Ordering information

Electromechanical relay (EMR)

A

Example: 34 series Ultra-Slim electromechanical relay, 1 CO (SPDT) 6 A contacts, 24 V sensitive DC coil.

3	4	.	5	1	.	7	.	0	2	4	.	0	0	1	0
												A	B	C	D

Series

Type
5 = Electromechanical type

No. of poles
1 = 1 pole, 6 A

Coil version
7 = Sensitive DC

Coil voltage
See coil specifications

A: Contact material
0 = Standard AgNi,
Standard $AgSnO_2$
(for 34.51-0000 only)
4 = $AgSnO_2$
5 = AgNi + Au

B: Contact circuit
0 = CO (SPDT)
3 = NO (SPST)

C: Options
0 = Wash tight RT III
1 = Flux proof RT II

D: Special versions
0 = Standard version
9 = Flat version

Selecting features and options: only combinations in the same row are possible.
Preferred selections for best availability are shown in **bold**.

Type	Coil version	A	B	C	D
34.51	sens. DC	**0** - 4 - 5	**0** - 3	**0 - 1**	**0**
34.51	sens. DC	0 - 4 - 5	0	1	9

Solid state relay (SSR)

Example: 34 series solid state relay, 6 A 24 V DC output, 24 V DC supply.

3	4	.	8	1	.	7	.	0	2	4	.	9	0	2	4

Series

Type
8 = SSR type

Output
1 = 1 NO (SPST-NO)

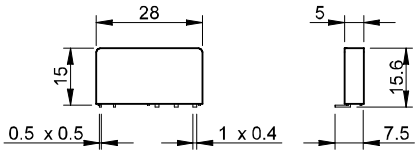
Input circuit
See input specifications

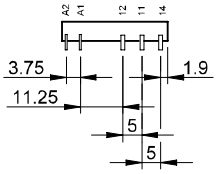
Output circuit
9024 = 6 A - 24 V DC
7048 = 0.1 A - 48 V DC
7220 = 0.2 A - 220 V DC
8240 = 2 A - 240 V AC

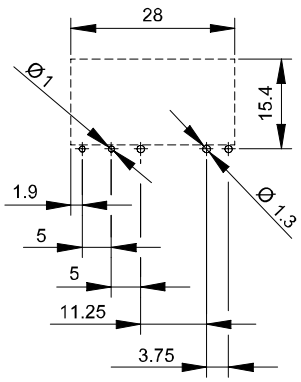
Flat pack version

Option = 34.51.7xxx.x019

Environmental protection RT I







Copper side view

Solid state relay

A

Technical data

Insulation			Dielectric strength	Impulse (1.2/50 µs)
Between input and output			3000 V AC	4 kV
EMC specifications		**Reference standard**		
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV	
	air discharge	EN 61000-4-2	8 kV	
Radiated electromagnetic field (80…1000 MHz)		EN 61000-4-3	10 V/m	
Fast transients on supply terminals (burst 5/50 ns, 5 and 100 kHz)		EN 61000-4-4	2 kV	
Voltage pulses on supply terminals (surge 1.2/50 µs)	common mode	EN 61000-4-5	0.7 kV	
	differential mode	EN 61000-4-5	0.7 kV*	
Radio-frequency common mode voltage (0.15…230 MHz)		EN 61000-4-6	10 V	
Other data				
Power lost to the environment	without output current	W	0.15	
	with rated current	W	0.4	

* For 34.81.7.005…= 0.3 kV ; for 34.81.7.012…= 0.5 kV

Input specification

Input data - DC types

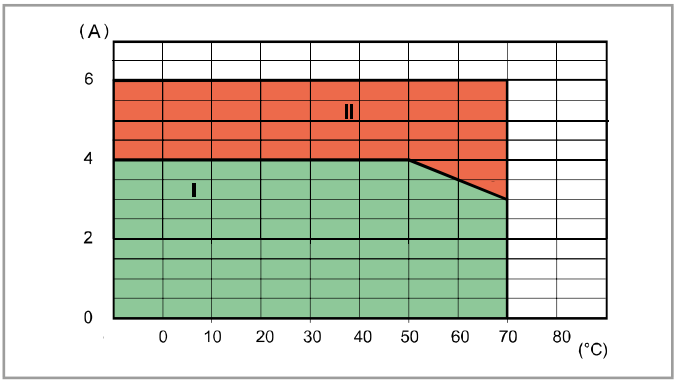
Nominal voltage U_N	Input code	Operating range U_{min}	Operating range U_{max}	Release voltage	Impedance	Control current I at U_N
V		V	V	V	Ω	mA
5	**7**.005	3.5	12*	1	715	7*
12	**7**.012	8	17	4	1715	7
24	**7**.024	16	30	10	3430	7
60	**7**.060	35	72	20	17000	3.5

* For 34.81.7.005.8240: U_{MAX} = 10 V, I @ 5 V = 12 mA

Output specification

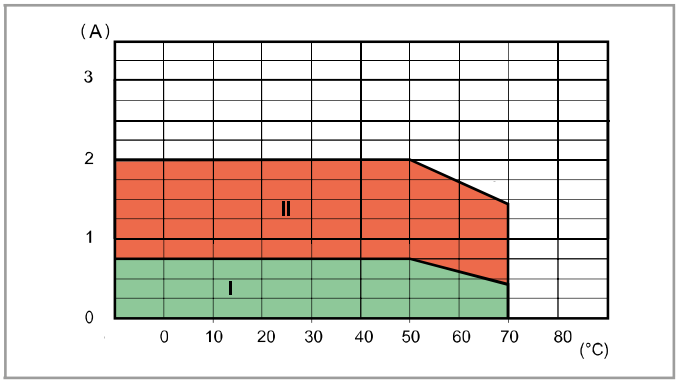
L 34-1 - Output DC current v ambient temperature

34.81.7…9024



L 34 - Output AC current v ambient temperature

34.81.7…8240



I: SSR installed on 93 series sockets as a group (without gap between sockets)
II: SSR installed individually in free air , or with a gap ≥ 9 mm, which implies a not significant influence from nearby components

Max recommended switching frequency (Cycles/Hour, with 50% Duty-cycle) at ambient temperature 50°C, single mounting

Load	34.81.7xxx.**9024**	34.81.7xxx.**8240**	34.81.7xxx.**7048**	34.81.7xxx.**7220**
24 V 6 A DC1	180 000	—	—	—
24 V 3 A DC L/R = 10 ms	5000	—	—	—
24 V 2 A DC L/R = 40 ms	3600	—	—	—
24 V 1 A DC L/R = 40 ms	6500	—	—	—
24 V 0.8 A DC L/R = 40 ms	9000	—	—	—
24 V 1.5 A DC L/R = 80 ms	3250	—	—	—
230 V 2 A AC1	—	60 000	—	—
230 V 1.25 A AC15	—	3600	—	—
48 V 0.1 A DC1	—	—	60 000	—
220 V 0.2 A DC1	—	—	—	60 000