

KISSLING SINGLE POLE BI-STABLE RELAYS

Series 30 / 300A - from TE Connectivity (TE)

The series 30 bi-stable relay meets even the most difficult operating requirements and is suited for various applications in severe conditions on commercial vehicles, buses, construction & agricultural vehicles, ground support equipment and fork lifts.

These relays are available with a wide variety of configuration options including different contact configurations and coil voltages to have the right product for your needs.

Other important advantages are low heat generation in the contact area based on low contact voltage drop, a compact design, silver alloy contact material and the use of mechanical and high thermal stability insulating compounds. Both the terminals and the housing are protected against corrosion. Furthermore, our relays are characterized by high shock and vibration characteristics and a low voltage drop.

By equipping the relays with blow-out magnets, contact voltages up to 250VDC are possible. The use of blow-out magnets is recommended for contact voltages over 40VDC and blow-out magnets are also recommended for inductive load applications to maintain long contact life at all voltages.

Features

- Sealed housing conforms to IP6K9K
- Robust design
- Variety of configuration options
- 6G shock and 4G vibration resistant
- Main contact current rated for continuous current and 100% duty cycle

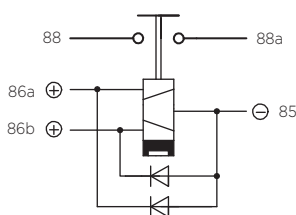
Applications

- Commercial vehicles
- Bus
- Lift truck
- Ground support equipment
- Construction and agricultural vehicles

Circuits

NO-Contact

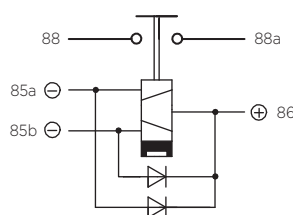
Standard type
common -



Suppression diode
30-200-50

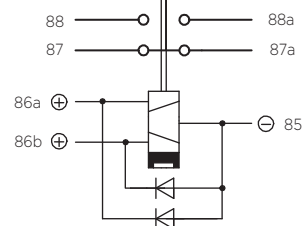
NO-Contact

Special type reversed polarity
common +



Suppression diode
30-200-59

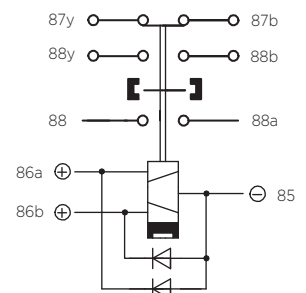
NO/NC-Contact



Suppression diode
30-200-50

NO-Contact

Auxiliary contact
/ Magnetic blowout



Suppression diode
30-200-50

SERIES 30

300A

Specification

Technical Data

| | |
|-----------------------|--|
| Temperature range | -40°C to +85°C |
| Protection | IEC 60529 / DIN 40050-9 / IP67 (0,2bar; 1min) and IP6K9K |
| Shock | 6g / 11msec |
| Vibration | 4g / 50 - 2000Hz |
| Thread sizes / Torque | M4 = 2.0 - 2.2Nm M10 = 15 - 20Nm |

Electrical Characteristics

| | |
|---------------------------------|-----------------------------|
| Min. Insulation resistance | 100MΩ |
| After live or environment | 50MΩ |
| Dielectric withstanding voltage | 1050VAC / 1min at 50Hz |
| Max. Contact drop, initial | 150mV |
| Contact drop after life test | 175mV |
| Continuous current | 300A |
| Overload | 2400A - 1sec / 600A - 20sec |

Rated contact load 12 and 24 / 28VDC

| | |
|-----------------|--------------------|
| Resistive load | 50.000 cycles 300A |
| Mechanical life | 100.000 cycles |

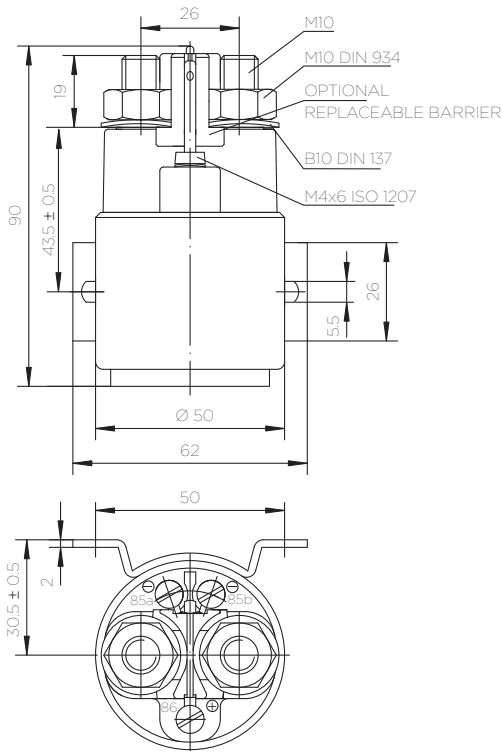
| Coil Data | 12VDC | 24 / 28VDC | 24VDC NO/NC | 36VDC |
|--------------------------------|------------|------------|-------------|--------------|
| Voltage range | 9-16VDC | 18-32VDC | 18-32VDC | 27-48VDC |
| Nominal voltage | 12VDC | 28VDC | 28VDC | 36VDC |
| Pick up voltage | ≥ 9VDC | ≥ 13VDC | ≥ 13VDC | ≥ 20VDC |
| Drop out voltage min. | ≥ 7VDC | ≥ 10VDC | ≥ 10VDC | ≥ 15VDC |
| Pull in coil resistance | 1.8Ω ± 20% | 7.8Ω ± 20% | 4.1Ω ± 20% | 18Ω ± 20% |
| Pull in current approx. | 6.6A | 3.0A | 6.8A | approx. 1.9A |
| Drop out coil resistance | 2.0Ω ± 20% | 8.4Ω ± 20% | 6.4Ω ± 20% | 21.8Ω ± 20% |
| Drop out current approx. | 6.0A | 2.8A | 4.4A | approx. 1.6A |
| Pick up impulse time approx.* | 50ms | 50ms | 50ms | 50ms |
| Drop out impulse time approx.* | 50ms | 50ms | 50ms | 50ms |

* (continuous impulse max.1 min)

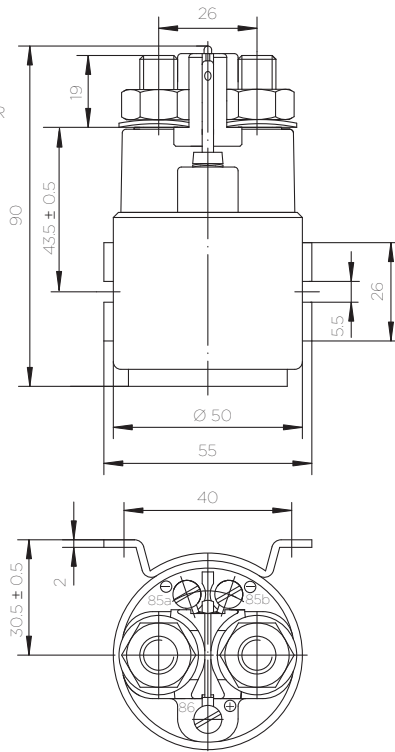
| Operating times | NO-Contact | Changeover NO-Contact | Changeover NC-Contact |
|-------------------|--|-----------------------|-----------------------|
| Operate | max. 15msec | max. 25msec | max. 30msec |
| Bounce | max. 5msec | max. 5msec | max. 8msec |
| Release | max. 10msec | max. 20msec | max. 35msec |
| Wire Section | min. 95mm ² / 0.147 sq.inch / AWG 4-0 | | |
| Mounting position | optional | | |

Technical drawings

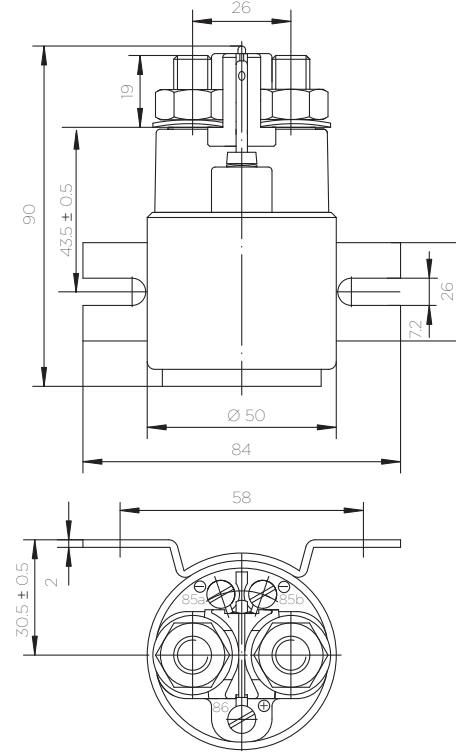
Standard side mounting



Short form side mounting

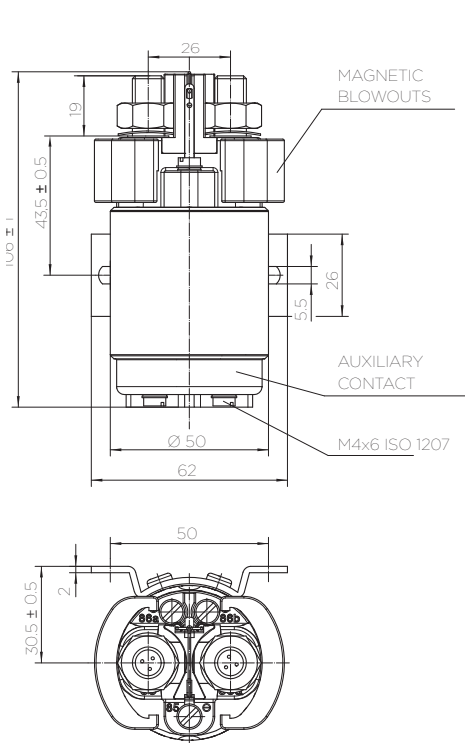


Long form side mounting

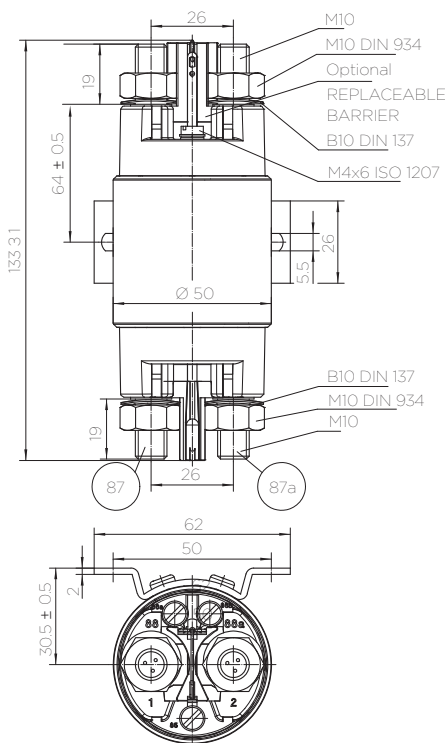


Options:

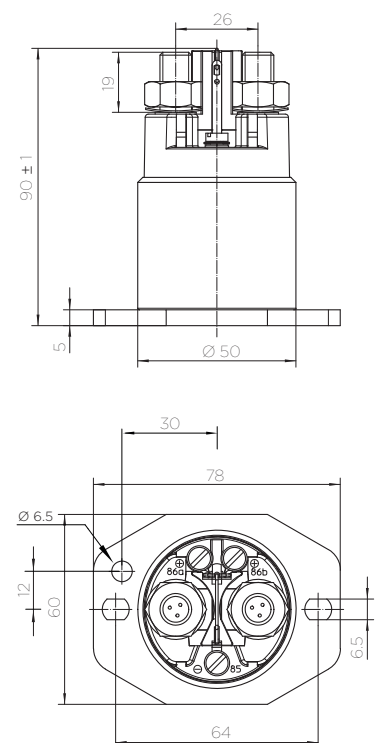
Auxiliary contacts, magnetic blowouts



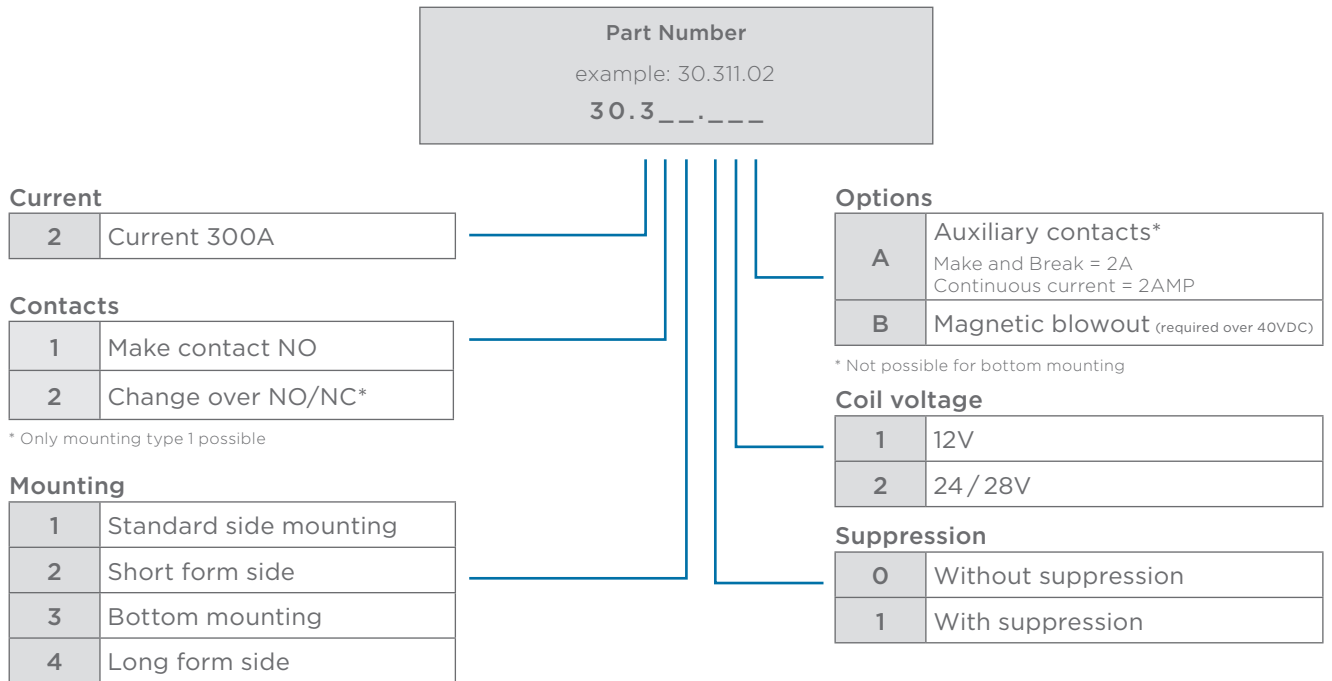
Change-over NO/NC



Bottom mounting



Ordering Information



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