

## KISSLING SINGLE POLE POWER RELAYS

### Series 29 / 500A - from TE Connectivity (TE)

The economical 29 series single coil relays with 500 amps (A) are developed using our competence and expertise gathered over decades of manufacturing to meet even the most demanding operating requirements.

This single coil system relay features high shock and vibration resistance predominantly from its careful design and an optimized magnetic circuit. The sealing technology used in these relays meets both the IP67 and IP6K9K (Steam pressure cleaning) protection standard. This relay series is well suited for various applications in severe conditions.

Other important advantages are low heat generation in the contact area based on low contact voltage drop, a compact design, low holding current, 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.

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

Also available are various bracket styles to meet your installation conditions and suppression devices to eliminate electromagnetic interference at the coil and optional auxiliary contacts.

#### Features

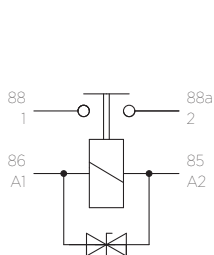
- Sealed housing conforms to IP6K9K
- Robust design
- Minimized coil current
- Variety of configuration options
- 6G shock and 4G vibration resistant
- Main contact current rated for continuous current and 100% duty cycle
- Efficient coil and magnetic circuit design with switching properties and holding current requirements

#### Applications

- Truck
- Bus
- Ground support vehicles
- Construction and agricultural vehicles
- Fork lift applications

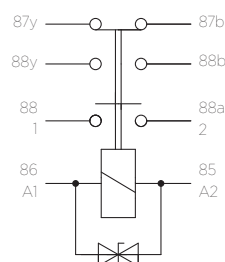
#### Circuits

NO-Contact



Suppression diode

NO-Contact/Auxiliary-Contact



Suppression diode

## SERIES 29

500A

### 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   M12 = 18 - 22Nm

#### 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	500A
Overload	4000A - 1sec / 1800A - 20sec

Rated contact load	12 / 24 / 28VDC	80VDC
Resistive load	500A	300A
Cycles	100.000	100.000
Mechanical life	2.000.000 cycles	2.000.000 cycles

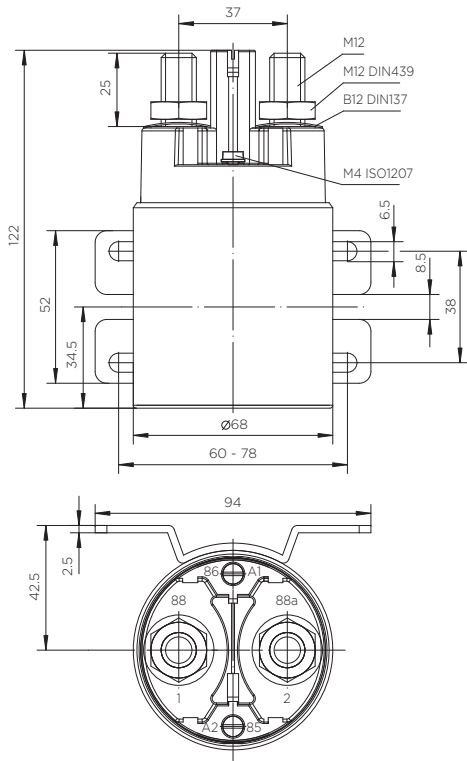
Coil Data	12VDC	24 / 28VDC	36VDC	48VDC	60VDC	80VDC
Voltage range	9-16VDC	18-32VDC	27-48VDC	36-54VDC	45-68VDC	60-90VDC
Nominal voltage	12VDC	28VDC	36VDC	48VDC	60VDC	80VDC
Pick up voltage max.	9VDC	18VDC	27VDC	36VDC	45VDC	60VDC
Drop out voltage min.	≤ 2VDC	≤ 4VDC	≤ 5 VDC	≤ 8VDC	≤ 10VDC	≤ 10VDC
Coil resistance	9Ω ± 10%	36Ω ± 10%	97Ω ±10%	166Ω ± 10%	195Ω ± 10%	350Ω ± 10%
Coil current approx.	1.33A	0.78A	0.40A	0.30A	0.30A	0.23A
Coil power approx.	22W	22W	15W	16W	18W	19W

#### Operating times NO-Contact relay

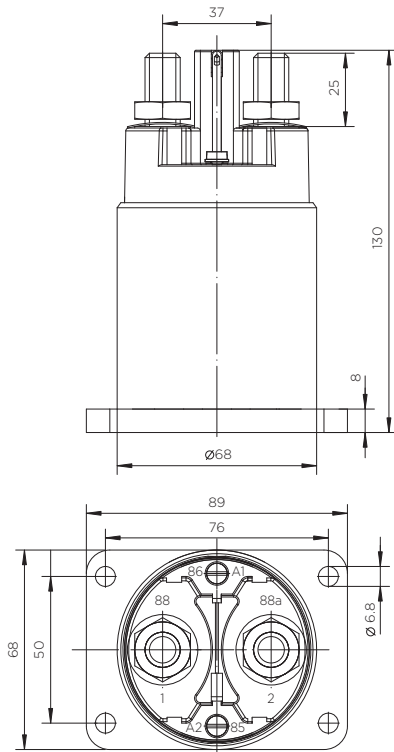
Operate	max. 60msec
Bounce	max. 5msec
Release	max. 30msec
Wire Section	min. 240mm <sup>2</sup> / 0.372 sq.inch / MCM 500
Mounting position	optional

**Technical drawings**

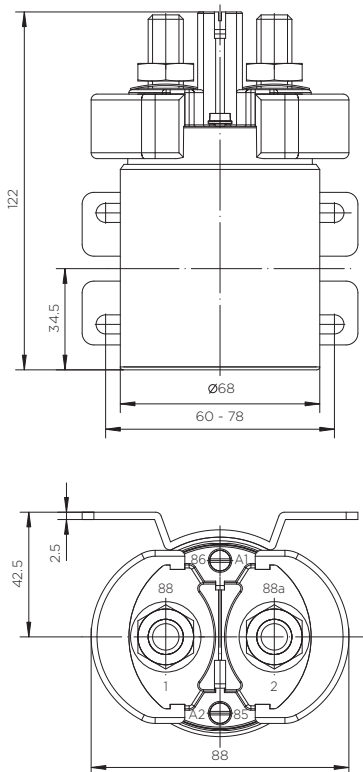
**Side mounting**



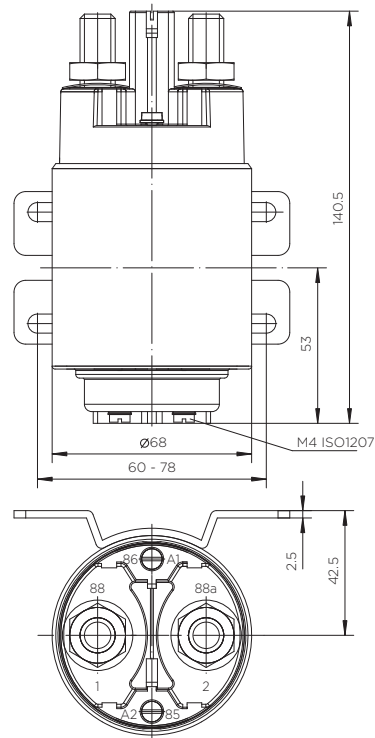
**Bottom mounting**



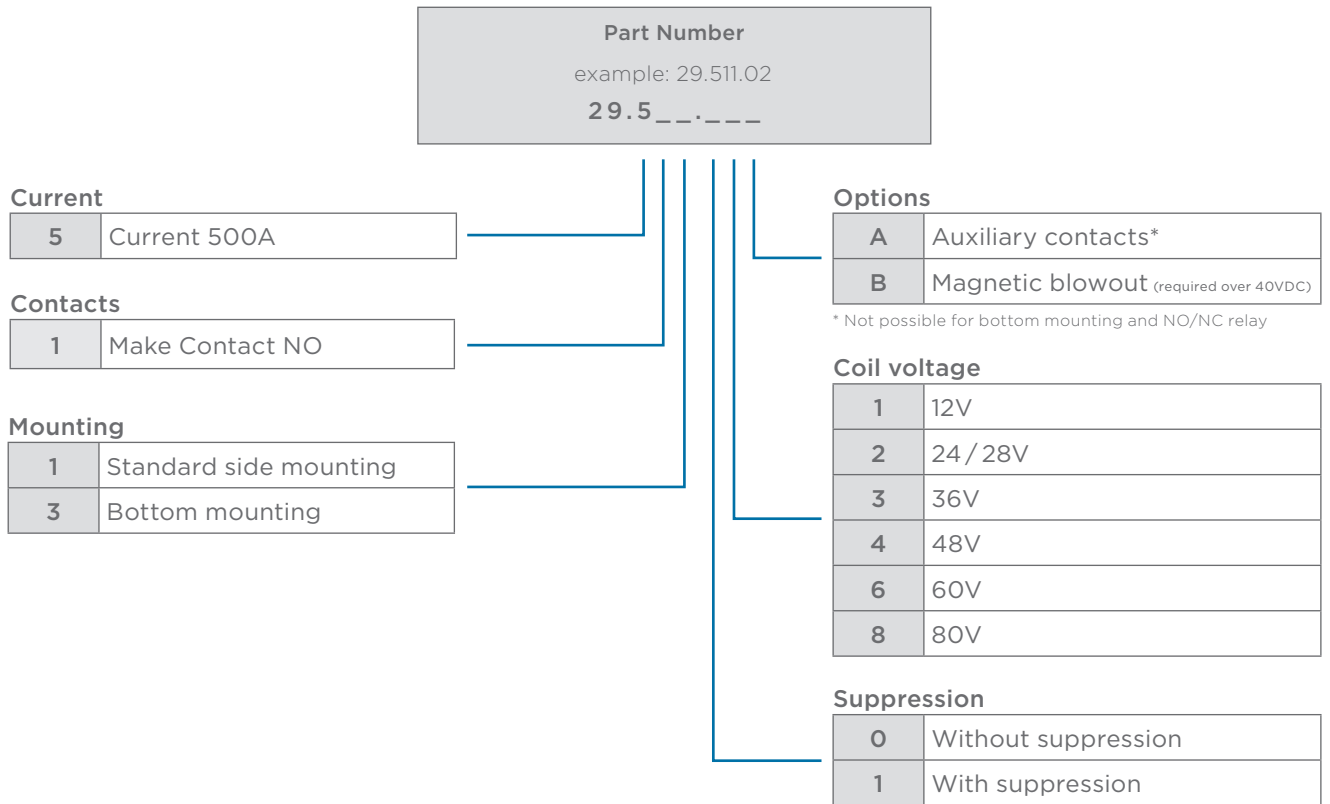
**Options: Magnetic blowout**



**Options: Auxiliary contact**



**Ordering Information**



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