

acrolinx IQ Prüfbericht



Einstellungen und Übersicht der Ergebnisse ▼anzeigen | Ausblenden

	Status	Ergebnisse	Fehlerquote
↗ Rechtschreibung	✓	15	67
↗ Grammatik	✓	6	27
↗ Stil	✓	76	338
↗ Terminologie	✓	0	0
↗ Wiederverwendung	✗		
↗ Neue Terme	✓	294	

Administrative Informationen ▼anzeigen | Ausblenden

Benutzername	admin
Lizenz-ID	acrolinx Internal / admin
Lizenz-Edition	Enterprise
Versionsinformation	Plug-in : 2.2.0 (build : 1000) / Server : 2.2 (build : 2704)
Ressourcen	Demo : 2.2 (build: 1009 / 2010-12-13)
Dateiname	file:///C:/Dokumente und Einstellungen/melanie/Eigene Dateien/Lehre/Coli Saarbrücken/Student Texts/re_ktp_500_eng.pdf
Dateiformat	application/pdf
processing_settings_extractor_type	PDF

Prüfungsinformationen ▼anzeigen | Ausblenden

Zeitpunkt der Prüfung	Tue Dec 14 12:01:17 CET 2010
Dokumentsprache	English
Regelset	Standard_US
Verwendete Termsets	acrolinx
Prüfumfang	2250 Wort/Wörter / 282 Satz/Sätze
Prüfstatus	● (Fehlerquote: 431; Grün < 100, Gelb 100 - 199, Rot ≥ 200)
Flesch Reading Ease	53.8

Rechtschreibung ▼anzeigen | Ausblenden

Wort	Anzahl	Vorschlag	Kontext
MM	1		Radius of the working area, MM 25.
MOhm	1	Ohm	Electrical resistance of insulation is not less than 20 MOhm .
blowed	1	blower bowed browed flowed Flowed glowed Glowed plowed Plowed slowed Slowed	Outside the instrument is protected by thermal insulation and placed in the casing, blowed on by a fan, positioned on the lower panel of KTTI-500.
thermo-electrical	1	thermoelectric	In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ICX), that are used for determination of the temperature gradient along the height of the thermostatic unit.

thermo-converter	1		In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (K).
Gostehnadzor	1		To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor , and should study the present certificate.
vapours	1	vapors	Surrounding environment should not be combustible, it should not contain salty mists, aggressive gases and vapours in concentrations destroying metal and insulations.
Вкл	1		Set the switch «Blocking» into the position « Вкл. »
resulta	1	result results	Requirements for organization, procedure of calibration and the form of resulta presentation is determined by ПП 50.2.006-94 "ГСИ.
Zelenograd	1		124460, Moscow, Zelenograd , korp.
korp	1		124460, Moscow, Zelenograd, korp.
Tel	1		1145, entrance 1, SPE «ELEMER» Tel.:
Given Date and time of	1	Wortwiederholung	Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature
operation names and	1	Wortwiederholung	Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature
signature	1	Wortwiederholung	Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature

Grammatik ▼ anzeigen | Ausblenden

Zusammenfassung

subject_verb_agreement	1
affect_effect_impact_confusion	1
irregular_verb_use	1
np_number_agreement	2
write_words_together	1

Details

🔍 Nach Auftreten sortieren

→ subject_verb_agreement

Operation **time register** 11 Appendix A 12

→ affect_effect_impact_confusion

*КТП-500 is resistant to **impact** of humidity up to 75 % at the temperature 30 °C.*

→ irregular_verb_use

*Outside the instrument is protected by thermal insulation and placed in the casing, **blowed** on by a fan, positioned on the lower panel of КТП-500.*

*Outside the instrument is protected by thermal insulation and placed in the casing, **blew** on by a fan, positioned on the lower panel of КТП-500.*

*Outside the instrument is protected by thermal insulation and placed in the casing, **blown** on by a fan, positioned on the lower panel of КТП-500.*

→ np_number_agreement

*It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, in case of a short-circuit in **a** thermal converters **circuits**.*

*After transporting or storage of КТП-500 at the temperature of air below plus 10 °C it is necessary to hold it before unpacking in **a** dark dry **premises** at the temperature from plus 10 to plus 35 °C during 24 hours.*

→ write_words_together

Without a guarantee sheet with filled in repair card
КТП-500 **can not** be accepted for repair.

→ Without a guarantee sheet with filled in repair card
КТП-500 **cannot** be accepted for repair.

Stil ▼ anzeigen | Ausblenden

Zusammenfassung

use_serial_comma	4
sentence_too_long	21
avoid_archaic_word	2
range_of_numbers	1
use_decimal_point	8
unnecessary_space	3
use_comma_after_introductory_phrase	5
spell_out_numerals	4
avoid_passive	6
simplify_word	1
avoid_modal_verbs	18
avoid_above_and_below	1
synonym_of_if	1
duplicate_punctuation_mark	1

Details

🔍 Nach Regeln sortieren

→ use_serial_comma

Resources, **service life and** storage time and
manufacturer's (supplier's) guaranties 10

→ Resources, **service life, and** storage time and
manufacturer's (supplier's) guaranties 10

→ sentence_too_long

Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and **calibration**.

→ avoid_archaic_word

Surface temperature calibrator КТП-500 (**hereinafter** - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.

→ range_of_numbers

Range of reproduced and measured temperatures is form
50 to 500 °C.

→ Range of reproduced and measured temperatures is form
50 - 500 °C.

→ use_decimal_point

Limits of the tolerable basic error of determination of temperature of comparator unit, °C ± (**0,2** + 0,003 · t) where t –the value of reproduced temperature.

→ use_decimal_point

Limits of the tolerable basic error of determination of temperature of comparator unit, °C ± (0,2 + **0,003** · t) where t –the value of reproduced temperature.

→ use_decimal_point

Temperature gradient by the radius of the working area of the comparator unit surface, °C ± (**0,003** · t – 0,05)

→ use_decimal_point

Temperature gradient by the radius of the working area of the comparator unit surface, °C ± (0,003 · t – **0,05**)

→ use_decimal_point

Instability of temperature maintenance during 10 minutes, °C ± 0,2 .

→ unnecessary_space

Instability of temperature maintenance during 10 minutes, → Instability of temperature maintenance during 10 minutes, °C ± 0,2 . °C ± 0,2.

→ use_decimal_point

Unit of the last order of the indicator, °C 0,01.

→ sentence_too_long

Limit of the tolerable additional error of determination of temperature of the thermostatic unit working area, caused by variation of mains voltage from nominal (220 V) within the limits (187...242) V, does not exceed 0,2 of the limit of tolerable basic **error**.

→ use_decimal_point

Limit of the tolerable additional error of determination of temperature of the thermostatic unit working area, caused by variation of mains voltage from nominal (220 V) within the limits (187...242) V, does not exceed 0,2 of the limit of tolerable basic error.

→ unnecessary_space

Power supply of KТП-500 is performed from the alternate → Power supply of KТП-500 is performed from the alternate current mains with frequency (50 ± 1) Hz and voltage (220 +22-33) V. current mains with frequency (50 ± 1) Hz and voltage (220 +22-33) V.

→ sentence_too_long

Insulation of electrical circuits of KТП-500 between themselves and relative to the housing withstands during 1 minute an impact of testing voltage of practically sinusoidal form of 660 V and frequency from 45 to 65 **Hz**.

→ sentence_too_long

KТП-500 in transport tare possesses durability to an impact of air media with a relative humidity up to 98 % at the temperature of 35 °**C**.

→ sentence_too_long

KТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s² and 1 hour durability of **impact**.

→ use_comma_after_introductory_phrase

In KТП-500 contains the following precious metals:

→ spell_out_numerals

№ n/n Name Designation Number 1 Surface temperature → № n/n Name Designation Number 1 Surface temperature calibrator KТП-500 HKГЖ 408749.002 1 2 Surface calibrator KТП-500 HKГЖ 408749.002 1 two Surface temperature calibrator KТП-500.

→ avoid_passive

Outside the instrument is protected by thermal insulation and placed in the casing, blown on by a fan, positioned on the lower panel of KТП-500.

→ sentence_too_long

In the upper channel, close to working surface of the thermostatic unit, a platinum thermal converter of resistance is located, with the help of which measurement and regulation of temperature of the thermostatic unit is **performed**.

→ sentence_too_long

In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ICX), that are used for determination of the temperature gradient along the height of the thermostatic **unit**.

→ sentence_too_long

In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (**K**).

→ sentence_too_long

ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of **readiness**.

→ sentence_too_long

In the lower row depending on the signal of readiness is reflected either a preset temperature (temperature of setting) or the time during which the calibrator is working in operating **mode**.

→ sentence_too_long

When the deviation rate of the current temperature from the preset one does not exceed 0,5 °C during 3 minutes, the countdown is started as well as indication of time of working of the calibrator in the present (operational) **mode**.

→ use_decimal_point

When the deviation rate of the current temperature from the preset one does not exceed **0,5** °C during 3 minutes, the countdown is started as well as indication of time of working of the calibrator in the present (operational) mode.

→ use_comma_after_introduutory_phrase

In the left corner there a conventionalized letter «t» appears.

→ sentence_too_long

It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, in case of a short-circuit in a thermal converters **circuits**.

→ simplify_word

It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, **in case of a** short-circuit in a thermal converters circuits.

It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, **in a** short-circuit in a thermal converters circuits.

→ sentence_too_long

To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present **certificate**.

→ avoid_modal_verbs

To operate КТП-500 personnel **should** be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate.

→ avoid_modal_verbs

To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and **should** study the present certificate.

→ avoid_modal_verbs

Surrounding environment **should** not be combustible, it should not contain salty mists, aggressive gases and vapours in concentrations destroying metal and insulations.

→ avoid_modal_verbs

Surrounding environment should not be combustible, it **should** not contain salty mists, aggressive gases and vapours in concentrations destroying metal and insulations.

→ use_serial_comma

Surrounding environment should not be combustible, it should not contain salty mists, aggressive **gases and** vapours in concentrations destroying metal and insulations.

Surrounding environment should not be combustible, it should not contain salty mists, aggressive **gases, and** vapours in concentrations destroying metal and insulations.

→ avoid_archaic_word

Prior to starting operations it is necessary to check the quality of grounding of КТП-500.

→ sentence_too_long

After transporting or storage of KТП-500 at the temperature of air below plus 10 °C it is necessary to hold it before unpacking in a dark dry premisses at the temperature from plus 10 to plus 35 °C during 24 **hours**.

→ avoid_above_and_below

After transporting or storage of KТП-500 at the temperature of air **below** plus 10 °C it is necessary to hold it before unpacking in a dark dry premisses at the temperature from plus 10 to plus 35 °C during 24 hours.

→ sentence_too_long

Elimination of faults and all preventive operations should be performed only when the instrument is disconnected from the mains, temperature of verified KТП-500 should not exceed the temperature of surrounding **media**.

→ avoid_modal_verbs

Elimination of faults and all preventive operations **should** be performed only when the instrument is disconnected from the mains, temperature of verified KТП-500 should not exceed the temperature of surrounding media.

→ avoid_modal_verbs

Elimination of faults and all preventive operations should be performed only when the instrument is disconnected from the mains, temperature of verified KТП-500 **should** not exceed the temperature of surrounding media.

→ avoid_modal_verbs

In order to avoid burns one **should** not touch surfaces of the display of the unit, having a high temperature.

→ avoid_modal_verbs

Make a surface examination, during which the following items **should** be checked:

→ sentence_too_long

• **complete** set and correspondence to the section 3 of the present certificate; • absence of mechanical damage, affecting operational characteristics of KТП-500; • correspondence of the factory number of KТП-500 to the one provided in the **certificate**.

→ avoid_modal_verbs

It **should** display the temperature close to the room temperature.

→ avoid_modal_verbs

The temperature **should** remain constant within the limits of 3-5 °C.

→ use_comma_after_introduutory_phrase

With the help of control buttons the temperature of 50 °C should be set.

→ avoid_modal_verbs

With the help of control buttons the temperature of 50 °C **should** be set.

→ avoid_modal_verbs

For safety purpose it is envisaged that heating **may** be dropped during editing.

→ avoid_modal_verbs

Readings of the digital indicator **should** grow.

→ use_comma_after_introduutory_phrase

With the help of control buttons one should set the required temperature value.

→ avoid_modal_verbs

With the help of control buttons one **should** set the required temperature value.

→ avoid_modal_verbs

After termination of the time of KТП-500 entering the operational mode one **should** switch on the switch «Blocking».

→ avoid_passive

Calibration of KТП-500 **is performed by** the bodies of State metrological service or by other authorized institutions.

→ avoid_passive

Requirements for organization, procedure of calibration and the form of resulta presentation **is determined by** ПП 50.2.006-94 "ГЦИ.

→ spell_out_numerals

Interval between calibrations - **1** year.

→

Interval between calibrations - **one** year.

→ use_serial_comma

Requirements for calibration, **calibration instruments** **and** operations during its performance are determined by the document on calibration "Calibrator of the surface temperature.

→

Requirements for calibration, **calibration instruments**, **and** operations during its performance are determined by the document on calibration "Calibrator of the surface temperature.

→ avoid_passive

Requirements for calibration, calibration instruments and operations during its performance **are determined by** the document on calibration "Calibrator of the surface temperature.

→ avoid_passive

KТП-500 **is transported by** all types of transport in covered vehicles.

→ avoid_modal_verbs

Tare fastening in transport vehicles **should** be performed in accordance with regulations valid for corresponding types of transport means.

→ sentence_too_long

Conditions of transportation of KТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and **vibration**.

→ sentence_too_long

Conditions of storage of KТП-500 in transport tare in the storehouse of the manufacturer and of a client should correspond to conditions 1 by State Standards **15150-69**.

→ avoid_modal_verbs

Conditions of storage of KТП-500 in transport tare in the storehouse of the manufacturer and of a client **should** correspond to conditions 1 by State Standards 15150-69.

→ sentence_too_long

Surface temperature calibrator KТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for **operation**.

→ avoid_passive

Surface temperature calibrator KТП-500 factory number №_____ **was packed by** the science – production enterprise «ELEMER» in accordance with requirements, envisaged by the actual technical documentation.

→ unnecessary_space

(position) (personal
signature) (decoding of the **signature**)

→

(position) (personal
signature) (decoding of the **signature**)

→ sentence_too_long

Resource of the surface temperature calibrator KТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage **room**.

→ spell_out_numerals

Resource of the surface temperature calibrator KТП-500 is 10000 hours during the life term of **5** years including storage term of 6 months from the manufacturing date in

→

Resource of the surface temperature calibrator KТП-500 is 10000 hours during the life term of **five** years including storage term of 6 months from the manufacturing date in

packaging of the manufacturer in storage room.

packaging of the manufacturer in storage room.

→ spell_out_numerals

Resource of the surface temperature calibrator KТП-500 is 10000 hours during the life term of 5 years including storage term of **6** months from the manufacturing date in packaging of the manufacturer in storage room.

→

Resource of the surface temperature calibrator KТП-500 is 10000 hours during the life term of 5 years including storage term of **six** months from the manufacturing date in packaging of the manufacturer in storage room.

→ use_serial_comma

The indicated resource, **life term and** storage term are valid only in case if a client abides by the requirements of actual operation documentation.

→

The indicated resource, **life term, and** storage term are valid only in case if a client abides by the requirements of actual operation documentation.

→ synonym_of_if

In case of operation ability failure of KТП-500 it may be repaired at the producing works at the address:

→ avoid_modal_verbs

In case of operation ability failure of KТП-500 it **may** be repaired at the producing works at the address:

→ duplicate_punctuation_mark

1145, entrance 1, SPE «ELEMER» Tel.:

→

1145, entrance 1, SPE «ELEMER» Tel.
1145, entrance 1, SPE «ELEMER» Tel.:

→ use_comma_after_introductory_phrase

Without a guarantee sheet with filled in repair card KТП-500 can not be accepted for repair.

→ sentence_too_long

Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature **signature**

Terminologie ▼ anzeigen | Ausblenden

Keine Einträge gefunden

Neue Terme ▼ anzeigen | Ausblenden

(http://127.0.0.1:8031/output/TH/en/re_ktp_500_eng_pdf_admin_d2b1b35645...)

Termkandidat	Kontext
2-digit 5-digit indicator	• 8-channel commutator; • 18-digit ADC; • microcontroller; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator ; • power supply source for feeding of thermal converters.
8-channel commutator	• 8-channel commutator ; • 18-digit ADC; • microcontroller; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters.
acceleration	KТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s ² and 1 hour durability of impact.
Acceptance certificate	Acceptance certificate 9
ACCEPTANCE CERTIFICATE	ACCEPTANCE CERTIFICATE
ADC	• 8-channel commutator; • 18-digit ADC ; • microcontroller; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters. HKГЖ 408749.002PЭ C.6 Commutator is designed for connection in a certain sequence of input signals to ADC . ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
air media	KТП-500 in transport tare possesses durability to an impact of air media with a relative humidity up to 98 % at the temperature of 35 °C.

ambient air	Conditions of transportation of КТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and vibration.
analog converter	Digital to analog converter produces the control signal to thyristors for feeding of the heater.
authorized institution	Calibration of КТП-500 is performed by the bodies of State metrological service or by other authorized institutions .
basic error	Limits of the tolerable basic error of determination of temperature of comparator unit, $^{\circ}\text{C} \pm (0,2 + 0,003 \cdot t)$ where t – the value of reproduced temperature. Limit of the tolerable additional error of determination of temperature of the thermostatic unit working area, caused by variation of mains voltage from nominal (220 V) within the limits (187...242) V, does not exceed 0,2 of the limit of tolerable basic error .
bumping	КТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s ² and 1 hour durability of impact.
calibrating	where a, b, c – coefficients, determined when calibrating КТП-500.
calibration	Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration . Requirements for organization, procedure of calibration and the form of results presentation is determined by ПП 50.2.006-94 "ГСИ". Organization and procedure of calibration . Requirements for calibration , calibration instruments and operations during its performance are determined by the document on calibration "Calibrator of the surface temperature". Requirements for calibration, calibration instruments and operations during its performance are determined by the document on calibration "Calibrator of the surface temperature".
Calibration	Calibration of КТП-500 is performed by the bodies of State metrological service or by other authorized institutions. Calibration of measuring instruments.
Calibration technique	Calibration technique 8
CALIBRATION TECHNIQUE	CALIBRATION TECHNIQUE
Calibration technique	Calibration technique » НКГЖ 408749.002МП.
calibration instrument	Requirements for calibration, calibration instruments and operations during its performance are determined by the document on calibration "Calibrator of the surface temperature".
calibration	Interval between calibrations - 1 year.
calibrator	In the lower row depending on the signal of readiness is reflected either a preset temperature (temperature of setting) or the time during which the calibrator is working in operating mode. When the deviation rate of the current temperature from the preset one does not exceed 0,5 °C during 3 minutes, the countdown is started as well as indication of time of working of the calibrator in the present (operational) mode.
Calibrator	Requirements for calibration, calibration instruments and operations during its performance are determined by the document on calibration " Calibrator of the surface temperature".
calibrator entrance	Time of calibrator entrance of the operational mode, hours 2.
CHARACTERISTICS	TECHNICAL DATA AND CHARACTERISTICS
clamp	Connect the ground loop to the clamp of grounding of КТП-500.
climatic impact	By tolerance to climatic impact during operation corresponds to КТП-500 the group of manufacturing B1 according to State Standards ГОСТ 12997-84.
coefficient	where a, b, c – coefficients , determined when calibrating КТП-500.
Commutator	НКГЖ 408749.002ПЭ C.6 Commutator is designed for connection in a certain sequence of input signals to ADC.
comparator unit	Limits of the tolerable basic error of determination of temperature of comparator unit , $^{\circ}\text{C} \pm (0,2 + 0,003 \cdot t)$ where t – the value of reproduced temperature.
comparator unit surface	Temperature gradient by the radius of the working area of the comparator unit surface , $^{\circ}\text{C} \pm (0,003 \cdot t - 0,05)$
COMPLETE SET	COMPLETE SET
computation	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HСХ or IСХ of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
contact method	Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.
CONTENT	CONTENT

control button	With the help of control buttons the temperature of 50 °C should be set. With the help of control buttons one should set the required temperature value.
control signal	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness. Digital to analog converter produces the control signal to thyristors for feeding of the heater.
conventionalized letter	In the left corner there a conventionalized letter «t» appears.
converter	In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ICX), that are used for determination of the temperature gradient along the height of the thermostatic unit.
countdown	When the deviation rate of the current temperature from the preset one does not exceed 0,5 °C during 3 minutes, the countdown is started as well as indication of time of working of the calibrator in the present (operational) mode.
Coupon	4 Coupon for guarantee repair and 1 after guarantee servicing
decoding	Seal place _____ (personal signature) (decoding of the signature) _____ (position) (personal signature) (decoding of the signature)
deviation	It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, in case of a short-circuit in a thermal converters circuits.
deviation rate	When the deviation rate of the current temperature from the preset one does not exceed 0,5 °C during 3 minutes, the countdown is started as well as indication of time of working of the calibrator in the present (operational) mode.
digital indicator	Readings of the digital indicator should grow. Take the readings of the digital indicator КТП-500 and determine characteristics of calibrated thermal convertors at the present temperature.
Digital indicator	Digital indicator displays service information, and afterwards starts operating in the working mode.
digital-to-analog converter	• 8-channel commutator; • 18-digit ADC; • microcontroller; • digital-to-analog converter ; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters.
disconnect	• set the tumbler «Circuit» in the following position; • disconnect КТП-500 from the circuit.
disconnection	Blocking is designed for disconnection of power supply in case of an emergency.
Double-pole switch	Double-pole switch «Blocking» is designed for switching on of the system of blocking of power supply circuits of heaters.
durability	КТП-500 in transport tare possesses durability to an impact of air media with a relative humidity up to 98 % at the temperature of 35 °C. КТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s ² and 1 hour durability of impact.
electrical circuit	Insulation of electrical circuits of КТП-500 between themselves and relative to the housing withstands during 1 minute an impact of testing voltage of practically sinusoidal form of 660 V and frequency from 45 to 65 Hz.
electrical converter	In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (K).
electrical device	To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices » and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate. To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate.
Electrical resistance	Electrical resistance of insulation is not less than 20 MOhm.
ELEMER	Surface temperature calibrator КТП-500 factory number №_____ was packed by the science – production enterprise « ELEMER » in accordance with requirements, envisaged by the actual technical documentation. 1145, entrance 1, SPE « ELEMER » Tel.:
Elimination	Elimination of faults and all preventive operations should be performed only when the instrument is disconnected from the mains, temperature of verified КТП-500 should not exceed the temperature of surrounding media.
E-mail	(499) 710-00-01 E-mail :

factory number	<p>• complete set and correspondence to the section 3 of the present certificate; • absence of mechanical damage, affecting operational characteristics of КТП-500; • correspondence of the factory number of КТП-500 to the one provided in the certificate.</p> <p>Surface temperature calibrator КТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for operation.</p> <p>Surface temperature calibrator КТП-500 factory number №_____ was packed by the science – production enterprise «ELEMER» in accordance with requirements, envisaged by the actual technical documentation.</p>
fan	Outside the instrument is protected by thermal insulation and placed in the casing, blown on by a fan , positioned on the lower panel of КТП-500.
fanning ventilator	The fanning ventilator of the unit starts working.
front panel	On the vertical part of the front panel there are two switches:
Gostehnadzor	To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor , and should study the present certificate.
Gradient correction	Gradient correction by height between an incorporated platinum thermometer of resistance and the surface of the thermostatic unit can be calculated from the formula
Gradient error	Gradient error is determined when calibrating КТП-500 at the manufacturing factory and automatically is taken into account in the readings of the indicator КТП-500.
ground loop	Connect the ground loop to the clamp of grounding of КТП-500.
guarantee repair	4 Coupon for guarantee repair and 1 after guarantee servicing
guarantee servicing	4 Coupon for guarantee repair and 1 after guarantee servicing
guarantee sheet	Without a guarantee sheet with filled in repair card КТП-500 can not be accepted for repair.
Guarantee term	Guarantee term of operation is 12 months from the selling date.
GUARANTEES OF THE MANUFACTURER	RESOURCES, TERMS OF LIFE AND STORAGE AND GUARANTEES OF THE MANUFACTURER (SUPPLIER)
guaranty	Resources, service life and storage time and manufacturer's (supplier's) guaranties 10
Head	Head of the quality control department
heater	Digital to analog converter produces the control signal to thyristors for feeding of the heater .
heater	<p>Double-pole switch «Blocking» is designed for switching on of the system of blocking of power supply circuits of heaters.</p> <p>After the temperature of the blocked channel of КТП-500 returns the zone of preset limits power supply of the heaters is continued.</p>
heating device	<p>The unit with the ring is installed on the heating device.</p> <p>The heating device is a flat metallic disc with an incorporated heater.</p>
humidity	<p>КТП-500 is resistant to impact of humidity up to 75 % at the temperature 30 °C.</p> <p>КТП-500 in transport tare possesses durability to an impact of air media with a relative humidity up to 98 % at the temperature of 35 °C.</p>
incorporated heater	The heating device is a flat metallic disc with an incorporated heater .
incorporated platinum thermometer	Gradient correction by height between an incorporated platinum thermometer of resistance and the surface of the thermostatic unit can be calculated from the formula
indicated resource	The indicated resource , life term and storage term are valid only in case if a client abides by the requirements of actual operation documentation.
indicated time	Format of the indicated time :
Instability	Instability of temperature maintenance during 10 minutes, °C ± 0,2 .
insulation	Electrical resistance of insulation is not less than 20 MOhm.
Insulation	Insulation of electrical circuits of КТП-500 between themselves and relative to the housing withstands during 1 minute an impact of testing voltage of practically sinusoidal form of 660 V and frequency from 45 to 65 Hz.
insulation	Surrounding environment should not be combustible, it should not contain salty mists, aggressive gases and vapours in concentrations destroying metal and insulations .
korp	124460, Moscow, Zelenograd, korp .
left corner	<p>After assigning the setting its temperature is displayed, at the same time in the left corner of the lower part the symbol «=» is displayed.</p> <p>In the left corner there a conventionalized letter «t» appears.</p>
life term	Resource of the surface temperature calibrator КТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage room.
life term	The indicated resource, life term and storage term are valid only in case if a client abides by the requirements of actual operation documentation.

mains	Power supply of КТП-500 is performed from the alternate current mains with frequency (50 ±1) Hz and voltage (220 +22–33) V. Elimination of faults and all preventive operations should be performed only when the instrument is disconnected from the mains , temperature of verified КТП-500 should not exceed the temperature of surrounding media. Connect КТП-500 to the mains .
mains voltage	Limit of the tolerable additional error of determination of temperature of the thermostatic unit working area, caused by variation of mains voltage from nominal (220 V) within the limits (187...242) V, does not exceed 0,2 of the limit of tolerable basic error.
manufacturing date	Resource of the surface temperature calibrator КТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage room.
manufacturing factory	Gradient error is determined when calibrating КТП-500 at the manufacturing factory and automatically is taken into account in the readings of the indicator КТП-500.
Measuring–regulator	Measuring–regulator of temperature comprises:
mechanical damage	• complete set and correspondence to the section 3 of the present certificate; • absence of mechanical damage , affecting operational characteristics of КТП-500; • correspondence of the factory number of КТП-500 to the one provided in the certificate.
metallic disc	The heating device is a flat metallic disc with an incorporated heater.
metrological service	Calibration of КТП-500 is performed by the bodies of State metrological service or by other authorized institutions.
microcontroller	• 8-channel commutator; • 18-digit ADC; • microcontroller ; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters. ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
minus	Conditions of transportation of КТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and vibration.
monoblock	Physically КТП-500 is manufactured in the form of a monoblock .
Name Designation Number	№ п/п Name Designation Number 1 Surface temperature calibrator КТП-500 НКГЖ 408749.002 1 2 Surface temperature calibrator КТП-500.
obligatory requirement	Surface temperature calibrator КТП-500 factory number № _____ safety category ____4Н by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for operation.
OPERATING TIME REGISTER	OPERATING TIME REGISTER
operation name	Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature
operation ability failure	In case of operation ability failure of КТП-500 it may be repaired at the producing works at the address:
operation documentation	The indicated resource, life term and storage term are valid only in case if a client abides by the requirements of actual operation documentation .
Operation manual	Operation manual НКГЖ 408749.002РЭ 1
Operation Manual	Operation Manual НКГЖ 408749.002РЭ
OPERATION OF THE INSTRUMENT	DESIGN AND OPERATION OF THE INSTRUMENT
Operation procedure	Operation procedure 8 Operation procedure of КТП-500
OPERATION PROCEDURE	OPERATION PROCEDURE
Operation time	Operation time register 11 Appendix A 12
Packaging certificate	Packaging certificate 10
PACKAGING CERTIFICATE	PACKAGING CERTIFICATE

penetration	Protection degree from penetration of dust and of water into KТП-500 corresponds to IP30 according to State Standards 14254-96.
personal signature	Seal place _____ (personal signature) (decoding of the signature) _____ (position) (personal signature) (decoding of the signature)
Platinum	Platina - 2,1674 gr, Rhodium - 0,2476 gr.
platinum	In the upper channel, close to working surface of the thermostatic unit, a platinum thermal converter of resistance is located, with the help of which measurement and regulation of temperature of the thermostatic unit is performed.
platinum thermo-converter	In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (K).
power supply circuit	Double-pole switch «Blocking» is designed for switching on of the system of blocking of power supply circuits of heaters.
power supply source	• 8-channel commutator; • 18-digit ADC; • microcontroller; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters.
Precision temperature	• Thermostatic unit with an open working surface; • Precision temperature regulator- measuring instrument.
premiss	After transporting or storage of KТП-500 at the temperature of air below plus 10 °C it is necessary to hold it before unpacking in a dark dry premises at the temperature from plus 10 to plus 35 °C during 24 hours.
PREPARATION FOR OPERATION	PREPARATION FOR OPERATION
present certificate	To operate KТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate .
present certificate	• complete set and correspondence to the section 3 of the present certificate ; • absence of mechanical damage, affecting operational characteristics of KТП-500; • correspondence of the factory number of KТП-500 to the one provided in the certificate.
present temperature	Take the readings of the digital indicator KТП-500 and determine characteristics of calibrated thermal convertors at the present temperature .
preset limits power supply	After the temperature of the blocked channel of KТП-500 returns the zone of preset limits power supply of the heaters is continued.
preset temperature	In the lower row depending on the signal of readiness is reflected either a preset temperature (temperature of setting) or the time during which the calibrator is working in operating mode.
preventive operation	Elimination of faults and all preventive operations should be performed only when the instrument is disconnected from the mains, temperature of verified KТП-500 should not exceed the temperature of surrounding media.
production enterprise	Surface temperature calibrator KТП-500 factory number №_____ was packed by the science – production enterprise «ELEMER» in accordance with requirements, envisaged by the actual technical documentation.
Protection degree	Protection degree from penetration of dust and of water into KТП-500 corresponds to IP30 according to State Standards 14254-96.
protective measure	Conditions of transportation of KТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and vibration.
protective ring	Thermostatic unit is surrounded from outside by a protective ring , the temperature of which is maintained similar with the temperature of thermostatic unit.
protective unit	In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (K).
PURPOSE	PURPOSE
quadratic value	KТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s ² and 1 hour durability of impact.
quality control department	Head of the quality control department
radial channel	In the thermostatic unit there are three radial channels for placing thermal converters.
radius	Temperature gradient by the radius of the working area of the comparator unit surface, °C ± (0,003 · t – 0,05)
Radius	Radius of the working area, mm 25.

readiness	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness . In the lower row depending on the signal of readiness is reflected either a preset temperature (temperature of setting) or the time during which the calibrator is working in operating mode.
regulator	Temperature measuring regulator has got two channels of regulation.
repair card	Without a guarantee sheet with filled in repair card КТП-500 can not be accepted for repair.
RESOURCES	RESOURCES , TERMS OF LIFE AND STORAGE AND GUARANTEES OF THE MANUFACTURER (SUPPLIER)
Rhodium	Platina - 2,1674 gr, Rhodium - 0,2476 gr.
room temperature	It should display the temperature close to the room temperature .
safety category	Surface temperature calibrator КТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for operation.
Safety measures instruction	Safety measures instructions 6
SAFETY MEASURES INSTRUCTIONS	SAFETY MEASURES INSTRUCTIONS
safety purpose	For safety purpose it is envisaged that heating may be dropped during editing.
salty mist	Surrounding environment should not be combustible, it should not contain salty mists , aggressive gases and vapours in concentrations destroying metal and insulations.
Science production enterprise	RELIABLE INSTRUMENTS AND SYSTEMS OF TECHNOLOGICAL MONITORING Science production enterprise
selling date	Guarantee term of operation is 12 months from the selling date .
service life	Resources, service life and storage time and manufacturer's (supplier's) guaranties 10
short-circuit	It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, in case of a short-circuit in a thermal converters circuits.
signature signature signature	Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature
SPE	1145, entrance 1, SPE «ELEMER» Tel.:
State Standard	Conditions of transportation of КТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and vibration.
state standard	Surface temperature calibrator КТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards , of actual technical documentation and was acknowledged to be fit for operation.
State Standard	Protection degree from penetration of dust and of water into КТП-500 corresponds to IP30 according to State Standards 14254-96. By tolerance to climatic impact during operation corresponds to КТП-500 the group of manufacturing B1 according to State Standards ГОСТ 12997-84. Conditions of storage of КТП-500 in transport tare in the storehouse of the manufacturer and of a client should correspond to conditions 1 by State Standards 15150-69.
static feature	In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ICX), that are used for determination of the temperature gradient along the height of the thermostatic unit.
storage room	Resource of the surface temperature calibrator КТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage room .
storage term	Resource of the surface temperature calibrator КТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage room. The indicated resource, life term and storage term are valid only in case if a client abides by the requirements of actual operation documentation.
storage time	Resources, service life and storage time and manufacturer's (supplier's) guaranties 10
storehouse	Conditions of storage of КТП-500 in transport tare in the storehouse of the manufacturer and of a client should correspond to conditions 1 by State Standards 15150-69.
SUPPLIER	RESOURCES, TERMS OF LIFE AND STORAGE AND GUARANTEES OF THE MANUFACTURER (SUPPLIER)
surface examination	Make a surface examination , during which the following items should be checked:

surface temperature	Requirements for calibration, calibration instruments and operations during its performance are determined by the document on calibration "Calibrator of the surface temperature .
surface temperature calibrator	Resource of the surface temperature calibrator КТП-500 is 10000 hours during the life term of 5 years including storage term of 6 months from the manufacturing date in packaging of the manufacturer in storage room.
Surface temperature calibrator	<p>Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.</p> <p>№ п/п Name Designation Number 1 Surface temperature calibrator КТП-500 НКГЖ 408749.002 1 2 Surface temperature calibrator КТП-500.</p> <p>Surface temperature calibrator КТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for operation.</p> <p>Surface temperature calibrator КТП-500 factory number №_____ was packed by the science – production enterprise «ELEMER» in accordance with requirements, envisaged by the actual technical documentation.</p>
SURFACE TEMPERATURE CALIBRATOR	SURFACE TEMPERATURE CALIBRATOR
Surname	<p>Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature</p> <p>Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature</p> <p>Surname, Surname, Surname, Date and time Given Date and time of Given Date and time of Given of operation names and operation names and operation names and signature signature signature</p>
SYSTEMS OF TECHNOLOGICAL MONITORING	RELIABLE INSTRUMENTS AND SYSTEMS OF TECHNOLOGICAL MONITORING Science production enterprise
Technical data	Technical data and characteristics 3
technical documentation	<p>Surface temperature calibrator КТП-500 factory number №_____ safety category ____4H by ОПБ-88/97 was manufactured and accepted in accordance with obligatory requirements of state standards, of actual technical documentation and was acknowledged to be fit for operation.</p> <p>Surface temperature calibrator КТП-500 factory number №_____ was packed by the science – production enterprise «ELEMER» in accordance with requirements, envisaged by the actual technical documentation.</p>
technical operation	To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate.
technical safety	To operate КТП-500 personnel should be trained in accordance with «Regulations of technical operations of consumers electrical devices" and "regulations of technical safety when operating electrical devices of consumers", approved by Gostehnadzor, and should study the present certificate.
Tel	1145, entrance 1, SPE «ELEMER» Tel.:
temperature calibrator	№ п/п Name Designation Number 1 Surface temperature calibrator КТП-500 НКГЖ 408749.002 1 2 Surface temperature calibrator КТП-500.
temperature gradient	In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ИСХ), that are used for determination of the temperature gradient along the height of the thermostatic unit.
Temperature gradient	Temperature gradient by the radius of the working area of the comparator unit surface, °C ± (0,003 · t – 0,05)
temperature maintenance	Instability of temperature maintenance during 10 minutes, °C ± 0,2 .
temperature measuring	↵ - input (output) in the mode of editing (temperature measuring), buttons ►
temperature mode	The indicator is designed for reflection of temperature modes КТП-500, as well as for installation of the setting.
temperature point	Repeat the operation according to items 7.1.3...7.1.5 consequently for all the remaining temperature points .
temperature range	Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.

temperature value	With the help of control buttons one should set the required temperature value .
termination	After termination of the time of КТП-500 entering the operational mode one should switch on the switch «Blocking».
thermal converter	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters , calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
thermal converter	In the upper channel, close to working surface of the thermostatic unit, a platinum thermal converter of resistance is located, with the help of which measurement and regulation of temperature of the thermostatic unit is performed.
thermal converter	<p>Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers, used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.</p> <p>In the thermostatic unit there are three radial channels for placing thermal converters.</p> <p>• 8-channel commutator; • 18-digit ADC; • microcontroller; • digital-to-analog converter; • thyristor amplifier; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters.</p> <p>ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HCX or ICX of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.</p> <p>Preparation and operation of calibrated thermal converters is performed in accordance with operational documentation.</p>
thermal converters circuit	It operates in case of deviation of the current temperature from the preset one for ± 20 °C, for example, in case of a short-circuit in a thermal converters circuits .
thermal convertor	Take the readings of the digital indicator КТП-500 and determine characteristics of calibrated thermal convertors at the present temperature.
thermal insulation	Outside the instrument is protected by thermal insulation and placed in the casing, blown on by a fan, positioned on the lower panel of КТП-500.
thermometer	Surface temperature calibrator КТП-500 (hereinafter - КТП-500) is designed for determination of graduation characteristics of thermal converters and thermometers , used for measuring of the temperatures of flat surfaces of hard bodies by a contact method within the temperature range of from 50 to 500 °C during their manufacturing and calibration.
thermostatic unit	Limit of the tolerable additional error of determination of temperature of the thermostatic unit working area, caused by variation of mains voltage from nominal (220 V) within the limits (187...242) V, does not exceed 0,2 of the limit of tolerable basic error.
thermostatic unit	<p>Thermostatic unit is surrounded from outside by a protective ring, the temperature of which is maintained similar with the temperature of thermostatic unit.</p> <p>In the thermostatic unit there are three radial channels for placing thermal converters.</p> <p>In the upper channel, close to working surface of the thermostatic unit, a platinum thermal converter of resistance is located, with the help of which measurement and regulation of temperature of the thermostatic unit is performed.</p> <p>In the upper channel, close to working surface of the thermostatic unit, a platinum thermal converter of resistance is located, with the help of which measurement and regulation of temperature of the thermostatic unit is performed.</p> <p>In two other channels, the distance between them being 10 mm, there are thermo-electrical converters XA (K) are situated with individual static features (ICX), that are used for determination of the temperature gradient along the height of the thermostatic unit.</p> <p>In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with HCX XA (K).</p> <p>Gradient correction by height between an incorporated platinum thermometer of resistance and the surface of the thermostatic unit can be calculated from the formula</p>
Thermostatic unit	<p>• Thermostatic unit with an open working surface; • Precision temperature regulator- measuring instrument.</p> <p>Thermostatic unit is surrounded from outside by a protective ring, the temperature of which is maintained similar with the temperature of thermostatic unit.</p>
thyristor amplifier	• 8-channel commutator; • 18-digit ADC; • microcontroller; • digital-to-analog converter; • thyristor amplifier ; • 2-digit 5-digit indicator; • power supply source for feeding of thermal converters.
thyristor	Digital to analog converter produces the control signal to thyristors for feeding of the heater.
tolerance	By tolerance to climatic impact during operation corresponds to КТП-500 the group of manufacturing B1 according to State Standards ГОСТ 12997-84.
transport tare	<p>КТП-500 in transport tare withstands temperature up to plus 50 °C.</p> <p>КТП-500 in transport tare withstands temperature down to minus 50 °C.</p> <p>КТП-500 in transport tare possesses durability to an impact of air media with a relative humidity up to 98 % at the temperature of 35 °C.</p> <p>КТП-500 in transport tare is resistant to bumping with the number of shocks 80 per minute, with quadratic value of acceleration of 30 m/s² and 1 hour durability of impact.</p>

	Conditions of storage of КТП-500 in transport tare in the storehouse of the manufacturer and of a client should correspond to conditions 1 by State Standards 15150-69.
transport vehicle	Tare fastening in transport vehicles should be performed in accordance with regulations valid for corresponding types of transport means.
transportation regulation	Storage and transportation regulations 9
TRANSPORTATION REGULATIONS	STORAGE AND TRANSPORTATION REGULATIONS
tumbler	Switch on the tumbler «Circuit». Switch on the tumbler «Circuit». • set the tumbler «Circuit» in the following position; • disconnect КТП-500 from the circuit.
vapours	Surrounding environment should not be combustible, it should not contain salty mists, aggressive gases and vapours in concentrations destroying metal and insulations.
Verification certificate	3 Verification certificate 1
vibration	Conditions of transportation of КТП-500 correspond to the conditions 5 by State Standards 15150-69 at the temperature of ambient air from minus 50 to plus 50 °C with consideration of protective measures from shocks and vibration .
work switch	After ending work switch off КТП-500 in the following sequence:
Zelenograd	124460, Moscow, Zelenograd , korp.
ΔTH	ΔTH = a + b · t + c · t ²
Вкл	Set the switch «Blocking» into the position « Вкл. »
ГОСТ	By tolerance to climatic impact during operation corresponds to КТП-500 the group of manufacturing B1 according to State Standards ГОСТ 12997-84.
ГСИ	Requirements for organization, procedure of calibration and the form of resulta presentation is determined by ПП 50.2.006-94 " ГСИ ."
ИСХ	In two other channels, the distance between them being 10 mm, there are thermo-electrical converters ХА (K) are situated with individual static features (ИСХ), that are used for determination of the temperature gradient along the height of the thermostatic unit. ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HСХ or ИСХ of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
КГЖ	Н КГЖ 408749.002РЭ С.13
МОhm	Electrical resistance of insulation is not less than 20 МОhm .
мм	Radius of the working area, мм 25.
НКГЖ	Operation Manual НКГЖ 408749.002РЭ НКГЖ 408749.002РЭ С.2 НКГЖ 408749.002РЭ С.3 НКГЖ 408749.002РЭ С.4 № n/n Name Designation Number 1 Surface temperature calibrator КТП-500 НКГЖ 408749.002 1 2 Surface temperature calibrator КТП-500. Operation manual НКГЖ 408749.002РЭ 1 НКГЖ 408749.002РЭ С.5 НКГЖ 408749.002РЭ С.6 Commutator is designed for connection in a certain sequence of input signals to ADC. НКГЖ 408749.002РЭ С.7 НКГЖ 408749.002РЭ С.8 Calibration technique» НКГЖ 408749.002МП. НКГЖ 408749.002РЭ С.9 НКГЖ 408749.002РЭ С.10 НКГЖ 408749.002РЭ С.11 НКГЖ 408749.002РЭ С.12 APPENDIX A
НСХ	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with НСХ or ИСХ of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.
НСХ ХА	In the channel of regulating of temperature of thermostatic unit the platinum thermo-converter of resistance is used, in the channel of regulating of temperature of protective unit - thermal – electrical converter with НСХ ХА (K).
ПИД	ADC together with microcontroller makes measuring of output signals of thermal converters, their treatment, computation of the temperature in accordance with HСХ or ИСХ of thermal converters, calculation of the value of control signal (by ПИД law of regulation), produces a signal of readiness.