

## Thyratron TGI2-400/16

### 1. Allowed values of electrical operating conditions TGI2-400/16

Parameter	Rate		
	at	nominal	no more
Anode current time delay with respect to the voltage grid, ms	0.25		0.6
Pulse front of the anode current pulse to pulse spread, ns			5
Heating current, A	9		12.2
Warm-up time of the cathode and hydrogen generator, min	5		.
The pulse duration voltage grid, ms	4		5
Steepness of the pulse anode current, A / ms			800
Forward voltage of the anode, kV **			16
Reverse voltage of the anode, due to impedance mismatch			1.6
Heater voltage, V	6.0	6.3	6.6
Grid voltage pulse, V	200		400
Anode current pulse, A **			400
The average anode current, mA			500
The pulse repetition frequency, Hz **			450
Power factor, VA Hz **			$2,88 \cdot 10^9$
Ambient temperature, ° C	-60		plus 85
Minimum time (500 h - heat duty 6,3 and 500 hours - pulsing with the	1000		
Period, years		12	

\* Reverse the voltage of the anode that occurs due to mismatch of impedance and load impedance.

\*\* The pulse repetition rate is determined based on the value  $U_{apr}$ ,  $I_{ai}$ , and power factor.

### 2. Garantiynoe obligation TGI2-400/16

The supplier guarantees that the unit requirements of technical conditions TU 3,310,019 for the minimum operating time within the period of the conservation, subject to consumer modes and operating conditions, rules governing the storage and transportation, as well as indications for use, installation and operation, technical conditions established by TU 3,340,019.

### 3. Svedeniya the exploitation TGI2-400/16

3.1. Dlitelnaya work unit at the maximum permissible values of the filament voltage is not allowed.

3.2. Pri operation of the device parameters that determine the mode should not exceed the maximum allowable value. Doing so may lead to loss of the device.

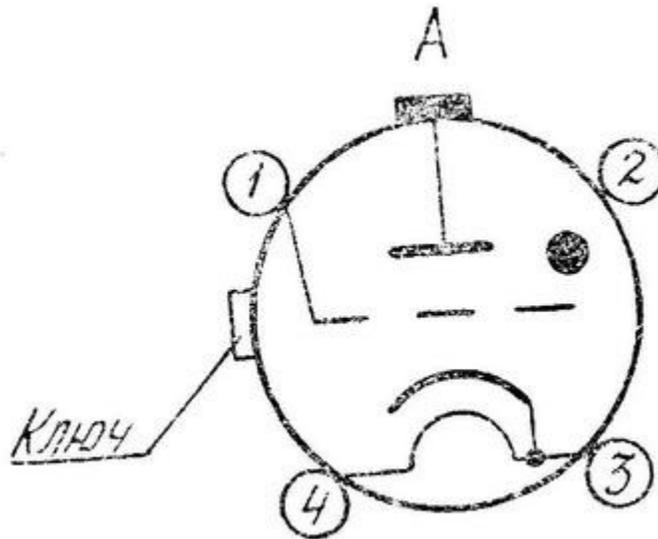
3.3. Neobhodimym condition operation of the device is small (about 5 - 10%) mismatch of the load resistance with impedance of the line that creates a negative voltage on the device after the passage of the current pulse.

3.4. Dlya power grid circuit of the thyatron ignition pulse generator is necessary, having the output load voltage of 200 V and the slope of the voltage rise of 300 - 600 V / ms and provides a grid circuit of the thyatron current pulse of at least 0.8 A, not on more than 2 A. The pulse duration 4 - 5 microseconds.

3.5. Panel and fastening device should allow free access of air to the bottom of the basement, where there are compensating resistance.

3.6. Rabochee position of the instrument, from horizontal to vertical, anode up.

#### 4. Shema combination electrode with pin TGI2-400/16



Штырьки Pins	Наименование электродов Name of the electrodes
1	Сетка Net
2	Не подключен Not Connected
3	Катод - подогреватель Cathode - heater
4	Подогреватель Heater
А – верхний вывод A - upper output	Анод Anode