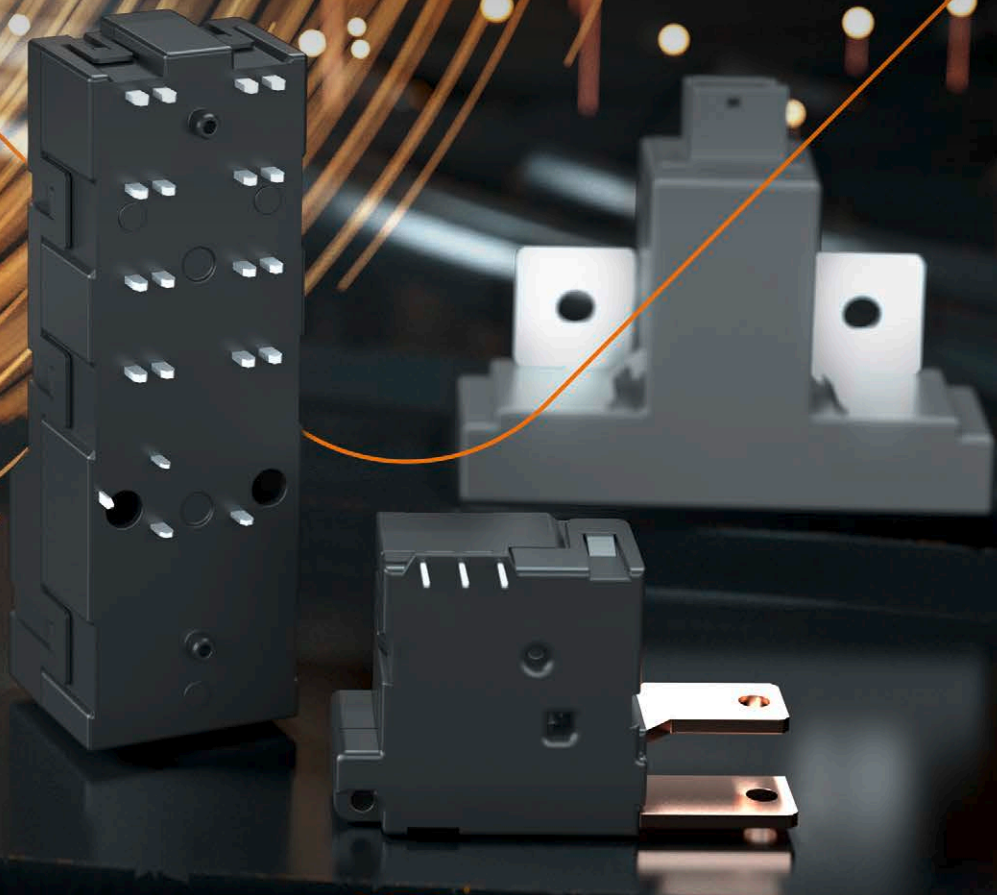


GRUNER RELAYS

**OFTEN COPIED,  
NEVER MET!**



# CHARGE AT HOME CONVENIENTLY AND SAFELY

**Gruner 800 relay – mechanically  
linked 4-pin separating relay  
with high resistance to short circuits**



## **WITH HIGH SHORT-CIRCUIT RESISTANCE TO SWITCH AC LOADS RELIABLY**

To comply with the requirements of IEC 62955, Gruner has developed a 4-pin relay with mechanical coupling action. The Gruner 800 relay ensures that all poles are either closed or opened and this reduces the number of relays and controls needed. This achieves a significant saving in components, power and costs. In addition, the 800 relay, which is designed for EV-AC charging of up to 22 kW, has a high short-circuit resistance of up to  $\geq 3$  kA and low contact circuit

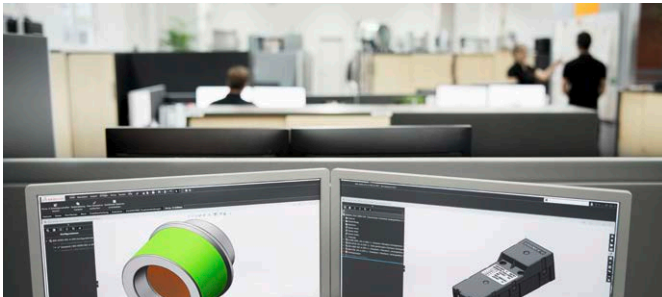
resistance levels. It is available in a monostable or a latching (bistable) variant. Its particularly narrow and flat design also enables it to be integrated easily in a printed circuit board. There is also a 2-pin variant for North America and Asia. This means that the 800 relay provides greater cost efficiency and safety, for example in wall charging stations for electric cars.



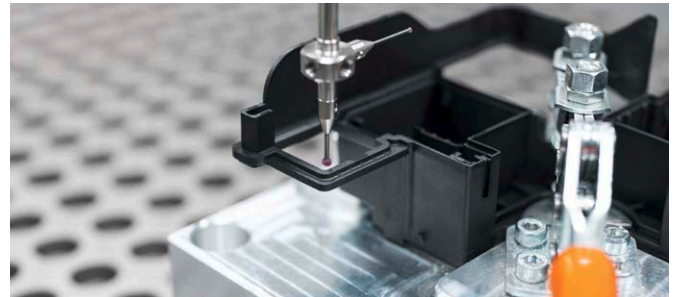
GRUNER DOES NOT HAVE  
A CRYSTAL BALL.

**BUT WE WILL CONTINUE TO DEVELOP  
OUR RELAY TECHNOLOGY TO REMAIN  
UNRIVALLED, ROBUST AND COST-  
EFFICIENT ALSO IN THE FUTURE.**

## A GLOBAL LEADER – GRUNER RELAYS



Innovation rather than 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.



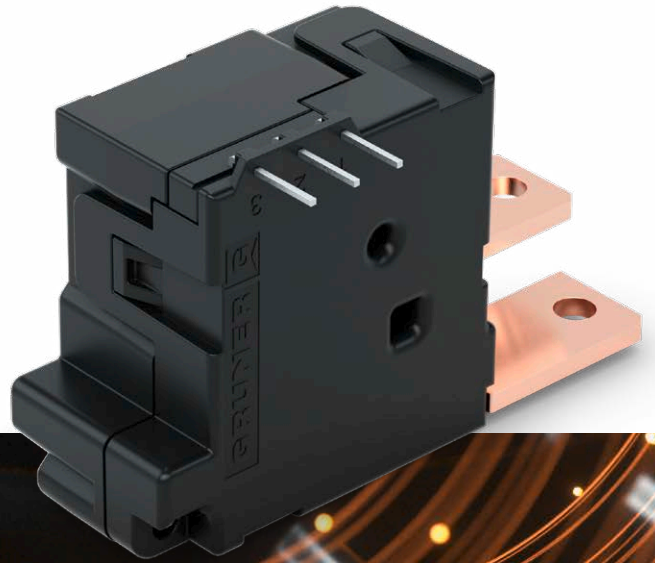
### **HIGH DEGREE OF VERTICAL INTEGRATION, HIGH QUALITY**

Our years of experience along with our high level of vertical integration, intelligent test systems to accompany the production, as well as our high degree of flexibility have put us in the favourable position as the innovation driver and quality provider in the relay sector. 100% quality and the development of genuine innovations are not mutually exclusives. We can prove this.

# FOR A WIDE VARIETY OF OPTIONS

Smaller, but just as powerful – the 726 relay is an example of the consistent way we have continued to develop our 700 series, in great demand for a wide variety of energy management functions.

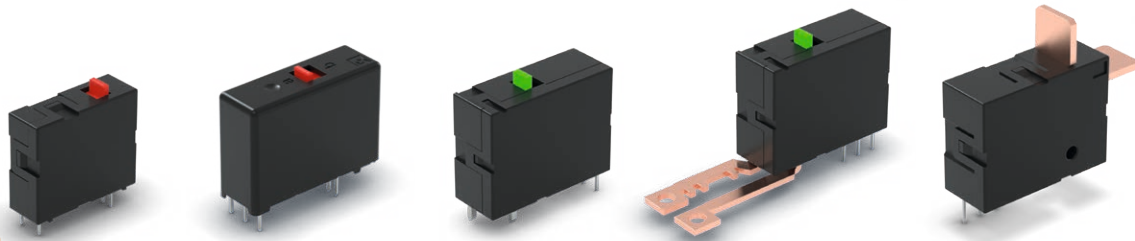
- > Load control
- > Tariff switching operations
- > Prepayment



The option to customize or adapting the relay to our customers' specific application and requirement is available to the entire line of relays.

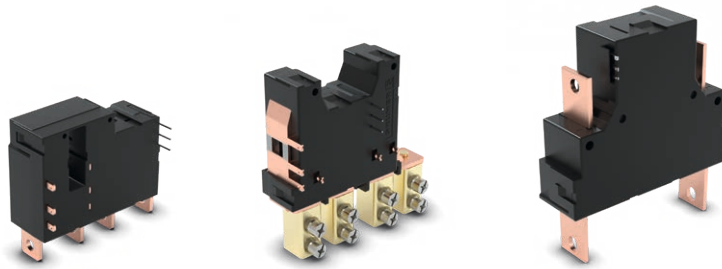
The choices range from busbar configuration to the integration of feed-back or even the drive (monostable or latching). Our vertically integrated production enables us to respond to a large number of specific customer requests within a short span and a quick turn-around to our customers, as most of these modifications are discussed, drafted and implemented in-house.





**SPST | 1 Form A | 1 NO**

Type	714	707L	704L	704	716
Max. switching current	10 A	10 A / 140 µF	20 A / 200 µF	60 A / 250 VAC 60 A / 12 VDC	80 A / 250 VAC
Rated coil power	750 mW (20 ms)	1.5 W (20 ms)	3 W (20 ms)	3 W (20 ms)	4.5 W (20 ms)
Dimensions	28.5 x 10 x 24 mm	37.4 x 13.1 x 25 mm	39 x 15 x 29.3 mm	39 x 15 x 29.3 mm	30 x 16 x 40 mm
Weight	12 g	21 g	36 g	36 g	45 g
Parallel contacts					
Integrated shunt				•	•
Lamp load version		•	•		

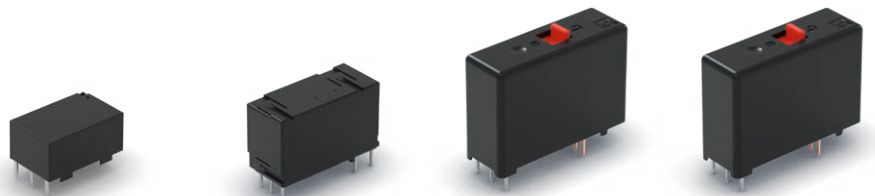


**DPST | 2 Form A | 2 NO**

Type	742 / 745	741 / 744	740
Max. switching current	80/100 A / 250 VAC	80/100 A / 250 VAC	200 A / 250 VAC
Rated coil power	8 W (30 ms)	8 W (30 ms)	24 W (30 ms)
Dimensions	48 x 23 x 66 mm	64 x 22 x 45 mm	80 x 97 x 30 mm
Weight	125 g	150 g	320 g
Parallel contacts	- / •	• / -	•
Integrated shunt	•	•	
Terminal grid			

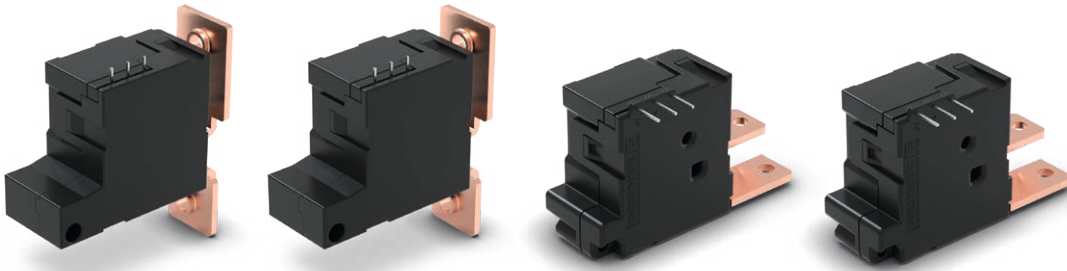
**3PST | 3 Form A |**

Type
Max. switching current
Rated coil power
Dimensions
Weight
Parallel contacts
Integrated shunt
Terminal grid

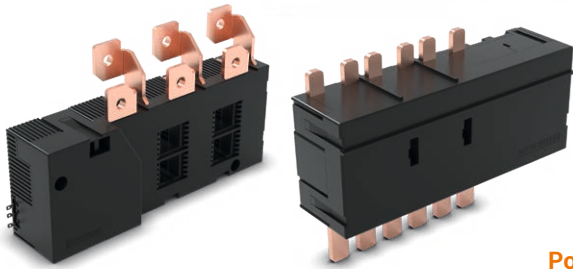


**SPDT | 1 Form C | 1 CO**

Type	710	715	706	707
Max. switching current	8 A / 250 VAC	16 A / 250 VAC	16 A / 250 VAC	20 A / 250 VAC
Rated coil power	300 mW (20 ms)	500 mW (20 ms)	1.5 W (20 ms)	1.5 W (20 ms)
Dimensions	22 x 14 x 12 mm	28.5 x 12.5 x 18 mm	37.4 x 13.1 x 25 mm	37.4 x 13.1 x 25 mm
Weight	5 g	12 g	21 g	21 g



723	725	726	727
120 A / 250 VAC	100 A / 250 VAC	100 A / 250 VAC	120 A / 250 VAC
5.5 W (20 ms)	5.5 W (20 ms)	5.5 W (20 ms)	5.5 W (20 ms)
47 x 22 x 38 mm	47 x 22 x 38 mm	41 x 22 x 37.5 mm	41 x 22 x 37.5 mm
70 g	70 g	65 g	65 g
•			•
•	•	•	•



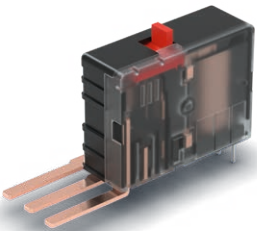
3 NO

733	736
100 A / 250 VAC	100 A / 250 VAC
16 W (30 ms)	16 W (30 ms)
132 x 77 x 30 mm	128 x 52 x 36 mm
300 g	360 g
•	•
	•
⌋ ⌋ ⌋	⌋ ⌋ ⌋



Power disconnect relays

Type	800	801
Nominal switching current	32 A / 250 VAC	32 A / 250 VAC
Contact arrangement	4PST / 4 Form A / 4 NO	DPST / 2 Form A / 2 NO
Rated coil power	24 W	24 W
Dimensions	98.5 x 32.5 x 30 mm	73 x 32.5 x 30 mm
Weight	255 g	140 g
Additional contact	•	•
Monostable version	•	•



703
25 A / 250 VAC
2 W (20 ms)
39 x 15 x 29.3 mm
36 g



DPDT | 2 Form C | 2 CO

Type	709
Max. switching current	10 A / 250 VAC
Rated coil power	1.5 W (20 ms)
Dimensions	37.4 x 13.1 x 25 mm
Weight	21 g

# GRUNER RELAYS – CLEAR BENEFITS

With these outstanding properties, Gruner polarised latching relays deliver clear benefits for energy management.



## BENEFITS OF LATCHING RELAYS

### GREAT SWITCHING POWER WITH MINIMAL POWER CONSUMPTION

- > Power is only needed for the actual switching process
- > Only a fraction of the power consumed by a monostable relay
- > No change in switching position in the event of a power failure

### GREAT SWITCHING RELIABILITY AND OPTIMISED SERVICE LIFE

- > No self-heating of the winding
- > Great dielectric strength
- > Great overload characteristics and short-circuit resistance in full compliance with international standards

### GREAT RELIABILITY WITH A MINIMUM OF MECHANICAL COMPONENTS

- > High switching reliability through absolutely dependable achievement of the switching limit point thanks to optimised switching mechanisms
- > High contact force combined with low operating voltage
- > Rotational armature movement enables switching with low levels of impact and vibration

### EXCEPTIONALLY WIDE RANGE OF SWITCHING POWERS

- > 8-200 A / 250 VAC
- > In accordance with international regulations and standards

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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