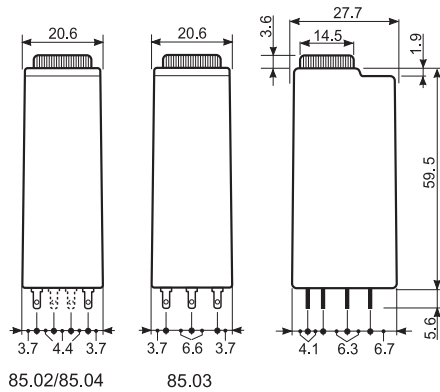


## Features

### Plug-in timer

- 85.02 - 2 Pole 10 A
- 85.03 - 3 Pole 10 A
- 85.04 - 4 Pole 7 A

- Multifunctions
- Seven time scales, from 0.05s to 100h
- 94 series sockets



FOR UL RATINGS SEE:  
"General technical information" page V

### Contact specification

Contact configuration	2 CO (DPDT)	3 CO (3PDT)	4 CO (4PDT)
Rated current/Maximum peak current	A 10/20	A 10/20	A 7/15
Rated voltage/Maximum switching voltage V AC	250/400	250/400	250/250
Rated load AC1	VA 2,500	VA 2,500	VA 1,750
Rated load AC15 (230 V AC)	VA 500	VA 500	VA 350
Single phase motor rating (230 V AC)	kW 0.37	kW 0.37	kW 0.125
Breaking capacity DC1: 30/110/220 V	A 10/0.25/0.12	A 10/0.25/0.12	A 7/0.25/0.12
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

### Supply specification

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	230...240	230...240	230...240
	V AC/DC	12 - 24 - 48 - 110...125 (non polarized)		
Rated power AC/DC	V AC (50 Hz)/W	2/2	2/2	2/2
Operating range	AC	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>

### Technical data

Specified time range		(0.05...1)s, (0.5...10)s, (5...100)s, (0.5...10)min, (5...100)min, (0.5...10)h, (5...100)h		
Repeatability	%	± 2	± 2	± 2
Recovery time	ms	≤ 20	≤ 20	≤ 20
Minimum control impulse	ms	—	—	—
Setting accuracy-full range	%	± 5	± 5	± 5
Electrical life at rated load in AC1	cycles	200 · 10 <sup>3</sup>	200 · 10 <sup>3</sup>	150 · 10 <sup>3</sup>
Ambient temperature range	°C	-20...+60	-20...+60	-20...+60
Protection category		IP 40	IP 40	IP 40

### Approvals (according to type)



**85.02**

- 2 pole, 10 A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**AI:** On-delay  
**DI:** Interval  
**SW:** Symmetrical flasher (starting pulse on)  
**GI:** Pulse delayed

Wiring diagram (without control signal)

**85.03**

- 3 pole, 10 A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**AI:** On-delay  
**DI:** Interval  
**SW:** Symmetrical flasher (starting pulse on)  
**GI:** Pulse delayed

Wiring diagram (without control signal)

**85.04**

- 4 pole, 7 A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**AI:** On-delay  
**DI:** Interval  
**SW:** Symmetrical flasher (starting pulse on)  
**GI:** Pulse delayed

Wiring diagram (without control signal)

**Ordering information**

Example: 85 series timer, 4 CO (4PDT), 24 V AC/DC supply voltage, AI, DI, GI, SW functions.



**Series** \_\_\_\_\_  
**Type** \_\_\_\_\_  
 0 = Multifunction (AI, DI, GI, SW)\*  
 \* AI = On-delay  
 DI = Interval  
 GI = Pulse delayed  
 SW = Symmetrical flasher (starting pulse on)

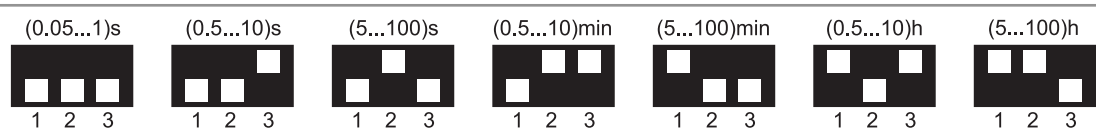
**No. of poles** \_\_\_\_\_  
 2 = 2 pole - 10 A  
 3 = 3 pole - 10 A  
 4 = 4 pole - 7 A

**Supply voltage**  
 012 = 12 V AC/DC  
 024 = 24 V AC/DC  
 048 = 48 V AC/DC  
 125 = (110...125)V AC/DC  
 240 = (230...240)V AC  
**Supply version**  
 0 = AC (50/60 Hz)/DC  
 8 = AC (50/60 Hz) for 240 V only

**Technical data**

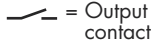
Insulation			
Dielectric strength			<b>85.02, 85.03</b>
	between input and output circuit	V AC	2,000
	between open contacts	V AC	1,000
	between adjacent contacts	V AC	2,000
Insulation (1.2/50 µs) between input and output		kV	6
			<b>85.04</b>
			2,000
			1,000
			1,550
			4
EMC specifications			
Type of test	Reference standard		
Electrostatic discharge	contact discharge		EN 61000-4-2
	air discharge		EN 61000-4-2
Radio-frequency electromagnetic field (80 ÷ 1,000 MHz)			EN 61000-4-3
Fast transients (burst) (5-50 ns, 5 kHz) on Supply terminals			EN 61000-4-4
Surges (1.2/50 µs) on Supply terminals	common mode		EN 61000-4-5
	differential mode		EN 61000-4-5
Radio-frequency common mode (0.15 ÷ 80 MHz) on Supply terminals			EN 61000-4-6
Power-frequency (50 Hz)			EN 61000-4-8
Radiated and conducted emission			EN 55022
			class B
Other data			
Power lost to the environment	without contact current	W	1.6
	with rated current	W	3.7 (85.02)    4.7 (85.03)    3.6 (85.04)





**Times scales**



NOTE: time scales and functions must be set before energising the timer.

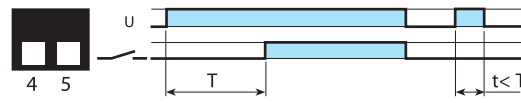
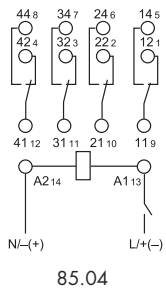
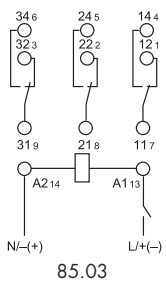
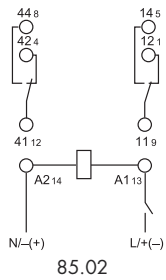
Functions

- U** = Supply voltage
-  = Output contact

LED	Supply voltage	NO (SPDT-NO) output contact	Contacts	
			Open	Closed
	OFF	Open	x1 - x4	x1 - x2
	ON	Open	x1 - x4	x1 - x2
	ON	Open (Timing in Progress)	x1 - x4	x1 - x2
	ON	Closed	x1 - x2	x1 - x4

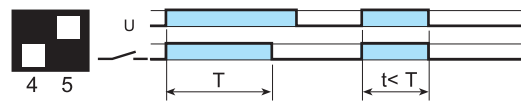
Wiring diagram

Type: 85.02, 85.03, 85.04



**(AI) On-delay.**

Apply power to timer. Output contacts transfer after preset time has elapsed. Reset occurs when power is removed.



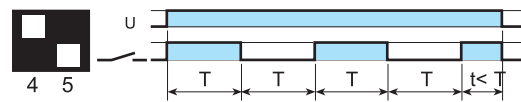
**(DI) Interval.**

Apply power to timer. Output contacts transfer immediately. After the preset time has elapsed, contacts reset.




**(GI) Pulse delayed.**

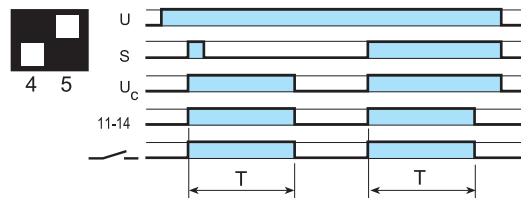
Apply power to timer. Output contacts transfer after preset time has elapsed. Reset occurs after a fixed time of 0.5s.



**(SW) Symmetrical flasher (starting pulse on).**

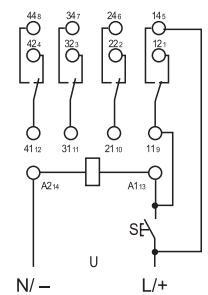
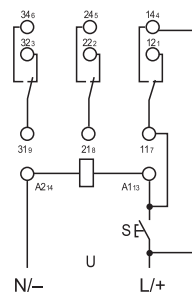
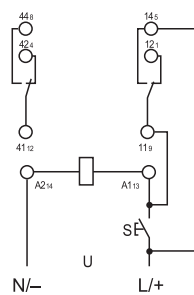
Apply power to timer. Output contacts transfer immediately and cycle between ON and OFF for as long as power is applied. The ratio is 1:1 (time on = time off).

- U** = Supply voltage
- S** = Signal switch
- U<sub>c</sub>** = Supply voltage to the timer
- 11-14** = Self-holding contact
-  = Output contact



**Signal ON Pulse**

On momentary closure of Signal Switch (S) > 50 ms, the output contacts transfer and remain so (with self-holding on contact 11-14) for the duration of the preset delay, after which they reset.



# 94 Series - Sockets and accessories for 85 series timers

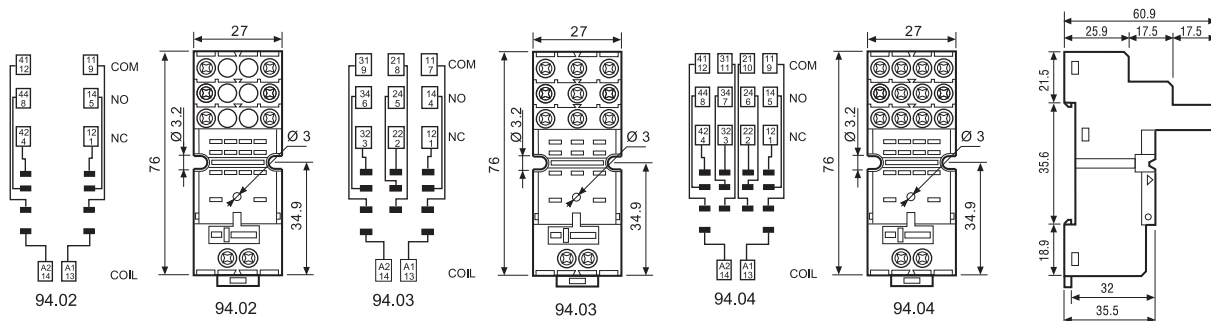


94.04

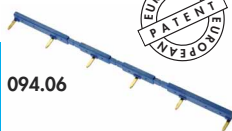
Approvals  
(according to type):



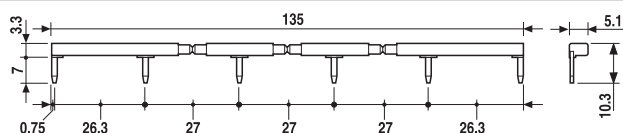
Screw terminal (Box clamp) socket	94.02	94.02.0	94.03	94.03.0	94.04	94.04.0
panel or 35 mm rail (EN 60715) mount	Blue	Black	Blue	Black	Blue	Black
For timer type	85.02		85.03		85.04	
<b>Accessories</b>						
Metal retaining clip (supplied with timer)	094.81					
6-way jumper link	094.06	094.06.0	094.06	094.06.0	094.06	094.06.0
Identification tag	094.00.4					
<b>Technical data</b>						
Rated values	10 A - 250 V					
Dielectric strength	2 kV AC					
Protection category	IP 20					
Ambient temperature	°C -40...+70					
⊕ Screw torque	Nm 0.5					
Wire strip length	mm 8					
Max. wire size for 94.02, 94.03 and 94.04 sockets	solid wire			stranded wire		
	mm <sup>2</sup> 1x6 / 2x2.5			1x4 / 2x2.5		
	AWG 1x10 / 2x14			1x12 / 2x14		

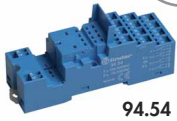


6-way jumper link for 94.02, 94.03 and 94.04 sockets	094.06 (blue)	094.06.0 (black)
Rated values	10 A - 250 V	



094.06



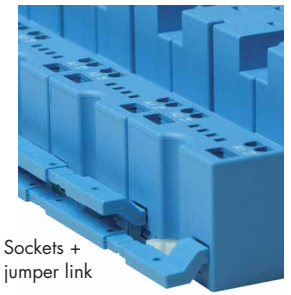
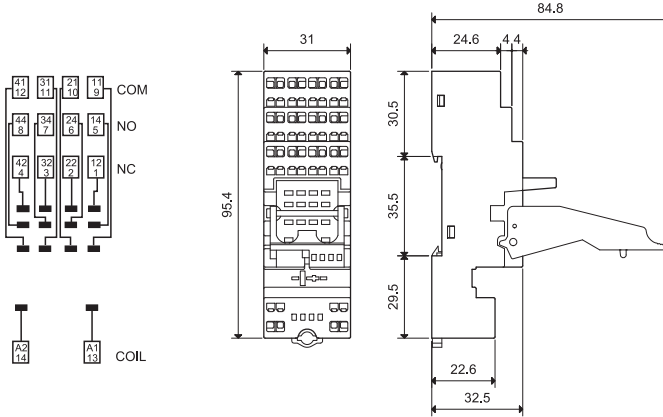
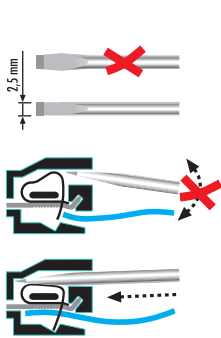


94.54

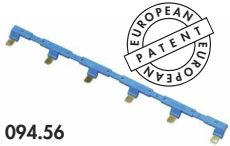
Approvals  
(according to type):



<b>Screwless terminal socket 35 mm rail (EN 60715) mount</b>	<b>94.54 (blue)</b>	
For timer type	85.02, 85.04	
<b>Accessories</b>		
Metal retaining clip	094.81	
6-way jumper link	094.56	
<b>Technical data</b>		
Rated values	10 A - 250 V	
Dielectric strength	2 kV AC	
Protection category	IP 20	
Ambient temperature	°C -25...+70	
Wire strip length	mm 10	
Max. wire size for 94.54 socket	solid wire	stranded wire
	mm <sup>2</sup> 2x(0.2...1.5)	2x(0.2...1.5)
	AWG 2x(24...14)	2x(24...14)



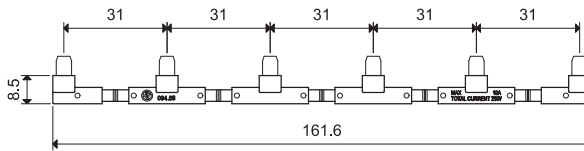
Sockets + jumper link



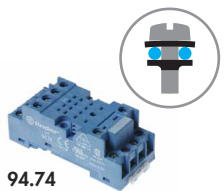
094.56



<b>6-way jumper link</b>	<b>094.56 (blue)</b>
Rated values	10 A - 250 V

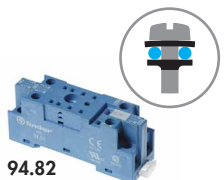


# 94 Series - Sockets and accessories for 85 series timers



94.74

Approvals  
(according to type):

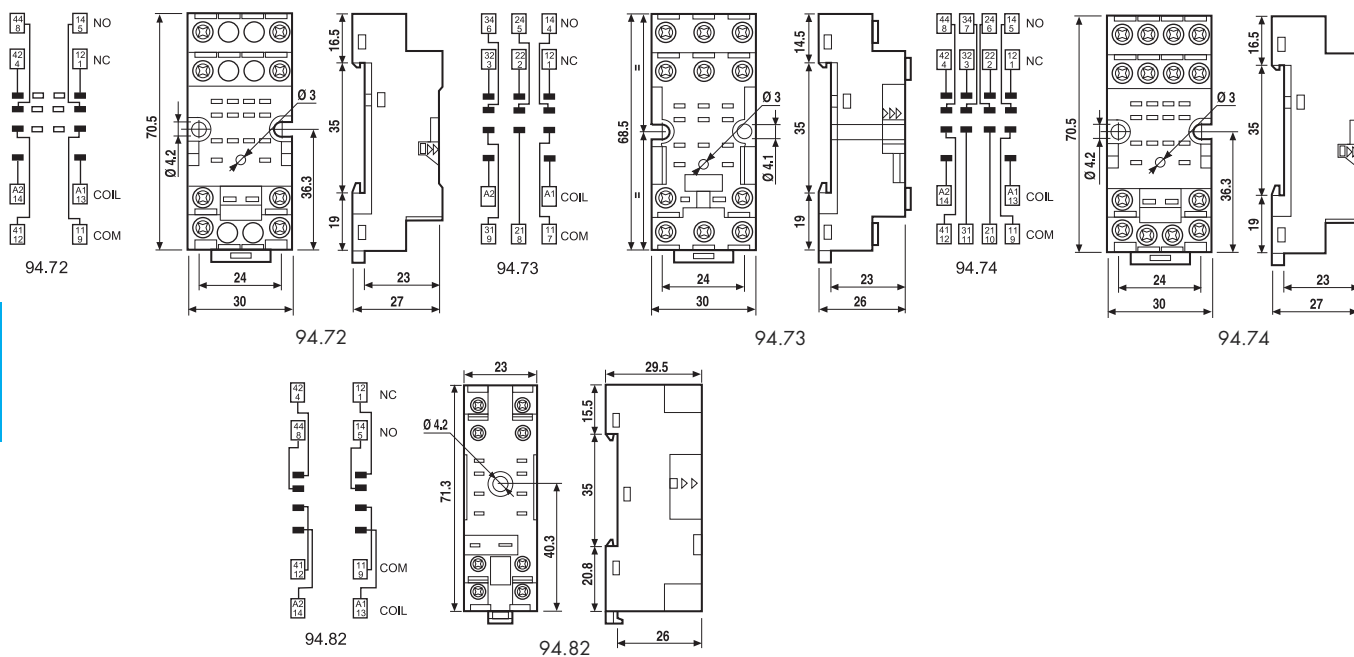


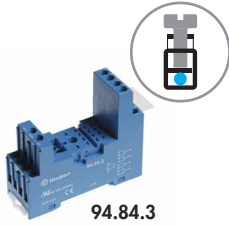
94.82

Approvals  
(according to type):



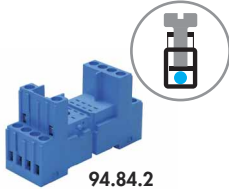
<b>Screw terminal (Plate clamp) socket</b> panel or 35 mm rail (EN 60715) mount For timer type	<b>94.72</b> Blue	<b>94.72.0</b> Black	<b>94.73</b> Blue	<b>94.73.0</b> Black	<b>94.74</b> Blue	<b>94.74.0</b> Black
	85.02		85.03		85.02, 85.04	
<b>Accessories</b>						
Metal retaining clip (supplied with timer)	094.81					
<b>Screw terminal socket</b> panel or 35 mm rail (EN 60715) mount For timer type	<b>94.82</b> Blue				<b>94.82.0</b> Black	
	85.02				85.02	
<b>Accessories</b>						
Metal retaining clip (supplied with timer)	094.81					
<b>Technical data</b>						
Rated values	10 A - 250 V					
Dielectric strength	2 kV AC					
Protection category	IP 20					
Ambient temperature	°C -40...+70					
⊕ Screw torque	Nm	0.5				
Wire strip length	mm	8 (94.72, 94.73, 94.74)			9 (94.82)	
Max. wire size for 94.72, 94.73, 94.74 and 94.82 sockets		solid wire			stranded wire	
	mm <sup>2</sup>	1x2.5 / 2x1.5			1x2.5 / 2x1.5	
	AWG	1x14 / 2x16			1x14 / 2x16	





94.84.3

Approvals  
(according to type):

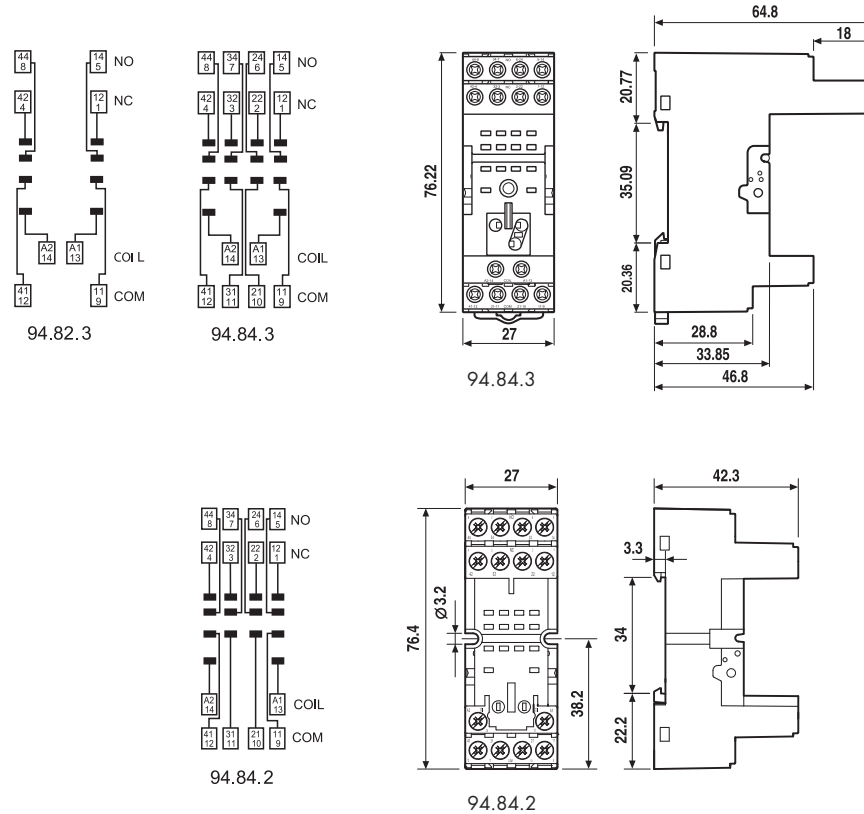


94.84.2

Approvals  
(according to type):



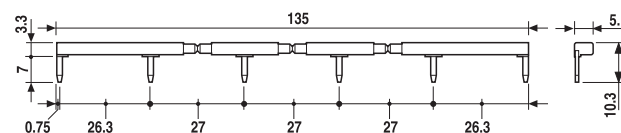
<b>Screw terminal (Box clamp) socket</b> panel or 35 mm rail (EN 60715) mount	<b>94.82.3</b> <b>Blue</b>	<b>94.82.30</b> <b>Black</b>	<b>94.84.3</b> <b>Blue</b>	<b>94.84.30</b> <b>Black</b>
For timer type	85.02		85.02, 85.04	
<b>Accessories</b>				
Metal retaining clip	094.81			
6-way jumper link	094.06	094.06.0	094.06	094.06.0
Identification tag	094.80.2			
<b>Screw terminal (Box clamp) socket</b> panel or 35 mm rail (EN 60715) mount	<b>94.84.2</b> <b>Blue</b>	<b>94.84.20</b> <b>Black</b>		
For timer type	85.02, 85.04			
<b>Accessories</b>				
Metal retaining clip	094.81			
6-way jumper link	094.06	094.06.0		
Identification tag	094.80.2			
<b>Technical data</b>				
Rated values	10 A - 250 V			
Dielectric strength	2 kV AC			
Protection category	IP 20			
Ambient temperature	°C -40...+70			
⊕ Screw torque	Nm	0.5		
Wire strip length	mm	7		
Max. wire size for 94.82.3, 94.84.3 and 94.84.2 sockets	solid wire		stranded wire	
	mm <sup>2</sup>	1x6 / 2x2.5		1x4 / 2x2.5
	AWG	1x10 / 2x14		1x12 / 2x14

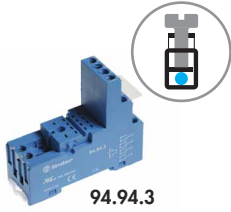


094.06



<b>6-way jumper link for 94.82.3, 94.84.3 and 94.84.2 sockets</b>	094.06 (blue)	094.06.0 (black)
Rated values	10 A - 250 V	



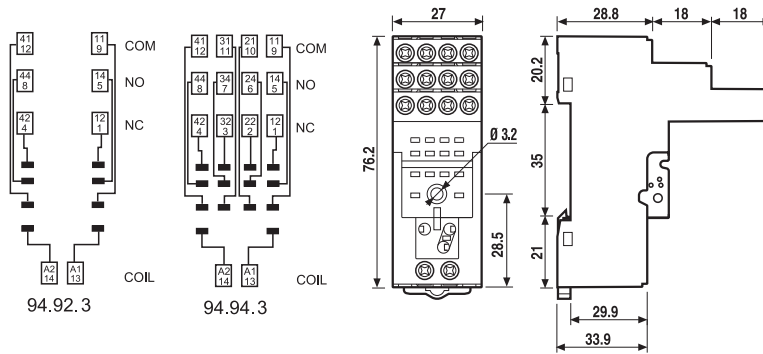


94.94.3

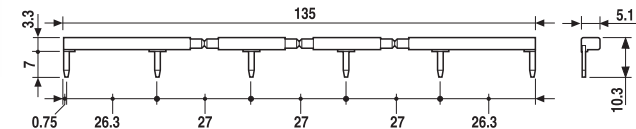
Approvals  
(according to type):



<b>Screw terminal (Box clamp) socket</b>	<b>94.92.3</b>	<b>94.92.30</b>	<b>94.94.3</b>	<b>94.94.30</b>
panel or 35 mm rail (EN 60715) mount	<b>Blue</b>	<b>Black</b>	<b>Blue</b>	<b>Black</b>
For timer type	85.02		85.02, 85.04	
<b>Accessories</b>				
Metal retaining clip	094.81			
6-way jumper link	094.06	094.06.0	094.06	094.06.0
Identification tag	094.80.2			
<b>Technical data</b>				
Rated values	10 A - 250 V			
Dielectric strength	2 kV AC			
Protection category	IP 20			
Ambient temperature	°C	-25...+70		
Screw torque	Nm	0.5		
Wire strip length	mm	8		
Max. wire size for 94.92.3 and 94.94.3 sockets		solid wire		stranded wire
	mm <sup>2</sup>	1x6 / 2x2.5		1x4 / 2x2.5
	AWG	1x10 / 2x14		1x12 / 2x14



<b>6-way jumper link for 94.92.3 and 94.94.3 sockets</b>	094.06 (blue)	094.06.0 (black)
Rated values	10 A - 250 V	



094.06

