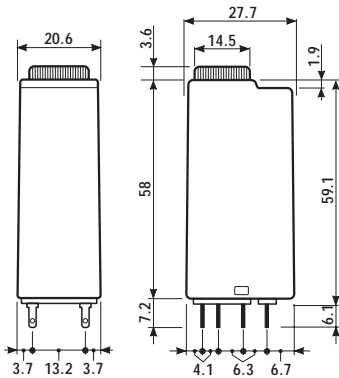


- Plug-in timer relay
- 2, 3 or 4 CO contact available
- Six time scales, from 0.1s to 10h
- Sockets: see 94 series



### 85.32

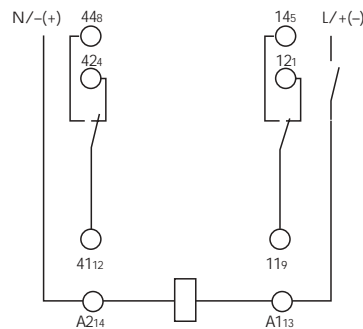
### 85.33



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

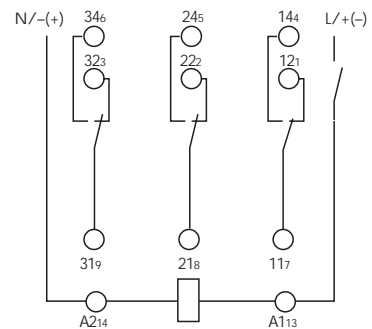
- 3 Pole, 10A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**AI:** ON delay  
**DI:** ON pulse



wiring diagram

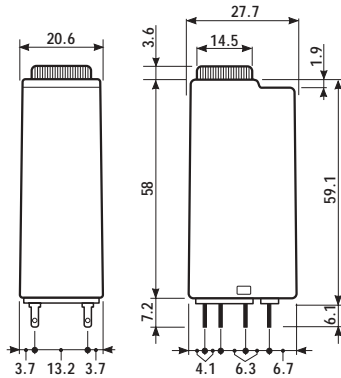
**AI:** ON delay  
**DI:** ON pulse



wiring diagram

Contact specifications			
Contact configuration		2 CO	3 CO
Rated current/Maximum peak current	A	10/20	10/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	2,500	2,500
Rated load in AC15 (230 VAC)	VA	500	500
Single phase motor rating (230 VAC)	kW	0.37	0.37
Breaking capacity in DC1:	30/110/220V A	10/0.25/0.1	10/0.25/0.1
Minimum switching load	mW(V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi
Supply specifications			
Nominal voltage	V AC(50/60Hz)	230...240	230...240
	V AC/DC	12 - 24 - 48 - 110...125 (non polarized)	12 - 24 - 48 - 110...125 (non polarized)
Rated power AC/DC	VA (50Hz)/W	2/2	2/2
Operating range	AC	(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>
Technical data			
Specified time range		(0.1...1) s, (1...10) s, (10...60) s, (1...10) min, (10...60) min, (1...10) h	
Repeatability	%	± 2	± 2
Recovery time	ms	≤ 20	≤ 20
Minimum control impulse	ms	—	—
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	200·10 <sup>3</sup>	200·10 <sup>3</sup>
Ambient temperature range	°C	-20...+60	-20...+60
Protection category		IP 40	IP 40
<b>Approvals:</b> (according to type)			

- Plug-in timer relay
- 2, 3 or 4 CO contact available
- Six time scales, from 0.1s to 10h
- Sockets: see 94 series

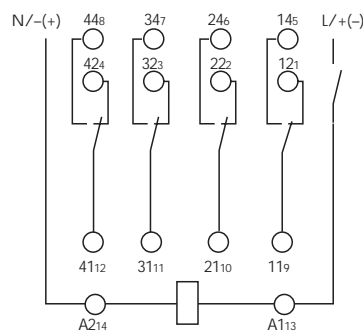


## 85.34



- 4 Pole, 5A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**AI:** ON delay  
**DI:** ON pulse



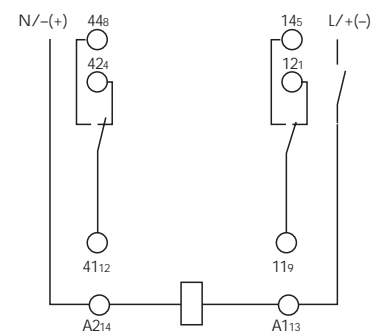
wiring diagram

## 85.52



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

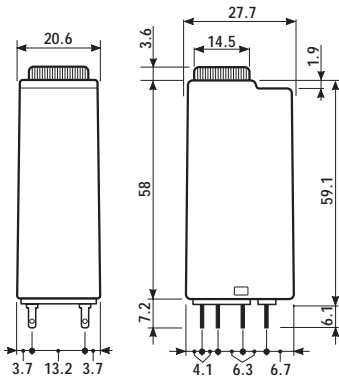
**SW:** Symmetrical recycler: ON start  
**SP:** Symmetrical recycler: OFF start



wiring diagram

Contact specifications			
Contact configuration		4 CO	2 CO
Rated current/Maximum peak current	A	5/10	10/20
Rated voltage/Maximum switching voltage	V AC	250/250	250/400
Rated load in AC1	VA	1,250	2,500
Rated load in AC15 (230 VAC)	VA	250	500
Single phase motor rating (230 VAC)	kW	0.125	0.37
Breaking capacity in DC1:	30/110/220V A	5/0.25/0.1	10/0.25/0.1
Minimum switching load	mW(V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi
Supply specifications			
Nominal voltage	V AC(50/60Hz)	230...240	230...240
	V AC/DC	12 - 24 - 48 - 110...125 (non polarized)	12 - 24 - 48 - 110...125 (non polarized)
Rated power AC/DC	VA (50Hz)/W	2/2	2/2
Operating range	AC	(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>
Technical data			
Specified time range		(0.1...1) s, (1...10) s, (10...60) s, (1...10) min, (10...60) min, (1...10) h	
Repeatability	%	± 2	± 2
Recovery time	ms	≤ 20	≤ 20
Minimum control impulse	ms	—	—
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	150·10 <sup>3</sup>	200·10 <sup>3</sup>
Ambient temperature range	°C	-20...+60	-20...+60
Protection category		IP 40	IP 40
<b>Approvals:</b> (according to type)			

- Plug-in timer relay
- 2, 3 or 4 CO contact available
- Six time scales, from 0.1s to 10h
- Sockets: see 94 series

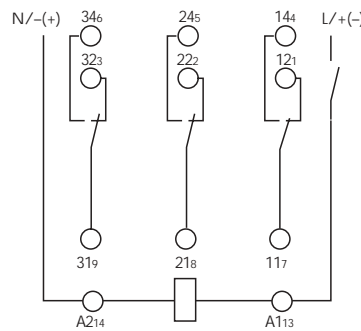


## 85.53



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

**SW:** Symmetrical recycler: ON start  
**SP:** Symmetrical recycler: OFF start



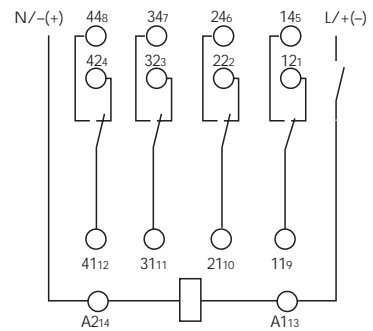
wiring diagram

## 85.54



- 4 Pole, 5A
- AC/DC supply non polarized
- Plug-in for use with 94 series sockets

**SW:** Symmetrical recycler: ON start  
**SP:** Symmetrical recycler: OFF start



wiring diagram

Contact specifications			
Contact configuration		3 CO	4 CO
Rated current/Maximum peak current	A	10/20	5/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/250
Rated load in AC1	VA	2,500	1,250
Rated load in AC15 (230 VAC)	VA	500	250
Single phase motor rating (230 VAC)	kW	0.37	0.125
Breaking capacity in DC1:	30/110/220V A	10/0.25/0.1	5/0.25/0.1
Minimum switching load	mW(V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi
Supply specifications			
Nominal voltage	V AC(50/60Hz)	230...240	230...240
	V AC/DC	12 - 24 - 48 - 110...125 (non polarized)	12 - 24 - 48 - 110...125 (non polarized)
Rated power AC/DC	VA (50Hz)/W	2/2	2/2
Operating range	AC	(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>
Technical data			
Specified time range		(0.1...1) s, (1...10) s, (10...60) s, (1...10) min, (10...60) min, (1...10) h	
Repeatability	%	± 2	± 2
Recovery time	ms	≤ 20	≤ 20
Minimum control impulse	ms	—	—
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	200·10 <sup>3</sup>	150·10 <sup>3</sup>
Ambient temperature range	°C	-20...+60	-20...+60
Protection category		IP 40	IP 40
<b>Approvals:</b> (according to type)			

## ORDERING INFORMATION

Example: 85 series timer, 4 CO, 24 V AC/DC supply voltage with AI - DI functions.

8

5

.

3

4

.

0

.

0

2

4

.

0

0

0

0

**Series** \_\_\_\_\_

**Type** \_\_\_\_\_  
 3 = Functions: AI (ON delay) · DI (ON pulse)  
 5 = Functions: SW · SP (Symmetrical Recycler)

**No. of poles** \_\_\_\_\_  
 2 = 2 pole · 10 A  
 3 = 3 pole · 10 A  
 4 = 4 pole · 5 A

**Supply voltage**  
 012 = 12 V AC/DC  
 024 = 24 V AC/DC  
 048 = 48 V AC/DC  
 110 = 110...125 V AC/DC  
 230 = 230...240 V AC

**Supply version**  
 0 = AC (50/60 Hz)/DC  
 8 = AC (50/60 Hz) for 230 V only

## TECHNICAL DATA

### 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 ÷ 1000 MHz)	EN 61000-4-3	15 V/m
FAST TRANSIENTS (burst) (5-50 ns, 5 kHz) on Supply terminals	EN 61000-4-4	4 kV
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	10 V
POWER-FREQUENCY (50 Hz)	EN 61000-4-8	30 A/m
RADIATED AND CONDUCTED EMISSION	EN 55022	class B

### OTHER DATA

POWER LOST TO THE ENVIRONMENT	2 pole	3 pole	4 pole
- without contact current W	1.6	1.6	1.6
- with rated current W	3.7	4.7	3.3

## TIME SCALES

(0.1...1) s

1 2 3

(1...10) s

1 2 3

(10...60) s

1 2 3

(1...10) min

1 2 3

(10...60) min

1 2 3

(1...10) h

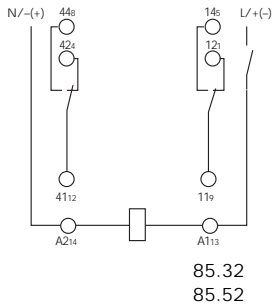
1 2 3

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

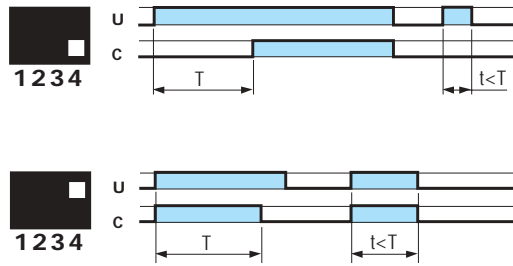
## FUNCTIONS

	Green	LED	Red	Supply voltage	NO output contact
<b>U</b> = Supply voltage				OFF	Open
<b>C</b> = Output contact				ON	Open
				ON	Closed

### Wiring diagram



### Types: 85.32, 85.33, 85.34

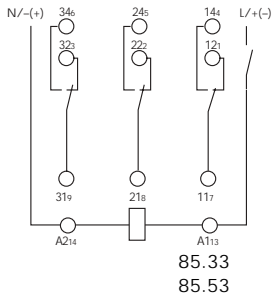


#### (AI) ON delay.

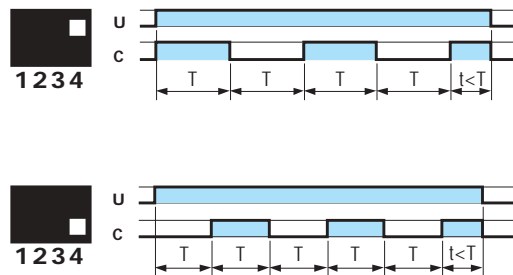
Apply power to timer.  
Output contacts transfer after preset time has elapsed.  
Reset occurs when power is removed.

#### (DI) ON pulse.

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



### Types: 85.52, 85.53, 85.54

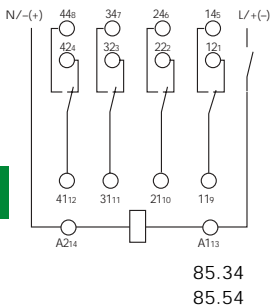


#### (SW) Symmetrical recycler: ON start.

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).

#### (SP) Symmetrical recycler: OFF start.

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





94.04

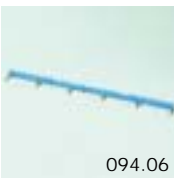
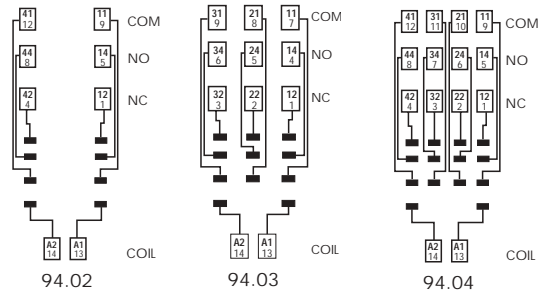
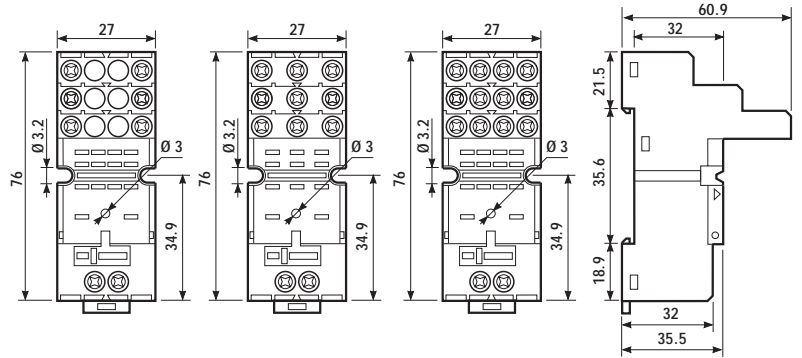
Approvals  
(according to type):



- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH:  $\geq 2$  kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- WIRE STRIP LENGTH: 8 mm
- MAX WIRE SIZE:

	solid wire	stranded wire
mm <sup>2</sup>	1x6 / 2x2.5	1x4 / 2x2.5
AWG	1x10 / 2x14	1x12 / 2x14

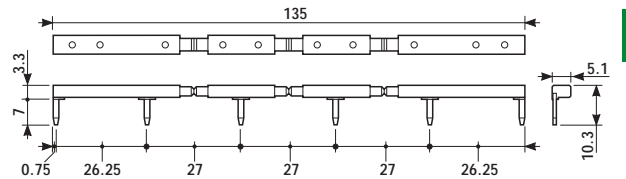
Timer type	85.32, 85.52		85.33, 85.53		85.34, 85.54	
Colour	BLUE	BLACK	BLUE	BLACK	BLUE	BLACK
Clamp terminal socket: panel or 35 mm rail (EN 50022) mount	94.02	94.02.0	94.03	94.03.0	94.04	94.04.0
Retaining clip (supplied with timer)	094.81					
6-way jumper link for 94.02, 94.03 and 94.04 sockets	094.06	094.06.0	094.06	094.06.0	094.06	094.06.0
Identification tag	094.00.4					



094.06

- RATED VALUES: 10 A - 250 V

6-way jumper link for 94.02, 94.03 and 94.04 sockets	094.06
--	--------





94.74

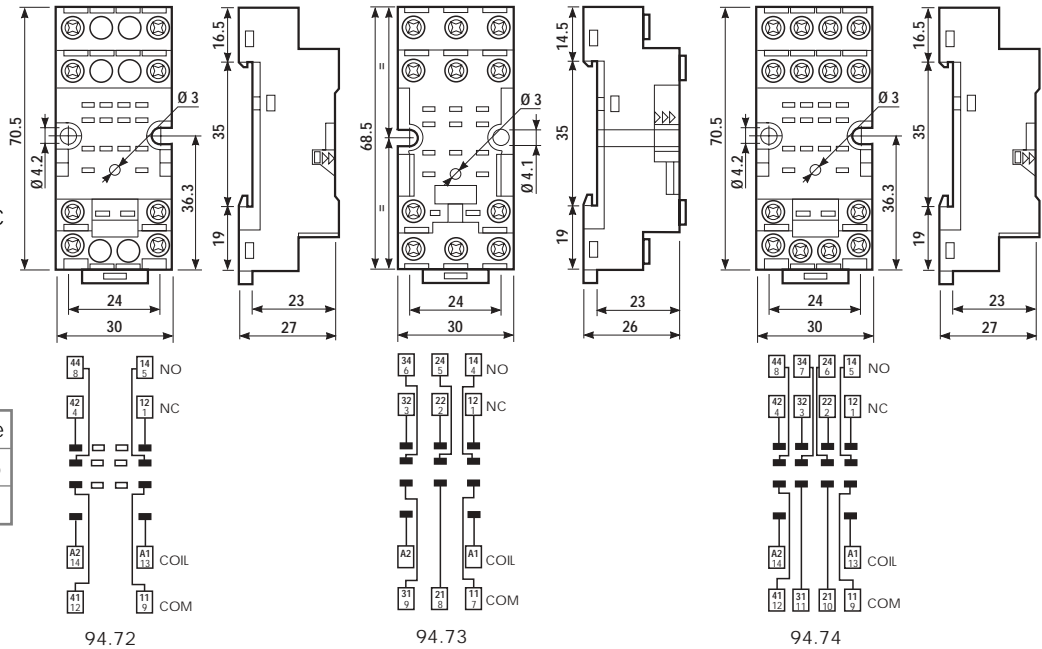
<b>Timer type</b>	<b>85.32, 85.52</b>		<b>85.33, 85.53</b>		<b>85.34, 85.54</b>	
Colour	BLUE	BLACK	BLUE	BLACK	BLUE	BLACK
<b>Screw terminal socket:</b> panel or 35 mm rail (EN 50022) mount	94.72	94.72.0	94.73	94.73.0	94.74	94.74.0
Retaining clip (supplied with timer)	094.81					

Approvals  
(according to type):



- RADET VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH:  $\geq 2$  kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- WIRE STRIP LENGTH: 8 mm
- MAX WIRE SIZE:

	solid wire	stranded wire
mm <sup>2</sup>	1x2.5 / 2x1.5	1x2.5 / 2x1.5
AWG	1x14 / 2x16	1x14 / 2x16



94.82

<b>Timer type</b>	<b>85.32, 85.52</b>	
Colour	BLUE	BLACK
<b>Screw terminal socket:</b> panel or 35 mm rail (EN 50022) mount	94.82	94.82.0
Retaining clip (supplied with timer)	094.81	

Approvals  
(according to type):



85

- RATED VALUES: 10 A - 250 V
- DIELECTRIC STRENGTH:  $\geq 2$  kV AC
- PROTECTION CATEGORY: IP 20
- AMBIENT TEMPERATURE: (-40...+70)°C
- TORQUE: 0.5 Nm
- WIRE STRIP LENGTH: 9 mm
- MAX WIRE SIZE:

	solid wire	stranded wire
mm <sup>2</sup>	1x2.5 / 2x1.5	1x2.5 / 2x1.5
AWG	1x14 / 2x16	1x14 / 2x16

