

KSZ 100B

Current Probe Calibrator

Instruction Manual



Information in this publication supersedes that in all previously published material.
Specifications are subject to change without notice.

Manufacturer

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Warranty

PMK GmbH warrants this oscilloscope accessory for normal use and operation within specifications for a period of two (2) years from date of shipment and will repair or replace any defective product which was not damaged by negligence, misuse, improper installation, accident or unauthorized repair or modification by the buyer. This warranty is applicable only to defects due to material or workmanship. PMK GmbH disclaim any other implied warranties of merchantability or fitness for a particular purpose. PMK GmbH will not be liable for any indirect, special, incidental, or consequential damages (including damages for loss of profits, loss of business, loss of use or data, interruption of business and the like), even if PMK GmbH has been advised of the possibility of such damages arising from any defect or error in this manual or product.



(EC conformity marking)

This electronic product is classified within the WEEE/ RoHS* category list as monitoring and control equipment (category 9). Category 9 products are exempted from the restrictions under the scope of the RoHS directive.

Your help and efforts are required to protect and keep clean our environment. Therefore return this electronic product at the end of its life either to the manufacturer or take care of separate WEEE collection and professional WEEE treatment yourself. Do not dispose as unsorted municipal waste!

* EC Directives:

WEEE Directive 2002/96/EC	-	Waste Electrical and Electronic Equipment
RoHS Directive 2002/95/EC	-	Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment

Safety Information

To avoid personal injury and to prevent fire or damage to this product or products connected to it, review and comply with the following safety precautions. Be aware that if you use this instrument in a manner not specified the protection this product provides may be impaired.

Only qualified personnel should use this instrument.



Warning:

Dangerous voltages capable of causing death are present when using this instrument.
Use extreme caution when handling, testing and adjusting.

Connect and disconnect properly.

The KSZ100 B has a condensator battery of 8 mF, wich are charged to 200 V. +200 Volts lie against the red safety connector and earth ground. Make sure the Calibrator is turned off while removing or exchanging the contact bar. Operate the device only with insulated leads.

Keep away from live circuits.

Avoid open circuitry. Do not touch connections or components when power is present.

Do not operate with suspected failures.

Refer to qualified service personnel.

Indoor use only.

Do not operate in wet/damp environment. Keep product surfaces dry and clean.

Do not operate the product in an explosive atmosphere.

Do not modify the instrument.

Adapt to the respective safety restrictions at all time.

Functionality:

The functionality of the KSZ100 B is discribed by the simplyfied diagram (Fig. 1).

By a fast noninductive switching transistor a pulsed current is generated from a condensator bank through an exact resistor. The value of the pulsed current is determined by the value U1 and the value of resistance R1. U1 is stabilized.

At the contact bar a clamp device can be connected.

Current transformers can be connecet via power lead to the safety connectors.

Simplified diagram of the Current Probe Calibrator KSZ100 B:

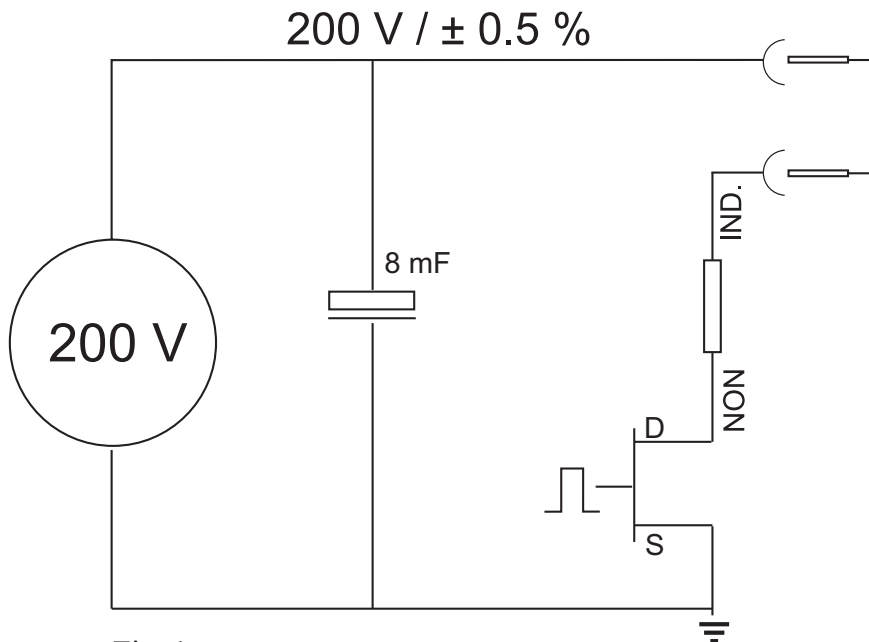
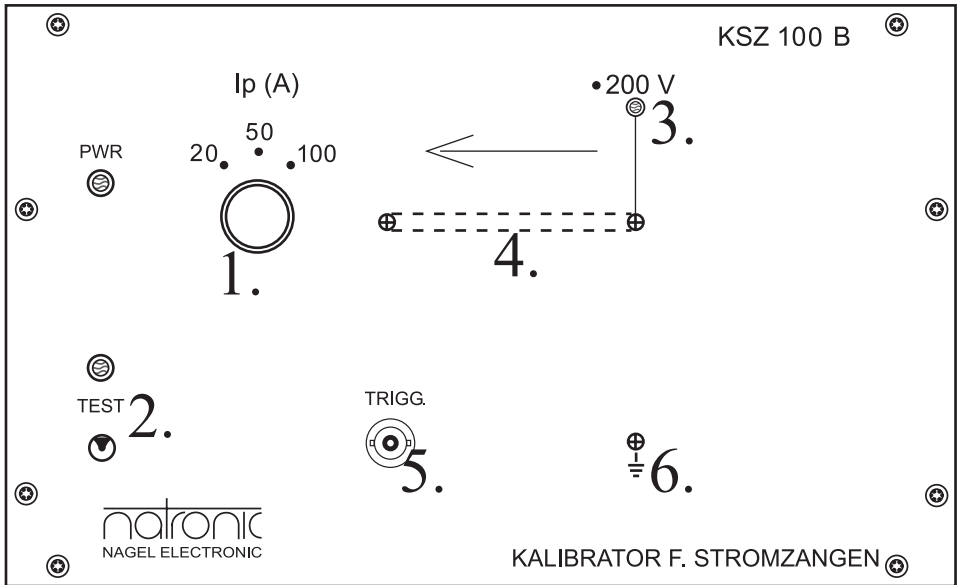


Fig. 1



1. Rotary switch "**Ip (A)**" from 20 A up to 100 A
2. "**TEST**" trigger switch and indicator LED
3. LED "**200 V**"
4. Contact Bar for Clamp or Hall device
5. Trigger Output
6. Earth ground

1. Turn on the KSZ100 B by pressing the switch at the backplate.
Notice that the LED "**PWR**" at the front of the calibrator is lit.
2. Wait until the LED "**200 V**" is lit (approx. 30 seconds)
3. Connect Clamp or Hall device to the contact bar.
(In case of Hall device remove the bar by pulling it slowly out of its sockets.)
4. Connect Trigger output with an oscilloscope if needed.
5. Set desired value on rotary switch "**Ip (A)**" - do not switch while testing!
6. Activate trigger switch "**TEST**" to start the test. Notice that the red LED "**TEST**" is blinking.



Make sure the Calibrator is turned off while removing or exchanging the contact bar.

Specifications

Square wave current output (switchable):	20 / 50 / 100 A
Square Wave pulse width:	1 msec.
Drooprate	1 % / msec.
Rise time:	approx. 40- 120 nsec.
Overshoot:	< 2 %
Repetition frequency:	0.5 Hz
Trigger output	10 Vp
Trigger pulse width	100 µsec.
Dimensions (L x W x H)	approx. 240 x 135 x 300 mm
Power supply voltage	100 - 240 V , 50 - 60 Hz

Scope of Delivery

KSZ100B

The following items are included in the scope of delivery. Please check the delivery for completeness. If any item is missing, send a message to our service department and we will send you the item immediately.

Item	Qty.
Generator	1
Power cord	1
Instruction manual	1

Ordering Information

Version	Order-No.
US	894-010-0US
EU	894-010-000