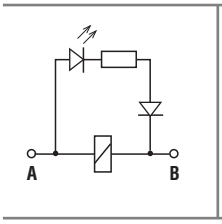
C: Options
0 = None
2 = Mechanical indicator
3 = LED (AC)
4 = Lockable test button + mechanical indicator
5 = Lockable test button + LED (AC)
54 = Lockable test button + LED (AC) + mechanical indicator
6 = LED + diode (DC, polarity positive to pin A/A1)
7 = Lockable test button + LED + diode (DC, polarity positive to pin A/A1)
74 = Lockable test button + LED + diode (DC, polarity positive to pin A/A1) + mechanical indicator

62

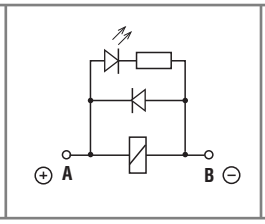
Selecting features and options: only combinations in the same row are possible.
Preferred selections for best avaliability are shown in **bold.**

Type	Coil version	A	B	C	D
62.22/23	AC-DC	**0** - 4	**0** - 3 - 5 - 6	**0**	**0**
62.32/33	AC-DC	0 - 4	0 - 3 - 5 - 6	0	0-5-6-7-8
	AC-DC	**0** - 4	**0** - 5	2 - **4**	**0** - 6 - 8
	AC	**0** - 4	**0**	2 - 3 - **4** - 5	**0** - 6 - 8
	AC	0 - 4	0 - 3	3	0 - 6 - 8
	AC	0 - 4	0	54	/
	DC	**0** - 4	**0**	**4** - 6 - 7	**0** - 6 - 8
	DC	0 - 4	0 - 3	6	0 - 6 - 8
	DC	0 - 4	0	74	/
62.82/83	AC-DC	**0** - 4	**0** - 3 - 5 - 6	**0**	**0** - 5 - 7 - 8 - 9
	AC-DC	0 - 4	0 - 5	2 - 4	0 - 8
	AC	0 - 4	0	2 - 3 - 4 - 5	0 - 8
	AC	0 - 4	0 - 3	3	0 - 8
	DC	0 - 4	0	4 - 6 - 7	0 - 8
	DC	0 - 4	0 - 3	6	0 - 8

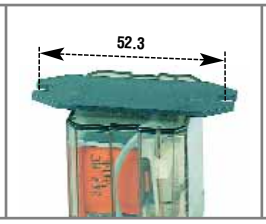
Descriptions: Options and Special versions



C: Option 3, 5, 54
LED (AC)



C: Option 6, 7, 74
LED + diode (DC, polarity positive to pin A/A1)



D: Special versions 5
Top flange mount

D: Special versions 7
Top 35 mm rail mount

B: Contact circuit 5, 6
Additional physical separator between coil and contacts (for SELV applications)

Lockable test button and mechanical flag indicator (0040)

The dual-purpose Finder test button can be used in two ways:
Case 1) The plastic pip (located directly above the test button) remains intact. In this case, when the test button is pushed, the contacts operate. When the test button is released the contacts return to their former state.

Case 2) The plastic pip is broken-off (using an appropriate cutting tool). In this case, (in addition to the above function), when the test button is pushed and rotated, the contacts are latched in the operating state, and remain so until the test button is rotated back to its former position.

In both cases ensure that the test button actuation is swift and decisive.

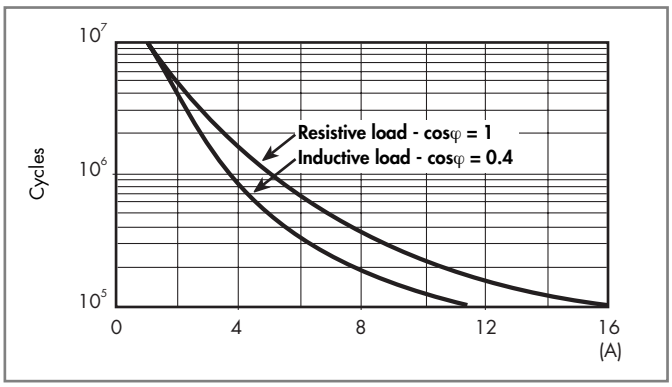
Technical data

Insulation						
Insulation according to EN 61810-1 ed. 2	insulation rated voltage	V	400			
	rated impulse withstand voltage	kV	4			
	pollution degree		3			
	overvoltage category		III			
Insulation between coil and contacts (1.2/50 µs)		kV	6			
Dielectric strength between open contacts		V AC	1,500 (changeover contact types)			
		V AC	2,500 (normally open contact types)			
Dielectric strength between adjacent contacts		V AC	2,500			
Conducted disturbance immunity						
Burst (5...50)ns, 5 kHz, on A1 - A2			EN 61000-4-4		level 4 (4 kV)	
Surge (1.2/50 µs) on A1 - A2 (differential mode)			EN 61000-4-5		level 4 (4 kV)	
Other data						
Bounce time: NO/NC		ms	3/6 (changeover)		3/— (normally open)	
Vibration resistance (5...55)Hz, max. ± 1 mm: NO/NC		g/g	5/3			
Shock resistance		g	15			
Power lost to the environment			**2 pole (CO)**	**3 pole (CO)**	**2 pole (NO)**	**3 pole (NO)**
	without contact current	W	1.3	1.3	3	3
	with rated current	W	3.3	4.3	5	6
Recommended distance between relays mounted on PCB		mm	≥ 5			

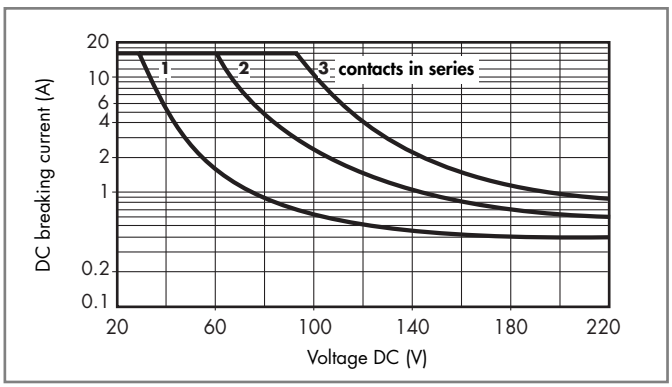
62

Contact specification

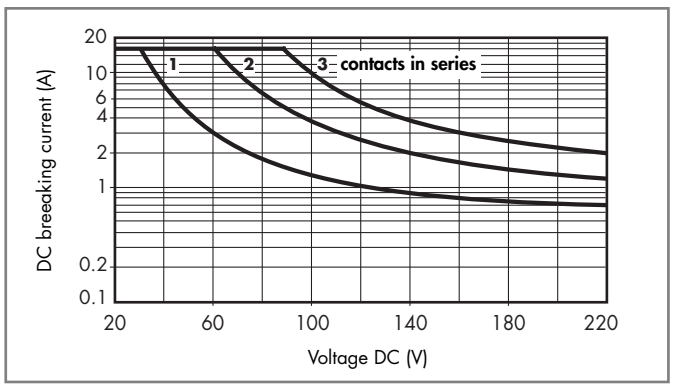
F 62 - Electrical life (AC) v contact current



H 62 - Maximum DC1 breaking capacity
Changeover contacts



H 62 - Maximum DC1 breaking capacity
Normally open contacts



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 100·10³ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
  Note: the release time of the load will be increased.

Coil specifications

DC version data

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N
V		V	V	Ω	mA
6	**9**.006	4.8	6.6	28	214
12	**9**.012	9.6	13.2	110	109
24	**9**.024	19.2	26.4	445	54
48	**9**.048	38.4	52.8	1,770	27
60	**9**.060	48	66	2,760	21.7
110	**9**.110	88	121	9,420	11.7
125	**9**.125	100	137.5	12,000	10.4
220	**9**.220	176	242	37,300	5.8

AC version data

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N (50Hz)
V		V	V	Ω	mA
6	**8**.006	4.8	6.6	4.6	367
12	**8**.012	9.6	13.2	19	183
24	**8**.024	19.2	26.4	74	90
48	**8**.048	38.4	52.8	290	47
60	**8**.060	48	66	450	37
110	**8**.110	88	121	1,600	20
120	**8**.120	96	132	1,940	18.6
230	**8**.230	184	253	7,250	10.5
240	**8**.240	192	264	8,500	9.2
400	**8**.400	320	440	19,800	6

DC (NO/nPST-NO) version data (≥ 3 mm)

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N
V		V	V	Ω	mA
6	**9**.006	5.1	6.6	12	500
12	**9**.012	10.2	13.2	48	250
24	**9**.024	20.4	26.4	192	125
48	**9**.048	40.8	52.8	770	63
60	**9**.060	51	66	1,200	50
110	**9**.110	93.5	121	4,200	26
125	**9**.125	106.2	137.5	5,200	24
220	**9**.220	187	242	17,600	12.5

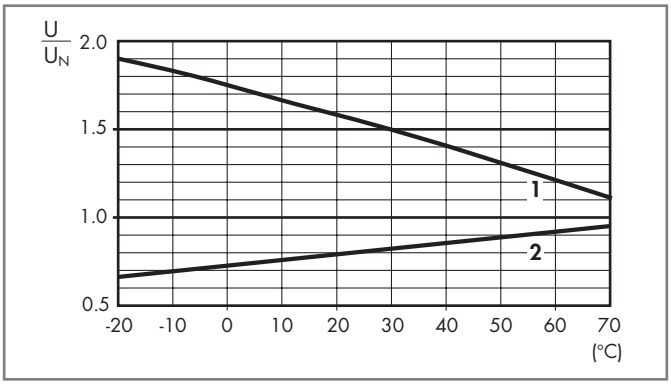
AC (NO/nPST-NO) version data (≥ 3 mm)

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N (50Hz)
V		V	V	Ω	mA
6	**8**.006	5.1	6.6	4	540
12	**8**.012	10.2	13.2	14	275
24	**8**.024	20.4	26.4	62	130
48	**8**.048	40.8	52.8	220	70
60	**8**.060	51	66	348	55
110	**8**.110	93.5	121	1,200	30
120	**8**.120	106	137	1,350	24
230	**8**.230	196	253	5,000	14
240	**8**.240	204	264	6,300	12.5
400	**8**.400	340	440	14,700	7.8

62

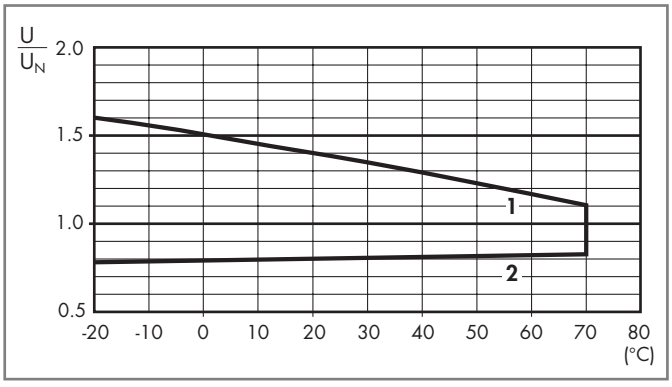
R 62 - DC coil operating range v ambient temperature

Changeover contacts



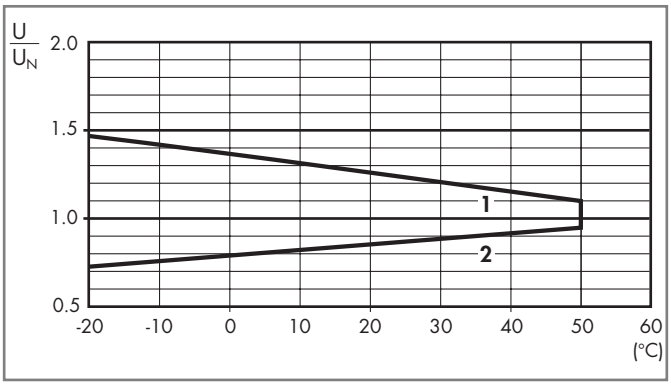
R 62 - AC coil operating range v ambient temperature

Changeover contacts



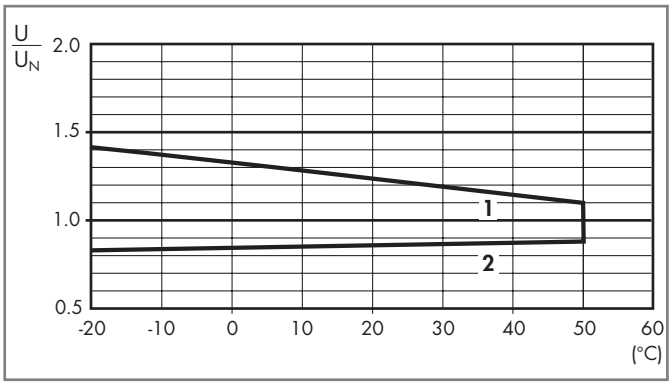
R 62 - DC coil operating range v ambient temperature

Normally open contacts



R 62 - AC coil operating range v ambient temperature

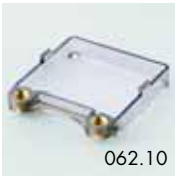
Normally open contacts



1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

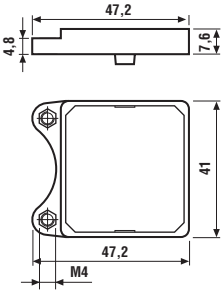
1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

Accessories


062.10


062.10

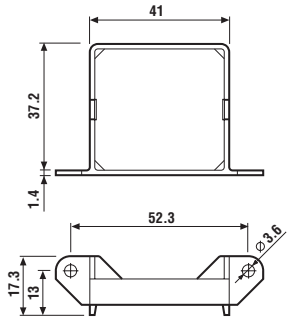
Mounting adaptor for types 62.3x and 62.8x.xxxx.xxx9 (M4)	062.10

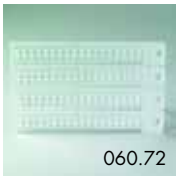



062.60


062.60

Flange mounting adaptor for types 62.3x and 62.8x.xxxx.xxx9	062.60




060.72

Sheet of marker tags for 62 series relays, plastic, 72 tags, 6x12 mm	060.72