


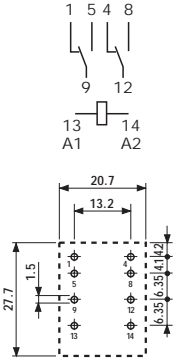
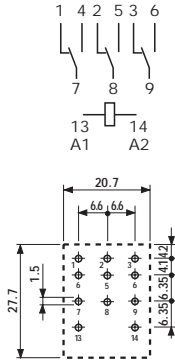
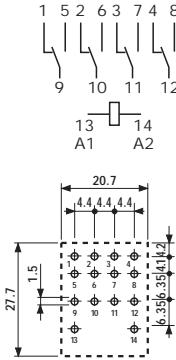




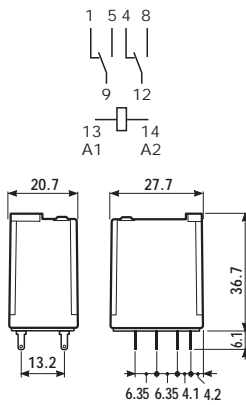
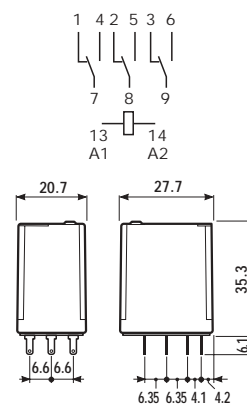
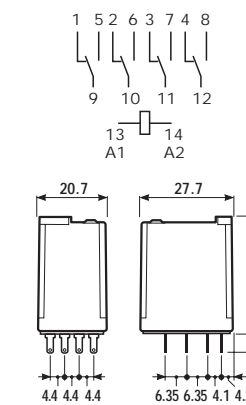



- Plug-in or P.C.B. versions
- AC or DC coils
- Lockable test button and mechanical flag indicator as standard on 2 and 4 CO relays type
- Sockets and accessories: see 94, 99 and 86 series

	55.12	55.13	55.14
			
	- 2 pole - PCB mounting	- 3 pole - PCB mounting	- 4 pole - PCB mounting
	 <p style="text-align: center;">h = 35.5 mm</p>	 <p style="text-align: center;">h = 35.5 mm</p>	 <p style="text-align: center;">h = 35.5 mm</p>
Contact specifications			
Contact configuration	2 CO (DPDT)	3 CO (3PDT)	4 CO (4PDT)
Rated current/Maximum peak current A	10/20	10/20	5/10
Rated voltage/Maximum switching voltage V AC	250/400	250/400	250/250
Rated load in AC1 VA	2,500	2,500	1,250
Rated load in AC15 (230 VAC) VA	500	500	250
Single phase motor rating (230 VAC) kW/HP	0.37/0.6	0.37/0.6	0.125/0.2
Breaking capacity in DC1: 30/110/220V A	10/0.25/0.12	10/0.25/0.12	5/0.25/0.12
Minimum switching load mW (V/mA)	300 (5/5)	300 (5/5)	300 (5/5)
Standard contact material	AgNi	AgNi	AgNi
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	1.5/1	1.5/1	1.5/1
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 /0.5 U _N	0.8 U _N /0.5 U _N	0.8 U _N /0.5 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	20 · 10 ⁶ /50 · 10 ⁶	20 · 10 ⁶ /50 · 10 ⁶	20 · 10 ⁶ /50 · 10 ⁶
Electrical life at rated load AC1 cycles	200 · 10 ³	200 · 10 ³	150 · 10 ³
Operate/release time (bounce included) ms	10/15	10/15	10/15
Insulation according to EN 61810-5	3.6 kV/2	3.6 kV/2	3.6 kV/2
Insulation between coil and contacts (1.2/50µs) kV	3.6	3.6	3.6
Dielectric strenght between open contacts V AC	1,000	1,000	1,000
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
- Lockable test button and mechanical flag indicator as standard on 2 and 4 CO relays type
- Sockets and accessories: see 94, 99 and 86 series

	55.32	55.33	55.34
			
	- 2 pole - Plug-in for use with 94 Series sockets	- 3 pole - Plug-in for use with 94 Series sockets	- 4 pole - Plug-in for use with 94 Series sockets
			
Contact specifications			
Contact configuration	2 CO (DPDT)	3 CO (3PDT)	4 CO (4PDT)
Rated current/Maximum peak current	A 10/20	A 10/20	A 5/10
Rated voltage/Maximum switching voltage	V AC 250/400	V AC 250/400	V AC 250/250
Rated load in AC1	VA 2,500	VA 2,500	VA 1,250
Rated load in AC15 (230 VAC)	VA 500	VA 500	VA 250
Single phase motor rating (230 VAC)	kW/HP 0.37/0.6	kW/HP 0.37/0.6	kW/HP 0.125/0.2
Breaking capacity in DC1: 30/110/220V	A 10/0.25/0.12	A 10/0.25/0.12	A 5/0.25/0.12
Minimum switching load	mW (V/mA) 300 (5/5)	mW (V/mA) 300 (5/5)	mW (V/mA) 300 (5/5)
Standard contact material	AgNi	AgNi	AgNi
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 1.5/1	VA (50 Hz)/W 1.5/1	VA (50 Hz)/W 1.5/1
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 /0.5 U _N	AC/DC 0.8 U _N /0.5 U _N	AC/DC 0.8 U _N /0.5 U _N
Must drop-out voltage	AC/DC 0.2 U _N /0.1 U _N	AC/DC 0.2 U _N /0.1 U _N	AC/DC 0.2 U _N /0.1 U _N
Technical data			
Mechanical life AC/DC	cycles 20 · 10 ⁶ /50 · 10 ⁶	cycles 20 · 10 ⁶ /50 · 10 ⁶	cycles 20 · 10 ⁶ /50 · 10 ⁶
Electrical life at rated load AC1	cycles 200 · 10 ³	cycles 200 · 10 ³	cycles 150 · 10 ³
Operate/release time (bounce included)	ms 10/15	ms 10/15	ms 10/15
Insulation according to EN 61810-5	3.6 kV/2	3.6 kV/2	3.6 kV/2
Insulation between coil and contacts (1.2/50µs)	kV 3.6	kV 3.6	kV 3.6
Dielectric strenght between open contacts	V AC 1,000	V AC 1,000	V AC 1,000
Ambient temperature range	°C -40...+70	°C -40...+70	°C -40...+70
Protection category	IP 50	IP 50	IP 50
Approvals: (according to type)			

ORDERING INFORMATION

Example: a 55 series plug-in relay, 4 CO (4PDT) contacts, coil rated 12 V DC with a lockable test button and mechanical indicator.

	5 5 . 3 4 . 9 . 0 1 2 . 0 0 4 0	A	B	C	D
Series		A: Contact material		C: Options	D: Special applications
Type		0 = Standard		0 = Standard	0 = Standard
1 = P.C.B.		2 = AgCdO		1 = Lockable test button	1 = Sealed (for 55.12, 55.13 and 55.14 only)
3 = Plug-in		5 = AgNi + 5µm Au		2 = Mechanical indicator	6 = Rear flange mount
No. of poles		B: Contact circuit		3 = LED (AC)	
2 = 2 CO (DPDT), 10 A		0 = Standard		4 = Lockable test button + mechanical indicator	
3 = 3 CO (3PDT), 10 A				5 = Lockable test button + LED (AC)	
4 = 4 CO (4PDT), 5 A				54 = Lockable test button + LED (AC) + mechanical indicator	
Coil version				6 = LED + diode (positive to pin A2/14, DC non standard polarity)	
8 = AC (50/60 Hz)				7 = Lockable test button + LED + diode (positive to pin A2/14, DC non standard polarity)	
9 = DC				74 = Lockable test button + LED + diode (positive to pin A2/14, DC non standard polarity) + mechanical indicator	
Coil voltage				8 = LED + diode (positive to pin A1/13, DC standard polarity)	
see coil specifications				9 = Lockable test button + LED + diode (positive to pin A1/13, DC standard polarity)	
				94 = Lockable test button + LED + diode (positive to pin A1/13, DC standard polarity) + mechanical indicator	

Only combinations in the same row are possible

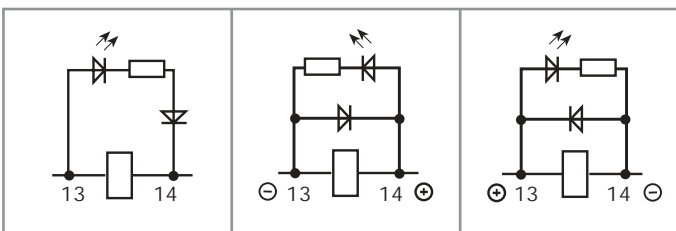
Preferred versions

	coil version	A	B	C	D
55.32/34	AC/DC	0	0	4	0
55.12/13/14	AC/DC	0	0	0	0
55.33	AC/DC	0	0	0	0

All versions

	coil version	A	B	C	D
55.32/34	AC/DC	0 - 2 - 5	0	0	0 - 6
	AC	0 - 2 - 5	0	2 - 3 - 4 - 5	0 - 6
	AC	0 - 2 - 5	0	54	/
	DC	0 - 2 - 5	0	2 - 4 - 6 - 7 - 8 - 9	0 - 6
	DC	0 - 2 - 5	0	74 - 94	/
55.33	AC/DC	0 - 2 - 5	0	0	0 - 6
	AC	0 - 2 - 5	0	1 - 3 - 5	0 - 6
	DC	0 - 2 - 5	0	1 - 6 - 7 - 8 - 9	0 - 6
55.12/13/14	AC/DC	0 - 2 - 5	0	0	0 - 1

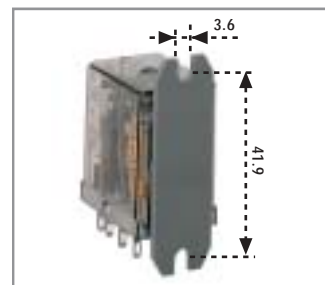
POSSIBLE OPTIONS



Option = 0030
0050
0054

Option = 0060
0070
0074

Option = 0080
0090
0094



Option = 0006
REAR MOUNT FLANGE



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	250
	rated impulse withstand voltage	kV	3.6
	pollution degree		2
	overvoltage category		III

IMMUNITY

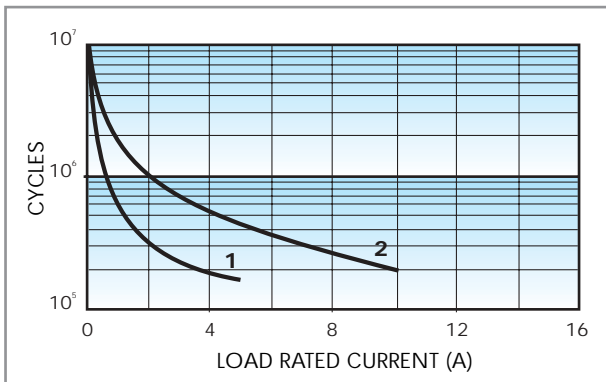
CONDUCTED DISTURBANCE IMMUNITY	BURST (according to EN 61000-4-4) level 4 (4 kV)
	SURGE (according to EN 61000-4-5) level 4 (4 kV)

OTHER DATA

VIBRATION RESISTANCE (10...55Hz): NO/NC	g/g	6/6			
POWER LOST IN THE ENVIRONMENT		2 CO (DPDT)	3 CO (3PDT)	4 CO (4PDT)	
	without contact current	W	1	1	1
	with rated current	W	3	4	2.6
RECOMMENDED DISTANCE between RELAY mounted on P.C.B.s	mm	≥5			

CONTACT SPECIFICATIONS

F 55

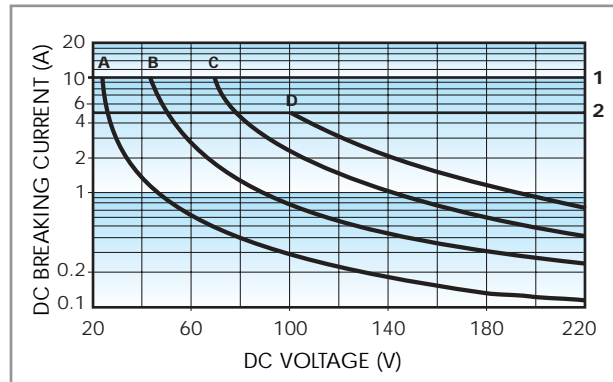


Electrical life vs AC1 load.

1 - 4 CO (4PDT) relay type (5 A).

2 - 2 - 3 CO (DPDT - 3PDT) relay type (10 A).

H 55



Breaking capacity for DC1 load.

1 - 2 - 3 CO (DPDT - 3PDT) type.

2 - 4 CO (4PDT) type.

A = load applied to 1 contact

B = load applied to 2 contacts in series

C = load applied to 3 contacts in series

D = load applied to 4 contacts in series

- 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

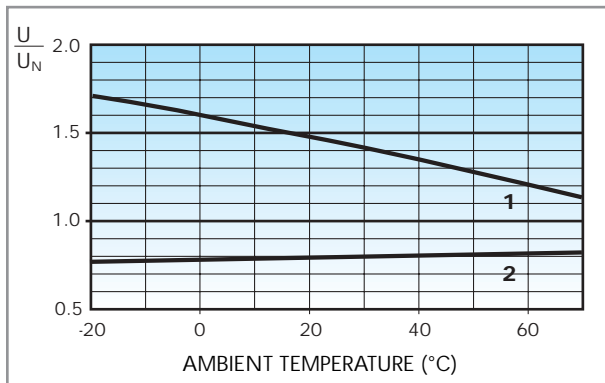
AC VERSION DATA

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	12	200
12	8.012	9.6	13.2	50	97
24	8.024	19.2	26.4	190	53
48	8.048	38.4	52.8	770	25
60	8.060	48	66	1,200	21
110	8.110	88	121	4,000	12.5
120	8.120	96	132	4,700	12
230	8.230	184	253	17,000	6
240	8.240	192	264	19,100	5.3

DC VERSION DATA

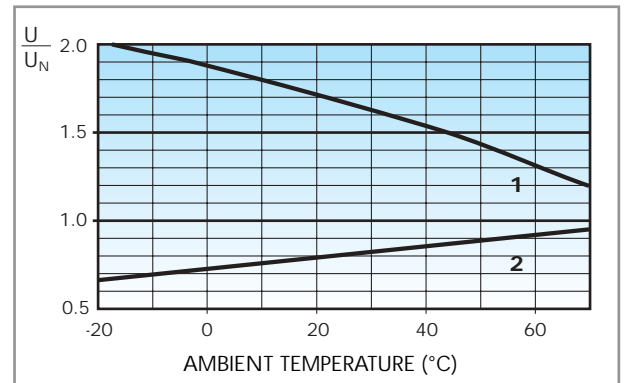
Nominal voltage U_N V	Coil code	Operating range		Resistance R Ω	Rated coil absorption I at U_N mA
		U_{min} V	U_{max} V		
6	9.006	4.8	6.6	40	150
12	9.012	9.6	13.2	140	86
24	9.024	19.2	26.4	600	40
48	9.048	38.4	52.8	2,400	20
60	9.060	48	66	4,000	15
110	9.110	88	121	12,500	8.8

R 55 AC



Operating range (AC type) vs ambient temperature.
1 - Max coil voltage permitted
2 - Min pick-up voltage with coil at ambient temperature

R 55 DC



Operating range (DC type) vs ambient temperature.
1 - Max coil voltage permitted
2 - Min pick-up voltage with coil at ambient temperature



94.04

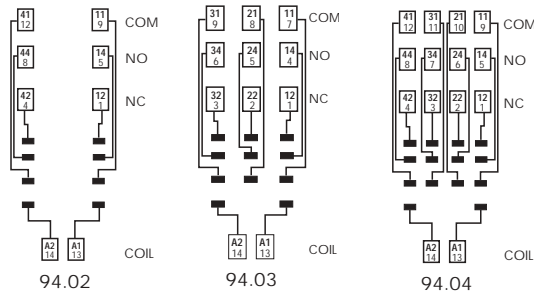
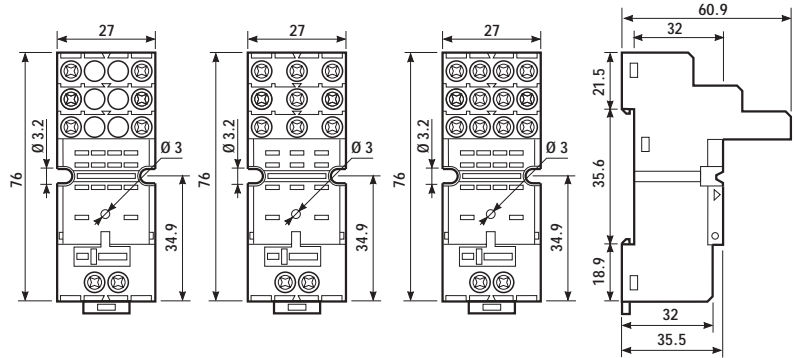
Approvals
(according to type):



Relay type	55.32	55.33	55.32, 55.34	
Clamp terminal socket: panel or 35 mm rail (EN 50022) mount	BLUE	94.02	94.03	94.04
	BLACK*	94.02.0	94.03.0	94.04.0
Retaining clip (supplied with socket)	094.71	094.71	094.71	
Identification tag	094.00.4	094.00.4	094.00.4	
Modules	99.02	99.02	99.02	
6 way jumper link for 94.02, 94.03 and 94.04 sockets	094.06	094.06	094.06	
Timer modules	86.10, 86.20	86.10, 86.20	86.10, 86.20	

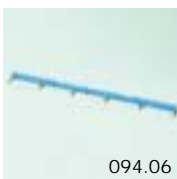
- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- MAX WIRE SIZE:

	solid wire	flexible wire
mm ²	1x6 / 2x2.5	1x4 / 2x2.5
AWG	1x10 / 2x14	1x12 / 2x14



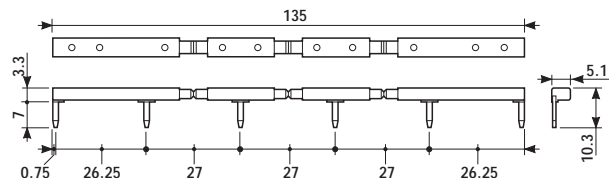
99.02

99 Series modules for 94.02, 94.03 and 94.04 sockets		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



094.06

6-way jumper link for 94.02, 94.03 and 94.04 sockets	094.06
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- RATED VALUES: 10 A - 250 V

*Available on request



94.74

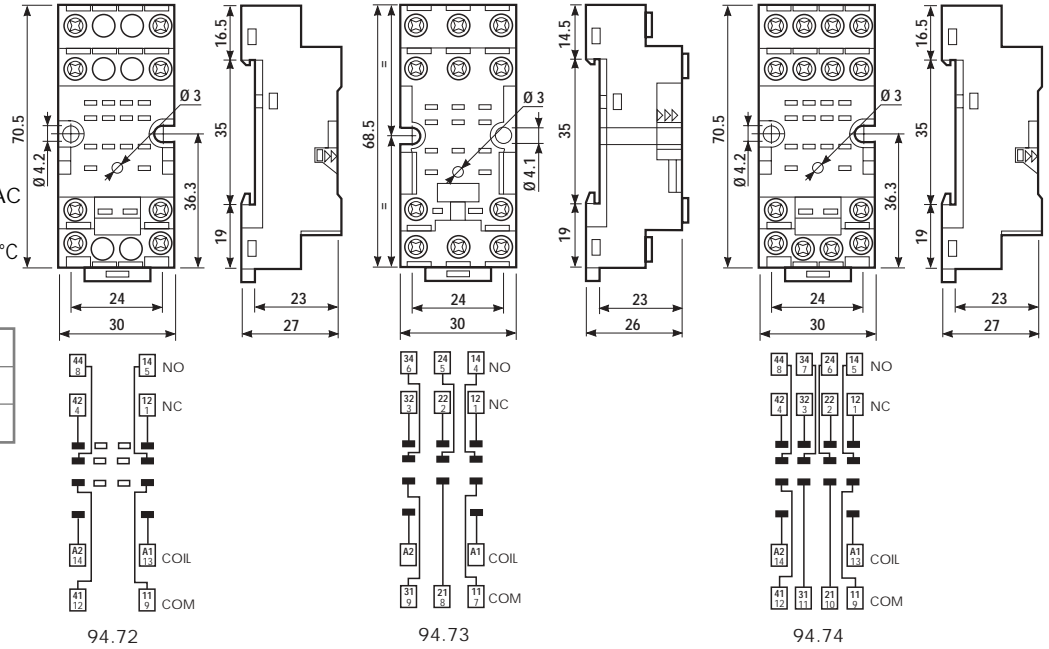
Relay type	55.32	55.33	55.32, 55.34
Screw terminal socket: panel or 35 mm rail (EN 50022) mount	BLUE	94.72	94.73
	BLACK*	94.72.0	94.73.0
Retaining clip (supplied with sockets)	094.71	094.71	094.71
Modules	99.01	99.01	99.01

Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- MAX WIRE SIZE:

	solid wire	flexible wire
mm ²	1x2.5 / 2x1.5	1x2.5 / 2x1.5
AWG	1x14 / 2x16	1x14 / 2x16



94.82

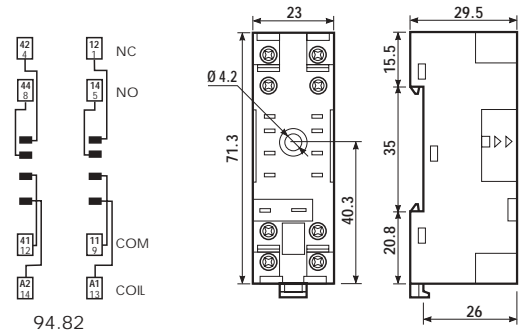
Relay type	55.32	55.33	55.32, 55.34
Screw terminal socket: panel or 35 mm rail (EN 50022) mount	BLUE	94.82	—
	BLACK*	94.82.0	—
Retaining clip (supplied with sockets)	094.71	—	—
Modules	99.01	—	—

Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- MAX WIRE SIZE:

	solid wire	flexible wire
mm ²	1x2.5 / 2x1.5	1x2.5 / 2x1.5
AWG	1x14 / 2x16	1x14 / 2x16



99.01

99 Series modules for 94.72, 94.73, 94.74 and 94.82 sockets	BLUE	BLACK*
Diode (6...220) V DC	99.01.3.000.00	99.01.3.000.00.0
Diode (inverted polarity) (6...220) V DC	99.01.2.000.00	99.01.2.000.00.0
LED (6...24) V DC/AC	99.01.0.024.59	99.01.0.024.59.0
LED (28...60) V DC/AC	99.01.0.060.59	99.01.0.060.59.0
LED (110...240) V DC/AC	99.01.0.230.59	99.01.0.230.59.0
LED + Diode (6...24) V DC	99.01.9.024.99	99.01.9.024.99.0
LED + Diode (28...60) V DC	99.01.9.060.99	99.01.9.060.99.0
LED + Diode (110...220) V DC	99.01.9.220.99	99.01.9.220.99.0
LED + Diode (inverted polarity) (6...24) V DC	99.01.9.024.79	99.01.9.024.79.0
LED + Diode (inverted polarity) (28...60) V DC	99.01.9.060.79	99.01.9.060.79.0
LED + Diode (inverted polarity) (110...220) V DC	99.01.9.220.79	99.01.9.220.79.0
LED + Varistor (6...24) V DC/AC	99.01.0.024.98	99.01.0.024.98.0
LED + Varistor (28...60) V DC/AC	99.01.0.060.98	99.01.0.060.98.0
LED + Varistor (110...240) V DC/AC	99.01.0.230.98	99.01.0.230.98.0
RC circuit (6...24) V DC/AC	99.01.0.024.09	99.01.0.024.09.0
RC circuit (28...60) V DC/AC	99.01.0.060.09	99.01.0.060.09.0
RC circuit (110...240) V DC/AC	99.01.0.230.09	99.01.0.230.09.0
No - remanence (110...240) V AC	99.01.8.230.07	99.01.8.230.07.0

*Available on request



94.84.1

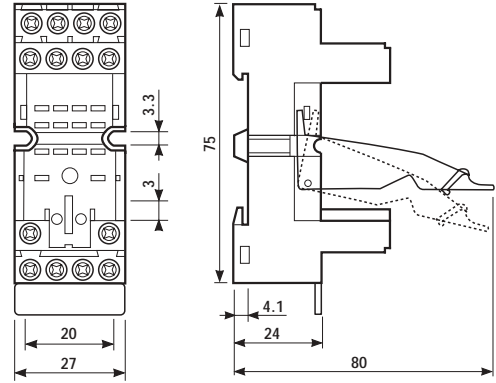
Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- MAX WIRE SIZE:

	solid wire	flexible wire
mm ²	1x6 / 2x2.5	1x4 / 2x2.5
AWG	1x10 / 2x14	1x12 / 2x14

Relay type	55.32, 55.34	
Clamp terminal socket: panel or 35 mm rail (EN 50022) mount	BLUE	94.84.1
	BLACK*	94.84.10
Retaining and release clip		094.91
Identification tag		094.80.2
Modules		99.80



94.84.1



99.80

99 Series modules for 94.84.1 sockets		BLUE	BLACK*
Diode	(6...220) V DC	99.80.3.000.00	99.80.3.000.00.0
LED	(6...24) V DC/AC	99.80.0.024.59	99.80.0.024.59.0
LED	(28...60) V DC/AC	99.80.0.060.59	99.80.0.060.59.0
LED	(110...240) V DC/AC	99.80.0.230.59	99.80.0.230.59.0
LED + Diode	(6...24) V DC	99.80.9.024.99	99.80.9.024.99.0
LED + Diode	(28...60) V DC	99.80.9.060.99	99.80.9.060.99.0
LED + Diode	(110...220) V DC	99.80.9.220.99	99.80.9.220.99.0
LED + Varistor	(6...24) V DC/AC	99.80.0.024.98	99.80.0.024.98.0
LED + Varistor	(28...60) V DC/AC	99.80.0.060.98	99.80.0.060.98.0
LED + Varistor	(110...240) V DC/AC	99.80.0.230.98	99.80.0.230.98.0
RC circuit	(6...24) V DC/AC	99.80.0.024.09	99.80.0.024.09.0
RC circuit	(28...60) V DC/AC	99.80.0.060.09	99.80.0.060.09.0
RC circuit	(110...240) V DC/AC	99.80.0.230.09	99.80.0.230.09.0
No - remanence	(110...240) V AC	99.80.8.230.07	99.80.8.230.07.0



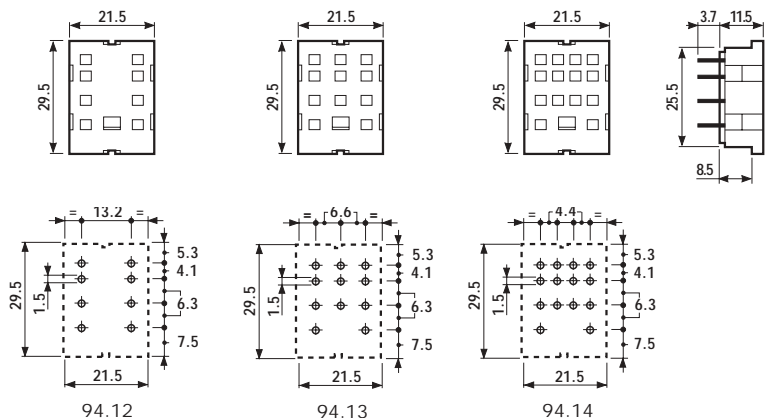
94.14

Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- AMBIENT TEMPERATURE: (-40...+70)°C

Relay type	55.32	55.33	55.32, 55.34
P.C.B. socket	BLUE	94.12	94.13
	BLACK*	94.12.0	94.13.0
Metal retaining clip (supplied with sockets)	094.51	094.51	094.51



*Available on request

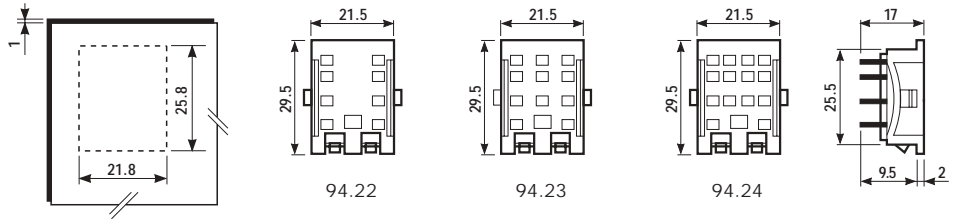


Relay type	55.32	55.33	55.32, 55.34
Panel mount solder socket: 1 mm thick panel	BLUE	94.22	94.23
	BLACK*	94.22.0	94.23.0
Metal retaining clip (supplied with sockets)	094.51	094.51	094.51

Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- AMBIENT TEMPERATURE: (-40...+70)°C

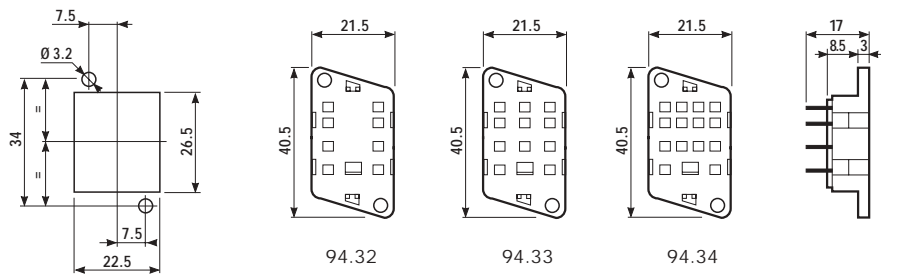


Relay type	55.32	55.33	55.32, 55.34
Panel mount socket: M3 screw mount	BLUE	94.32	94.33
	BLACK*	94.32.0	94.33.0
Metal retaining clip (supplied with sockets)	094.51	094.51	094.51

Approvals
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH: ≥ 2 kV AC
- AMBIENT TEMPERATURE: (-40...+70)°C



*Available on request