

THE INFORMATION-DIAGNOSTIC COMPLEX «REGINA»



The information-diagnostic complex (IDC) «Regina» is intended for the registration of analog and digital signals, the analysis of emergency situations, the estimation of the functioning of the relay protection and automatics, the location of the damaged place during short circuit on the power line, the determination of the remaining resource of high-voltage switches, the formation of the twenty four hour register of modes, the implementation of the harmonic and phase analysis of the sinusoid signal, the detailing of the symmetrical components of the three phase alternating current nets, the output of text messages, graphics and tables on the display, the transfer of the registered and processed information on any higher levels of control.

The basics components of the system are the recorders of the analog and digital signals. The number of the recorders is determined by the number of the analog and digital signals that are processed. The recorders detect electric signals of the alternating and direct current and voltage, also the digital signals "dry contact" and potential signals. The analog signal input unit, also the digital signal input and output units provide the galvanic decoupling of the input circuits one from another, from power lines and the frame of the unit.

The insulation resistance of all independent input and output circuits relating to the frame and one to another during switched off condition and at the temperature 20°C and relative humidity of 80% is not less than 20 MOm. The insulation of the input circuits of TC and TV endures without a break-downs or sparkovers testing AC voltage of 2,5 kV with frequency 50 Hz for one minute. The insulation of the input circuits (except TC and TV inputs) and output circuits endures without a breakdowns or sparkovers testing AC voltage of 1,5 kV with frequency 50 Hz for one minute.

The power supply of each recorder is made from the alternating or direct current voltage 220 V. During the supply by the direct current an UPS is used. The power consumed by the device is not more than 50 VA.

Main Technical Characteristics:

The quantity of analog inputs	16 - 32
The quantity of digital inputs	224, 448, 672
Digitization frequency, Hz	1000 - 5000
The duration of registration of one event	Unlimited
The quantity of registration of the events	Unlimited
The duration of the registration of preemergency situation, ms	Usually 200
The registration of digitize signals mode	Continuous
Nominal value of the input alternating current I_H , A	1 or 5
Nominal value of the input alternating voltage, V	100
The range of registration of analog signals: alternating current I_H alternating voltage, V direct current, A direct voltage, V	from 0,1 to 40 from 0,001 to 1000 from -0,02 to 0,02 from -150 to 150 from -10 to 10 from -400 to 400
The switch on the registration of the emergency mode:	
<ul style="list-style-type: none"> • During the change of the condition of any (by client's selection) digital signals; • During the run out from the limits of any (by client's selection) analog signals; • During outside switching. 	