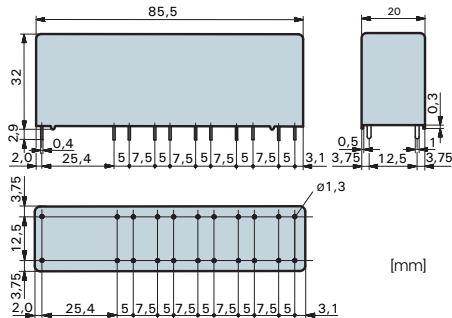


Relay data

- PCB relay with forcibly guided contacts
- Protective separation between coil/control contacts and output contacts (> 8mm) and output contacts in one row (> 8mm) and as left to right contact side (> 10mm)
- EN 50205, type A
- Contact mounting:

SIR372	3NO/7NC	SIR462	4NO/6NC
SIR552	5NO/5NC	SIR642	6NO/4NC
SIR732	7NO/3NC	SIR822	8NO/2NC
SIR912	9NO/1NC		
- Small external dimensions
- Mean coil power 1.3W
- Holding power 0.39W



Contact material	AgSnO ₂ +0.2μm Au
Type of contact	Crest contact
Rated switching capacity	250VAC 10A AC1 2'500VA
Electr. life AC1 (360 cycles/h)	approx. 100'000
Inrush current max.	25A for 20ms
Switching voltage range	5 to 250 VDC/VAC
Switching current range*	10mA to 10A
Switching capacity range*	0.06VA(V) to 2'500VA
Contact resistance (as delivered)	≤100mΩ/28 V/100mA

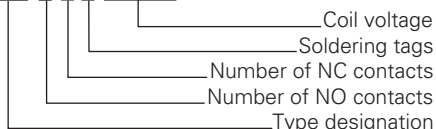
* Guide values

Standard coils for direct current (other voltages on request)

Nominal voltage VDC	Min. pick-up voltage at 20°C	Drop-out voltage at 20 °C	Nominal current in mA	Resistance in Ohm at 20 °C	Tolerance in %
6	4,2	≥ 0,6	218	275	± 10
12	8,4	≥ 1,2	109	110	± 10
18	12,6	≥ 1,8	72	250	± 10
24	16,8	≥ 2,4	54,5	440	± 10
48	33,6	≥ 4,8	27,2	1'760	± 10
60	42,0	≥ 6,0	11,8	2'750	± 10
110	77,0	≥ 11,0	6,8	9'250	± 13
220	154,0	≥ 22,0	5,9	37'000	± 15

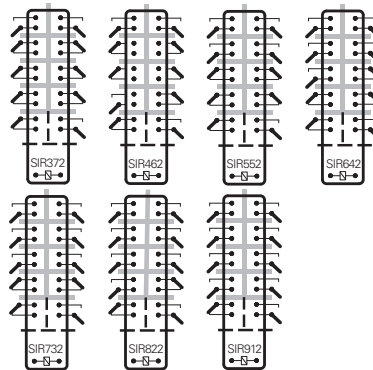
Ordering example

SIR 5 5 2 24VDC



General data

Circuit diagram (view on relay upper side)



--- Basic insulation
— Double or reinforced insulation

Mechanical life	> 10 x 10 ⁶ operations
Switching frequency, mechanical	15Hz
Response time	typically 18ms
Drop-out time**	typically 5ms
Bounce time of NO contact	typically 8ms
Bounce time of NC contact	typically 12ms
Shock resistance	16ms NO contact > 10g NC contact 8g
Vibration resistance	NO contact > 10g 10-200Hz NC contact 5g

Test voltage	coil/control contacts	2'500Veff 1min
Test voltage	coil-control contacts/output contacts	5'000Veff 1min
Test voltage output contacts	as against each other	4'000Veff 1min
Test voltage contact open		1'500Veff 1min
Insulation resistance		10 ¹¹ Ω
Creepage resistance		CTI 250
Weight		approx. 60g
Mounting position		any
Ambient temperature		-40°C to +70°C
Type of protection		RT II
Solder bath temperature		270 °C/5s
Thermal resistance		40K/W
Temperature limit for coil		125°C
Pollution degree		2
Overvoltage category		III
Resistance to short circuiting output contacts		1'000A SCPD 10A gG (pre-fuse)

** without spark suppression

Insulation terms

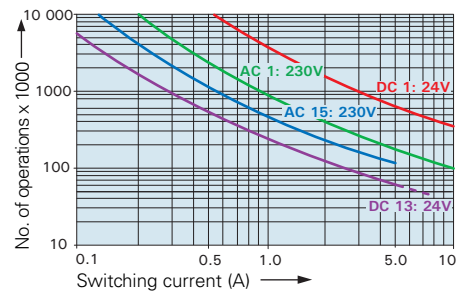
Coil to control contacts: Basic insulation
Coil/control contacts to output contacts:
Double or reinforced insulation > 8mm
All output contacts in one row:
Double or reinforced insulation > 8mm
All output contacts as left to right contact side:
Double or reinforced insulation > 10mm

Tests, regulations

Approvals	SEV, UL, cUL, TÜV
UL File E188953	Sec. 3
Insulation class IEC 60664-1	250VAC
Protection class II	VDE 0106
Fire protection requirements	UL 94 /V0

Diagrams

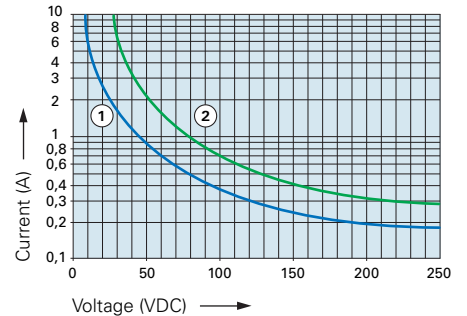
Contact lifetime



Max. switching characteristics
(determined acc. to DIN EN 60947-5-1 table C2):
AC 15: 230V/5A
DC 13: 24V/7.5A/0.1 Hz
UL 508: C600/R300

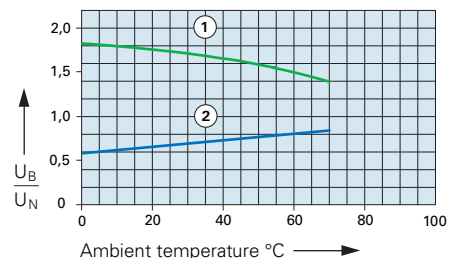
Maximal contact load at AC 1 with 230V:
2 contacts each with 10A
3 contacts each with 8.4A
4 contacts each with 7.3A
5 contacts each with 6.5A
6 contacts each with 6A
8 contacts each with 5A
9 contacts each with 4.2A

Load limit curve with direct current



- 1) Inductive load, L/R 40 ms
- 2) Resistive load

Excitation voltage range



- 1) Max. excitation voltage with contact load ≤ 2A
 - 2) Min. excitation voltage (guaranteed values) without previous operation
- No heat accumulation due to intrinsic heating of other components.
Continuous duty 100%.