

40 Series - Miniature PCB/Plug-in relays 8 - 10 - 16 A

Features

1 & 2 Pole relay range

40.31 - 1 Pole 10 A (3.5 mm pin pitch) 40.51 - 1 Pole 10 A (5 mm pin pitch) 40.52 - 2 Pole 8 A (5 mm pin pitch)

PCB mount

direct or via PCB socket

35 mm rail mount

- via screw and screwless sockets
- DC coils (standard or sensitive) & AC coils
- Cadmium Free contact material
- 8 mm, 6 kV (1.2/50 µs) isolation, coil-contacts
- UL Listing (certain relay/socket combinations)
- Flux proof: RT II standard, (RT III option)
- 95 series sockets
- Coil EMC suppression
- Timer accessories 86 series



40.31

- 3.5 mm contact pin pitch
- 1 Pole 10 A
- PCB or 95 series sockets

40.51



- 5 mm contact pin pitch
- 1 Pole 10 A
- PCB or 95 series sockets

40.52



- 5 mm contact pin pitch
- 2 Pole 8 A
- PCB or 95 series sockets

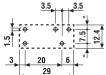
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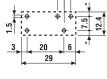
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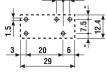
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FOR UL RATINGS SEE: "General technical information" page V



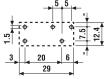


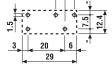




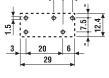


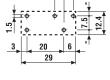


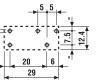


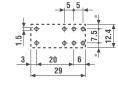


Copper side view









Copper	side	view

, 6			
Contact specification			
Contact configuration	1 CO (SPDT)	1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current A	10/20	10/20	8/15
Rated voltage/Maximum switching voltage V AC	250/400	250/400	250/400
Rated load AC1 VA	2,500	2,500	2,000
Rated load AC15 (230 V AC) VA	500	500	400
Single phase motor rating (230 V AC) kW	0.37	0.37	0.3
Breaking capacity DC1: 30/110/220 V A	10/0.3/0.12	10/0.3/0.12	8/0.3/0.12
Minimum switching load mW (V/mA)	300 (5/5)	300 (5/5)	300 (5/5)
Standard contact material	AgNi	AgNi	AgNi
Coil specification			
Naminal valtage (III) VAC (50/60 H-)	4 10	24 48 60 110 120 230	240

Nominal voltage (U_N)

(II-2012, www.findernet.com

V AC (50/60 Hz)

6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240

r tollillar tollage (ON)	7 7 (0 (00) 00 112)	2 12 24 40 00 110 120 200 240				
	V DC	5 - 6 - 7 - 9 - 12	5 - 6 - 7 - 9 - 12 - 14 - 18 - 21 - 24 - 28 - 36 - 48 - 6			
Rated power AC/DC/sens. DC	VA (50 Hz)/W/W	1.2/0.65/0.5	1.2/0.65/0.5	1.2/0.65/0.5		
Operating range	AC	(0.81.1)U _N	(0.81.1)U _N	(0.81.1)U _N		
•	DC/sens. DC	(0.731.5)U _N /(0.731.75)U _N	(0.731.5)U _N /(0.731.75)U _N	(0.731.5)U _N /(0.731.75)U _N		
Holding voltage	AC/DC	0.8 U _N /0.4 U _N	0.8 U _N /0.4 U _N	0.8 U _N /0.4 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 cycle		10 · 10°/20 · 10°	10 · 10°/20 · 10°	10 · 106/20 · 106		
Electrical life at rated load A	C1 cycles	200 · 10³	200 · 10³	100 · 10³		
Operate/release time	ms	7/3 - (12/4 sensitive)	7/3 - (12/4 sensitive)	7/3 - (12/4 sensitive)		
Insulation between coil and cont	acts (1.2/50 µs) kV	6 (8 mm)	6 (8 mm)	6 (8 mm)		
Dielectric strength between open contacts V AC		1,000	1,000	1,000		
Ambient temperature range °C		-40+85	-40+85	-40+85		
Environmental protection		RT II**	RT II**	RT II**		
Approvals (according to type)		⑤ □ F	RINA	A S UR US O		

^{**} See general technical information "Guidelines for automatic flow solder processes" page II .



Features

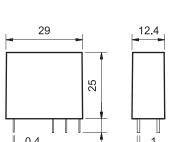
- 1 Pole 16 A (5 mm pin pitch) 40.61 40.xx.6 - Bistable versions of the 40.31, 40.51, 40.52 & 40.61 relays

PCB mount

- direct or via PCB socket

35 mm rail mount

- via screw and screwless sockets
- DC coils & AC coils
- Cadmium Free option available
- 8 mm, 6 kV (1.2/50 µs) isolation, coil-contacts 5 mm contact pin pitch
- UL Listing (certain 40.61 relay/socket combinations)
 1 Pole 16 A
- Flux proof: RT II standard, (RT III option)
- 95 series sockets
- Coil EMC suppression
- Timer accessories 86 series



0.4 FOR UL RATINGS SEE:

"General technical information" page V

Rated current/Maximum peak current

Single phase motor rating (230 V AC)

Rated load AC15 (230 V AC)

Rated voltage/Maximum switching voltage V AC

Contact specification Contact configuration

Rated load AC1

40.61



- PCB or 95 series sockets

40.xx.6



- Bistable (single coil) versions of 40.31/51/52/61
- PCB or 95 series sockets

Bistable version (1 coil) types:

40.31.6...

40.51.6...

40.52.6...

40.61.6...

For wiring diagrams see page 8

Copper side view

1 CO (SPDT)

16/30*

250/400

4,000

750

0.55

See relays 40.31

40.51 40.52

40.61

* With the AgSnO₂ material the maximum peak current is 120 A - 5 ms on normally open contact.

Breaking capacity DC1: 30/110/220 V 16/0.3/0.12 Minimum switching load mW (V/mA) 500 (10/5) Standard contact material AgCdO Coil specification Nominal voltage (UN) V AC (50/60 Hz) 6-12-24-48-60-110-120-230-240 5 - 6 - 12 - 24 - 48 - 110 V DC * * * See table 5 - 6 - 12 - 24 - 48 - 110 Rated power AC/DC/sens. DC VA (50 Hz)/W/W 1.2/0.65/0.5 1.0/1.0/-

VA

VA

kW

(0.8...1.1)U_N $(0.8...1.1)U_N$ Operating range (0.73...1.5)U_N/(0.8...1.5)U_N DC/sens. DC $(0.8...1.1)U_N/-$

Holding voltage AC/DC $0.8 U_{N} / 0.4 U_{N}$ AC/DC Must drop-out voltage $0.2 U_{N} / 0.1 U_{N}$ Technical data 10 · 106/20 · 106 Mechanical life AC/DC See relays cycles Electrical life at rated load AC1 $100 \cdot 10^{3}$ 40.31 cycles Operate/release time 7/3 - (12/4 sensitive) 40.51 Insulation between coil and contacts (1.2/50 µs) kV 40.52 6 (8 mm) Dielectric strength between open contacts V AC 1,000 40.61 -40...+85 Min. impulse duration Ambient temperature range Environmental protection RT II**

(1)

≥ 20 ms

RINA

(N)

5 - 6 - 7 - 9 - 12 - 14 - 18 - 21 -24 - 28 - 36 - 48 - 60 - 90 -110 - 125 V DC

*** Nominal voltage (U_N) :

c**FN**®US



Approvals (according to type)

(FI)

Œ

(D)



40 Series - Miniature PCB/Plug-in relays 8 - 10 - 16 A

Features

1 Pole relay range 40.11 - 1 Pole 10 A (Flat pack) 40.11-2016 - 1 Pole 16 A (Flat pack) 40.41 - 1 Pole 10 A (Vertical)

PCB mount

- direct or via PCB socket (40.41 version)
- DC coils
- Cadmium Free option available
- 8 mm, 6 kV (1.2/50 µs) isolation, coil-contacts
- 40.41 NO version available



• 1 Pole 10 A

• Flat pack

• PCB mount

40.11

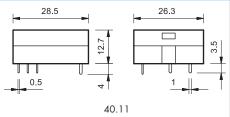
40.11-2016

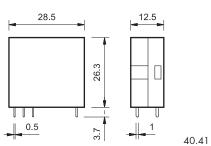


40.41



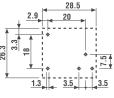
- 1 Pole 16 A
- Flat pack
- PCB mount
- 1 Pole 10 A
- Vertical
- PCB or 95 series socket





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







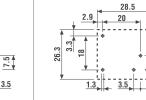
Copper side view

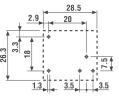
6 (8 mm)

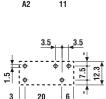
1,000

-40...+70

RT I







Copper side view Copper side view

Contact specification Contact configuration Rated current/Maximum peak current 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 mW (V/mA) Minimum switching load

Minimum switching load	mvv (v/mA)
Standard contact material	
Coil specification	
Nominal voltage (U_N)	V AC (50/60 Hz)
	V DC
Rated power AC/DC/sens. DC	VA (50 Hz)/W/W
Operating range	AC
	DC/sens. DC
Holding voltage	AC/DC
Must drop-out voltage	AC/DC
Technical data	
Mechanical life AC/DC	cycles
Electrical life at rated load A	C1 cycles
Operate/release time	ms
Insulation between coil and con	tacts (1.2/50 µs) kV
Dielectric strength between o	pen contacts V AC
Ambient temperature range	°C

1 CO (SPDT)	1 CO (SPDT)	1 CO (SPDT)	
10/20	16/30	10/20	
250/400	250/400	250/400	
2,500	4,000	2,500	
500	750	500	
0.37	0.55	0.37	
10/0.3/0.12	16/0.3/0.12	10/0.3/0.12	
300 (5/5)	500 (10/5)	300 (5/5)	
AgCdO	AgCdO	AgCdO	
_	_	_	
6 - 12 - 24 - 48 - 60	6 - 12 - 24 - 48	6 - 12 - 24 - 48 - 60	
-/-/0.5	-/-/0.5	-/-/0.5	
_	_	_	
-/(0.731.75)U _N	-/(0.731.5)U _N	-/(0.731.75)U _N	
−/0.4 U _N	-/0.4 U _N	-/0.4 U _N	
-/0.1 U _N	-/0.1 U _N	-/0.1 U _N	
−/20 · 10 ⁶	−/20 · 10 ⁶	−/20 · 10 ⁶	
200 · 10³	50 · 10³	200 · 10³	
12/4	12/4	12/4	

Environmental protection Approvals (according to type) 6 (8 mm)

1,000

-40...+70

RT I

6 (8 mm)

1,000

-40...+70

RT I

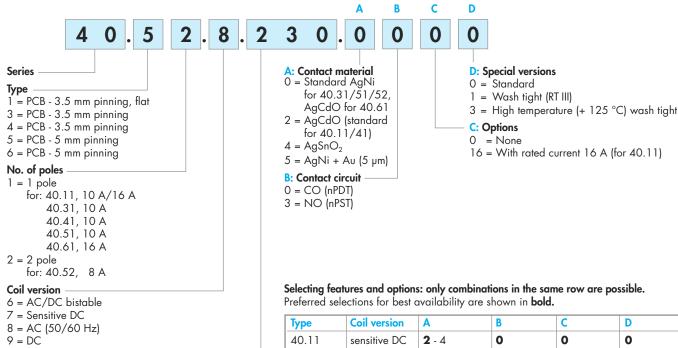


Coil voltage

See coil specifications

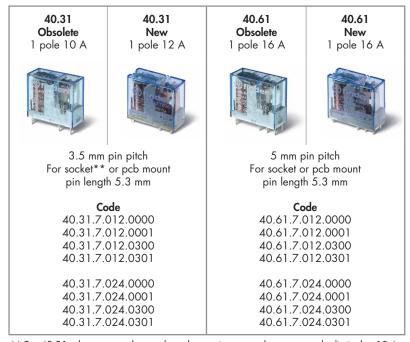
Ordering information

Example: 40 series PCB relay, 2 CO (DPDT), 230 V AC coil.



Туре	Coil version	Α	В	С	D
40.11	sensitive DC	2 - 4	0	0	0
40.11	sensitive DC	2 - 4	0	16	/
40.41	sensitive DC	0 - 2	0 - 3	0	0
40.31*/51	AC-sens. DC	0 - 2 - 5	0 - 3	0	0 - 1
40.31/51	DC	0 - 2 - 5	0 - 3	0	0 - 1 - 3
40.52	AC-sens. DC	0 - 2 - 5	0 - 3	0	0 - 1
40.52	DC	0 - 2 - 5	0 - 3	0	0 - 1 - 3
40.61*	AC-sens. DC	0 - 4	0 - 3	0	0 - 1
40.61	DC	0 - 4	0 - 3	0	0 - 1 - 3
40.31/51/	bistable	0	0	0	0
52/61					

^{*} As the result of a new production line and increased production capacity, the design/specification of the sensitive DC version will be changed to align with current PCB relay versions 40.31.7.0xx.xx20 and 40.61.7.0xx.xx20. This changeover will occur during the first quarter in 2013 for the types mentioned below. For full technical data refer to data sheet: PCB/Plug-in relays 12 - 16 A.



^{**} For 40.31 relays mounted on sockets, the maximum rated current must be limited to 10 A.





Technical data

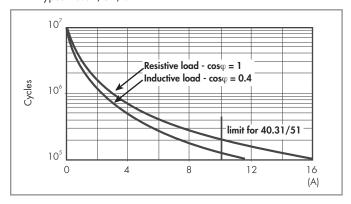
			1 pole		2 pole	
Nominal voltage of supply system	V AC	230/400	-	230/400		
Rated insulation voltage	V AC	250	400	250	400	
Pollution degree		3	2	3	2	
Insulation between coil and contact s	et			<u> </u>	'	
Type of insulation		Reinforced	(8 mm)	Reinforced (8	3 mm)	
Overvoltage category				III		
Rated impulse voltage	kV (1.2/50 μs)	6		6		
Dielectric strength	V AC	4,000		4,000		
Insulation between adjacent contacts				·		
Type of insulation		_		Basic	Basic	
Overvoltage category		_		II		
Rated impulse voltage	kV (1.2/50 μs)	_		2.5	2.5	
Dielectric strength	V AC	_		2,000		
Insulation between open contacts						
Type of disconnection		Micro-disc	onnection	Micro-discon	nection	
Dielectric strength	V AC/kV (1.2/50 μs)	1,000/1.5				
Conducted disturbance immunity				,		
Burst (550)ns, 5 kHz, on A1 - A2		EN 61000)-4-4	level 4 (4 kV)	
Surge (1.2/50 µs) on A1 - A2 (differ	rential mode)	EN 61000-4-5 level 3 (2 kV)				
Other data				·		
Bounce time: NO/NC	ms	2/5				
Vibration resistance (555)Hz: NO	/NC g	10/4 (1 changeover) 15/3 (2 changeover)		ngeover)		
Shock resistance	g	13				
Power lost to the environment	without contact current W	0.6				
	with rated current W	1.2 (40.1	1/31/41/51)	2 (40.61/52	2/40.11-2016)	
Recommended distance between rele	avs mounted on PCB mm	≥ 5	<u> </u>			



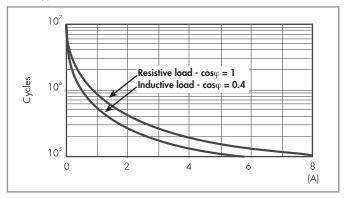


Contact specification

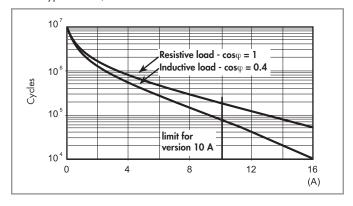
F 40 - Electrical life (AC) v contact current Types 40.31/51/61



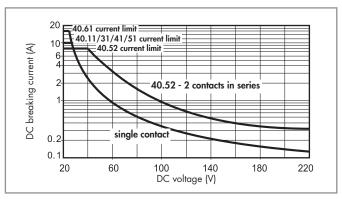
F 40 - Electrical life (AC) v contact current Type 40.52



F 40 - Electrical life (AC) v contact current Types 40.11/41



H 40 - Maximum DC1 breaking capacity



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 100·10° can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load. Note: the release time for the load will be increased.

40 Series - Miniature PCB/Plug-in relays 8 - 10 - 16 A

Coil specifications

DC coil data - 0.65 W standard (types 40.31/51/52/61)

Nominal	Coil	Operatir	ng range	Resistance	Rated coil
voltage	code				consumption
U _N		U_{min}	U _{max}	R	I at U _N
V		V	V	Ω	mA
5	9 .005	3.65	7.5	38	130
6	9 .006	4.4	9	55	109
7	9 .007	5.1	10.5	75	94
9	9 .009	6.6	13.5	125	72
12	9 .012	8.8	18	220	55
14	9 .014	10.2	21	300	47
18	9 .018	13.1	27	500	36
21	9 .021	15.3	31.5	700	30
24	9 .024	17.5	36	900	27
28	9 .028	20.5	42	1,200	23
36	9 .036	26.3	54	2,000	18
48	9 .048	35	72	3,500	14
60	9 .060	43.8	90	5,500	11
90	9 .090	65.7	135	12,500	7.2
110	9 .110	80.3	165	18,000	6.2
125	9 .125	91.2	188	23,500	5.3

DC coil data - 0.5 W sensitive (types 40.31/51/52/61)

Nominal	Coil	Operatin	g range	Resistance	Rated coil
voltage	code				consumption
U_N		U _{min} *	U _{max} **	R	I at U _N
V		V	V	Ω	mA
5	7 .005	3.7	8.8	50	100
6	7 .006	4.4	10.5	75	80
7	7 .007	5.1	12.2	100	70
9	7 .009	6.6	15.8	160	56
12	7 .012	8.8	21	288	42
14	7 .014	10.2	24.5	400	35
18	7 .018	13.2	31.5	650	27.7
21	7 .021	15.4	36.9	900	23.4
24	7 .024	17.5	42	1,150	21
28	7 .028	20.5	49	1,600	17.5
36	7 .036	26.3	63	2,600	13.8
48	7 .048	35	84	4,800	10
60	7 .060	43.8	105	7,200	8.4
90	7 .090	65.7	157	16,200	5.6
110	7 .110	80.3	192	23,500	4.7
125	7 .125	91.2	219	32,000	3.9

 $^{^*}U_{min} = 0.8 \ U_N \text{ for } 40.61$

DC coil data - 0.5 W sensitive (types 40.11/41)

Nominal	Coil	Operating range		Resistance	Rated coil
voltage	code				consumption
U _N		U _{min}	U_{max^*}	R	I at U _N
V		V	V	Ω	mA
6	7 .006	4.4	10.5	75	80
12	7 .012	8.8	21	300	40
24	7 .024	17.5	42	1,200	20
48	7 .048	35	84	4,600	10.4
60	7 .060	43.8	105	7,200	8.3

 $^{^*}U_{max} = 1.5 \ U_{N} \text{ for } 40.11-2016$

AC coil data (types 40.31/51/52/61)

Nominal	Coil	Operatir	ng range	Resistance	Rated coil
voltage	code				consumption
U _N		U_{min}	U _{max}	R	I at U _N (50Hz)
V		V	٧	Ω	mA
6	8 .006	4.8	6.6	21	168
12	8 .012	9.6	13.2	80	90
24	8 .024	19.2	26.4	320	45
48	8 .048	38.4	52.8	1,350	21
60	8 .060	48	66	2,100	16.8
110	8 .110	88	121	6,900	9.4
120	8 .120	96	132	9,000	8.4
230	8 .230	184	253	28,000	5
240	8 .240	192	264	31,500	4.1

AC/DC coil data - bistable (types 40.31/51/52/61)

Nominal	Coil	Operatin	g range	Resistance	Rated coil	DC: Release
voltage	code				consumption	resistance**
U_N		U _{min}	U _{max}	R	I at U _N	R _{DC}
V		V	V	Ω	mA	Ω
5	6 .005	4	5.5	23	215	37
6	6 .006	4.8	6.6	33	165	62
12	6 .012	9.6	13.2	130	83	220
24	6 .024	19.2	26.4	520	40	910
48	6 .048	38.4	52.8	2,100	21	3,600
110	6 .110	88	121	11,000	10	16,500

^{**} R_{DC} = Resistance in DC, R_{AC} = 1.3 x R_{DC} 1W

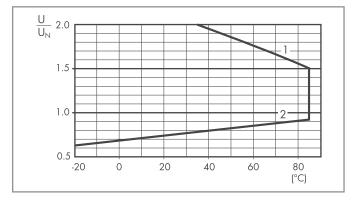
 $^{**}U_{max} = 1.5 U_{N} \text{ for } 40.61$



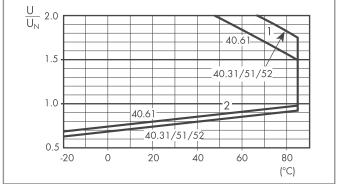
finder

Coil specifications

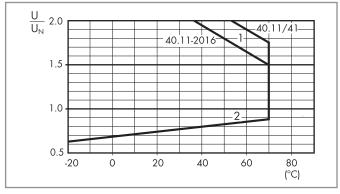
R 40 - DC coil operating range v ambient temperature



R 40 - DC coil operating range v ambient temperature Sensitive coil, types 40.31/51/52/61

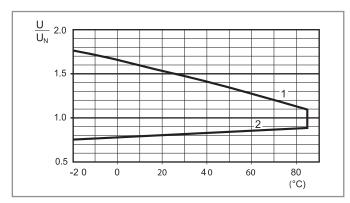


R 40 - DC coil operating range v ambient temperature Sensitive coil, types 40.11/41



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

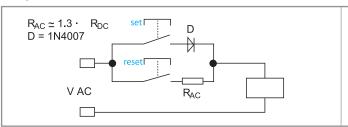
R 40 - AC coil operating range v ambient temperature



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

Wiring diagram for 40 series bistable coil version

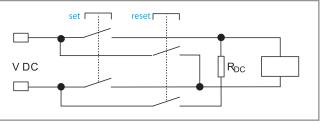
AC Operation



On momentary closure of the SET switch the relay is magnetised through the diode and the relay contacts transfer to the set position and remain in this position

On momentary closure of the RESET switch the relay is demagnetised through limiting resistor (R_{AC}) and the contacts return to the reset position.

DC Operation



On momentary closure of the SET switch the relay is magnetised and the relay contacts transfer to the set position and remain in this position. On momentary closure of the RESET switch the relay is demagnetised through limiting resistor ($R_{\rm DC}$) and the contacts return to the reset position.

Notes: The minimum SET or RESET impulse time is 20 ms. The maximum time can be continuous. In practice, always ensure that the SET and RESET contacts cannot be operated simultaneously.



95 Series - Socket overview for 40 series relays



	1
95.05	1
See page 10	

١	Module	Socket	,	Description	Mounting	Accessories
4	99.02	95.03	40.31	Screw terminal (Box clamp) socket	Panel or 35 mm rail	- Coil indication and EMC
		95.05	40.51	- Top terminals - Contacts	(EN 60715) mount	suppression modules
	@ et		40.52	- Bottom terminals - Coil		- Jumper link
	1950		40.61			- Timer modules
	79.02.9.02.99 500 m					- Plastic retaining and release
	Made in Rivor and					clip



Module	Socket	Relay	Description	Mounting	Accessories
99.80	95.83.3	40.31	Screw terminal (Box clamp) socket	Panel or 35 mm rail	- Coil indication and EMC
	95.85.3	40.51	95.83.3 wiring:	(EN 60715) mount	suppression modules
@finder 99.80.0.230.98 113_260/4000		40.52	- Top terminals - Contacts		- Jumper link
TO ALL		40.61	- Bottom terminals - Coil		- Plastic retaining and release clip
					·



Module	Socket	Relay	Description	Mounting	Accessories
99.80	95.93.3	40.31	Screw terminal (Box clamp) socket	Panel or 35 mm rail	- Coil indication and EMC
	95.95.3	40.51	- Top terminals - Contacts	(EN 60715) mount	suppression modules
## finder 99,800,230,98 10,280,4000		40.52	- Bottom terminals - Coil		- Jumper link
松		40.61			- Plastic retaining and release
-\$2 AT=					clip



See page 13

Module	Socket	Relay	Description	Mounting	Accessories
99.02	95.55	40.51	Screwless terminal socket	Panel or 35 mm rail	- Coil indication and EMC
		40.52	- For fast cable connections	(EN 60715) mount	suppression modules
ma.		40.61	- Top terminals - Contacts		- Timer modules
79.02.9 May 299			- Bottom terminals - Coil		- Plastic retaining and release
99.02.9.024.99					clip
550m					
0.00					



		95
See	page	14

Module	Socket	Relay	Description	Mounting	Accessories
99.80	95.55.3	40.51	Screwless terminal socket	Panel or 35 mm rail	- Coil indication and EMC
		40.52	For fast cable connections	(EN 60715) mount	suppression modules
## Hinder ## 220.22.038		40.61	- Top terminals - Contacts - Bottom terminals - Coil		- Plastic retaining and release clip



Module	Socket	Relay	Description	Mounting	Accessories
99.01	95.63	40.31	Screw terminal (Box clamp) socket	Panel or 35 mm rail	- Coil indication and EMC
24 Voc 1			- Top terminals - Contacts - Bottom terminals - Coil	(EN 60715) mount	suppression modules - Metal retaining clip



١	Module	Socket	Relay	Description	Mounting	Accessories
1	_	95.65	40.51	Screw terminal (Box clamp) socket	Panel or 35 mm rail	- Metal retaining clip
			40.52	_	(EN 60715) mount	
			40.61			



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05 12 2

See page 16

Module	Socket	Relay	Description	Mounting	Accessories
_	95.13.2	40.31	PCB socket	PCB mounting	- Metal retaining clip
		40.41			- Plastic retaining clip
_	95.15.2	40.51			
		40.52			
		40.61			





Approvals (according to type):

CE @ @ @

Certain relay/socket combinations



095.01

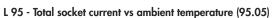


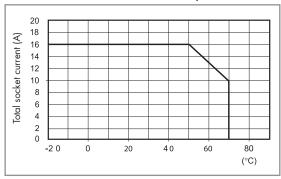
060.72

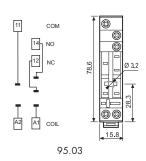
Screw terminal (Box clamp) socket panel or 35 mm rail mount 95.03 (blue) 95.03.0 (black) 95.05 (blue) 95.05.0 (black) For relay type 40.31 40.51, 40.52, 40.61 Accessories 095.71 Metal retaining clip Plastic retaining and release clip 095.01 095.01.0 095.01.0 095.01 (supplied with socket - packaging code SPA) 095.18 095.18.0 095.18 095.18.0 8-way jumper link Identification tag 095.00.4 Modules (see table below) 99.02 Timer modules (see table below) 86.30 Sheet of marker tags for retaining and release clip 095.01 060.72 plastic, 72 tags, 6x12 mm Technical data 10 A - 250 V * Rated values Dielectric strength 6 kV (1.2/50 µs) between coil and contacts Protection category Ambient temperature °C -40...+70 (see diagram L95) Screw torque Nm0.5 Wire strip length 8 mm Max. wire size for 95.03 and 95.05 sockets solid wire stranded wire 1x6 / 2x2.5 1x4 / 2x2.5 mm^2

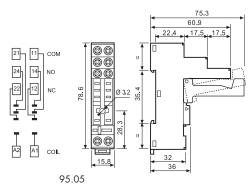
AWG

1x10 / 2x14









1x12 / 2x14



8-way jumper link for 95.03 and 95.05 sockets	095.18 (blue)	095.18.0 (blac
Rated values	10 A - 250 V	





86.30



Approvals (according to type):



DC Modules with non-standard polarity (+A2) on request.

3.3	4				110.5				.	5.	.1
_	F	15	15.8	15.8	15.8	15.8	15.8	15	j 		1

86 series timer modules	
(1224)V AC/DC; Bi-function: AI, DI; (0.05s100h)	86.30.0.024.0000
(110125)V AC; Bi-function: AI, DI; (0.05s100h)	86.30.8.120.0000
(230240)V AC; Bi-function: AI, DI; (0.05s100h)	86.30.8.240.0000

99.02 coil indication and EMC suppression	99.02 coil indication and EMC suppression modules for 95.03 and 95.05 sockets				
Diode (+A1, standard polarity)	(6220)V DC	99.02.3.000.00			
LED	(624)V DC/AC	99.02.0.024.59			
LED	(2860)V DC/AC	99.02.0.060.59			
LED	(110240)V DC/AC	99.02.0.230.59			
LED + Diode (+A1, standard polarity)	(624)V DC	99.02.9.024.99			
LED + Diode (+A1, standard polarity)	(2860)V DC	99.02.9.060.99			
LED + Diode (+A1, standard polarity)	(110220)V DC	99.02.9.220.99			
LED + Varistor	(624)V DC/AC	99.02.0.024.98			
LED + Varistor	(2860)V DC/AC	99.02.0.060.98			
LED + Varistor	(110240)V DC/AC	99.02.0.230.98			
RC circuit	(624)V DC/AC	99.02.0.024.09			
RC circuit	(2860)V DC/AC	99.02.0.060.09			
RC circuit	(110240)V DC/AC	99.02.0.230.09			
Residual current by-pass	(110240)V AC	99.02.8.230.07			

ck)

^{*} For currents >10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.





Approvals (according to type):









095.91.3

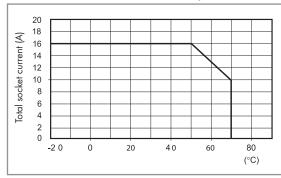


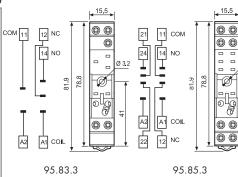
060.72

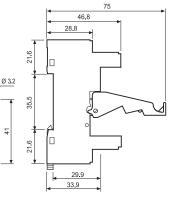
Screw terminal (Box clamp) socket panel or 35 mm rail mount	95.83.3 (blue)	95.83.30 (black)	95.85.3 (blue)	95.85.30 (black)
For relay type	40.31		40.51, 40.52	2, 40.61
Accessories				
Metal retaining clip		095	.71	
Plastic retaining and release clip	095.91.3	095.91.30	095.91.3	095.91.30
(supplied with socket - packaging code SPA)				
8-way jumper link	095.08	095.08.0	095.08	095.08.0
Identification tag		095.	80.3	
Modules (see table below)		99.	.80	
Sheet of marker tags for retaining and release clip 095.91.3	060.72			
plastic, 72 tags, 6x12 mm				
Technical data				
Rated values	10 A - 250 V	10 A - 250 V *		
Dielectric strength	6 kV (1.2/50	μs) between coil	and contacts (95.83.3 only)
Protection category	IP 20			
Ambient temperature °C	-40+70 (see diagram L95)			
⊕ Screw torque Nm	0.5			
Wire strip length mm	7			
Max. wire size for 95.83.3 and 95.85.3 sockets	solid wire		stranded wire	
m ²	1x6 / 2x2.5		1x4 / 2x2.5	
AWG	1x10 / 2x14		1x12 / 2x14	

^{*} For currents >10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.

L 95 - Total socket current vs ambient temperature (95.85.3)









8-way jumper link for 95.83.3 and 95.85.3 sockets	095.08 (blue)	095.08.0 (black)
Rated values	10 A - 250 V	



Approvals (according to type):



* Modules in Black housing are available on request.

Green LED is standard. Red LED available on request.

mJ →I4		113.1	> <	13.9
				2
†	, <u> </u>	, , , ,	 	_ "
0.75 15.8	15.8 15.8	15.8 15.8	15.8 15.8	

99.80 coil indication and EMC suppression modules for 95.83.3 and 95.85.3 sockets				
		Blue*		
Diode (+A1, standard polarity)	(6220)V DC	99.80.3.000.00		
LED	(624)V DC/AC	99.80.0.024.59		
LED	(2860)V DC/AC	99.80.0.060.59		
LED	(110240)V DC/AC	99.80.0.230.59		
LED + Diode (+A1, standard polarity)	(624)V DC	99.80.9.024.99		
LED + Diode (+A1, standard polarity)	(2860)V DC	99.80.9.060.99		
LED + Diode (+A1, standard polarity)	(110220)V DC	99.80.9.220.99		
LED + Varistor	(624)V DC/AC	99.80.0.024.98		
LED + Varistor	(2860)V DC/AC	99.80.0.060.98		
LED + Varistor	(110240)V DC/AC	99.80.0.230.98		
RC circuit	(624)V DC/AC	99.80.0.024.09		
RC circuit	(2860)V DC/AC	99.80.0.060.09		
RC circuit	(110240)V DC/AC	99.80.0.230.09		
Residual current by-pass	(110240)V AC	99.80.8.230.07		





Approvals (according to type):





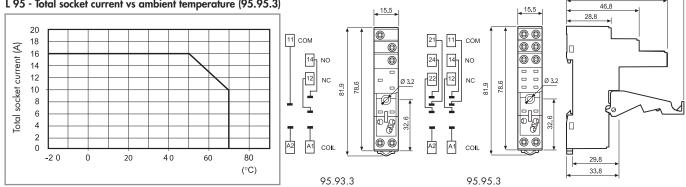


060.72

Carrow (Day alarmy) townshed and saturated and 25 man and an are	05 03 3 (block	05 02 20 /bld-/	05 05 2 /kls\	95.95.30 (black)
Screw (Box clamp) terminal socket panel or 35 mm rail mount		93.93.30 (black)	, ,	, ,
For relay type	40.31		40.51, 40.52	2, 40.61
Accessories				
Metal retaining clip		095	.71	
Plastic retaining and release clip	095.91.3	095.91.30	095.91.3	095.91.30
8-way jumper link	095.08	095.08.0	095.08	095.08.0
Identification tag		095.	80.3	
Modules (see table below)		99.	80	
Sheet of marker tags for retaining and release clip 095.91.3	060.72			
plastic, 72 tags, 6x12 mm				
Technical data				
Rated values	10 A - 250 V	*		
Dielectric strength	6 kV (1.2/50	μs) between co	il and contacts	
Protection category	IP 20			
Ambient temperature °C	-40+70 (see diagram L95)			
Screw torque Nm	0.5			
Wire strip length mm	8			
Max. wire size for 95.93.3 and 95.95.3 sockets	solid wire		stranded wire	
$\overline{m^2}$	1x6 / 2x2.5		1x4 / 2x2.5	
AWG	1x10 / 2x14		1x12 / 2x14	

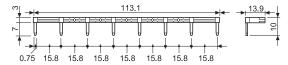
^{*} For currents >10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.







8-way jumper link for 95.93.3 and 95.95.3 sockets	095.08 (blue)	095.08.0 (black)
Rated values	10 A - 250 V	





Approvals (according to type):



* Modules in Black housing are available on request.

Green LED is standard. Red LED available on request.

99.80 coil indication and EMC suppression modules for 95.93.3 and 95.95.3 sockets				
-		Blue*		
Diode (+A1, standard polarity)	(6220)V DC	99.80.3.000.00		
LED	(624)V DC/AC	99.80.0.024.59		
LED	(2860)V DC/AC	99.80.0.060.59		
LED	(110240)V DC/AC	99.80.0.230.59		
LED + Diode (+A1, standard polarity)	(624)V DC	99.80.9.024.99		
LED + Diode (+A1, standard polarity)	(2860)V DC	99.80.9.060.99		
LED + Diode (+A1, standard polarity)	(110220)V DC	99.80.9.220.99		
LED + Varistor	(624)V DC/AC	99.80.0.024.98		
LED + Varistor	(2860)V DC/AC	99.80.0.060.98		
LED + Varistor	(110240)V DC/AC	99.80.0.230.98		
RC circuit	(624)V DC/AC	99.80.0.024.09		
RC circuit	(2860)V DC/AC	99.80.0.060.09		
RC circuit	(110240)V DC/AC	99.80.0.230.09		
Residual current by-pass	(110240)V AC	99.80.8.230.07		





Approvals (according to type):

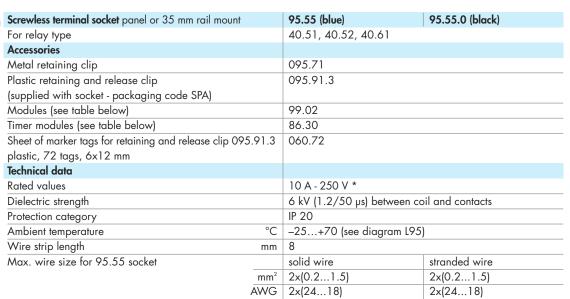






095.91.3

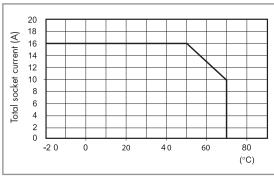


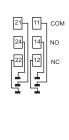


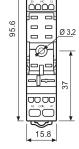
^{*} For currents >10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.

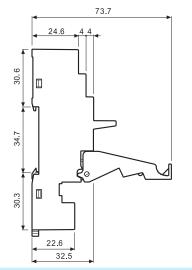
060.72

L 95 - Total socket current vs ambient temperature













86 series timer modules

(1224)V AC/DC; Bi-function: AI, DI; (0.05s100h)	86.30.0.024.0000
(110125)V AC; Bi-function: AI, DI; (0.05s100h)	86.30.8.120.0000
(230240)V AC; Bi-function: AI, DI; (0.05s100h)	86.30.8.240.0000

Approvals







Approvals (according to type):



DC Modules with non-standard polarity (+A2) on request.

99.02 coil indication and EMC suppression modules for 95.55 socket					
Diode (+A1, standard polarity)	(6220)V DC	99.02.3.000.00			
LED	(624)V DC/AC	99.02.0.024.59			
LED	(2860)V DC/AC	99.02.0.060.59			
LED	(110240)V DC/AC	99.02.0.230.59			
LED + Diode (+A1, standard polarity)	(624)V DC	99.02.9.024.99			
LED + Diode (+A1, standard polarity)	(2860)V DC	99.02.9.060.99			
LED + Diode (+A1, standard polarity)	(110220)V DC	99.02.9.220.99			
LED + Varistor	(624)V DC/AC	99.02.0.024.98			
LED + Varistor	(2860)V DC/AC	99.02.0.060.98			
LED + Varistor	(110240)V DC/AC	99.02.0.230.98			
RC circuit	(624)V DC/AC	99.02.0.024.09			
RC circuit	(2860)V DC/AC	99.02.0.060.09			
RC circuit	(110240)V DC/AC	99.02.0.230.09			
Residual current by-pass	(110240)V AC	99.02.8.230.07			





Approvals (according to type):

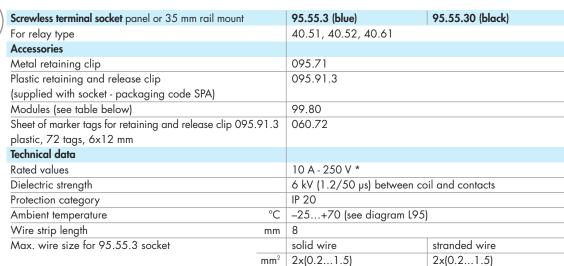






095.91.3





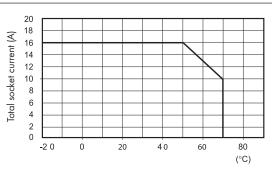
^{*} For currents > 10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.

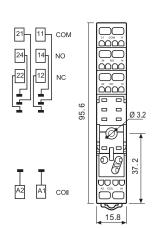
AWG

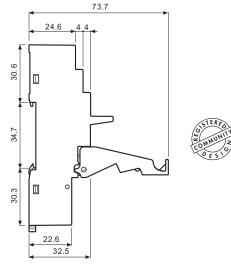
2x(24...18)

060.72

L 95 - Total socket current vs ambient temperature







2x(24...18)



Approvals (according to type):



* Modules in Black housing are available on request.

Green LED is standard. Red LED available on request.

		Blue*
Diode (+A1, standard polarity)	(6220)V DC	99.80.3.000.00
LED	(624)V DC/AC	99.80.0.024.59
LED	(2860)V DC/AC	99.80.0.060.59
LED	(110240)V DC/AC	99.80.0.230.59
LED + Diode (+A1, standard polarity)	(624)V DC	99.80.9.024.99
LED + Diode (+A1, standard polarity)	(2860)V DC	99.80.9.060.99
LED + Diode (+A1, standard polarity)	(110220)V DC	99.80.9.220.99
LED + Varistor	(624)V DC/AC	99.80.0.024.98
LED + Varistor	(2860)V DC/AC	99.80.0.060.98
LED + Varistor	(110240)V DC/AC	99.80.0.230.98
RC circuit	(624)V DC/AC	99.80.0.024.09
RC circuit	(2860)V DC/AC	99.80.0.060.09
RC circuit	(110240)V DC/AC	99.80.0.230.09
Residual current by-pass	(110240)V AC	99.80.8.230.07





Approvals (according to type):

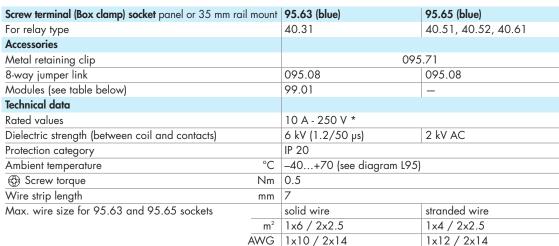








Approvals (according to type):



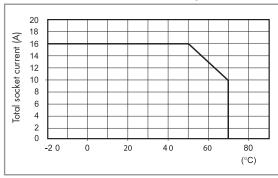
* For currents > 10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.

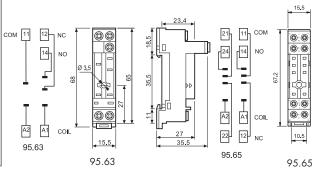


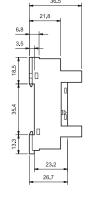




L 95 - Total socket current vs ambient temperature

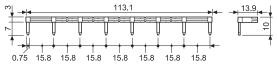








8-way jumper link for 95.63 and 95.65 sockets 095.0	08 (blue)
Rated values 10 A	- 250 V





Approvals (according to type):



* Modules in Black housing are available on request.

Green LED is standard. Red LED available on request.

99.01	coil indication	and EMC	suppression	modules for typ	e 95.63 socket

		Blue*
Diode (+A1, standard polarity)	(6220)V DC	99.01.3.000.00
Diode (+A2, non-standard polarity)	(6220)V DC	99.01.2.000.00
LED	(624)V DC/AC	99.01.0.024.59
LED	(2860)V DC/AC	99.01.0.060.59
LED	(110240)V DC/AC	99.01.0.230.59
LED + Diode (+A1, standard polarity)	(624)V DC	99.01.9.024.99
LED + Diode (+A1, standard polarity)	(2860)V DC	99.01.9.060.99
LED + Diode (+A1, standard polarity)	(110220)V DC	99.01.9.220.99
LED + Diode (+A2, non-standard polarity)	(624)V DC	99.01.9.024.79
LED + Diode (+A2, non-standard polarity)	(2860)V DC	99.01.9.060.79
LED + Diode (+A2, non-standard polarity)	(110220)V DC	99.01.9.220.79
LED + Varistor	(624)V DC/AC	99.01.0.024.98
LED + Varistor	(2860)V DC/AC	99.01.0.060.98
LED + Varistor	(110240)V DC/AC	99.01.0.230.98
RC circuit	(624)V DC/AC	99.01.0.024.09
RC circuit	(2860)V DC/AC	99.01.0.060.09
RC circuit	(110240)V DC/AC	99.01.0.230.09
Residual current by-pass	(110240)V AC	99.01.8.230.07









95.15.2

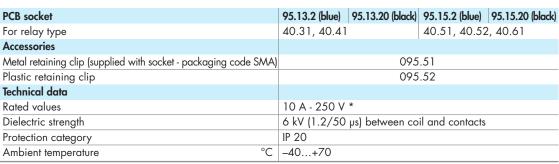
Approvals (according to type):



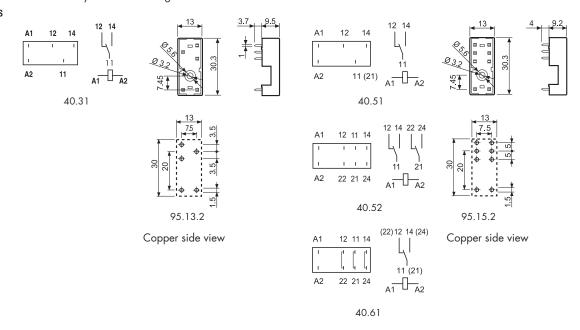








^{*} For currents >10 A, contact terminals must be connected in parallel (21 with 11, 24 with 14, 22 with 12). With the relay 40.51 the change-over contact will be 21-12-14.



Packaging codes

How to code and identify retaining clip and packaging options for sockets.

Example:

