



**finder**<sup>®</sup>  
SWITCH TO THE FUTURE

## Timed socket for 34 series



Hoists and cranes



Packaging machines



Traffic light controls



Bottling plant



Carousel warehouses



Control panels



Panels for electrical distribution



Labelling machines



**93**  
SERIES



**Slim timed sockets for 34 series, 6.2 mm wide**

- Timer adjustment via top mounted rotary knob accessible after assembly
- Control signal terminal
- DIP-switch for selection of 4 time scales and 8 functions
- Output with fuse module option
- EMR and SSR: 12 to 24 V AC/DC supply
- Screw terminal and push-in terminal

93.68  
Screw terminals

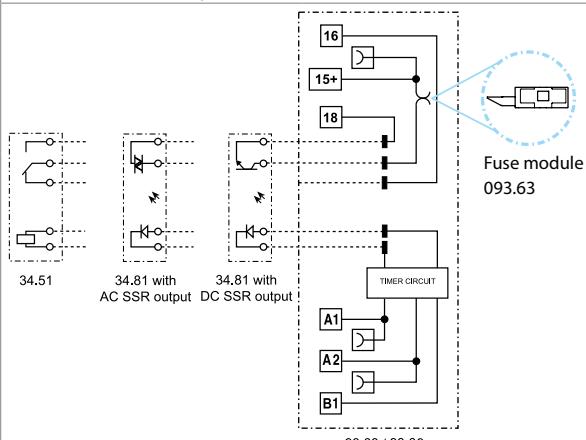


93.69  
Push-in terminal



**93.68/93.69**

- Time scale: from 0.1 s to 6 h
- Multi-function
- For use with 34.51 (EMR) and 34.81 (SSR) relays
- Screw terminal and push-in terminal



**AI:** On-delay

**DI:** Interval

**GI:** Pulse (0.5 s) delayed

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

**BE:** Off-delay with control signal

**CE:** On- and off-delay with control signal

**DE:** Interval with control signal on

**EE:** Interval with control signal off

For outline drawing see page 5

#### Contact specification

Contact configuration	
Rated current/Maximum peak current	A
Rated voltage/ Maximum switching voltage	V AC
Rated load AC1	VA
Rated load AC15 (230 V AC)	VA
Single phase motor rating (230 V AC)	kW
Breaking capacity DC1: 30/110/220 V	A
Minimum switching load	mW (V/mA)

See 34.51 and 34.81 relays

#### Standard contact material

#### Supply specification

Nominal voltage ( $U_N$ )	V AC (50/60 Hz)/DC	12...24
Rated power AC/DC	VA/W	See coils specifications page 4
Operating range	V AC (50/60 Hz)/DC	9.6...26.4

#### Technical data

Specified time range	(0.1...3)s, (3...60)s, (1...20)min, (0.3...6)h
Repeatability	%
Recovery time	ms
Setting accuracy - full range	%
Electrical life at rated load in AC1	cycles
Ambient temperature range	°C
Protection category	IP 20
Approvals (according to type)	

## Ordering information

Example: type 93.68 multi-function timer module for 34 series relay, screw terminals, (12...24)V AC/DC supply voltage.

9	3	.	6	8	.	0	.	0	2	4
Series							Supply voltage			
Type							024 = (12...24)V AC/DC			
6 = Multi-function (AI, DI, GI, SW, BE, CE, DE, EE)							Supply version			
No. of poles							0 = AC (50/60 Hz)/DC			

8 = 1 CO (EMR type 34.51), screw terminals  
8 = 1 NO (SSR type 34.81), screw terminals  
9 = 1 CO (EMR type 34.51), push-in terminals  
9 = 1 NO (SSR type 34.81), push-in terminals

## Combinations

Output	Supply voltage	Type of relay	Type of socket, screw terminals
1 pole 6 A, electromechanical relay	12 V AC/DC	34.51.7.012.0010	93.68.0.024
1 pole 6 A, electromechanical relay	24 V AC/DC	34.51.7.024.0010	93.68.0.024
1 output 6 A/24 V DC, solid state relay	12 V AC/DC	34.81.7.012.9024	93.68.0.024
1 output 2 A/240 V AC, solid state relay	12 V AC/DC	34.81.7.012.8240	93.68.0.024
1 output 6 A/24 V DC, solid state relay	24 V AC/DC	34.81.7.024.9024	93.68.0.024
1 output 2 A/240 V AC, solid state relay	24 V AC/DC	34.81.7.024.8240	93.68.0.024
Output	Supply voltage	Type of relay	Type of socket, push-in terminals
1 pole 6 A, electromechanical relay	12 V AC/DC	34.51.7.012.0010	93.69.0.024
1 pole 6 A, electromechanical relay	24 V AC/DC	34.51.7.024.0010	93.69.0.024
1 output 6 A 24 V DC, solid state relay	12 V AC/DC	34.81.7.012.9024	93.69.0.024
1 output 2 A 240 V AC, solid state relay	12 V AC/DC	34.81.7.012.8240	93.69.0.024
1 output 6 A 24 V DC, solid state relay	24 V AC/DC	34.81.7.024.9024	93.69.0.024
1 output 2 A 240 V AC, solid state relay	24 V AC/DC	34.81.7.024.8240	93.69.0.024

Note: Although the timer socket covers both 12 and 24 V supplies, it must be combined with the appropriate 12 V or 24 V relay; resulting in a combination suitable for just a single supply voltage.

## H

## Technical data

### EMC specifications

Type of test	Reference standard		
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV
	air discharge	EN 61000-4-2	8 kV
Radio-frequency electromagnetic field	(80 ÷ 1000 MHz)	EN 61000-4-3	10 V/m
	(1400 ÷ 2700 MHz)	EN 61000-4-3	10 V/m
Fast transients (burst) (5-50 ns, 5 and 100 kHz)	on Supply terminals	EN 61000-4-4	4 kV
	on control signal terminals	EN 61000-4-4	4 kV
Surges (1.2/50 µs) on supply and control signal terminals	common mode	EN 61000-4-5	2 kV
	differential mode	EN 61000-4-5	0.8 kV
Radio-frequency common mode (0.15 ÷ 80 MHz)	on Supply terminals	EN 61000-4-6	10 V
	on control signal terminals	EN 61000-4-6	3 V
Radiated and conducted emission		EN 55022	class B

### Other data

Current absorption on signal control (B1)	mA	< 1.7 (12 V) - < 3.5 (24 V)
Bounce time (EMR) : NO/NC	ms	1/6
Vibration resistance (EMR, 10...55 Hz): NO/NC	g	10/5
Power lost to the environment	without contact current W	0.3
	with rated current W	0.8

### Terminals

Solid and stranded cable		
Screw terminals		Push-in terminals
Wire strip length	mm	10
 Screw torque	Nm	0.5
Max. wire size	mm <sup>2</sup>	1 x 2.5 / 2 x 1.5
	AWG	1 x 14 / 2 x 16
Min. wire size	mm <sup>2</sup>	1 x 0.5
	AWG	1 x 21

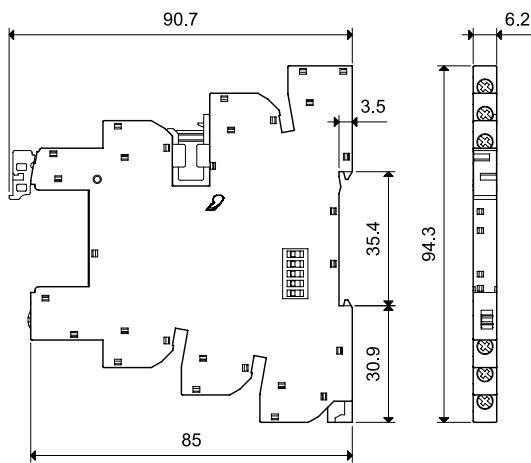
## Input specifications

### Input data AC/DC timer

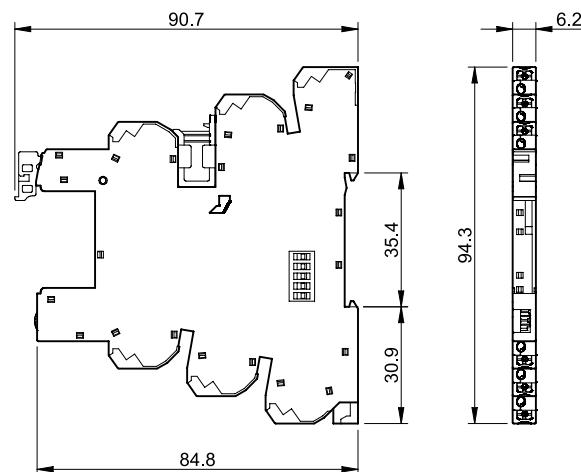
Nominal voltage U <sub>N</sub>	Operating range (AC/DC)		Must drop-out voltage U <sub>r</sub>	Rated input current at U <sub>N</sub>		Rated power at U <sub>N</sub>	
	U <sub>min</sub>	U <sub>max</sub>		DC mA	AC mA	DC mA	AC mA
12	9.6	13.2	1.2	15	23	0.2	0.3/0.2
24	19.2	26.4	2.4	11	19	0.25	0.4/0.3

## Outline drawing

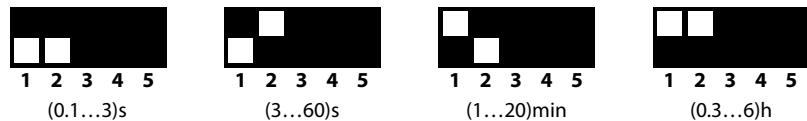
Type 93.68  
Screw terminals



Type 93.69  
Push-in terminal



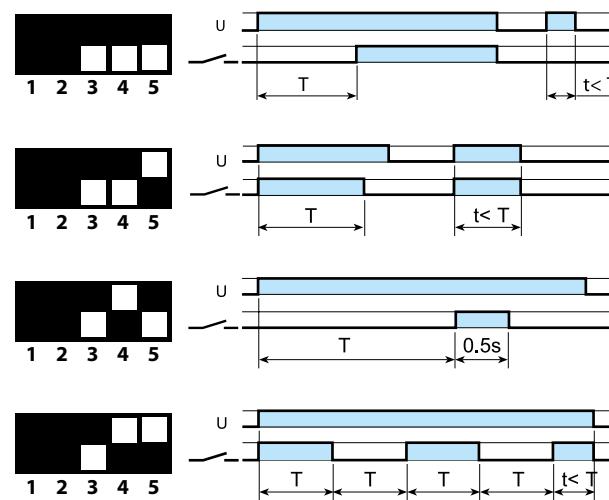
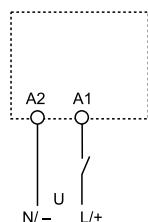
## Times scales



## Functions

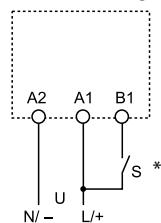
LED	Supply voltage	NO contact/output
—	OFF	Open
■ ■	ON	Open
■ ■ ■ ■ ■	ON	Open (timing to close in progress)
■ ■ ■ ■ ■	ON	Closed

## Wiring diagram

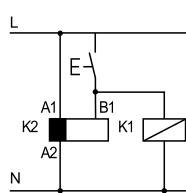
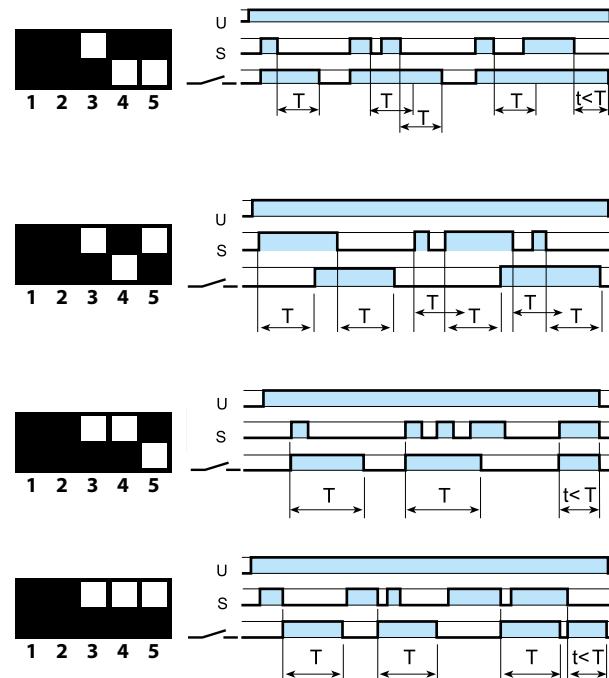
**U** = Supply voltage**S** = Signal switch

## H

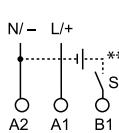
## With control signal



\* With DC supply,  
positive polarity has  
to be connected to B1  
terminal (according  
to EN 60204-1).



- Possible to control an external load, such as another relay coil or timer, connected to the control signal terminal B1.



\*\* A voltage other than the supply voltage can be applied to the command Start (B1), example:  
A1 - A2 = 24 V AC  
B1 - A2 = 12 V DC

## Accessories



**093.63**

Approvals  
(according to type):



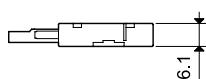
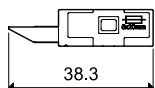
### Output fuse module

- For 5 x 20 mm fuses up to 6 A, 250 V
- Easy visibility of the fuse condition through the window
- Quick connection to socket

#### Notes

**Safety:** Because the output circuit can be reinstated, even with the fuse removed, it is important not to consider the removal of the fuse as a "safety disconnect". Always isolate elsewhere before working on the circuit.

**UL:** According to UL508A, the fuse module cannot be installed in power circuits (in which it is mandatory that a fuse certified according to UL category JDDZ be fitted). However, where the MasterInterface is connected as an output interface to a PLC no such restrictions apply, and the fuse module can be usefully employed.



**093.16**



**093.16.0**



**093.16.1**

Approvals  
(according to type):



### 16-way jumper link

#### Rated values

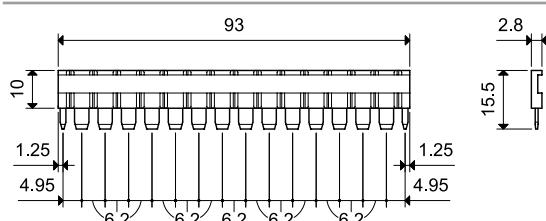
093.16 (blue)

093.16.0 (black)

093.16.1 (red)

6 A - 250 V

Possibility of multiple connection, side by side



**093.60**



### Dual-purpose plastic separator (1.8 mm or 6.2 mm separation)

093.60

**H**

1. By breaking off the protruding ribs (by hand), the separator becomes only 1.8 mm thick; useful for the visual separation of different groups of interfaces, or necessary for the protective separation of different voltages of neighbouring interfaces, or for the protection of cut ends of jumper links.



2. Leaving the ribs in place provides 6.2 mm separation. Simply cutting (with scissors) the relevant segment(s) permits the interconnection across the separator of 2 different groups of interface relays, using the standard jumper link.



**060.48**

### Sheet of marker tags, plastic, 48 tags, 6 x 12 mm, for CEMBRE thermal transfer printers

060.48

## Accessories



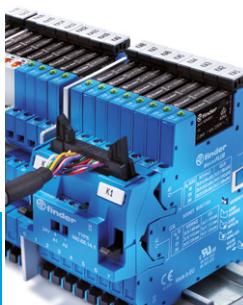
093.62

<b>Terminal doubler</b> (for socket Push-in only)	093.62
Total load	6 A - 300 V
<b>Solid and stranded cable</b>	
Max. wire size	mm <sup>2</sup> 2 x 1.5
	AWG 2 x 16



093.68.14.1

Approvals  
(according to type):



H  
Connected  
**MasterADAPTER**

<b>MasterADAPTER</b>	093.68.14.1
The <b>MasterADAPTER</b> permits the easy connection of A1/A2 terminals of up to <b>MasterINTERFACE</b> modules to PLC outputs via a 14-Pole ribbon cable, plus simple 2-wire power supply connection.	
<b>Technical data</b>	
Rated current (per signal path)	A 1
Minimum required supply power	W 3
Nominal voltage (U <sub>N</sub> )	V DC 24
Operating range	(0.8...1.1)U <sub>N</sub>
Control logic	Positive switching (to A1)
Power supply status indication	Green LED
Ambient temperature range	°C -40...+70
<b>Terminals for 24 V control logic</b>	
Type of connector	14 pole, according to IEC 60603-13
<b>Terminals for 24 V power supply</b>	
Wire strip length	mm 9.5
Screw torque	Nm 0.5
Max. wire size	
	solid wire mm <sup>2</sup> 1 x 4 / 2 x 1.5
	AWG 1 x 12 / 2 x 16
	stranded wire mm <sup>2</sup> 1 x 2.5 / 2 x 1.5
	AWG 1 x 14 / 2 x 16