

RANGE OF PRODUCTS

VOLTAGE SWITCHING RELAY

- >> Designed for applications in power systems with double busbar configurations, this system can also be used as a functional extension when voltage switching configurations are insufficient or to reduce costs.
- >> Optional single-position and double-position switching circuits.
- >> Provides simultaneous operation for dual busbars and PT undervoltage alarm contacts.

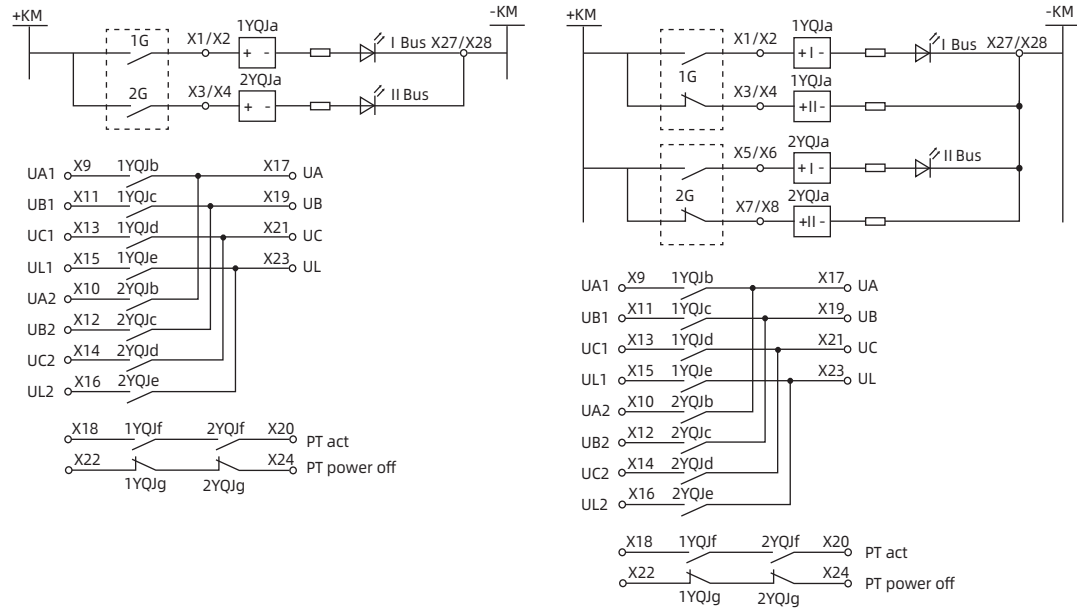
TECHNICAL STANDARDS

GENERAL STANDARDS

In addition to the specific applicable standards, ODES auxiliary relays are designed based on the fulfilment of the following standards:

- >> IEC 60255: Electrical relays. Measuring relays and protection equipment.
- >> IEC 60947: Low-voltage switchgear and controlgear.
- >> IEC 61000: Electromagnetic compatibility.



Model	GRUS-11G	GRUS-11GS
Product appearance		
Applications	Designed for power systems with double busbar configurations to achieve double busbar voltage switching.	
Construction Characteristics		
Switching method	Single position	Two-position
connections		
Indicator function	The corresponding red indicator light illuminates when Bus I is operational, and it turns off in the event of a power loss. Similarly, the red indicator light for Bus II illuminates during operation and turns off when there is a power loss.	
Weight (g)	750	
Dimensions (mm)	48 mm (L) × 177.6 mm (w) × 181 mm (H)	
Coil Characteristics		
Standard voltages	110 V DC, 220 V DC	
Voltage range	0.8U _n to 1.15U _n	
Pick-up voltage	70%U _n Reliable action	80%U _n Reliable action
Release voltage	10%U _n Reliable return	80%U _n Reliable return
Rated Power	≤5 W	
Operating Time		
Pick-up time	≤15 ms	
Drop-out time	≤15 ms	
Contacts		
Contact material	AgNi90/10	
Permanent current	10 A	
Instantaneous current	30A/0.2s	
Maximum limiting current	15A/4s	
Breaking capacity	L/R = 0 ms:10A@250 V AC / 30 V DC, 0.25A@220 V DC, 0.55A@110 V DC L/R = 40 ms:0.4A@110 V DC, 0.35A@125 V DC, 0.2A@220 V DC	
U _{max} opened contact	250 V DC / 400 V AC	
Performance Data		
Operating temperature	-25°C to 70°C	
Storage temperature	-40°C to 70°C	
Max operating humidity	93%RH@+40°C	
Operating altitude	< 4500 m	