

## KISSLING SINGLE POLE BI-STABLE RELAYS

### Series 30 / 120A - 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

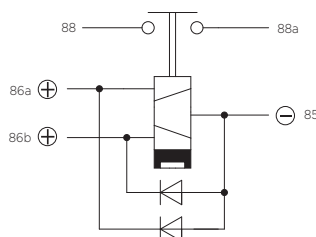
- Sealed housing conforms to IP6K9K
- Robust design
- Variety of configuration options
- 6G shock and 4G vibration resistant
- Main contact current rated for continuous current and 100% duty cycle

#### Applications

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

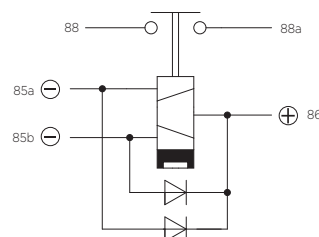
#### Circuits

**NO-Contact**  
Standard type  
common -



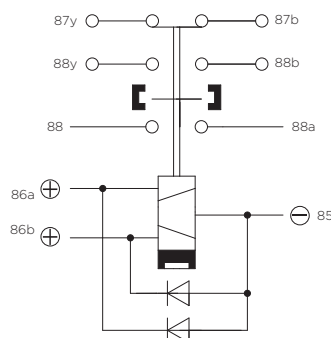
Suppression diode  
30-100-50

**NO-Contact**  
Special type reversed polarity  
common +



Suppression diode  
30-100-59

**NO-Contact**  
Auxiliary contact / Magnetic blowout



Suppression diode  
30-100-50

## 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	M3,5 = 1.1 - 1.2Nm   M4 = 2.0 - 2.2Nm   M8 = 12 - 13Nm

### 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	120A
Overload	1000A - 1sec / 250A - 20sec

### Rated contact load 12 and 24 / 28VDC

Resistive load	50.000 cycles 200A
Mechanical life	100.000 cycles

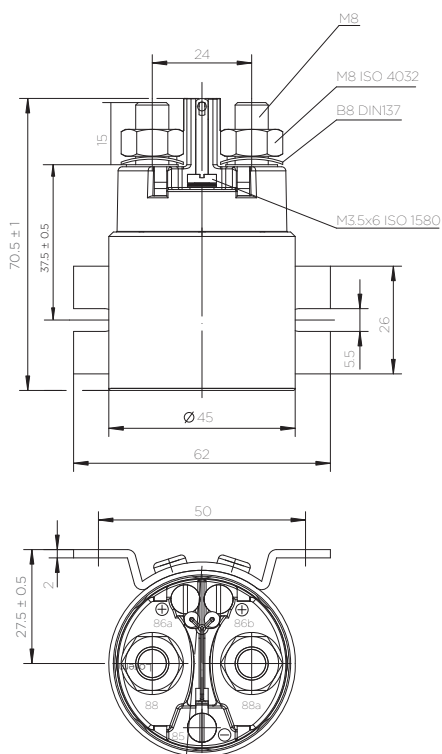
Coil Data	12VDC	24 / 28VDC
Voltage range	9-16VDC	18-32VDC
Nominal voltage	12VDC	28VDC
Pick up voltage	≥ 9VDC	≥ 13VDC
Drop out voltage min.	≥ 7VDC	≥ 10VDC
Pull in coil resistance	2.1Ω ± 20%	9.0Ω ± 20%
Pull in current approx.	5.7A	2.7A
Drop out coil resistance	2.4Ω ± 20%	10Ω ± 20%
Drop out current approx.	4.9A	2.4A
Pick up impulse time approx. (continuous impulse max.1 min)	50ms	50ms
Drop out impulse time approx. (continuous impulse max.1 min)	50ms	50ms

### Operating times NO-Contact relay

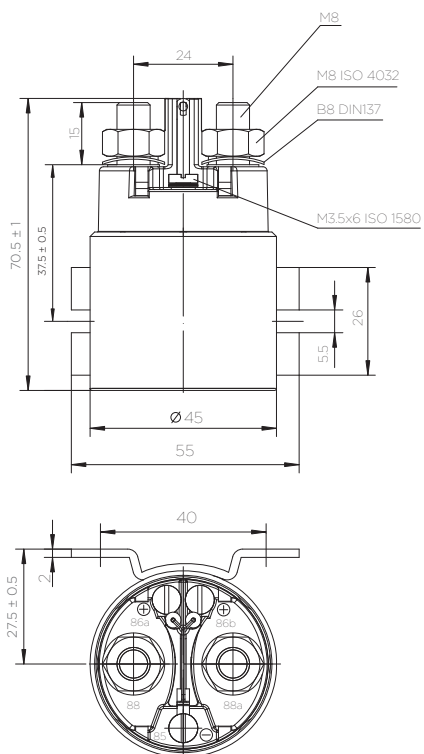
Operate	15msec
Bounce	5msec
Release	10msec
Wire Section	min. 25mm <sup>2</sup> / 0.039 sq.inch / AWG 3
Mounting position	optional

## Technical drawings

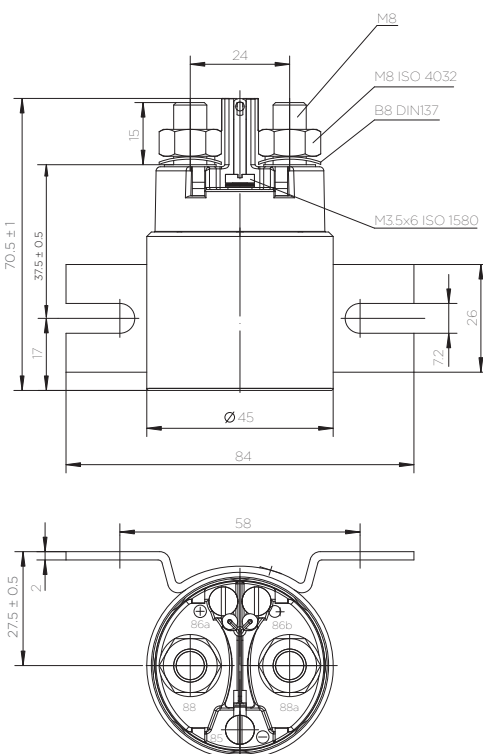
Standard side mounting



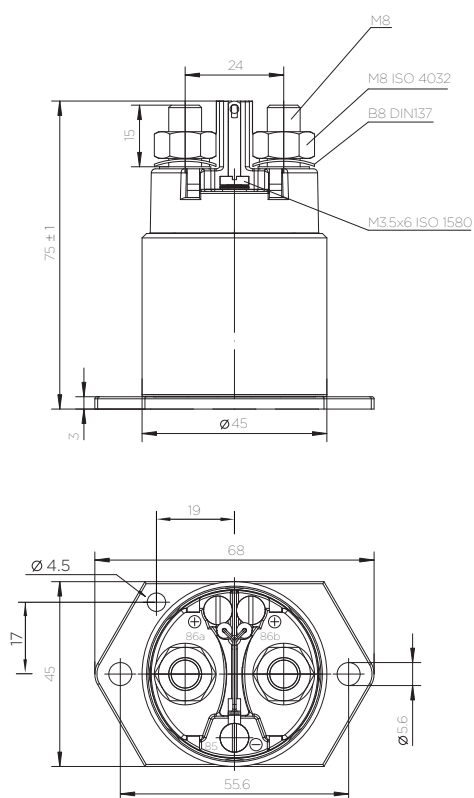
Short form side mounting



Long form side mounting

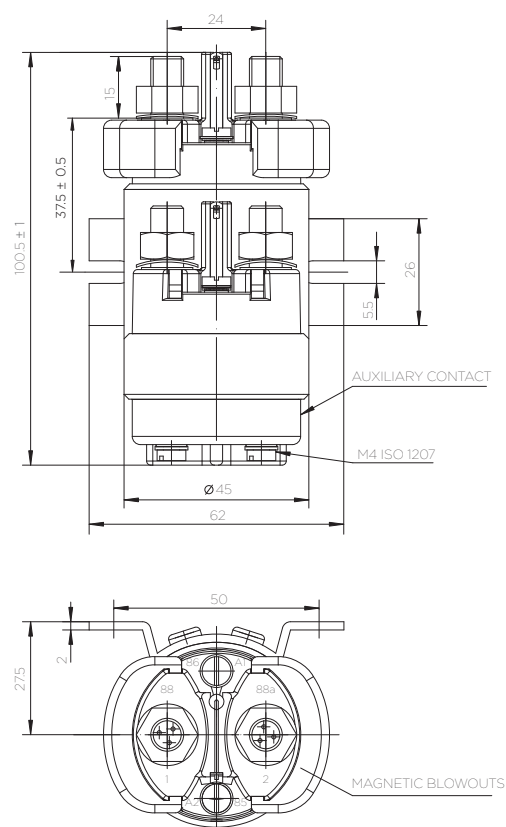


Bottom mounting

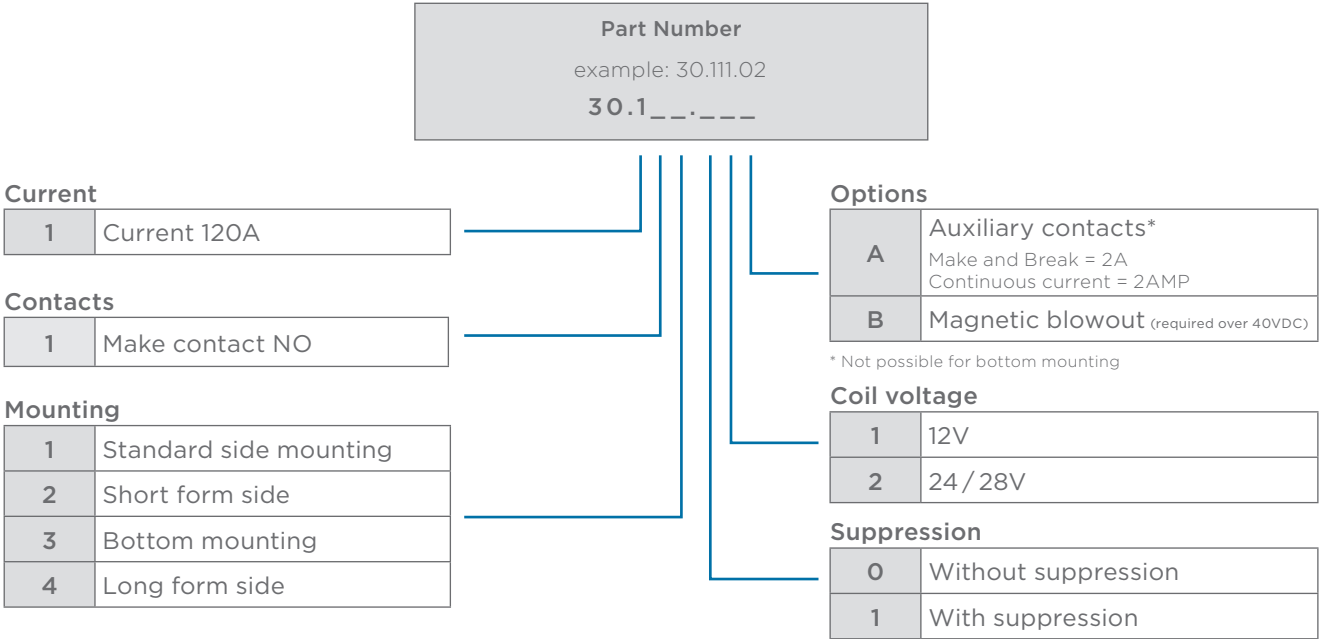


Options:

Auxiliary contacts, magnetic blowouts



Ordering Information



te.com

TE Connectivity, TE, TE connectivity (logo), KISSLING (logo) and KISSLING (word) are trademarks owned or licensed by the TE Connectivity family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[30-111-11](#) [30-111-12](#) [30-113-11](#) [30-113-12](#)