

Ultra-slim 1 Pole - 6 A relay
Printed circuit mount
- direct or via PCB socket
35 mm rail mount
- via screw, screwless or push-in terminal sockets

- 1 Pole changeover contacts or 1 Pole normally open contact
- Ultra slim, 5 mm, package
- Sensitive DC coil - 170 mW (Dual AC/DC coil drive possible using 93 series sockets)
- UL Listing (certain relay/socket combinations)
- Cadmium Free contact materials
- 8/8 mm clearance/creepage distance
- 6 kV (1.2/50 µs) insulation, coil-contacts

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

For outline drawing see page 5

Contact specification

Contact configuration	1 CO (SPDT)	1 CO (SPDT)
Rated current/ Maximum peak current	A 6/10	6/10
Rated voltage/ Maximum switching voltage	V AC 250/400	250/400
Rated load AC1	VA 1500	1500
Rated load AC15 (230 V AC)	VA 300	300
Single phase motor rating (230 V AC)	kW 0.185	0.185
Breaking capacity DC1: 30/110/220 V	A 6/0.2/0.12	6/0.2/0.12
Minimum switching load	mW (V/mA) 500 (12/10)	50 (5/2)
Standard contact material	AgNi	AgNi + Au

Coil specification

Nominal voltage (U _N)	V AC (50/60 Hz)	—	—
	V DC	5 - 12 - 24 - 48 - 60	5 - 12 - 24 - 48 - 60
Rated power AC/DC	VA (50 Hz)/W	—/0.17	—/0.17
Operating range	AC	—	—
	DC	(0.7...1.5)U _N	(0.7...1.5)U _N
Holding voltage	AC/DC	—/0.4 U _N	—/0.4 U _N
Must drop-out voltage	AC/DC	—/0.05 U _N	—/0.05 U _N

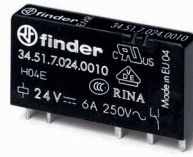
Technical data

Mechanical life AC/DC	cycles	—/10 · 10 ⁶	—/10 · 10 ⁶
Electrical life at rated load AC1	cycles	60 · 10 ³	60 · 10 ³
Operate/release time	ms	5/3	5/3
Insulation between coil and contacts (1.2/50 µs)	kV	6 (8mm)	6 (8mm)
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+85	-40...+85
Environmental protection		RT II	RT II

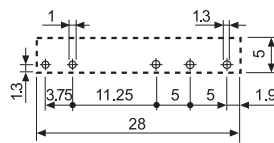
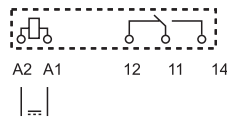
Approvals (according to type)



34.51

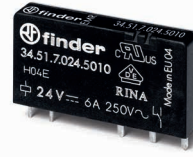


- 5 mm wide
- Low coil power
- PCB or 93 series sockets

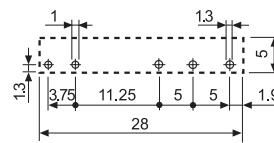
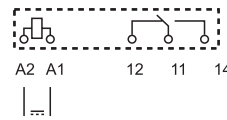


Copper side view

NEW 34.51-5010



- 5 mm wide
- Low coil power
- PCB or 93 series sockets
- Contact AgNi + Au



Copper side view

Ultra-slim - Solid State Relays

Printed circuit mount

- direct or via PCB socket

A 35 mm rail mount

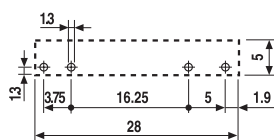
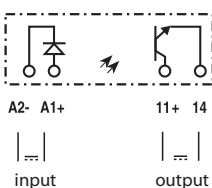
- via screw, screwless or push-in terminal sockets

- Single circuit output switching options
 - 2 A, 24 V DC
 - 0.1 A, 48 V DC
 - 2 A, 240 V AC
- Silent, high speed switching with long electrical life
- Ultra slim, 5 mm, package
- Sensitive DC Input circuits (Dual AC/DC input drive possible using 93 series sockets)
- UL Listing (certain relay/socket combinations)
- Wash tight: RT III
- 2500 V insulation, input-output

34.81-9024



- 2 A, 24 V DC output switching
- PCB or 93 series sockets

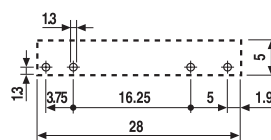
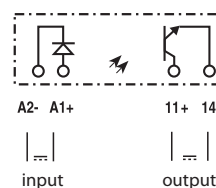


Copper side view

34.81-7048



- 0.1 A, 48 V DC output switching
- PCB or 93 series sockets

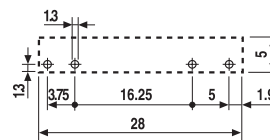
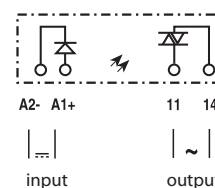


Copper side view

34.81-8240



- 2 A, 240 V AC output switching
- Zero crossing switching
- PCB or 93 series sockets



Copper side view

For outline drawing see page 5

Output circuit

Contact configuration		1 NO (SPST-NO)				1 NO (SPST-NO)		1 NO (SPST-NO)			
Rated current/ Maximum peak current (10 ms)	A	2/20				0.1/0.5		2/40			
Rated voltage/ Maximum blocking voltage	V	(24/33)DC				(48/60)DC		(240/—)AC			
Switching voltage range	V	(1.5...24)DC				(1.5...48)DC		(12...275)AC			
Repetitive peak off-state voltage	V _{pk}	—				—		600			
Minimum switching current	mA	1				0.05		22			
Max. "OFF-state" leakage current	mA	0.001				0.001		1.5			
Max. "ON-state" voltage drop	V	0.12				1		1.6			

Input circuit

Nominal voltage	V DC	5	12	24	60	24	60	5	12	24	60
Rated power AC/DC	W	0.035	0.087	0.17	0.18	0.17	0.18	0.060	0.087	0.17	0.18
Operating range	V DC	35...12	8...17	16...30	35...72	16...30	35...72	35...10	8...17	16...30	35...72
Control current	mA	7	7.2	7	3	7	3	12	7.2	7	3
Release voltage	V DC	1	4	10	20	10	20	1	4	10	20
Impedance	Ω	715	1940	3200	21300	3200	21300	416	1940	3200	21300

Technical data

Operate/release time	ms	0.1/0.6*				0.04/0.6*		12/12*			
Dielectric strength between input/output	V	2500				2500		2500			
Ambient temperature range	°C	-20...+60				-20...+60		-20...+60			
Environmental protection		RT III				RT III		RT III			

Approvals (according to type)



* Note: all technical data relates to using the relay directly on PCB or PCB socket type 93.11.

If the relay is used with 35 mm rail socket type 93.51, refer to the technical data of 38 Series; if used with types 93.60, 93.61, 93.62, 93.63, 93.64, 93.65, 93.66, 93.67, 93.68 and 93.69, refer to the technical data of the MasterINTERFACE 39 Series.