

GRUNER RELAYS

SOLUTIONS FOR THE AUTOMOTIVE SECTOR



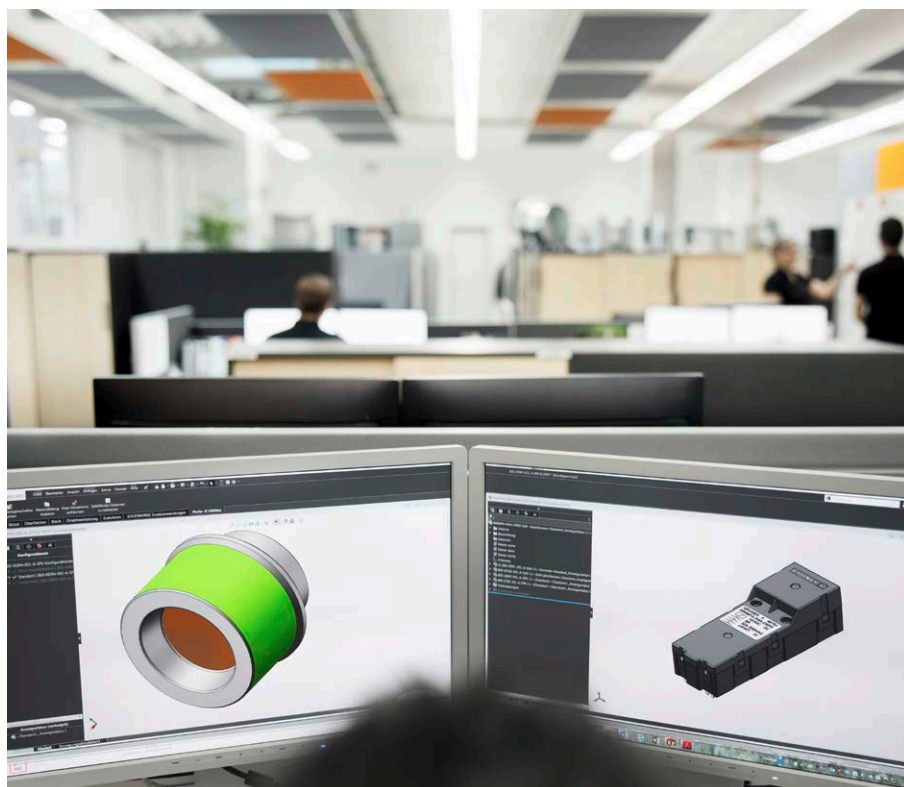


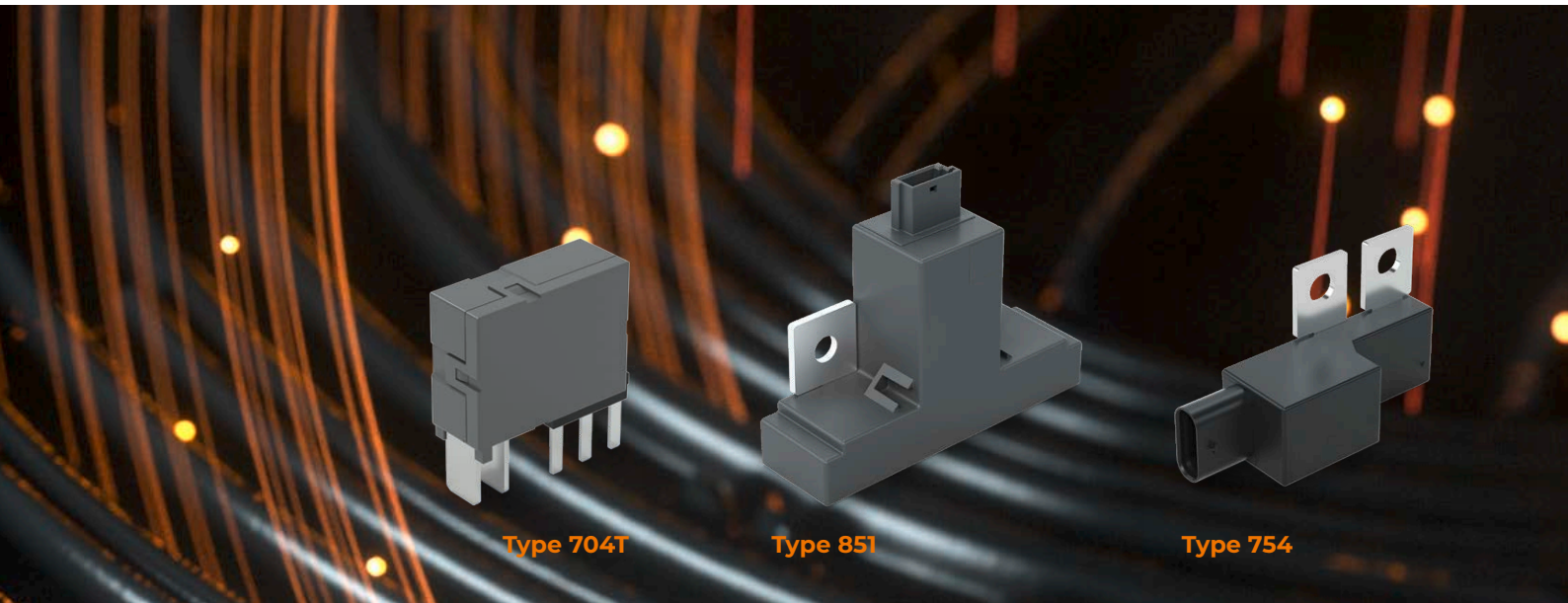
GRUNER DOES NOT HAVE
A CRYSTAL BALL
**BUT OUR RELAYS SUIT THE
MOBILITY OF TOMORROW.**

INNOVATION WITH EXPERIENCE – GRUNER RELAYS

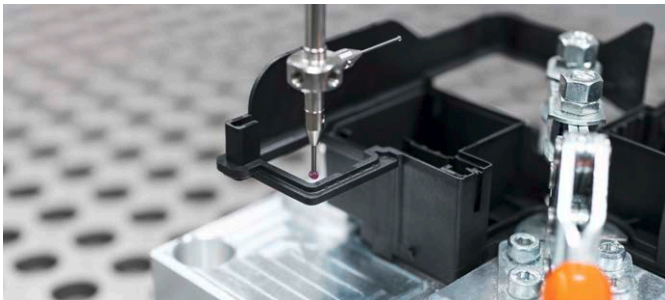
Innovation, not imitation is our motto for delivering relays to the market and to applications. Gruner is one of the last independent manufacturers of relays in Germany, and it has grown to become the world market leader for polarised latching switching relays across a range of 8 to 200 Amperes.

Gruner believes in taking the short route from A to B. This is the only way to adapt designs quickly, and to devise new solutions that provide our customers with genuine benefits. We have proven this, because our relays combine quality and innovation, cost-effectiveness and functionality, flexible volumes and availability.





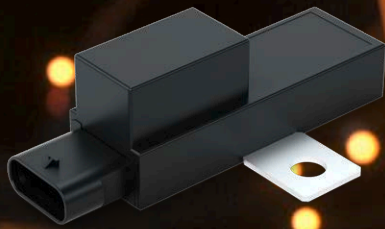
A PORTFOLIO WITH MANY OPTIONS



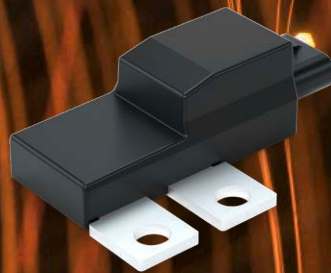
Gruner relays convince with high switching power at reduced levels of power consumption, maximum switching reliability, long service life and they are absolutely dependable.

For all the relays in our portfolio, we offer our customers the option of adapting the model individually. For a few types, there is a choice between monostable and latching (bistable) designs.

Our high level of vertically integrated production enables us to respond to a large number of specific customer requests within a short space of time, and to implement them. These modifications are discussed, drafted and implemented here in-house with our customers, within the space of just a few weeks.



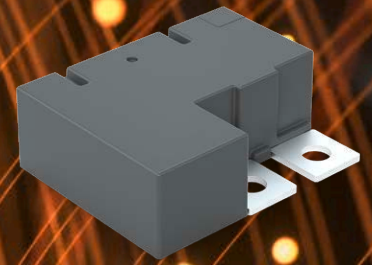
Type 750



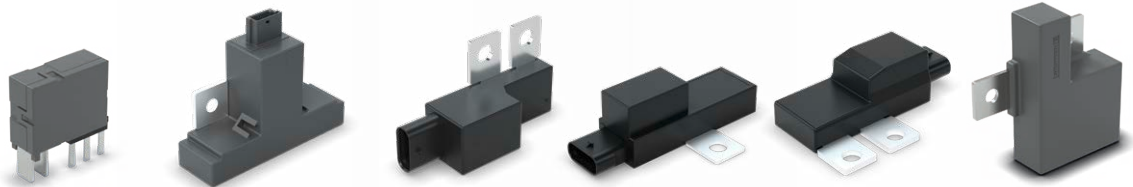
Type 753



Type 760

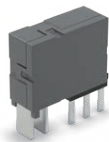


Type 852



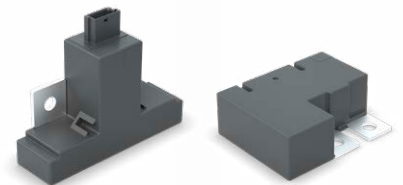
SPST | 12 V

Type	704T	851	754	750	753	760
Operating current range	60 A	130 A	150 A	250 A	250 A	250 A
Dimensions	39 x 30 x 15 mm	80 x 52 x 23 mm	69 x 25 x 26 mm	76 x 25 x 30 mm	69 x 31.5 x 26 mm	71 x 51 x 19 mm
Weight	40 g	110 g	65 g	85 g	90 g	110 g
Monostable version		•				
High overcurrent resistance	•	•		•		•



SPST | 24 V

Type	704T
Operating current range	30 A
Dimensions	39 x 30 x 15 mm
Weight	40 g
Monostable version	
High overcurrent resistance	•

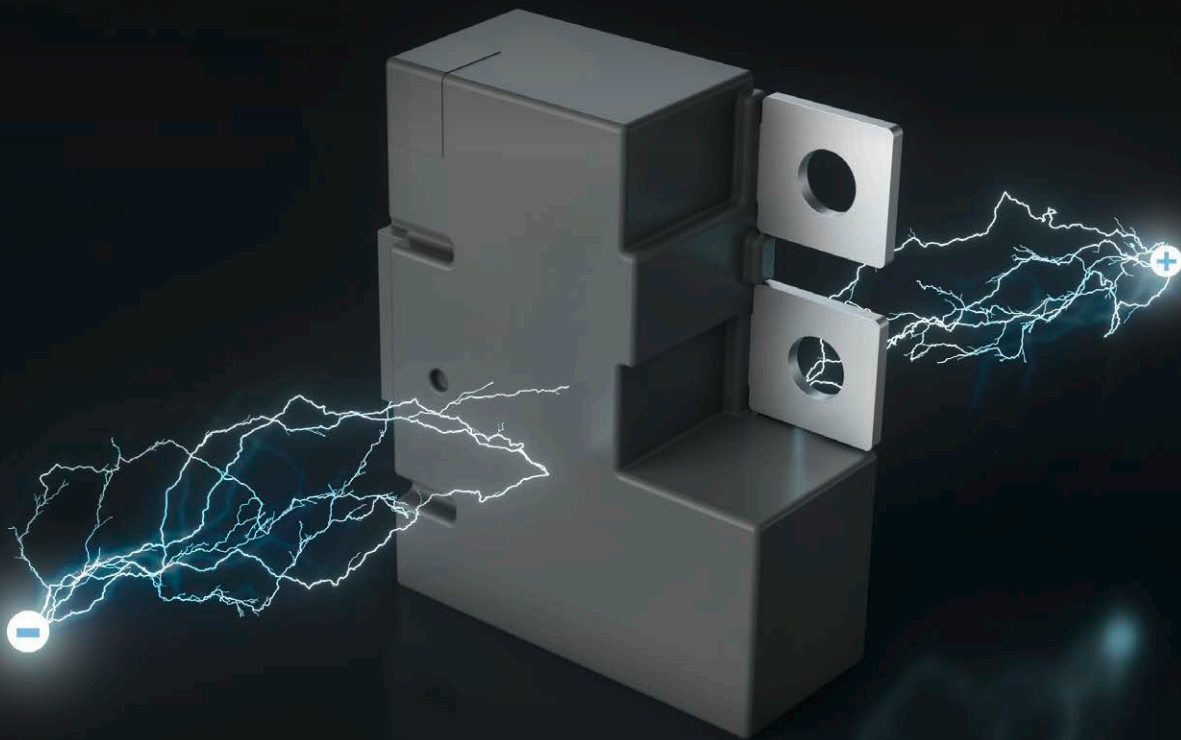


SPST | 48 V

Type	850	852
Operating current range	100 A	200 A
Dimensions	80 x 52 x 23 mm	77 x 61 x 26 mm
Weight	130 g	230 g
Monostable version	•	•
High overcurrent resistance	•	•

GRUNER RELAYS FOR THE 48V VEHICLE CIRCUIT

Electrification without a high-voltage battery



The GRUNER 850 relay was the first relay for 48 V application introduced to the automotive sector.

With the 852 relay, the 2nd generation of 48V relays is now available. 48V technology is used primarily in mild-hybrid vehicles for the management of lithium ion batteries. Due to their higher voltage, many functions in vehicles can be electrified without the additional weight of an extra battery. This enables the size of the engine to be reduced, which cuts down on CO₂ emissions. 48V technology (MHEV) offers a cost benefit across the board: compared to plug-in-hybrids (PHEV) or fully electric vehicles (BEV), the system costs are relatively low.

The 852 relay is characterised by a higher level of power capacity. Here, a printed circuit board is also integrated with temperature measurement capability that can be interrogated near the contacts. There is also scope for integrating the relay control.

IDEAL FOR 48V BATTERY MANAGEMENT

- > 3 times as economical as a high-voltage device
- > Shock-resistant to 150g
- > Short circuit-resistant to 7,000A
- > Space-saving, flat and compact design
- > Efficient and easy to adapt

GRUNER AG, headquartered in Wehingen with around 1,500 employees, based in Germany, Tunisia, Serbia and India, is an exceptional manufacturer of actuators, relays and solenoids. Our system solutions for building management, the automotive industry and metering industry are in demand around the world, featuring compelling innovation and quality.

GRUNER AG

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