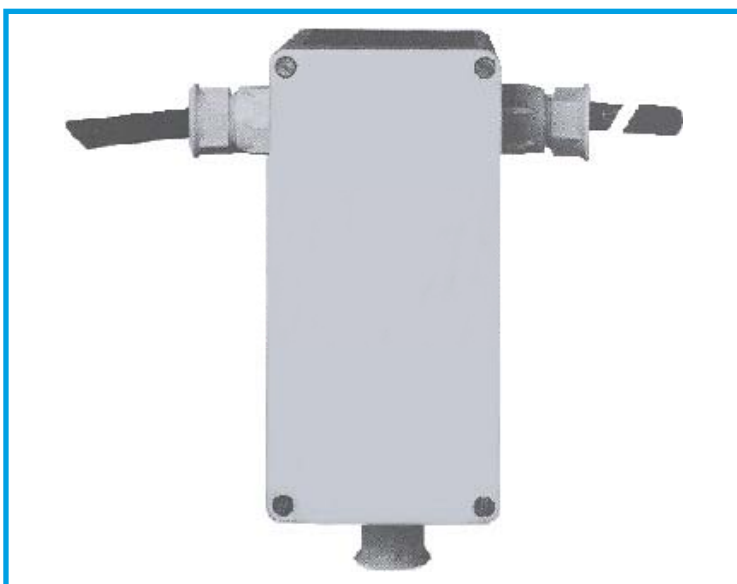


Voltage Indicator Relay

Type 8591 with magnetic shield

8591



Description

The voltage indicator relay type 8591 was developed specially for the recording and indication of voltages in direct voltage supply equipment in railway installations. It requires no auxiliary supply for operation.

As a result of its special construction, great voltage tolerances such as those which occur in railway operations are no problem for the voltage indicator relay type 8591.

The particular feature of the voltage indicator relay is its completely enclosed construction. In the standard design versions connection to the contact line and the return line, i.e. to the voltage source, is effected via permanently-fixed cable leads. The output contacts (1 changeover contact or 2 changeover contacts) are sealed air-tight and thus protected against corrosion.

The entire interior construction of the appliance is encapsulated in one unit. This provides the maximum possible level of protection of the output side against atmospheric overvoltages. This also applies to the separation of contacts, changeover to changeover. Bearing in mind the high value of the installations

and the effects of a malfunction in the signalling equipment or computer control systems connected to the output side, this is a particular advantage of the voltage indicator relay type 8591. In accordance with VDE 0100, section 60 Auxiliary Circuits, the 8591 voltage indicating relay may be operated without short-circuit protection if the laying of the connecting wires is inherently short-circuit proof (see also VDE 0100, section 30b, paragraph 3.2).

If the coil current increases to more than 5A, the current path in the interior of the relay is interrupted.

For the mounting of additional terminal blocks by the customer in the terminal compartment of the relay, the „Large Capacity“ variant is available. Assembly costs can be saved with the „Twin“ variant. In this, two relays are combined in one housing.

The coil is shielded against magnetic influence by a iron shield.

Technical Data

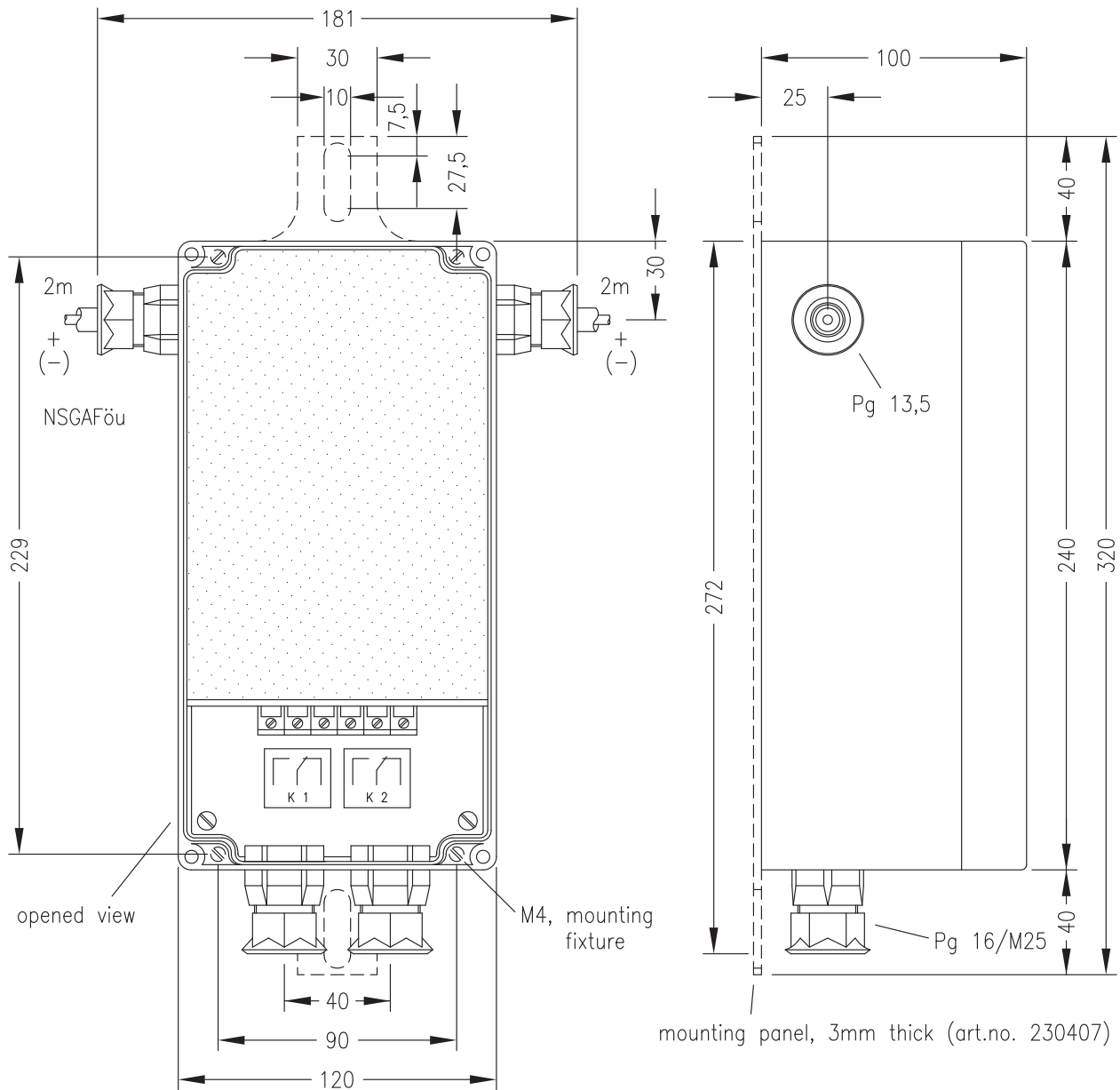
Dimensions	see figure
Housing	Makrolon Large-capacity variant with mounting plate
Mounting plate	stainless steel (1.4571)
Operating temperature	-20°C to +70°C
Protection type	IP 54
Protection class	Class II
Contact (reed contact)	2 changeover contacts
Switching power	max. 80 VA/60 W
Switching voltage	max. 250 V
Switching current	max. 1 A
Coil	
Rated voltage*	750 V (+20%/- 30%) DC
Auxiliary voltage	None
Relay operate voltage*	500 V ± 5% DC
Dropout voltage*	200 V ± 10% DC
Ri	> 560 kΩ
Li	> 50 H
Pa	< 1 W
Dielectric strength	11 kV _{eff} coil-contact** 1,6 kV _{eff} contact-contact
Coil connections*	permanently fixed and encapsulated cable leads (standard L=2m)
Cable	NSGAFöu (3 kV) 10 mm ²

Ordering Information

Type	Order No.
8591 with magnetic shield, without mounting plate	230406
8591 with magnetic shield, with mounting plate	230407

* Other rated voltages, relay operate/dropout voltages, contacts and switching powers, cable lead lengths etc. are available on request.

** Test report of Technische Hochschule Karlsruhe (technical college) is available (please request).



art.no. 230406 without mounting plate
art.no. 230407 with mounting plate