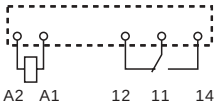
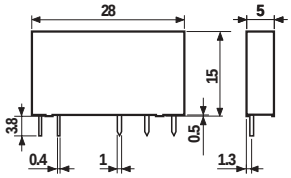
34

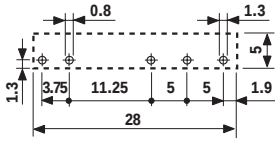
- *Ultra-slim, 5 mm wide*
- *Sensitive DC coil, 170mW*
- *6/8 mm distance/creepage*
- *6kV (1.2/50 µs) between coil and contacts*

34.51

- 5 mm wide
- P.C.B. mounting





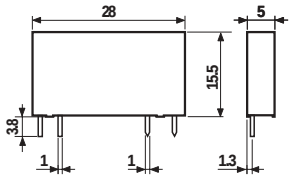


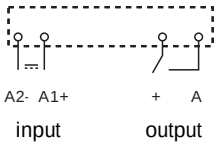
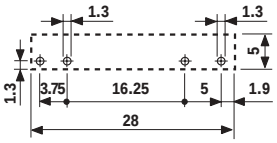
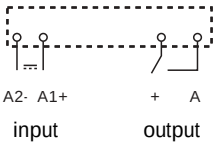
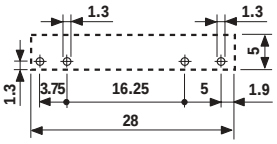
Copper side view

* for 400 V applications, requirements for pollution degree 2 are met.

Contact specifications		
Contact configuration		1 CO
Rated current / Maximum peak current	A	6 / 10
Rated voltage / Maximum switching voltage	V AC	250 / 400*
Rated load in AC1	VA	1,500
Rated load in AC15 (230 VAC)	VA	300
Single phase motor rating (230 VAC)	kW	—
Breaking capacity in DC1: 30 / 110 / 220V	A	6 / 0.2 / 0.12
Minimum switching load	mW (V/mA)	500 (12/10)
Standard contact material		AgNi
Coil specifications		
Nominal voltage (U_N)	V AC (50/60 Hz)	—
	V DC	5 - 12 - 24 - 48 - 60
Rated power AC / DC	VA (50 Hz) / W	— / 0.17
Operating range	AC (50 Hz)	—
	DC	$(0.7...1.5)U_N$
Holding voltage	AC / DC	— / 0.4 U_N
Must drop-out voltage	AC / DC	— / 0.05 U_N
Technical data		
Mechanical life AC / DC	cycles	— / $10 \cdot 10^6$
Electrical life at rated load AC1	cycles	$60 \cdot 10^3$
Operate / release time (bounce included)	ms	7 / 8
Insulation according to EN 61810-5		4 kV / 3
Insulation between coil and contacts (1.2/50µs)	kV	6 (8 mm)
Dielectric strength between open contacts	V AC	1,000
Ambient temperature range	°C	–40...+85
Environmental protection		RT II
Approvals: (according to type)		GOST VDE

- *Ultra-slim, 5 mm wide*
- *High switching speed and endurance*
- *Silent switching*



		34.81....9024		34.81....7048	
					
		- Switching current 2A - 24 V DC - P.C.B. mounting		- Switching current 100 mA - 48 V DC - P.C.B. mounting	
		 A2- A1+ + A input output  Copper side view		 A2- A1+ + A input output  Copper side view	
Output circuit					
Maximum switching current	A	2		0.1	
Rated voltage	V DC	24		48	
Switching voltage range	V DC	0...24		0...48	
Maximum blocking voltage	V DC	33		60	
Input circuit					
Nominal voltage	V DC	24	60	24	60
Operating range	V DC	16...30	35...72	16...30	35...72
Control current	mA	7	3	7	3
Release voltage	V DC	10	20	10	20
Technical data					
Dielectric strength between input / output	V	2500		2500	
Ambient temperature range	°C	–20...+55		–20...+55	
Environmental protection		RT II		RT II	
Approvals: (according to type)		—		—	

ORDERING INFORMATION

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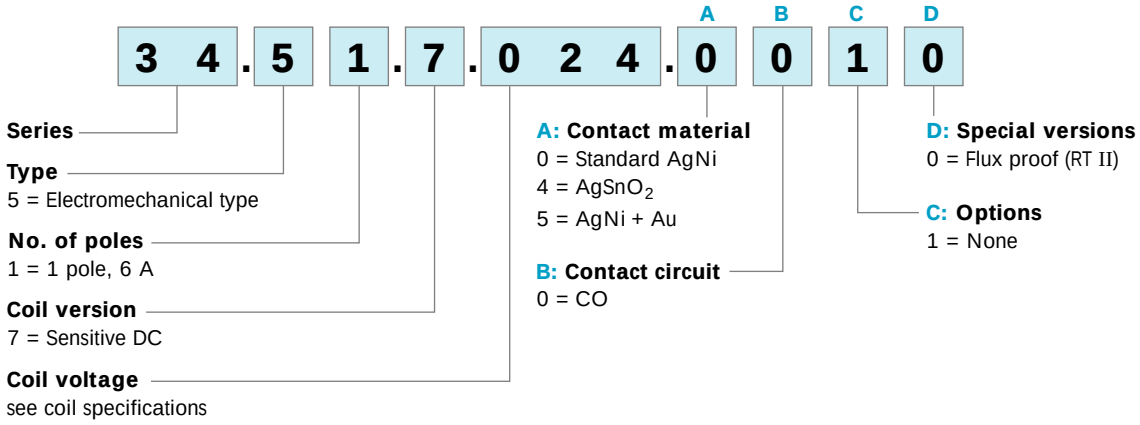
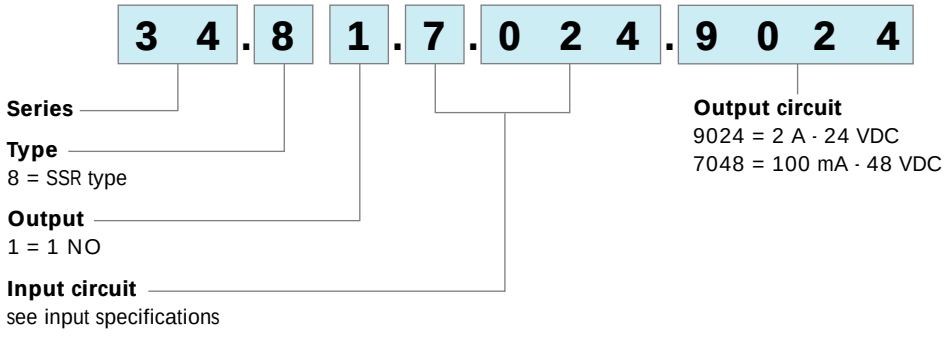
ELECTROMECHANICAL RELAY

Example: a 34 series slim electromechanical relay, 1 CO - 6 A, with 24 V sensitive DC coil.



SOLID STATE RELAY

Example: a 34 series SSR relay, 2 A, with 24 V DC supply.



SOLID STATE RELAY

OTHER DATA

POWER LOST TO THE ENVIRONMENT	without contact current	W	0.17
	with rated current	W	0.4

INPUT SPECIFICATION

DC VERSION DATA

Nominal voltage U_N	Input code	Operating range		Release voltage	Control current I at U_N
		Umin	Umax		
V		V	V	V	mA
24	7.024	16	30	10	7
60	7.060	35	72	20	3

ELECTROMECHANICAL RELAY

TECHNICAL DATA

INSULATION

INSULATION according to EN 61810-5	insulation rated voltage	V	250
	rated impulse withstand voltage	kV	4
	pollution degree		3
	overvoltage category		III

IMMUNITY

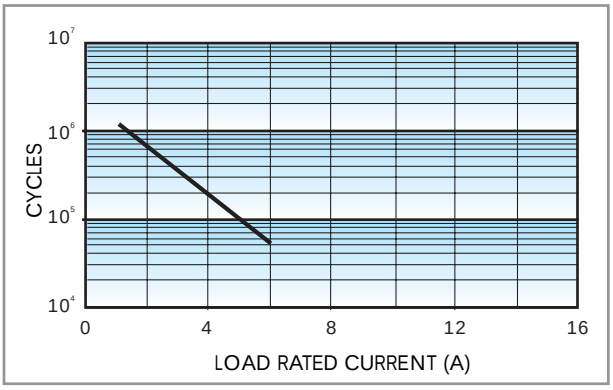
CONDUCTED DISTURBANCE IMMUNITY	BURST (according to EN 61000-4-4) level 4 (4 kV)
	SURGE (according to EN 61000-4-5) level 3 (2 kV)

OTHER DATA

VIBRATION RESISTANCE (10...55Hz): NO / NC		g / g	10 / 5
POWER LOST TO THE ENVIRONMENT	without contact current	W	0.2
	with rated current	W	0.5
RECOMMENDED DISTANCE between RELAYS mounted on P.C.B.s		mm	≥5

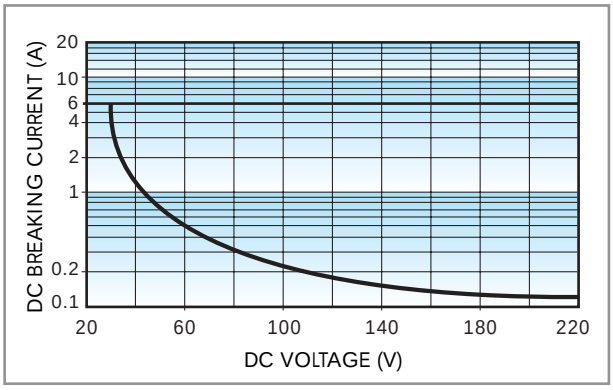
CONTACT SPECIFICATIONS

F 34



Electrical life vs AC1 load.

H 34



Breaking capacity in DC1 load.

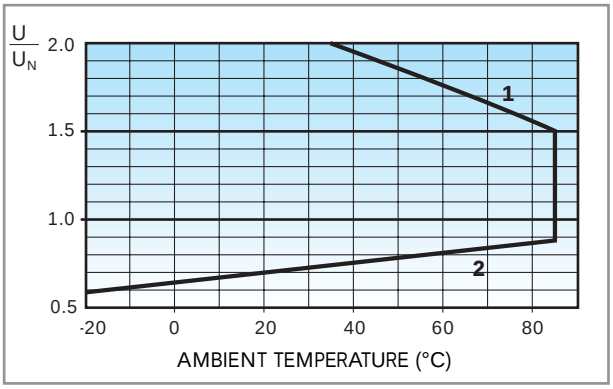
• When switching a resistive load (DC1) having voltage and current values under the curve the expected electrical life is ≥ $100 \cdot 10^3$ cycles.
• In case of DC13 loads the connection of a diode in parallel with the load will permit the same electrical life as for a DC1 load.
Note: the release time of load will be increase.

COIL SPECIFICATIONS

DC VERSION DATA

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Rated coil consumption I at U_N
V		V	V	Ω	mA
5	**7**.005	3.5	7.5	130	38.4
12	**7**.012	8.4	18	840	14.2
24	**7**.024	16.8	36	3,350	7.1
48	**7**.048	33.6	72	12,300	3.9
60	**7**.060	42	90	19,700	3

R 34 DC



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