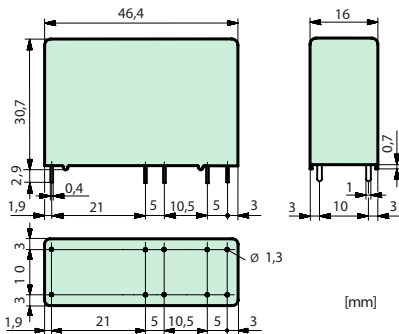


SIR 4 sensiv Series

Relay Key Data

- PCB Relay with forcibly guided Contacts
- Protective separation between Coil / Control Contacts (>10mm), as well as protective separation between the Output Contacts themselves (>8mm)
- EN50205 Type A
- Contact Mounting:
SIR312 3NO / 1NC
SIR222 2NO / 2NC
- Small external Dimensions
- Mean Coil Power 0.36 W
- Holding Power 0.12 W
- For Railway Application (EN50155) on request

Dimensions



Contact Data

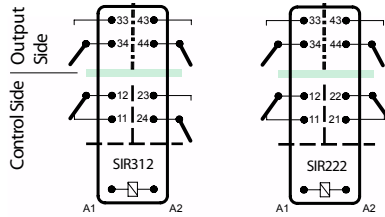
Contact Material	AgSnO ₂ +0.2µm Au
Type of Contact	Crest Contact
Rated Switching Capacity	250VAC 10AAC1 2'500VA
Electr. life AC1(360 cycles/h)	approx. 100'000
Inrush Current max.	25A for 20ms
Switching Voltage Range	5 to 250 VDC/VAC
Switching Current Range*	10mA to 10A
Switching Capacity Range*	60mW to 2'500W(VA)
Contact resistance (as delivered)	≤100mΩ/6V/100mA

*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	3.75	≥0.5	72.0	69.4 ± 10%
6	4.5	≥0.6	60.0	100 ± 10%
9	6.75	≥0.9	40.0	225 ± 10%
12	9.0	≥1.2	30.0	400 ± 10%
18	13.5	≥1.8	20.0	900 ± 10%
24	18.0	≥2.4	15.0	1'600 ± 10%
48	36.0	≥3.6	7.5	6'400 ± 13%
60	45.0	≥4.5	6.0	10'000 ± 15%

Circuit Diagram (Topview)



Insulation Data

-----	Basic Insulation	at 250VAC
-----	Air and Creepage Distance	>4mm
-----	Test Voltage	2'500V/50Hz/1min
-----	Double or Reinforced Insulation	
-----	at 250VAC	
-----	Air and Creepage Distance	>8mm
-----	Test Voltage	4'000V/50Hz/1min
-----	Double or Reinforced Insulation	
-----	at 250VAC	
-----	Air and Creepage Distance	>10mm
-----	Test Voltage	5'000V/50Hz/1min

Test Voltage contacts open	1'500V/50Hz/1min
Creepage Resistance	CTI 250
Pollution Degree	2
Overvoltage Category	III
Insulation Resistance at Up 500VDC	>100 MΩ

Weitere Daten

Mechanical life	>10x10 ⁶ operations
Switching frequency, mechanical	15Hz
Response Time (all NO closed)	typ. 18ms
Drop-Out Time** (all NC closed)	typ. 5ms
Bounce Time of NO Contact	typ. 6ms
Bounce Time of NC Contact	typ. 12ms
Shock Resistance 16ms	NO > 10g NC > 6g
Vibration Resistance (10-200Hz)	NO > 5g NC > 1.5g
Resistance to short circuiting output contacts	1'000A SCPD 10A gG/gL (pre-fuse)
Ambient Temperature	-40°C to +70°C
Thermal Resistance	55 K/W
Temperature Limit for Coil	120°C
Weight	approx. 30g
Mounting Position	any
Type of Protection	RT II
Solder bath Temperature	270°C/5s

**without spark suppression

Tests, Regulations Approvals

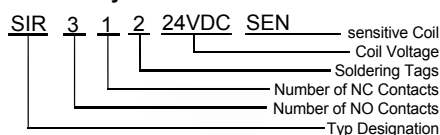


UL File E188953	Sec. 3
Insulation class (IEC 60664-1)	250VAC
Protection class II	VDE 0106
Fire Protection requirements	UL 94 / V0

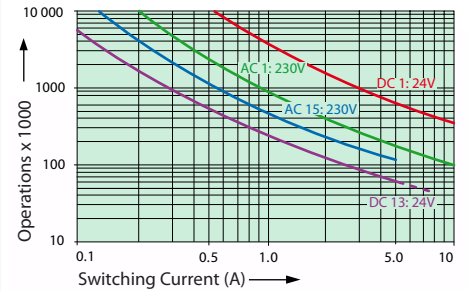
Options, Accessories

PCB Socket see Page 29

Product Key



Contact Lifetime



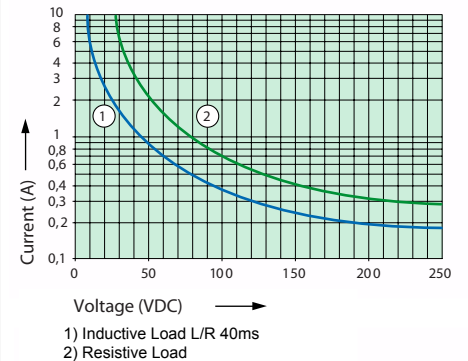
Max. Switching Characteristics (DIN EN60947-5-1, Tab.C2):

AC 15: 230V / 5A
DC 13: 24V / 7.5A / 0.1Hz
UL 508: C600 / R300

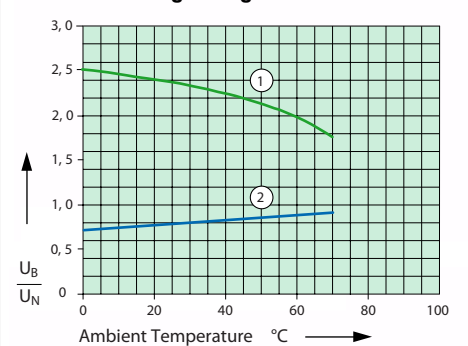
Maximal Contact Load at AC1 with 230V:

2 Contacts with 10A each
3 Contacts with 8.4A each

Load Limit Curve wit Direct Current



Excitation Voltage Range



- 1) Max. excitation Voltage with Contact Load: ≤6A (2 Contacts)
- 2) Min. excitation Voltage (guaranteed Values) without previous operation.

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