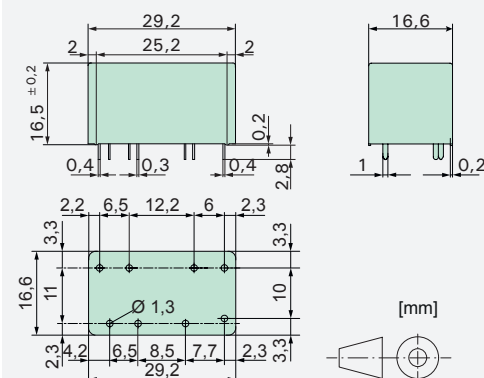




### Relay Key Data

- PCB Relay with forcibly guided contacts
- Protective separation between control and load circuit (leakage and creepage distances >8 mm)
- EN50205 type A
- Double and reinforced insulation between the contacts
- Contact mounting: SIS212 2 NO / 1 NC
- Small external dimensions
- Nominal coil power 0,6 W
- Holding coil power 0,18 W
- For railway application (EN50155) on request

### Dimensions



### Contact Data

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Contact material                  | AgCuNi+0,2-0,4 µm Au              |
| Type of contact                   | Single contact with notched crown |
| Rated switching capacity          | 250 VAC 6 A AC1 1500 VA           |
| Electr. life AC 1(360 cycles / h) | >90000                            |
| Inrush current max.               | 30 A for 20 ms                    |
| Switching voltage range           | 5 to 250 VDC / VAC                |
| Switching current range*          | 3 mA to 6 A                       |
| Switching capacity range*         | 40 mW to 1500 W(VA)               |
| Contact resistance (as delivered) | ≤100 mΩ / 6 V / 100 mA            |

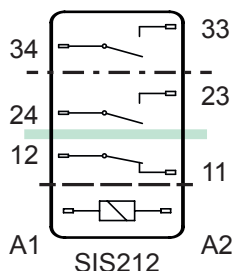
\*Guided values

### 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 |
|---------------------|-------------------------------|---------------------------|-----------------------|----------------------------|
| 5                   | ≤3,5                          | ≥0,5                      | 120,0                 | 41,5 ± 10%                 |
| 9                   | ≤6,3                          | ≥0,9                      | 66,6                  | 135 ± 10%                  |
| 12                  | ≤8,4                          | ≥1,2                      | 50,0                  | 240 ± 10%                  |
| 18                  | ≤12,6                         | ≥1,8                      | 33,3                  | 540 ± 10%                  |
| 24                  | ≤16,8                         | ≥2,4                      | 25,0                  | 960 ± 10%                  |
| 48                  | ≤33,6                         | ≥4,8                      | 12,5                  | 3840 ± 10%                 |
| 60                  | ≤42,0                         | ≥6,0                      | 10,0                  | 6000 ± 13%                 |
| 110                 | ≤77,0                         | ≥11,0                     | 5,4                   | 20150 ± 15%                |

### Circuit Diagram (view on relay upper side)



### Insulation Data

|                                     |                        |
|-------------------------------------|------------------------|
| - Basic insulation                  | at 250 VAC             |
| - Air and creepage distance         | >4 mm                  |
| - Test voltage                      | 2500 V / 50 Hz / 1 min |
| - Double or reinforced insulation   |                        |
| - Air and creepage distance         | at 250 VAC             |
| - Test voltage                      | >5,5 mm                |
| - Double or reinforced insulation   | 4000 V / 50 Hz / 1 min |
| - Air and creepage distance         | at 250 VAC             |
| - Test voltage                      | >8 mm                  |
| - Double or reinforced insulation   | 4000 V / 50 Hz / 1 min |
| Test voltage contact open           | 1500 V / 50 Hz / 1 min |
| Creepage resistance                 | CTI 175                |
| Pollution degree                    | 2                      |
| Overvoltage category                | III                    |
| Insulation resistance at Up 500 VDC | >100 MΩ                |

### Additional Data

|                                         |                                    |
|-----------------------------------------|------------------------------------|
| Mechanical endurance                    | >10x10 <sup>6</sup> operations     |
| Switching frequency, mechanical         | 15 Hz                              |
| Response time (all NO closed)           | typically 10 ms                    |
| Drop-out time** (NC closed)             | typically 3 ms                     |
| Bounce time of NO contact               | typically 2 ms                     |
| Bounce time of NC contact               | typically 15 ms                    |
| Shock resistance 16 ms                  | NO > 17g<br>NC > 10g               |
| Vibration resistance (10-200 Hz)        | NO > 7g<br>NC > 3g                 |
| Resistance to short circuiting contacts | 1000 A SCPD 6 A gG / gL (pre-fuse) |
| Ambient temperature                     | -40°C to +85°C                     |
| Thermal Resistance                      | 55 K / W                           |
| Temperature limit for coil              | 120°C                              |
| Weight                                  | ca. 20 g                           |
| Mounting position                       | any                                |
| Type of protection                      | RT III                             |
| Solder bath temperature                 | 270°C / 5 s                        |

\*\*without spark suppression

### Tests, Regulations

Approvals

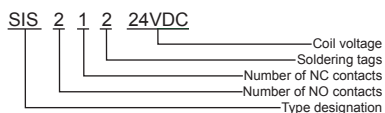


|                              |            |
|------------------------------|------------|
| UL File E188953              | Sec. 5     |
| Insulation class IEC 60664-1 | 250 VAC    |
| Fire protection requirements | UL 94 / V0 |

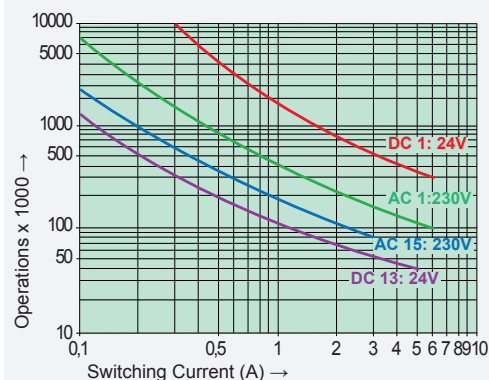
### Options, Accessories

none available

### Product Key



### Contact Lifetime for NO contacts

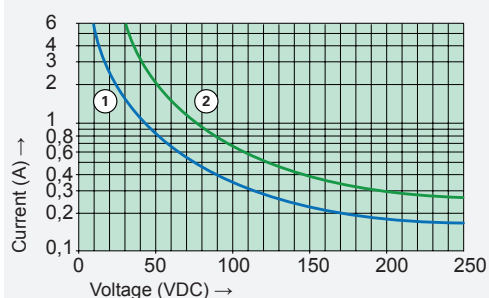


Maximal switching characteristics (DIN EN60947-5-1)

|         |                     |
|---------|---------------------|
| AC 1:   | 250 V / 6 A         |
| AC 15:  | 230 V / 3 A         |
| DC 1:   | 24 V / 6 A          |
| DC 13:  | 24 V / 5 A / 0,1 Hz |
| UL 508: | B300 / R300         |

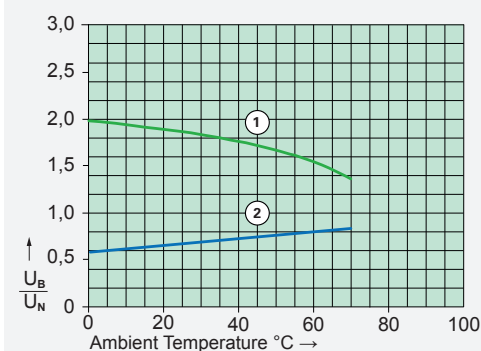
Maximal contact load at AC 1 with 230 V:  
2 contacts with 6 A each

### 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: ≤4 A
- 2) Min. excitation voltage (guaranteed values) without previous operation

No heat accumulation due to intrinsic heating of other components. Continuous duty 100%.