# Datenblatt Serie Minirelais /
# Data sheet series mini relays

## Artikelnummer / Article number: MINSXXXXXXX

### Allg. Eigenschaften / General Characteristics

| | |
|---|---|
| Nennspannung/ voltage | 12 VDC oder/ or 24 VDC |
| Auslegung/ contact arrangement | Schließer/Closer (Form A) oder/or Wechsler/ Changer (Form C) |
| | oder/ or Doppelschließer/ Double closer (Form 2A) |
| IP: | Staubgeschützt und gedichtet nach IP67/ Dust prodected and sealed IP67 |
| Abmessungen/Dimension: | 28,0mm x 28,0mm x 25,0mm |

| | |
|---|---|
| Versionen/Contact Arrangement: | Schließer/Closer (Form A) – Wechsler/Changer (Form C) - Doppelschließer/Double closer (Form 2A) |
| Spannung/ Voltage drop – initial | 40mV (10A) – max. 250mV (10A) |
| Max. Schaltstrom/Max. switching current | 40A oder 60A |
| Nennspannung/switching voltage | 12 VDC oder 24 VDC |
| Min. Kontakt Last/min. contact load | 1A - 6 VDC |
| Elektr. Lebensdauer/Electric life | 100.000 Schaltspiele/Operations |
| Mechan. Lebensdauer/mechanical life | 1.000.000 Schaltspiele/Operations (300/min) |
| Isolations Widerstand/Isolation resistence | 100M Ohm (500 VDC) |
| Dielektrikum Stärke/dielectric strengh | 500 VAC (1min. Ableitstrom weniger als 1mA)<br>500 VAC (1min. leakage current less than 1mA) |
| Kontaktmaterial / Contact material | AgSno2 |
| Ansprechzeit/Operation time | 10ms |
| Abfallzeit/Release time | 5ms |
| Arbeitstemperatur/storage temperature | Minus 40°C - Plus 85°C |
| Vibrationsbereich/vibration resistence | 10Hz-40Hz 1.5mm - 10Hz-40Hz 1.5mm DA |
| Schockbeständigkeit/shock resistence | Functional: 98(m/s²(10g) - Destructive: 196m/s²(20g) |
| Anschlüsse/Terminations | 4 x 6,3mm oder 5 x 6,3mm |
| Bauweise/Construction | Staub- und Wasserdicht (IP67)<br>Dust and Sealed prodected (IP67) |
| Gewicht/weight | Ca. 35g |
| REACH / ROHS Zertifikat / REACH / ROHS Certificate | Ja / yes |

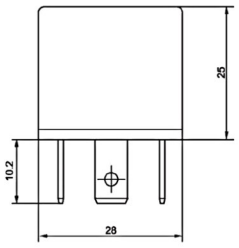
## Techn. Spulendaten/ Coil data 23°C

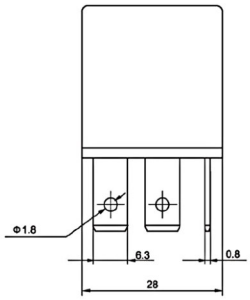
| | Nennspannung<br>Normal Voltage<br>(VDC) | Pick-up<br>Spannung/Voltage<br>(VDC) | Drop-down<br>Spannung/Voltage<br>(VDC) | Spulenwiderstand<br>Coil resistence<br>(Ohm +/-10%) | Parallel Widerstand<br>Resistance<br>(Ohm +/-5%) | Equivalentwiderstand<br>Resistance<br>(Ohm +/-10%) | Leistungsaufnahme<br>Power Consumtion<br>(W) | Max. Betriebsspannung<br>Max. Operating Voltage<br>(VDC)<br>20°C 85°C |
|---|---|---|---|---|---|---|---|---|
| Standard | 6 | 4.2 | 0.6 | 22 | ---- | ---- | 1.6 | 10.1 7.9 |
| | 6 | 4.2 | 0.6 | 22 | 180 | 20 | 1.8 | 10.1 7.9 |
| | 12 | 8.4 | 1.2 | 90 | ---- | ---- | 1.6 | 20.2 15.7 |
| | 12 | 8.4 | 1.2 | 80 | 680 | 79.5 | 1.8 | 20.2 15.7 |
| | 24 | 16. | 2.4 | 360 | ---- | ---- | 1.6 | 40-5 31.5 |
| | 24 | 16.8 | 2.4 | 360 | 2700 | 317.6 | 1.8 | 40-5 31.5 |
| | 24 | 16.8 | 2.4 | 250 | ---- | .... | 2.3 | 40-5 31.5 |

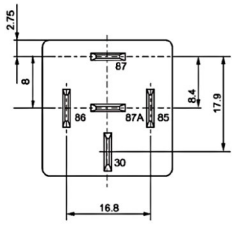
## Bestellschlüssel / Order code

| | MIN | S | 1 | 12/24 | A/C/2A | 1/3 | D2/R | 60 (bei 12V)<br>30 (bei 24V) |
|---|---|---|---|---|---|---|---|---|
| Type | X | | | | | | | |
| Verguss<br>Sealed | | X | | | | | | |
| Kontakt<br>Contact | | | X | | | | | |
| Nennspannung<br>Coil voltage | | | | 12 oder 24 | | | | |
| Form | | | | | A=Schließer/Closer<br>C=Wechsler/Changer<br>2A=Doppelschließer / 2A=Double Closer | | | |
| Befestigung<br>Bracket | | | | | | 1=Ohne / 1=Without<br>3=Mit Metallasche /3=With metal ashes | | |
| Diode / Widerstand<br>Diode/ Resistor | | | | | | | D2=Diode<br>R=Widerstand/<br>Resistor | |
| Version mit / Version with<br>Verstärkter Spule / Amplified coil | | | | | | | | 30 oder 60 je<br>nach Nennspannung / According to rated voltage |

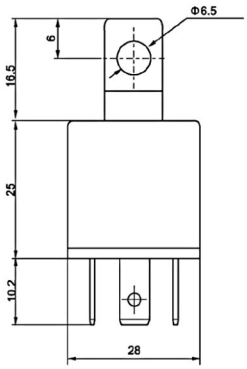
## Abmessungen / Dimensions

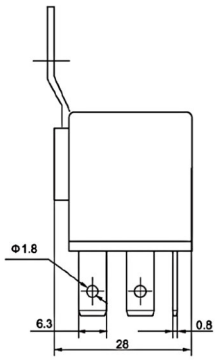


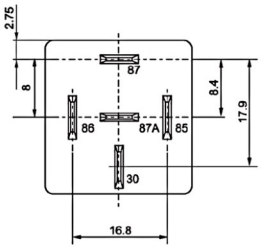




(Bottom view)

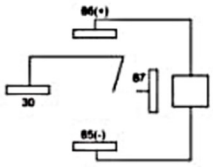


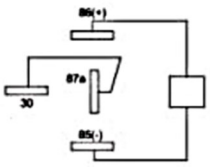




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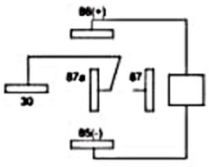
## Schaltbilder / Circuit diagram



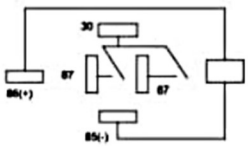

1A




1B




1C




2A

## Abbildung beispielhaft / exemplary illustration

