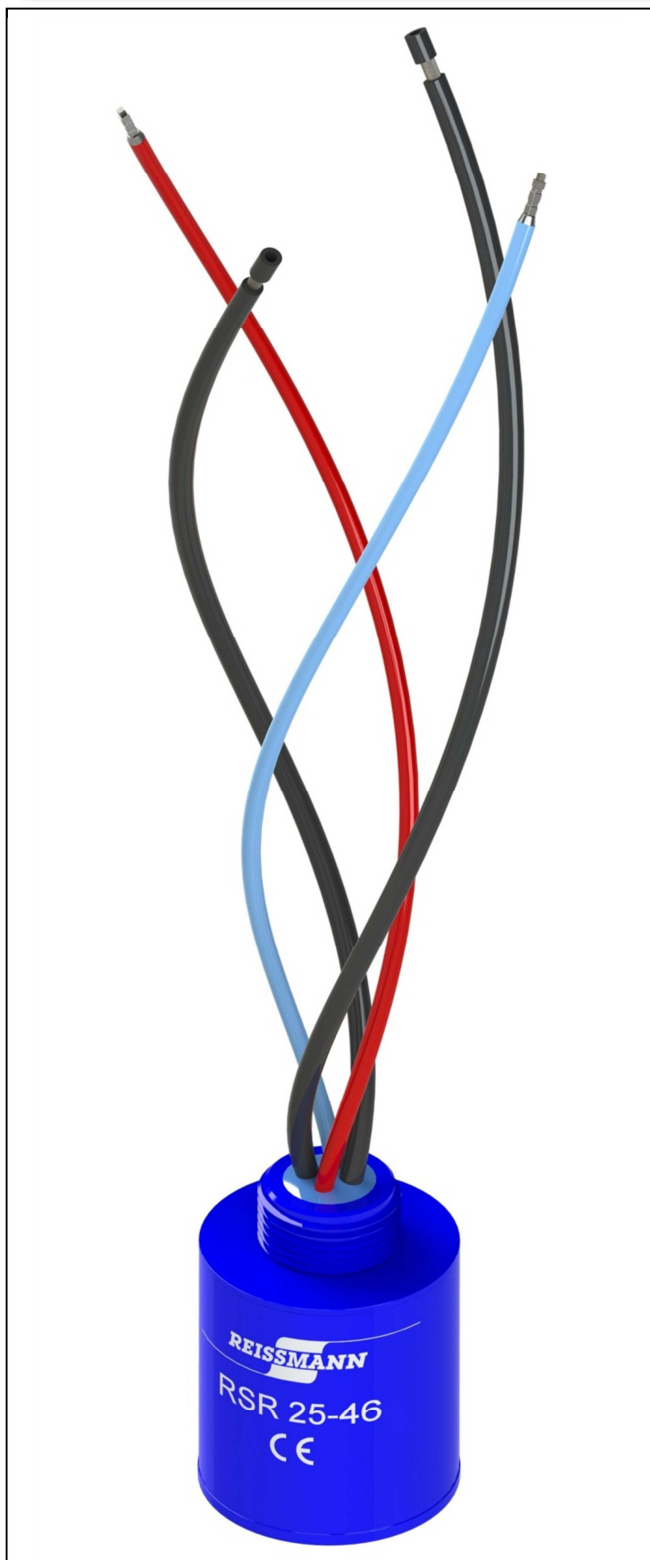


Produkt Information

► motor and machine protection

Electronic DC switch:
reduction of braking time for DC brakes

Type: RSR 10-46S , RSR 25-46 und RSR 50-46



- Basic information

Generator effects can delay the accurately timed action of a DC brake. The current relay avoids a delayed reaction time in the mechanical brakes of electric motors. The accurately timed braking action prevents damage to people and machines.

- Application

The current relay is used where an electric machine has to be stopped quickly to prevent danger to people or machinery, e.g:

- Cranes
- Lifts
- Elevating machines
- Machine tools

- General function

The current relay switches off the DC voltage to the brake coil, electronically and contact free, consequently shortening the braking time of the motor.

- Advantages

- Fast demagnetisation of the brake.
- Shortening of the reaction time of the motor brake.
- Faster set of the brake.
- Faster build up of braking torque.
- Short braking distances with a high repeat accuracy.
- Contact free switching of the current of the braking coils.
- Increased motor life.
- Decreased initial symmetrical short-circuit current.
- Greater safety with elevating machines and machine tools.
- UL certificated

- Certification

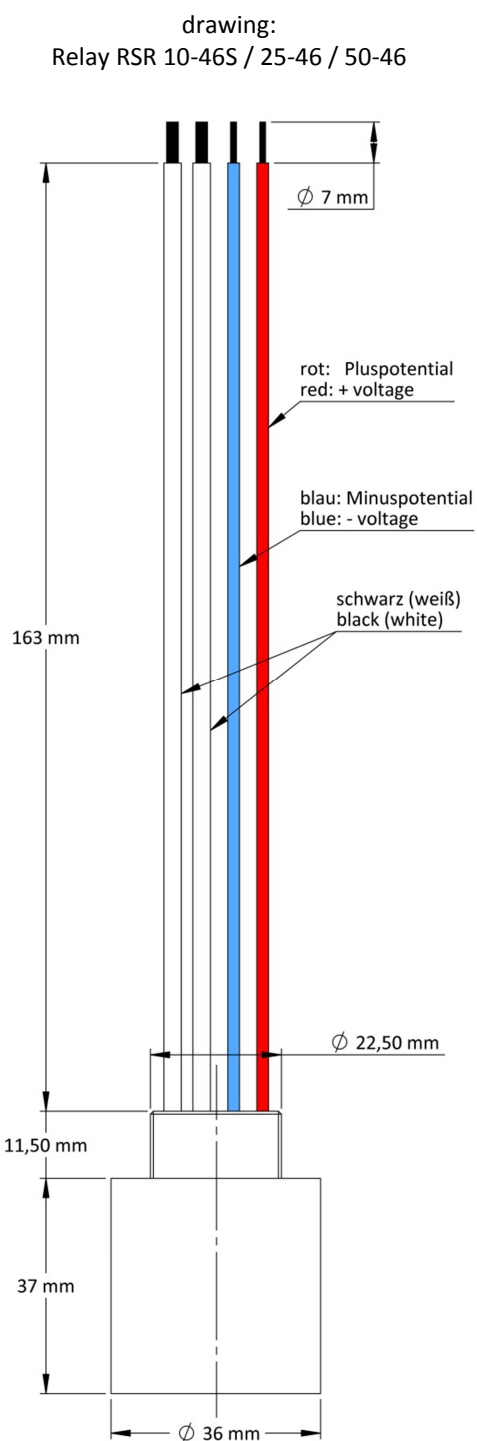
UL: E362588

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- Technical data

Electrical data

	RSR 10-46S	RSR 25-46	RSR 50-46
switching voltage:	42...550V DC	42...550V DC	42...550V DC
switching current:	1A DC	1A DC	1A DC
primary alternating current	10A	25A	50A
max. primary current:	30A, 0,2s, 500 c/h	75A, 0,2s, 500 c/h	150A, 0,2s, 500 c/h
holding current relative to the distortion by the magnetising current of the motor:	< 0,55 A ~	< 0,8 A ~	<0,8 A ~
delay time:	15ms±10%	15ms±10%	15ms±10%
rated temperature:	-25°C...+90°C	-25°C...+90°C	-25°C...+90°C
ambient temperature:	maximum +90°C	maximum +90°C	maximum +90°C
storage temperature:	-40°C...+75°C	-40°C...+75°C	-40°C...+75°C
bypass diode integrated in electronic switch			

Mechanical data

housing: material:	plastic/black PA6.6
Dimensional stability under heat:	short-term up to 160°C long-term 100°C
height x Ø:	50 x 36 mm, see drawing
mounting:	M20x1.5, at motor terminal block with screws; optional: PG 16
Protection factor:	IP 65: screwed in with seal at the aluminium- motor terminal box; the operator is responsible for the chemical or thermal resistance!

Anschlüsse:

feed line to motor coil:	Cu-strand, tin-plated, length=170 ± 5 mm, terminals: 7mm partly stripped, Radox-insulation		
	RSR 10-46S	RSR 25-46	RSR 50-46
profile:	1,5 mm ²	2,5 mm ²	6,0 mm ²
colour:	black	weiß	black
feed line to switch:	Cu-strand, tin-plated, red/blue, length=170 ± 5mm, terminals: end splice, Radox-insulation		
profile:	0,75 mm ²		
weight:	approx. 50 g		

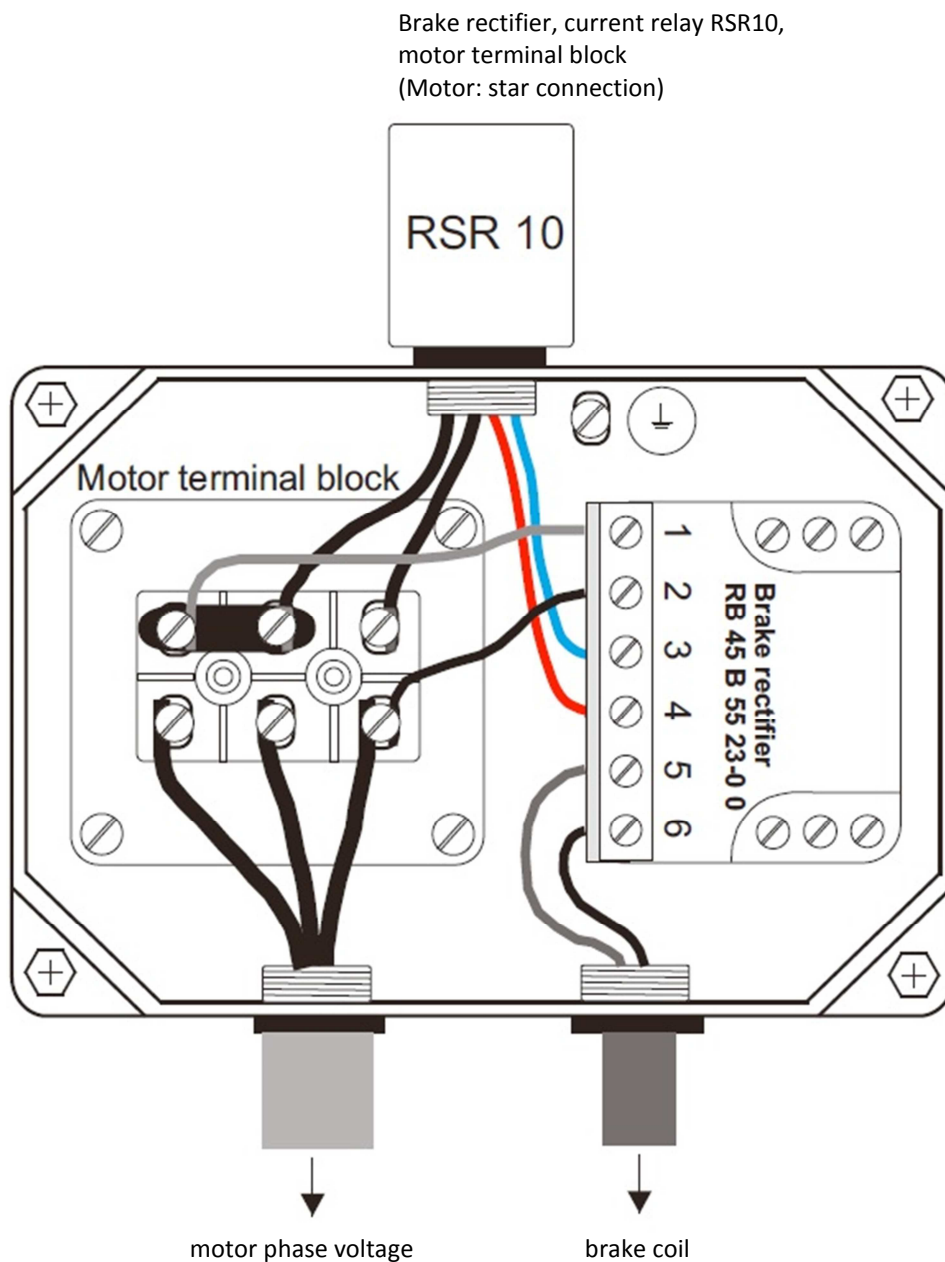
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Lead pattern: brake rectifier, current relay in motor terminal box



Produkt Information

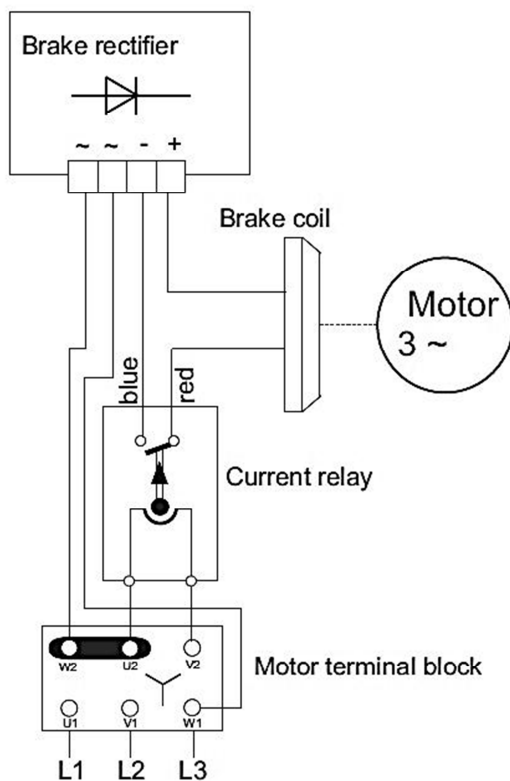
► motor and machine protection

Electronic DC switch:
reduction of braking time for DC brakes

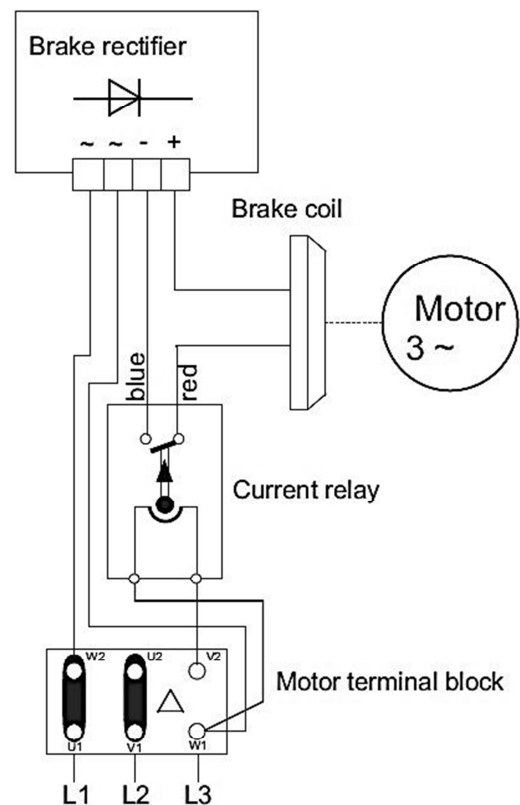
Type: RSR 10-46S , RSR 25-46 und RSR 50-46

Schematic diagram of current relay, brake rectifier,
motor terminal box, brake coil and motor

Motor terminal block: star connection



Motor terminal block: delta connection



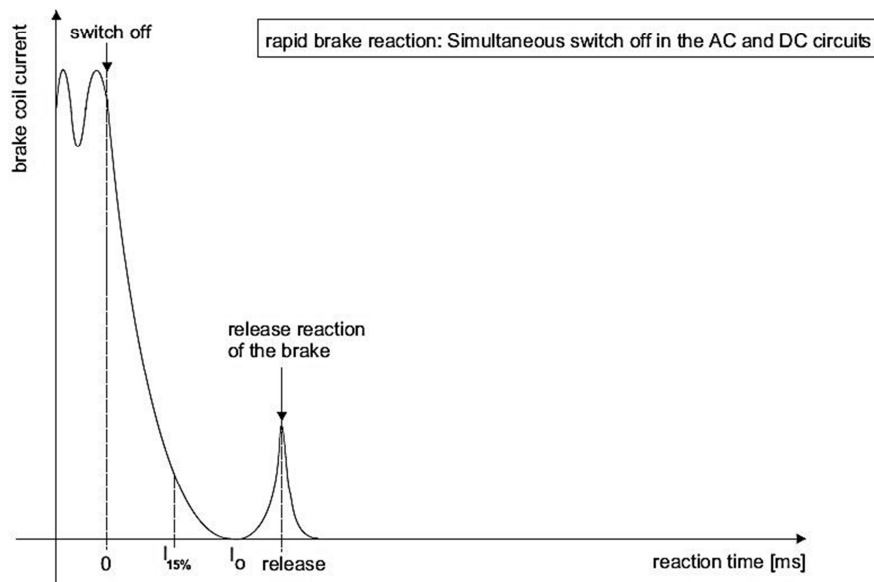
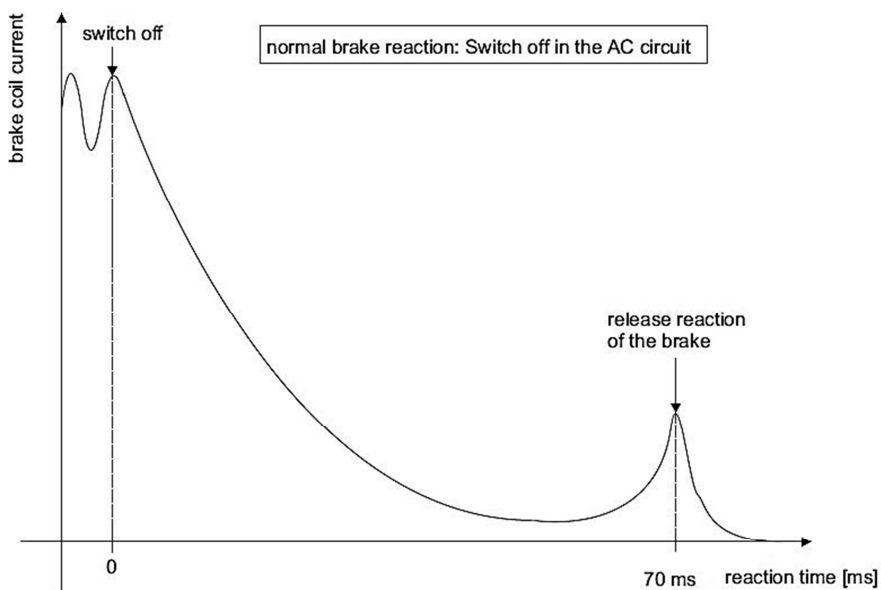
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Qualitative graph of the brake coil current, when connected to the brake



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Responsibility:

No responsibility will be accepted for thermistors which have not been installed and tested according to the relevant standards as previously listed in our data sheet.

Due to the ongoing research and development program, product specification may be subject to change, at the manufacturer's discretion.

For further advice and information contact: