

Designed to mechanically block the shaft gates and prevent unauthorized entry into the shaft

### PRINCIPLES OF OPERATION/MAIN CHARACTERISTICS

The RA1 shaft gates safety lock works by itself and in such a way that when the shaft gates are moved to its extreme position, the lock catch snaps shut, thus preventing unauthorized opening of the gates. To unblock the shaft gates in a maintenance-free manner, it is necessary to send the respective command signal from the superior, off-shaft equipment control system to the RA1 device. The RA1 shaft gates safety lock is constructed so that it can be released either from the shaft vessel compartment (by manual lifting of its latch) or from the shaft station side (by means of an emergency opening button – secured with a sealed split pin, thus enabling to open the shaft gates in case of emergency.

The (RA1) device is equipped with sensor that controls the latch position, which allows for better integration of the device with any automation and control or recording systems while operating.

The RA1 shaft gates safety lock is made of high quality corrosion-resistant materials, so it can be applied in an environment with high humidity and in the presence of chemically aggressive substances, which often occurs in underground mining plants.

### NOTE:

The RA1 shaft gates safety lock cannot be applied in potentially explosive areas.

# **TECHNICAL CHARACTERISTICS**

|                        | DC version                       | AC version                           |
|------------------------|----------------------------------|--------------------------------------|
| Rated supply voltage   | 24 V <sub>DC</sub>               | 24 V <sub>AC</sub>                   |
| Rated current          | 1.5 A <sub>DC</sub>              | 1.2 A <sub>AC</sub>                  |
| Rated power            | 36 W <sub>DC</sub>               | 28.8 W <sub>AC</sub>                 |
| Signal from the sensor | binary PNP (24 V <sub>DC</sub> ) | binary 24 V DC or 24 V <sub>AC</sub> |
| Cable exit             | 1 x PG13,5 cable gland           |                                      |
| Ingress protection     | IP54                             |                                      |
| Type of mount          | 4 × M12                          |                                      |
| Overall dimensions     | 154 mm × 245 mm × 309 mm         |                                      |
| Weight of the set      | 9.2 kg                           |                                      |

# **DESIGNATION**

The shaft gates safety lock is marked with the symbol: RA1

### **DESIGNATION FOR ORDERING:**

#### Make:

Right hand makeLeft hand makeRA1P/...

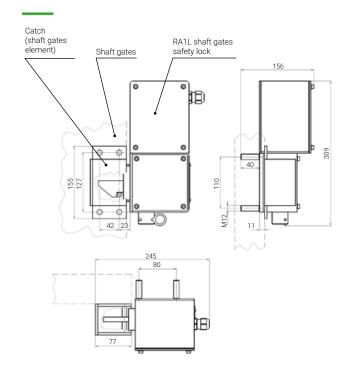
# Applicable power supply options:

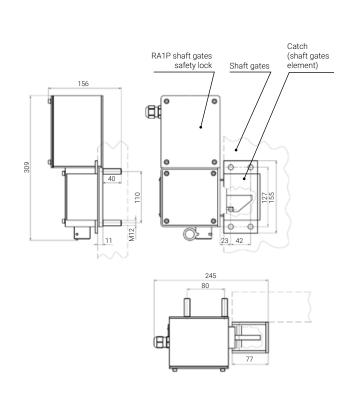
DC power supply option
AC power supply option
.../24VDC
.../24VAC

### **EXAMPLARY DESIGNATION FOR ORDERING:**

 ${\bf RA1L/24V_{pc}}$  – left hand make of RA1 shaft gates safety lock, powered from 24 V DC source.

# **TECHNICAL DRAWINGS**





LEFT HAND MAKE RIGHT HAND MAKE