

- Plug-in or P.C.B. versions
- AC or DC coils
- 3 mm gap between open contacts on NO option
- 8 mm, 6 kV (1.2/50 μs) between coil and contacts (internal distance)

	62.22	62.23	62.32
	- 2 pole - PCB mounting	- 3 pole - PCB mounting	- 2 pole - Faston 187 (4.8x0.5)mm - Plug-in for use with 92 Series sockets
	 h = 49.1 mm	 h = 49.1 mm	
Contact specifications			
Contact configuration	2 CO (DPDT)	3 CO (3PDT)	2 CO (DPDT)
Rated current/Maximum peak current	A 16/30	A 16/30	A 16/30
Rated voltage/Maximum switching voltage	V AC 250/400	V AC 250/400	V AC 250/400
Rated load in AC1	VA 4,000	VA 4,000	VA 4,000
Rated load in AC15 (230 VAC)	VA 750	VA 750	VA 750
Single phase motor rating (230 VAC)	kW/HP 0.8/1.2	kW/HP 0.8/1.2	kW/HP 0.8/1.2
Breaking capacity in DC1: 30/110/220V	A 16/0.6/0.4	A 16/0.6/0.4	A 16/0.6/0.4
Minimum switching load	mW (V/mA) 1,000 (10/10)	mW (V/mA) 1,000 (10/10)	mW (V/mA) 1,000 (10/10)
Standard contact material	AgCdO	AgCdO	AgCdO
Coil specifications			
Nominal voltage (U _N)	V AC (50/60 Hz)	6 · 12 · 24 · 48 · 60 · 110 · 120 · 230 · 240	
	V DC	6 · 12 · 24 · 48 · 60 · 110	
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3	2.2/1.3
Operating range	AC (50 Hz)	(0.8...1.1)U _N	(0.8...1.1)U _N
	DC	(0.8...1.1)U _N	(0.8...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 (bounce included)	ms	20/20	20/20
Insulation according to EN 61810-5		4kV/3	4kV/3
Insulation between coil and contacts (1.2/50μs)	kV	6	6
Dielectric strenght between open contacts	V AC	1,500	1,500
Ambient temperature range	°C	-40...+70	-40...+70
Protection category		IP 50	IP 50
Approvals: (according to type)			

- Plug-in or P.C.B. versions
- AC or DC coils
- 3 mm gap between open contacts on NO option
- 8 mm, 6 kV (1.2/50 μs) between coil and contacts (internal distance)

	62.33	62.82	62.83
	- 3 pole - Faston 187 (4.8x0.5)mm - Plug-in for use with 92 Series sockets	- 2 pole - Faston 250 (6.3x0.8)mm with flange rear mount	- 3 pole - Faston 250 (6.3x0.8)mm with flange rear mount
Contact specifications			
Contact configuration	3 CO (3PDT)	2 CO (DPDT)	3 CO (3PDT)
Rated current/Maximum peak current A	16/30	16/30	16/30
Rated voltage/Maximum switching voltage V AC	250/400	250/400	250/400
Rated load in AC1 VA	4,000	4,000	4,000
Rated load in AC15 (230 VAC) VA	750	750	750
Single phase motor rating (230 VAC) kW/HP	0.8/1.2	0.8/1.2	0.8/1.2
Breaking capacity in DC1: 30/110/220V A	16/0.6/0.4	16/0.6/0.4	16/0.6/0.4
Minimum switching load mW (V/mA)	1,000 (10/10)	1,000 (10/10)	1,000 (10/10)
Standard contact material	AgCdO	AgCdO	AgCdO
Coil specifications			
Nominal voltage (U _N) V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240		
V DC	6 - 12 - 24 - 48 - 60 - 110		
Rated power AC/DC VA (50 Hz)/W	2.2/1.3	2.2/1.3	2.2/1.3
Operating range AC (50 Hz)	(0.8...1.1)U _N	(0.8...1.1)U _N	(0.8...1.1)U _N
DC	(0.8...1.1)U _N	(0.8...1.1)U _N	(0.8...1.1)U _N
Holding voltage AC/DC	0.8 U _N /0.6 U _N	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	0.2 U _N /0.1 U _N
Technical data			
Mechanical life AC/DC cycles	10 · 10 ⁵ /30 · 10 ⁶	10 · 10 ⁵ /30 · 10 ⁶	10 · 10 ⁵ /30 · 10 ⁶
Electrical life at rated load AC1 cycles	100 · 10 ³	100 · 10 ³	100 · 10 ³
Operate/release time (bounce included) ms	20/20	20/20	20/20
Insulation according to EN 61810-5	4 kV/3	4 kV/3	4 kV/3
Insulation between coil and contacts (1.2/50μs) kV	6	6	6
Dielectric strenght between open contacts V AC	1,500	1,500	1,500
Ambient temperature range °C	-40...+70	-40...+70	-40...+70
Protection category	IP 50	IP 50	IP 50
Approvals: (according to type)			

- Plug-in or P.C.B. versions
- AC or DC coils
- 3 mm gap between open contacts on NO option
- 8 mm, 6 kV (1.2/50 μs) between coil and contacts (internal distance)

62.22 - 0300

62.23 - 0300

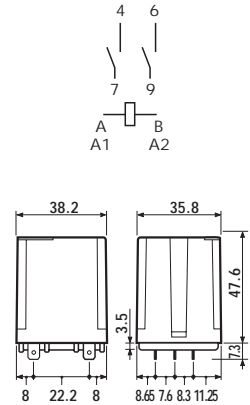
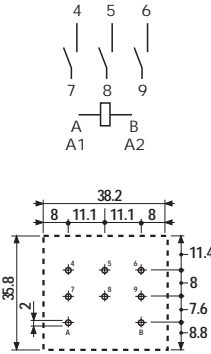
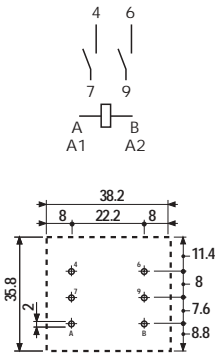
62.32 - 0300



- 2 NO (3mm contact gap)
- PCB mounting

- 3 NO (3mm contact gap)
- PCB mounting

- 2 NO (3mm contact gap)
- Faston 187 (4.8x0.5)mm
- Plug-in for use with 92 Series sockets



* Distance between contacts >3mm
(VDE 0700 art. 1)

Contact specifications		62.22 - 0300	62.23 - 0300	62.32 - 0300
Contact configuration		2 NO (DPST - NO) 3 mm*	3 NO (3PST - NO) 3 mm*	2 NO (DPST - NO) 3 mm*
Rated current/Maximum peak current	A	16/30	16/30	16/30
Rated voltage/Maximum switching voltage	V AC	250/400	250/400	250/400
Rated load in AC1	VA	4,000	4,000	4,000
Rated load in AC15 (230 VAC)	VA	750	750	750
Single phase motor rating (230 VAC)	kW/HP	0.8/1.2	0.8/1.2	0.8/1.2
Breaking capacity in DC1: 30/110/220V	A	16/1.1/0.7	16/1.1/0.7	16/1.1/0.7
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)	1,000 (10/10)
Standard contact material		AgCdO	AgCdO	AgCdO
Coil specifications				
Nominal voltage (U _N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240		
	V DC	6 - 12 - 24 - 48 - 60 - 110		
Rated power AC/DC	VA (50 Hz)/W	3/3	3/3	3/3
Operating range	AC (50 Hz)	(0.85...1.1)U _N	(0.85...1.1)U _N	(0.85...1.1)U _N
	DC	(0.85...1.1)U _N	(0.85...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	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	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	10 · 10 ⁶ /30 · 10 ⁶
Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³	100 · 10 ³
Operate/release time (bounce included)	ms	30/—	30/—	30/—
Insulation according to EN 61810-5		4kV/3	4kV/3	4kV/3
Insulation between coil and contacts (1.2/50μs)	kV	6	6	6
Dielectric strength between open contacts	V AC	2,500	2,500	2,500
Ambient temperature range	°C	-40...+50	-40...+50	-40...+50
Protection category		IP 50	IP 50	IP 50
Approvals: (according to type)				

- Plug-in or P.C.B. versions
- AC or DC coils
- 3 mm gap between open contacts on NO option
- 8 mm, 6 kV (1.2/50 μs) between coil and contacts (internal distance)

62.33 - 0300

62.82 - 0300

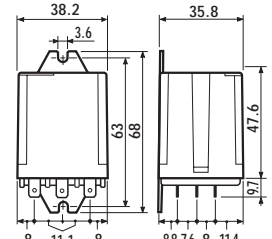
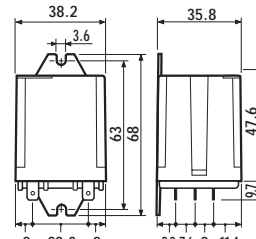
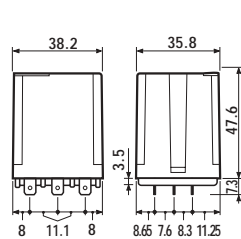
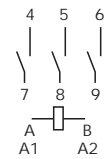
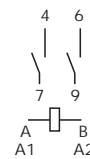
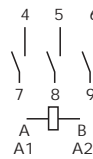
62.83 - 0300



- 3 NO (3mm contact gap)
- Faston 187 (4.8x0.5)mm
- Plug-in for use with 92 Series sockets

- 2 NO (3mm contact gap)
- Faston 250 (6.3x0.8)mm with flange rear mount

- 3 NO (3mm contact gap)
- Faston 250 (6.3x0.8)mm with flange rear mount



* Distance between contacts >3mm (VDE 0700 art. 1)

Contact specifications		62.33 - 0300	62.82 - 0300	62.83 - 0300						
Contact configuration		3 NO (3PST - NO) 3 mm*	2 NO (DPST - NO) 3 mm*	3 NO (3PST - NO) 3 mm*						
Rated current/Maximum peak current	A	16/30	16/30	16/30						
Rated voltage/Maximum switching voltage	V AC	250/400	250/400	250/400						
Rated load in AC1	VA	4,000	4,000	4,000						
Rated load in AC15 (230 VAC)	VA	750	750	750						
Single phase motor rating (230 VAC)	kW/HP	0.8/1.2	0.8/1.2	0.8/1.2						
Breaking capacity in DC1: 30/110/220V	A	16/1.1/0.7	16/1.1/0.7	16/1.1/0.7						
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)	1,000 (10/10)						
Standard contact material		AgCdO	AgCdO	AgCdO						
Coil specifications		6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240								
Nominal voltage (U _N)	V AC (50/60 Hz)									
	V DC	6 - 12 - 24 - 48 - 60 - 110								
Rated power AC/DC	VA (50 Hz)/W	3/3	3/3	3/3						
Operating range	AC (50 Hz)	(0.85...1.1)U _N	(0.85...1.1)U _N	(0.85...1.1)U _N						
	DC	(0.85...1.1)U _N	(0.85...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	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	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	10 · 10 ⁶ /30 · 10 ⁶						
Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³	100 · 10 ³						
Operate/release time (bounce included)	ms	30/—	30/—	30/—						
Insulation according to EN 61810-5		4 kV/3	4 kV/3	4 kV/3						
Insulation between coil and contacts (1.2/50μs)	kV	6	6	6						
Dielectric strength between open contacts	V AC	2,500	2,500	2,500						
Ambient temperature range	°C	-40...+50	-40...+50	-40...+50						
Protection category		IP 50	IP 50	IP 50						
Approvals: (according to type)		CE	ABS	SE	GOST	Y	S	S	RU	VDE

ORDERING INFORMATION

Example: a 62 series power relay + FASTON 250 rear flange mount (6.3 x 0.8 mm) with 2 NO (DPST-NO) contacts, coil rated at 12 V DC.

6 2 . 8 2 . 9 . 0 1 2 . 0 3 0 0

Series ————

Type ————

2 = P.C.B.
3 = Plug-in
8 = Faston 250 (6.3x0.8 mm) with rear flange mount

No. of poles ————

2 = 2 CO (DPDT)
3 = 3 CO (3PDT)

Coil version ————

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

Coil voltage ————

see coil specifications

A: Contact material
0 = Standard
4 = AgSnO₂

B: Contact circuit
0 = Standard
3 = NO (≥ 3 mm contact gap)
5 = CO version with coil to contacts SELV insulation
6 = NO version with coil to contacts SELV insulation

D: Special applications
0 = Standard
5 = Top flange mount
6 = Rear flange mount
7 = Top 35 mm rail mount
8 = Rear 35 mm rail mount
9 = Faston 250 without rear flange mount

C: Options
0 = Standard
2 = Mechanical indicator
3 = LED (AC)
4 = Test button + mechanical indicator
5 = Test button + LED (AC)
54 = Test button + LED (AC) + mechanical indicator
6 = LED + diode (DC polarity positive to pin A/A1)
7 = Test button + LED + diode (DC polarity positive to pin A/A1)
74 = Test button + LED + diode (DC polarity positive to pin A/A1) + mechanical indicator

Only combinations in the same row are possible

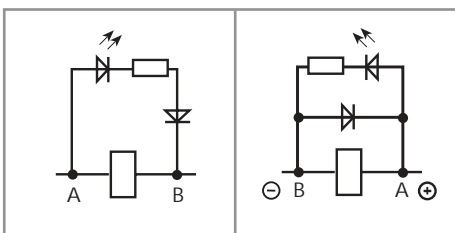
Preferred versions

	coil version	A	B	C	D
62.22/23	AC-DC	0	0	0	0
62.32/33	AC-DC	0	0	4	0
62.82/83	AC-DC	0	0	0	0

All versions

	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 - 9
	AC-DC	0 - 4	5	2 - 4	0 - 6 - 8
	AC	0 - 4	0	2 - 3 - 4 - 5	0 - 6 - 8
	AC	0 - 4	3	3	0 - 6 - 8
	AC	0 - 4	0	54	/
	DC	0 - 4	0	4 - 6 - 7	0 - 6 - 8
	DC	0 - 4	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	5	2 - 4	0 - 8
	AC	0 - 4	0	2 - 3 - 4 - 5	0 - 8
	AC	0 - 4	3	3	0 - 8
	DC	0 - 4	0	4 - 6 - 7	0 - 8
	DC	0 - 4	3	6	0 - 8

POSSIBLE OPTIONS



Option = 0030
0050

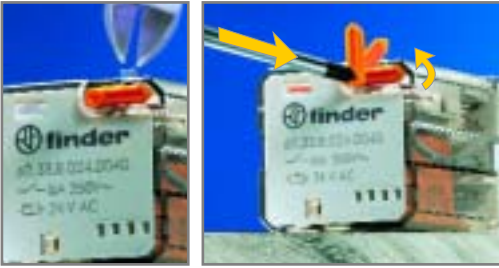
Option = 0060
0070



Option = 0005
TOP MOUNT FLANGE



Option = 0500 and 0600
COIL TO CONTACTS PHYSICAL
SEPARATOR 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 61810-5	insulation rated voltage	V	400
	rated impulse withstand voltage	kV	4
	pollution degree		3
	overvoltage category		III

IMMUNITY

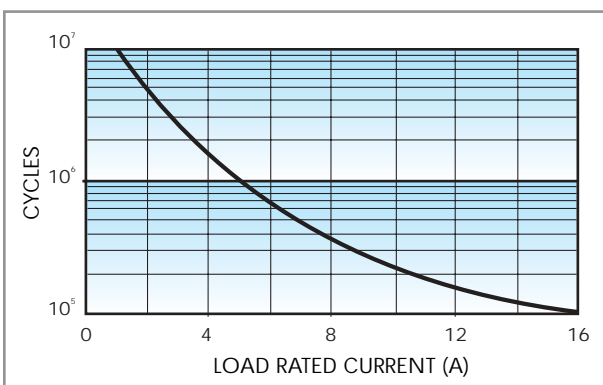
CONDUCTED DISTURBANCE IMMUNITY	BURST (according to EN 61000-4-4) level 4 (4 kV)
	SURGE (according to EN 61000-4-5) level 4 (4kV)

OTHER DATA

VIBRATION RESISTANCE (10...55Hz): NO/NC	g/g	5/3				
POWER LOST IN THE ENVIRONMENT		2 CO (DPDT)	3 CO (3PDT)	2 NO (DPST-NO)	3 NO (3PST-NO)	
	without contact current	W	1.3	1.3	3	3
	with rated current	W	3.3	4.3	5	6
RECOMMENDED DISTANCE between RELAY mounted on P.C.B.s	mm	≥5				

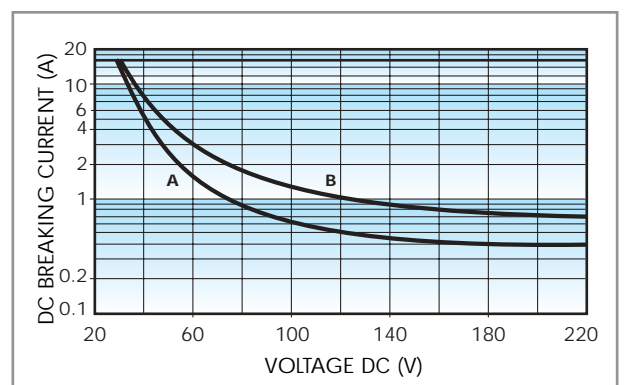
CONTACT SPECIFICATIONS

F 62



Electrical life vs AC1 load.

H 62



Breaking capacity for DC1 load.

Load applied to 1 contact.

A = other types

B = NO types

- When switching a resistive load (DC1) having voltage and current values under the curve the expected electrical life is $\geq 100 \cdot 10^3$ cycles.
- In case of DC13 loads the connection of a diode in parallel with the load will permit the same electrical life as for a DC1 load.

Note: the release time of load will be increase.

COIL SPECIFICATIONS

AC VERSION DATA

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil absorption I at U_N (50Hz) mA
		U_{min} V	U_{max} V		
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

DC VERSION DATA

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil absorption I at U_N mA
		U_{min} V	U_{max} V		
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

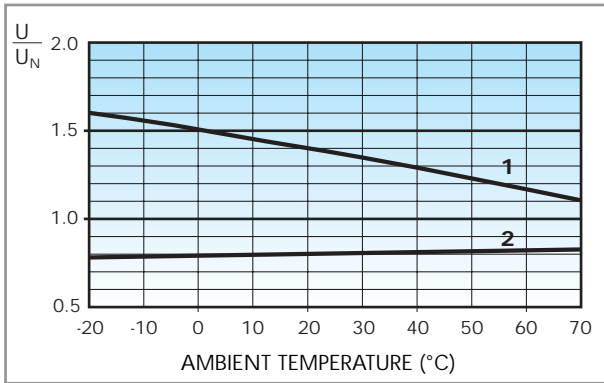
AC (NO/SPDT-NO) VERSION DATA (≥ 3 mm)

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil absorption I at U_N (50Hz) mA
		U_{min} V	U_{max} V		
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

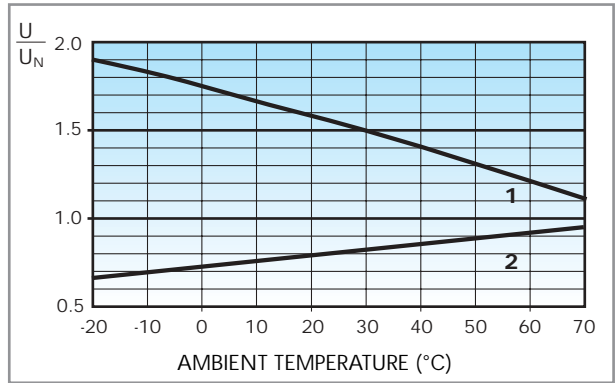
DC (NO/SPDT-NO) VERSION DATA (≥ 3 mm)

Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil absorption I at U_N mA
		U_{min} V	U_{max} V		
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

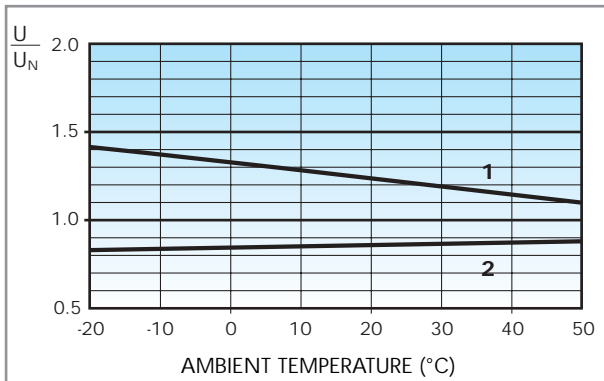
R 62 AC



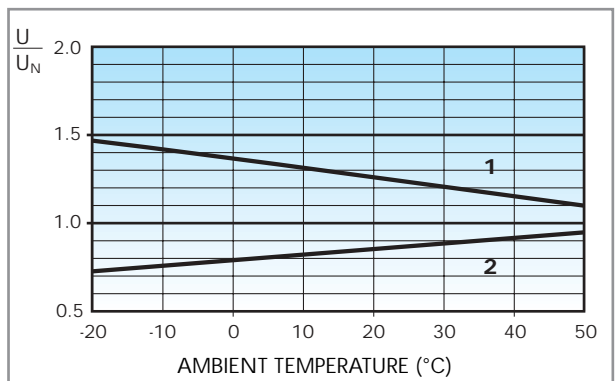
R 62 DC



R 62 AC (NO)



R 62 DC (NO)



Operating range (AC type) vs ambient temperature.

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

Operating range (DC type) vs ambient temperature.

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



92.03

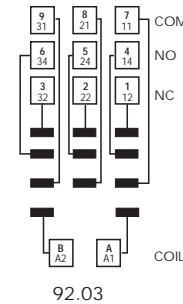
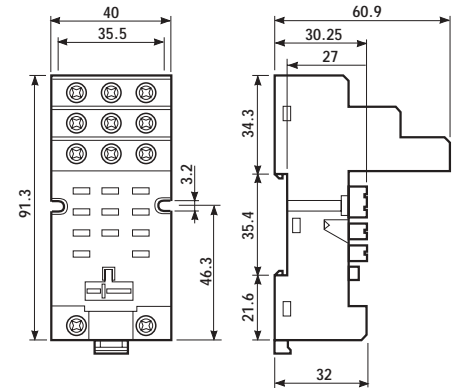
Approvals
(according to type):



- RATED VALUES: 16 A - 250 V
- INSULATION: ≥ 6 kV (1.2/50 μ s) between coil and contacts
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70) $^{\circ}$ C
- TORQUE: 0.8 Nm
- MAX WIRE SIZE:

	solid wire	flexible wire
mm ²	1x10 / 2x4	1x6 / 2x4
AWG	1x8 / 2x12	1x10 / 2x12

Relay type	62.32	62.33
Clamp terminal socket: panel or 35 mm rail (EN 50022) mount	BLUE	92.03 92.03
	BLACK*	92.03.10
Retaining clip (supplied with socket)	092.71	092.71
Modules	99.02	99.02
Timer modules	86.10, 86.20	86.10, 86.20



99.02

99 Series modules for 92.03 socket	BLUE	BLACK*
Diode (6...220) V DC	99.02.3.000.00	99.02.3.000.00.0
Diode (inverted polarity) (6...220) V DC	99.02.2.000.00	99.02.2.000.00.0
LED (6...24) V DC/AC	99.02.0.024.59	99.02.0.024.59.0
LED (28...60) V DC/AC	99.02.0.060.59	99.02.0.060.59.0
LED (110...240) V DC/AC	99.02.0.230.59	99.02.0.230.59.0
LED + Diode (6...24) V DC	99.02.9.024.99	99.02.9.024.99.0
LED + Diode (28...60) V DC	99.02.9.060.99	99.02.9.060.99.0
LED + Diode (110...220) V DC	99.02.9.220.99	99.02.9.220.99.0
LED + Diode (inverted polarity) (6...24) V DC	99.02.9.024.79	99.02.9.024.79.0
LED + Diode (inverted polarity) (28...60) V DC	99.02.9.060.79	99.02.9.060.79.0
LED + Diode (inverted polarity) (110...220) V DC	99.02.9.220.79	99.02.9.220.79.0
LED + Varistor (6...24) V DC/AC	99.02.0.024.98	99.02.0.024.98.0
LED + Varistor (28...60) V DC/AC	99.02.0.060.98	99.02.0.060.98.0
LED + Varistor (110...240) V DC/AC	99.02.0.230.98	99.02.0.230.98.0
RC circuit (6...24) V DC/AC	99.02.0.024.09	99.02.0.024.09.0
RC circuit (28...60) V DC/AC	99.02.0.060.09	99.02.0.060.09.0
RC circuit (110...240) V DC/AC	99.02.0.230.09	99.02.0.230.09.0
No - remanence (110...240) V AC	99.02.8.230.07	99.02.8.230.07.0

* Available on request



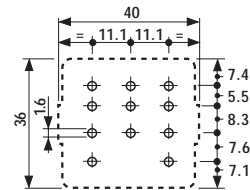
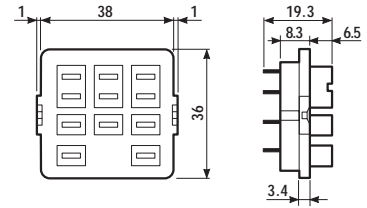
92.13

Relay type		62.32	62.33
P.C.B. socket	BLUE	92.13	92.13
	BLACK*	92.13.0	92.13.0
Retaining clip (supplied with socket)		092.54	092.54

Approvals
(according to type):



- RATED VALUES: 32 A - 250 V (10 A max for each contact circuit)
- DIELECTRIC STRENGTH: ≥ 2.5 kV AC
- AMBIENT TEMPERATURE: (-40...+70)°C



92.13



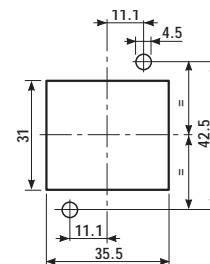
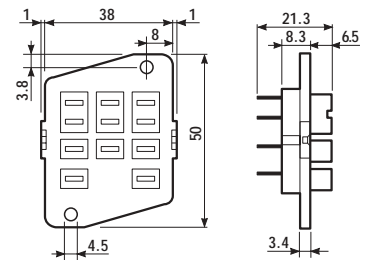
92.33

Relay type		62.32	62.33
Panel mount solder socket: mounted with M3 screw	BLUE	92.33	92.33
	BLACK*	92.33.0	92.33.0
Retaining clip (supplied with socket)		092.54	092.54

Approvals
(according to type):



- RATED VALUES: 32 A - 250 V (10 A max for each contact circuit)
- DIELECTRIC STRENGTH: ≥ 2.5 kV AC
- AMBIENT TEMPERATURE: (-40...+70)°C



92.33



062.10

Mounting adaptor for types 62.3x and 62.8x	062.10
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Sheet of marker tags for all types (72 tags)	060.72
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* Available on request