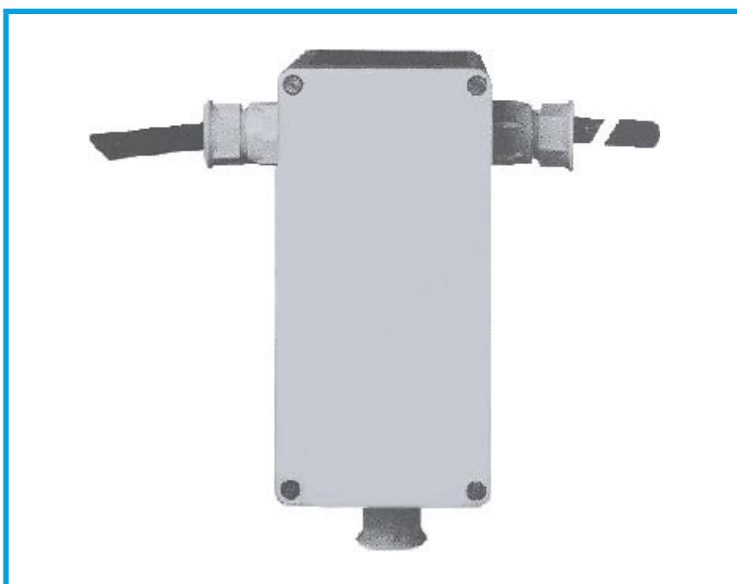


Voltage Indicator Relay

Type 8591 for 1500 V DC

8591



Description

The type 8591 voltage indicator relay was developed especially for the recording and transmission of voltage states from DC power supply units in railway operations. (No auxiliary power supply is needed to operate it.)

Due to its special construction, the large voltage tolerances that can occur in railway operation represent no problem for the type 8591 voltage indicator relay.

Its special feature is its fully encapsulated construction. The connection to the contact wire and the return wire or to the power source respectively are done by means of a fixed connected cable skein.

The output contacts (1 or 2 changeover contacts) are encapsulated and airtight, and hence protected against corrosion.

The moulded encapsulation provides the maximum amount of protection for the output side against atmospheric overvoltages.

This applies as well to the isolation of contacts, changeover contacts against changeover contacts.

In accordance with VDE 0100 § 60, auxiliary power circuits can be dispensed for the voltage reporting relay if the connecting cables are laid in such a way that they cannot short-circuit.

The current path inside the relay is interrupted if the coil current rises to more than 5 A.

Additional series terminals in the connection area of the relay make the »big version« available for installation by the customer. Installation costs can be reduced by the »double version«. This has two relays in one housing. See the complete brochure folder for additional relays.

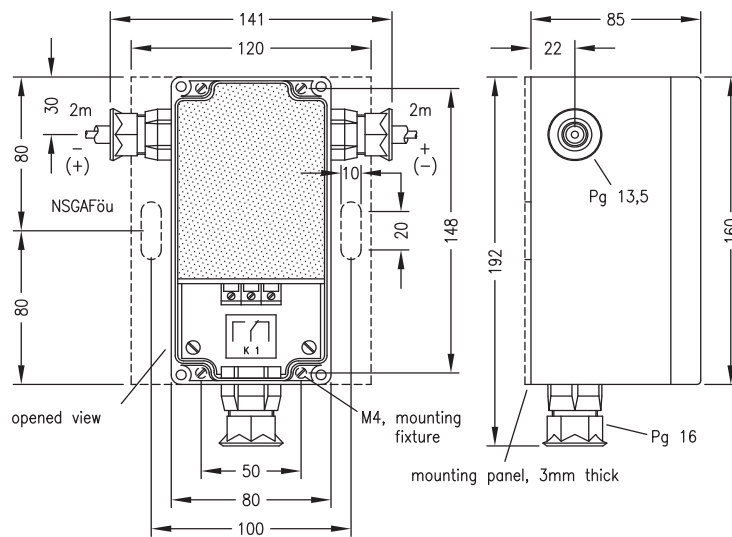
Technical data

Dimensions	see figure
Housing	Makrolon
Type of protection	IP 65
Protection class	Protection class II
Attachment	Screw fastening M4, see figure, by means of an installation plate: Screw fastening M8 or strip-type fastening
Installation plate	
Dimensions	see figure
Material	Stainless steel 1.4571
Ambient temperature	-20°C to +70°C
Coil	
Nominal DC voltage	1500 V (+20%/-30%)
Auxiliary power	none
Resistance	approx. 900 k Ω
Inductivity (L_i)	> 50 H
Power drawn	U _N = 1500 V: approx. 2.5 W U _N = 1800 V: approx. 3.6 W
U_{draw-in}	900 V ± 10 %
U_{drop-out}	500 V ± 20%
Contact (reed contact)	1 changeover contact (zero-potential) 2 changeover contact (zero-potential)
Switching rating	max. 80 VA/60 W
Switching voltage	max. 250 V
Switching current	max. 1 A
Electric strength	15 kV _{eff} (coil contact)
Coil connection	fixed connected and encapsulated cable skeins
Cable	NSGA Föu (3 kV) 10mm ²
Length	2 m
Configurations	
Standard configuration	without installation plate with installation plate
Large configuration	without installation plate with installation plate
Double configuration	without installation plate with installation plate

Ordering information

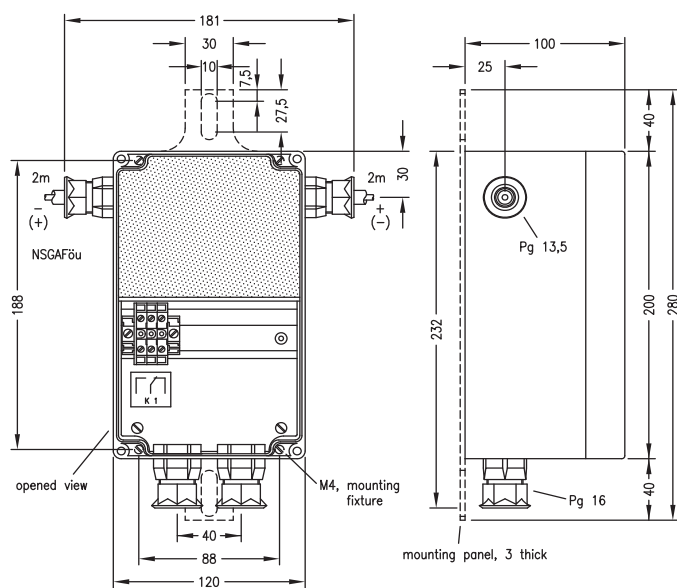
Type	Part No.
Voltage indicator relay, type 8591/1500	
Standard housing	
- without installation plate, output 1 changeover contact	230300
- with installation plate, output 1 changeover contact	230301
- without installation plate, output 2 changeover contact	230302
- with installation plate, output 2 changeover contact	230303

Other operating temperatures, nominal voltages, draw-in and drop-out values, contacts and switching rated capacities, cable skein lengths and special configurations are available on request.



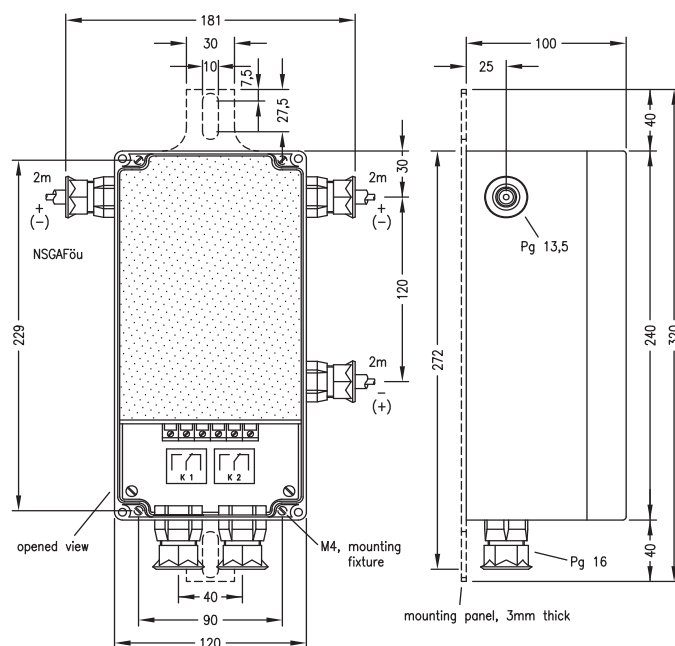
Typ HR-8591 01
Typ HR-8591 02

Standard – design



Typ HR-8591 05
Typ HR-8591 06

Large capacity – variant



Typ HR-8591 07
Typ HR-8591 08

Twin – variant