

HOCHLEISTUNGSRELAIS HIGH POWER RELAYS

Entspricht den Anforderungen nach MIL-R-6101
Meets the requirements of MIL-R-6101



50 A

Baureihe
Series
26



Hochwertiges und dichtes einspulisches Leistungsrelais für hohe Anforderungen.

Ursprünglich als Adaptionstyp für militärische Rad- und Kettenfahrzeuge konzipiert, ist das Relais für alle Anwendungen mit extremen Beanspruchungen geeignet.

Neben dem Militärbereich sind solche Anwendungen auch im Luftfahrtbereich sowie im Nutzfahrzeug- und Baumaschinenbereich zu finden.

Das Relais weist hohe Kontaktdrücke auf und daraus resultierend Kontaktsicherheit bei Schock und Vibration sowie geringer Kontaktspannungsabfall.

Kompakte Bauform und geringe Stromaufnahme sind weitere wichtige Merkmale.

Die Dichtheit nach IEC 60529 und DIN 40050-9 entspricht IP67 und IP6K9K (Dampfstrahldichtheit).

Relais dieser Baureihe sind in den Strombereichen 50 / 100 / 200 / 300 / 500 / 1000 A erhältlich.

Environmentally sealed one-coil system high quality Power Relay for high requirement usage.

Initially developed as substitution type for wheeled and tracked military vehicles, this relay is suitable for all extreme requirements and applications.

In addition to the military usage such applications are located in the aviation area as well as in the truck and construction sector.

The relay generates high contact pressure with the result of high performance on shock and vibration strength and low contact voltage drop.

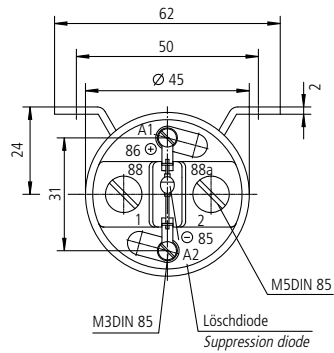
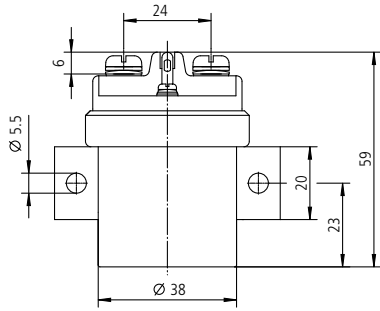
The compact design and minimized coil power are also important features.

Relay sealing complies with IEC 60529 and DIN 40050-9 and meets IP67 & IP6K9K (steam pressure cleaning).

Relays from this series are available in the following continuous current ranges: 50 / 100 / 200 / 300 / 500 / 1000 Amps.

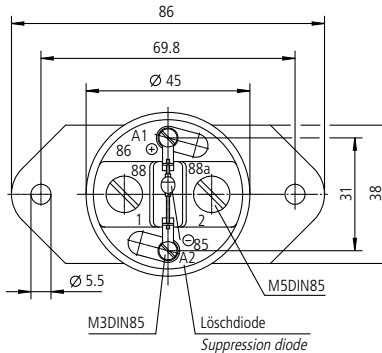
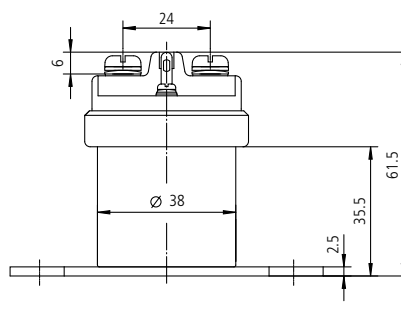
Seitenflansch
Side mounting

Typen | Types 26.70... & 26.73...



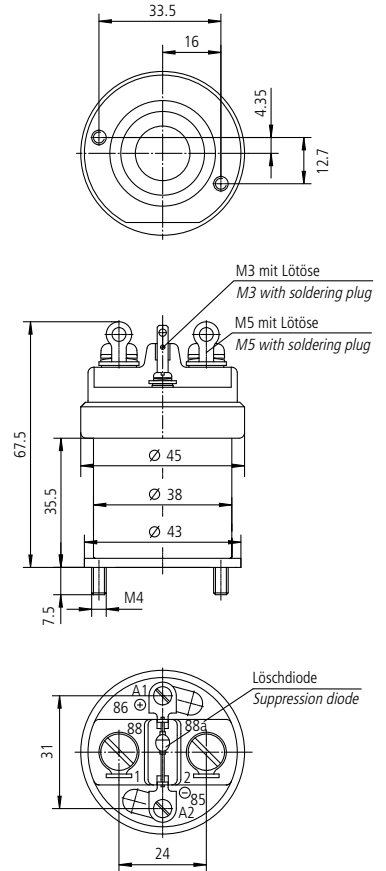
Langer Fussflansch
Long form bottom mounting

Typen | Types 26.70... & 26.73...



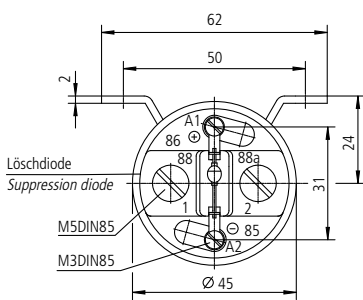
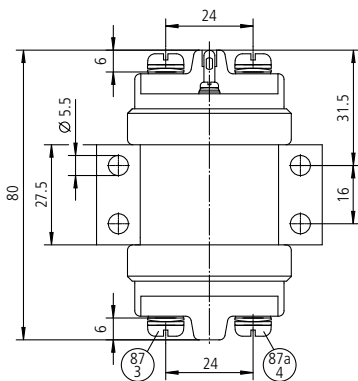
Stehbolzenfussflansch
Stud mounting

Typen | Types 26.70.06/07/08/09



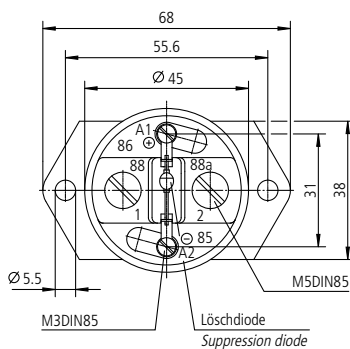
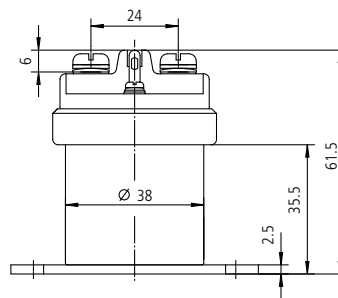
Wechsler
Change-over NO/NC

Typen | Types 26.72...



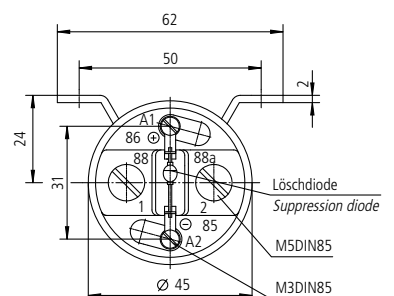
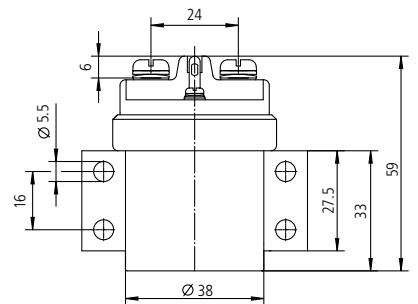
Kurzer Fussflansch
Short form bottom mounting

Typen | Types 26.71...

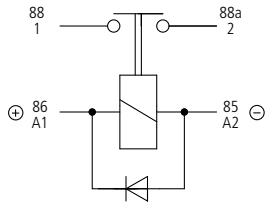


Vierloch Seitenflansch
4-hole side mounting

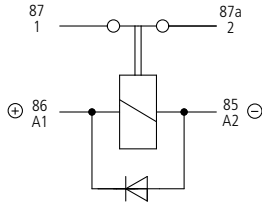
Typen | Types 26.71...



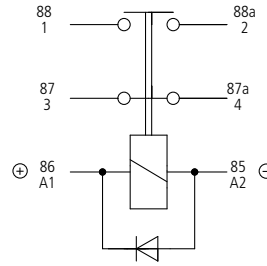
Schliesser
NO-Contact



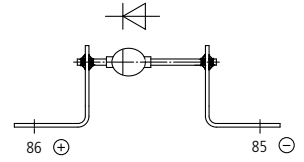
Öffner
NC-Contact



Wechsler
NO/NC-Contact



Löschdiode
Suppressiondiode
26.70.50



Löschdiode | Suppression diode

Löschdiode | Suppression diode

Löschdiode | Suppression diode

Lieferbare Typen

Available types

| | Typ Bestell- schlüssel Type Ordering Key | Kontakt Contact | | Seitenflansch Side mounting | Vierloch Seitenflansch 4-hole side mounting | 1) 90° Version | Langer Fussflansch Long form bottom mount. | Kurzer Fussflansch Short form bottom mount. | Stehbolzen Fussflansch Stud mounting | Löschdiode Suppression diode | Gewicht Weight | |
|-----------------|---|--------------------|----|-----------------------------------|--|----------------------|---|--|---|------------------------------------|-------------------|-------|
| | | NO | NC | | | | | | | | kg | pound |
| 12V | 26.70.24 | x | | x | | | | | | x | 0.33 | 0.73 |
| | 26.70.25 | x | | x | | | | | | | 0.33 | 0.73 |
| | 26.71.21 | x | | | | | | x | | x | 0.34 | 0.75 |
| | 26.71.22 | x | | | | | | x | | | 0.34 | 0.75 |
| | 26.71.24 | x | | | x | | | | | x | 0.34 | 0.75 |
| | 26.71.25 | x | | | x | | | | | | 0.34 | 0.75 |
| | 26.72.21 | x | x | | x | | | | | x | 0.40 | 0.88 |
| | 26.72.22 | x | x | | x | | | | | | 0.40 | 0.88 |
| | 26.72.23 | x | x | | x | x | | | | x | 0.40 | 0.88 |
| 26.72.24 | x | x | | x | x | | | | | 0.40 | 0.88 | |
| 24V - 28V | 26.70.01 | x | | | | | x | | | x | 0.35 | 0.77 |
| | 26.70.02 | x | | | | | x | | | | 0.35 | 0.77 |
| | 26.70.04 | x | | x | | | | | | x | 0.33 | 0.73 |
| | 26.70.05 | x | | x | | | | | | | 0.33 | 0.73 |
| | 26.70.06 | x | | | | | | | x | x | 0.33 | 0.73 |
| | 26.70.07 | x | | | | | | | x | | 0.33 | 0.73 |
| | 26.70.08 | x | | | | | | | x | x | 0.33 | 0.73 |
| | 26.70.09 | x | | | | | | | x | | 0.33 | 0.73 |
| | 26.71.01 | x | | | | | | x | | x | 0.34 | 0.75 |
| | 26.71.02 | x | | | | | | x | | | 0.34 | 0.75 |
| | 26.71.04 | x | | | x | | | | | x | 0.34 | 0.75 |
| | 26.71.05 | x | | | x | | | | | | 0.34 | 0.75 |
| | 26.72.01 | x | x | | x | | | | | x | 0.40 | 0.88 |
| | 26.72.02 | x | x | | x | | | | | | 0.40 | 0.88 |
| | 26.72.03 | x | x | | x | x | | | | x | 0.40 | 0.88 |
| | 26.72.04 | x | x | | x | x | | | | | 0.40 | 0.88 |
| | 26.73.04 | | x | x | | | | | | x | 0.33 | 0.73 |
| | 26.73.05 | | x | x | | | | | | | 0.33 | 0.73 |

Weitere Typen und kundenspezifische Sondertypen auf Anfrage
1) Hauptanschlüsse in 90° Position zum Flansch

Other types and customer specified special types upon request
1) Main terminals in 90° position to the bracket

Referenzen

References

| Typ Type | VG-Nr. VG-No. | Typ Type | VG-Nr. VG-No. | Typ Type | VG-Nr. VG-No. | Vers.-Nr. NSN |
|------------|-----------------------|------------|-----------------------|------------|-----------------------|------------------|
| 26.70.02 | VG 96928 T03 F1 BOAOA | 26.71.04 | VG 96928 T03 F1 DOBOA | 26.70.01 | VG 96928 T03 F1 BOBOA | |
| 26.70.05 | VG 96928 T03 F1 AOAOA | 26.71.05 | VG 96928 T03 F1 DOAOA | 26.70.04 | VG 96928 T03 F1 AOBOA | 5945-12-334-2087 |
| 26.70.06 | VG 96928 T03 F1 COBOA | 26.72.03 | VG 96928 T03 F3 FOBOA | 26.70.07 | VG 96928 T03 F1 COAOA | 6110-12-330-0529 |
| 26.70.08 | VG 96928 T03 F1 COBOB | 26.72.04 | VG 96928 T03 F3 FOAOA | 26.70.09 | VG 96928 T03 F1 COAOB | 6110-12-330-0528 |
| 26.71.01 | VG 96928 T03 F1 EOBOA | 26.73.04 | VG 96928 T03 F2 AOBOA | 26.72.01 | VG 96928 T03 F3 DOBOA | 5945-12-339-7841 |
| 26.71.02 | VG 96928 T03 F1 EOAOA | 26.73.05 | VG 96928 T03 F2 AOAOA | 26.72.02 | VG 96928 T03 F3 DOAOA | |

Technische Daten | Technical Data

Allgemeine Daten | Environmentally Characteristics

| | | | |
|---|---|--|-----------------------------|
| Umgebungstemperatur | -55°C bis +85°C | -67°F to +185°F | <i>Temperature range</i> |
| Max. Arbeitshöhe | 15000 m | 50 000 ft | <i>Max. Altitude rating</i> |
| Schutzart | IEC 60529 & DIN 40050-9, IP67 (0,2 bar; 1 min) & IP6K9K | | <i>Protection</i> |
| Schock | 10 g, 6 msec 500 g, 0,5 msec | | <i>Shock</i> |
| Vibration | Typen Types 26.70... & 26.73... 1,5 g (10-400Hz) / 1 g (400-2000Hz) | Typen Types 26.71... & 26.72... 10 g (10-500Hz) | <i>Vibration</i> |
| Beschleunigung | 15 g | 15 G | <i>Acceleration</i> |
| Beständigkeit gegen Öle, Kraftstoffe, Hydraulikflüssigkeiten, Alkohol, Salznebel, Feuchtigkeit, Ozon, Sand und Staub, Lösungsmittel, Feuerlöschmittel | <i>Resistance against oils, fuels, hydraulic fluids, alcohol, salt spray, humidity, ozone, sand & dust, solvents, fire-extinguishing agents</i> | | |

Elektrische Daten | Electrical Characteristics

| | | |
|---|--|--|
| Min. Isolationswiderstand | 100 MΩ | <i>Min. Insulation Resistance</i> |
| Isolationswiderstand nach Belastung | 50 MΩ | <i>After live or environmental</i> |
| Hochspannungsfestigkeit | 1050 VAC / 1 min | <i>Dielectric withstanding voltage</i> |
| Max. Kontaktspannungsabfall | 150 mV | <i>Max. Contact drop, initial</i> |
| Kontaktspannungsabfall nach Lebensdauer | 175 mV | <i>Contact drop after life test</i> |
| Dauerstrom | 50 A | <i>Continuous current</i> |
| Überlast | 200 A, 1 sec / 100 A, 20 sec | <i>Overload</i> |
| Reisslast | 500 A | <i>Rupture current</i> |
| Überlast Typen 26.70.08/09 | 400 A, 0,5 sec / 200 A, 1sec / 100 A, 20 sec | <i>Types 26.70.08/09 Overload</i> |

Lebensdauer und Kontaktbelastung (12 & 24 / 28VDC) | Rated contact load (12 & 24 / 28VDC)

| | | |
|-------------------------------------|---|---|
| Ohmsche Last | 100 000 Schaltspiele cycles 50 A | <i>Resistive load</i> |
| Induktive Last | 20 000 Schaltspiele cycles 12 A | <i>Inductive load</i> |
| Motor Last | 100 000 Schaltspiele cycles 50 A | <i>Motor load</i> |
| Mech. Lebensdauer (nach MIL-R-6106) | 200 000 Schaltspiele cycles 12 A | <i>(iaw MIL-R-6106) Mechanical life</i> |
| Lebensdauer | 1 000 000 Schaltspiele cycles 12 A | <i>Endurance</i> |
| Überlast Typen 26.70.08/09 | 50 000 Schaltspiele cycles 400 A on, 50 A off | <i>Types 26.70.08/09 Overload</i> |

Spulendaten | Coil data

| | Typen Types 26.70 / 71 / 73 ... | | Typen Types 26.72 ... | | |
|---------------------|-----------------------------------|---------------|-------------------------|-------------|-----------------------------|
| | 12 VDC | 24 / 28 VDC | 12 VDC | 24 / 28 VDC | |
| Betriebsspannung | 10-16 VDC | 18-32 VDC | 10-16 VDC | 18-32 VDC | <i>Voltage range</i> |
| Nennspannung | 12 VDC | 24 / 28 VDC | 12 VDC | 24 / 28 VDC | <i>Nominal voltage</i> |
| Max. Anzugsspannung | 10 VDC | 18 VDC | 10 VDC | 18 VDC | <i>Pick up voltage max.</i> |
| Trennspannung | ≤ 3 VDC | ≤ 6 VDC | ≤ 3 VDC | ≤ 6 VDC | <i>Drop out voltage</i> |
| Spulenwiderstand | 26 Ω ±10% | 110 Ω ±10% | 21 Ω ±10% | 88 Ω ±10% | <i>Coil resistance</i> |
| Spulenstrom, max. | 0,6 A | 0,25 / 0,30 A | 0,7 A | 0,3 / 0,4 A | <i>Coil current max.</i> |

Schaltzeiten | Operating times

| | Schliesser-Relais NO-Contact relay | | Wechsler Changeover NO-Contact | | |
|---------------------------|--------------------------------------|----------|----------------------------------|---------|------------------------------------|
| | max. | msec | max. | msec | |
| Anzugszeit | max. | 30 msec | max. | 30 msec | <i>Operate</i> |
| Prellzeit | max. | 8 msec | max. | 8 msec | <i>Bounce</i> |
| Abfallzeit mit Löschiode | max. | 120 msec | max. | 80 msec | <i>Release with suppression</i> |
| Abfallzeit ohne Löschiode | max. | 15 msec | max. | 15 msec | <i>Release without suppression</i> |

Öffner-Relais | NC-Contact relay

Wechsler | Changeover NC-Contact

| | Öffner-Relais NC-Contact relay | | Wechsler Changeover NC-Contact | | |
|-----------------------------|----------------------------------|----------|----------------------------------|---------|--------------------------------------|
| | max. | msec | max. | msec | |
| Öffnungszeit | max. | 25 msec | max. | 25 msec | <i>Break time</i> |
| Schliesszeit mit Löschiode | max. | 100 msec | max. | 80 msec | <i>Make time with suppression</i> |
| Schliesszeit ohne Löschiode | max. | 25 msec | max. | 20 msec | <i>Make time without suppression</i> |
| Prellzeit | max. | 8 msec | max. | 8 msec | <i>Bounce</i> |

| | | |
|-----------------------------|---|---|
| Anschlussquerschnitt | min 6 mm ² / AWG 9 | Wire section |
| Einbaulage | beliebig | Mounting position |
| | Für hohe Schaltzyklen empfehlen wir speziell optimierte Relais Typen. | For high switching cycles we recommend specially optimized relay types. |



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