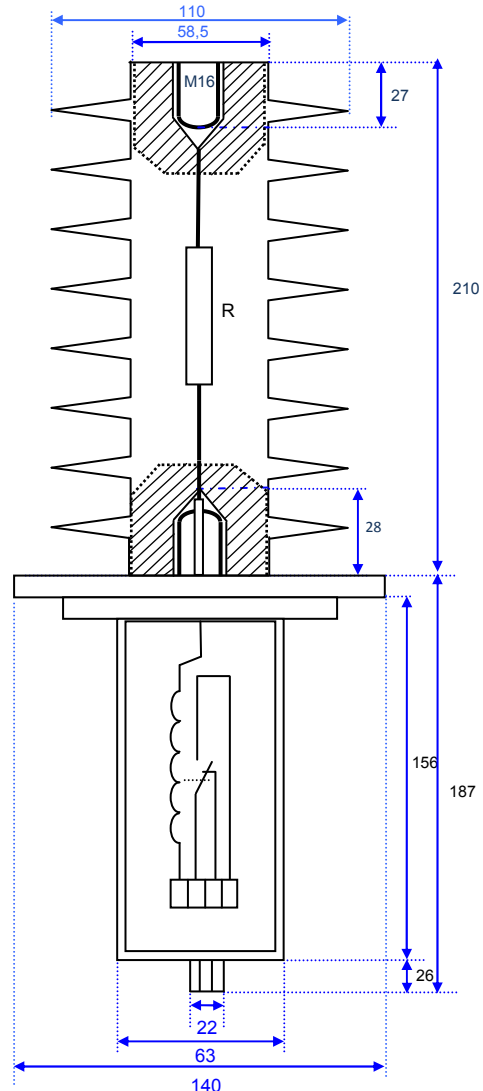


CRS4000+RL

SILICONE RESISTIVE SENSORS WITH REED RELAY



0. - Description an applications

CRS4000RL is a presence detector is a DC voltage, self-powered, with an output by contact potential free.

It consists of two elements, a resistive sensor silicone and a reed relay.

The resistive sensor and relay coil sheets form a set of very low current; the changeover contact is activated when the line voltage reaches a level of 40% of the rated voltage.

Its main application is in the electrical systems companies Railways (RENFE, Metro, etc.) to detect the presence of line voltage.

1. - Characteristic

The inner core of the sensor is made of fiberglass which provides adequate levels of electrical insulation and mechanical strength. The outside is silicone which gives the set the following properties:

- Increased resistance to degradation (tracking and erosion)

- Excellent resistance to shock and acid agents.
- Highest level of hydrophobicity (water rejection).
- High resistance against manipulation and vandalism
- Better rigidity / weight ratio, facilitating transportation and installation
- Longer sensor life.

Model	Mechanical Load	Cree page	Nominal Voltage Vn	Voltage Test 10 s.	Weight
CRS-xxxx RL	4000N	618 mm	600, 1500, 3000, 4000 VDC	2 Vn	1,5kg.

2. - Reed Relay

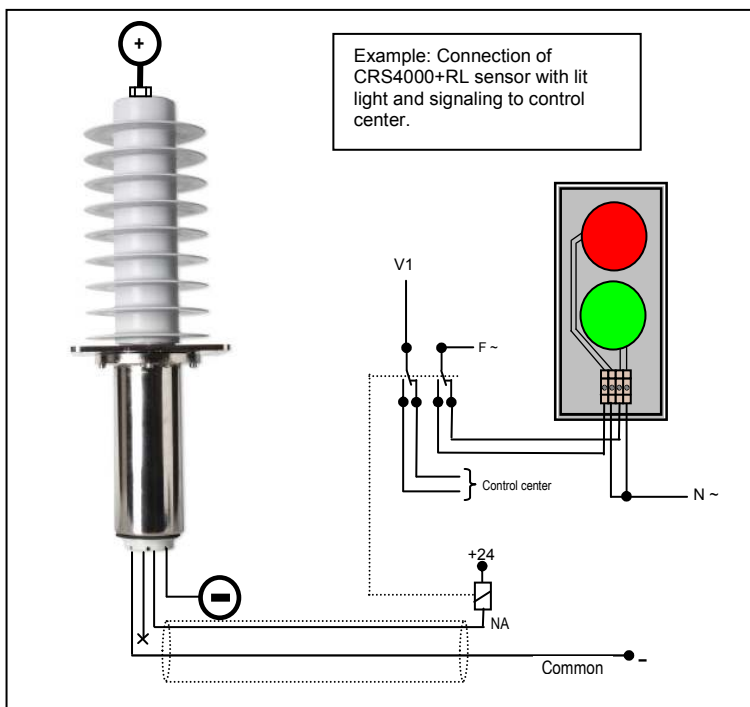
At the bottom of the sensor of silicone, there is the support and a stainless steel cylindrical casing, that containing the reed relay, it is casting resin.

It has four output terminals for external connection, one for negative of catenary and the other three are the contacts switched reed relay.

Contact Rating (2)		Watt - max.	30
Voltage	Switching Breakdown	Vdc - max.	500
		Vdc - min.	1200
Current	Switching Carry	A - max.	0.5
		A - max.	3.0
Resistance	Contact, Initial Insulation	Ω - max.	0.125
		Ω - min.	10 ⁹
Capacitance	Contact	pF - typ.	2.0
Temperature	Operating	°C	-20 to +125
	Storage (6)	°C	-65 to +125

3. - Electrical characteristics of the CRS4000RL

- Consumption: 3mA (Vn)
- Response time: 15 msec.
- Performance of the relay:
 - connection: 40% Vn
 - disconnection: 30% Vn



Models: CRS-XXXX-RL

XXXX = Nominal Voltage 4000, 3000, 1500, 600 VDC

For example: If the catenary line has a 1500 VDC nominal voltage, the model to use is: CRS1500RL



Pol. Ind. Can Tapioles c/Narcís Monturiol, 4 nave 10
08110 MONTCADA-REIXAC (Barcelona) SPAIN
Tel: 935790610 Fax: 935792522
e-mail: comercial@proat.es
web: www.proat.es