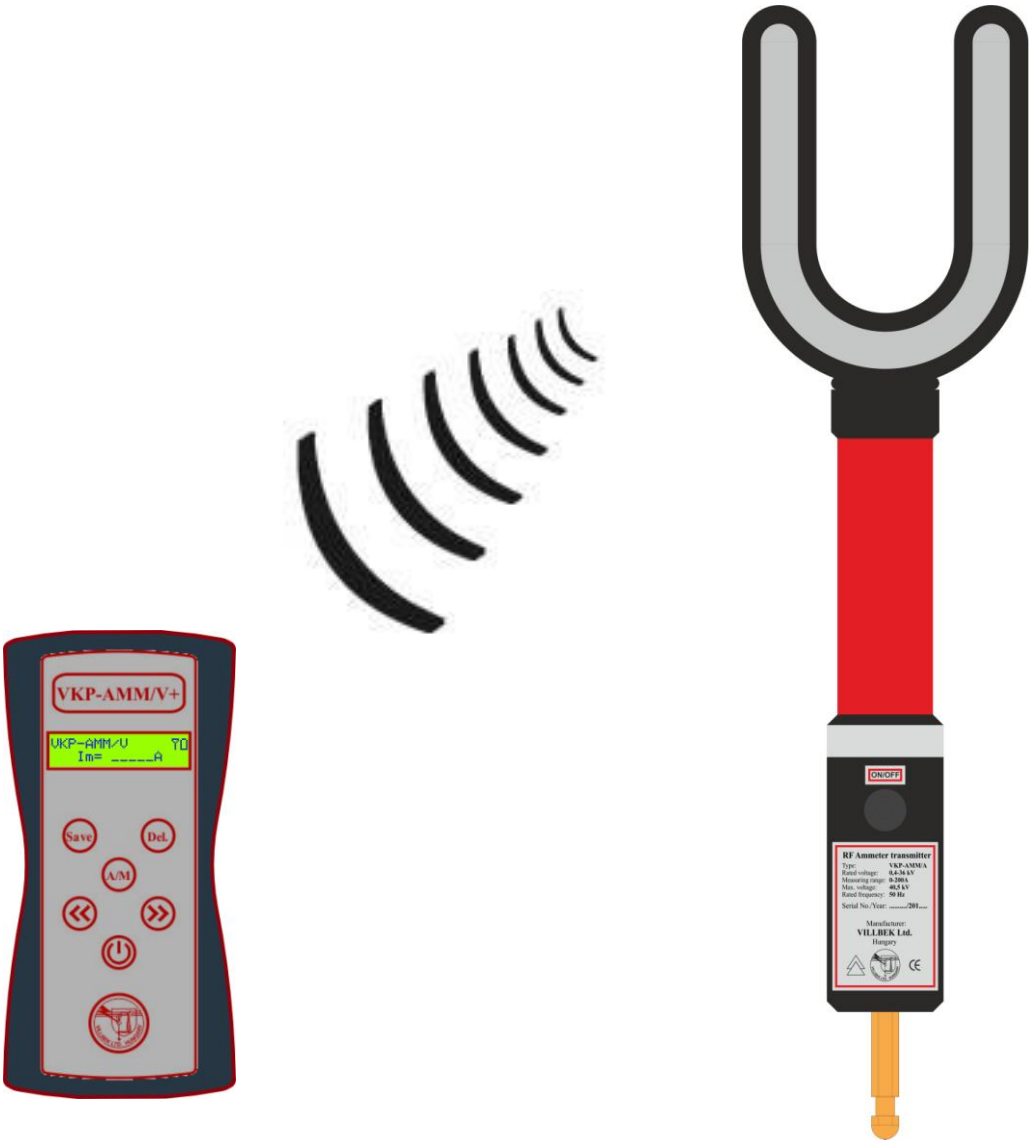
VKP-AMM+

HIGH VOLTAGE

RF AMMETER

Technical parameters
and
Operating instructions



Technical parameters

VKP-AMM/T MEASURING TRANSMITTER

Rated voltage:	0-**72 kV**
Measuring frequency:	**50 Hz (47 to 53 Hz)**
Measuring range:	**0-5000 A**
Supply voltage:	**9 V (6F22 alkaline)**
Transmitter frequency:	**433,9 MHz (Free usable frequency)**
Power demand:	**20 mA**
Indication:	**Illuminated LED when turned on and ready to operate. Rapid blinking when the power is low.**
IP class:	**IP65**
Weight:	**1,17kg (Without battery)**
Opening Width:	**70mm**
Coating:	**heat resistant silicone (-40˚C…+300˚C)**

VKP-AMM/R MEASURING RECEIVER

Indication of measurement:	**LCD**
Accuracy of measurement:	**± 1 %; ± 5 digit**
Range of indication:	**0-399,9A (0,1A)….400-5000 A (1A)**
RF receiving range:	**15 m**
Receiving frequency:	**433,9 MHz**
Set-up time:	**4-5 sec after turn-on**

The device collecting data from the transmitter ammeter. Displaying the incoming data and able to save them. Saving the maximum value of an actual measurement. The device has 16 memory blocks, which keep contents when turned off.

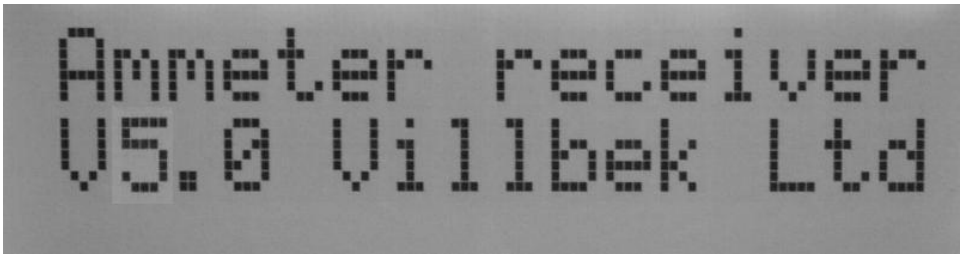
Dimensions:	**75 x 155 x 35 mm**
Display:	**Backlight LCD 2x16 characters**
Supply voltage:	**3 x 1.5V** (LR6 AA alkaline)
Consumption::	**15mA /60mA backlight on**
Operating frequency:	**433,9 MHz**
Memory:	**16 blocks**
IP class:	**IP65**
Weight:	**0,19kg (Without battery)**

The set includes:

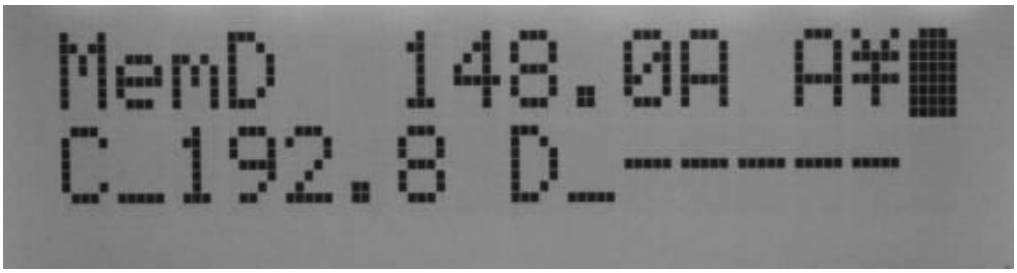
Measuring transmitter,
Measuring receiver,
Batteryes,
With carrying bag

2.1. Operating

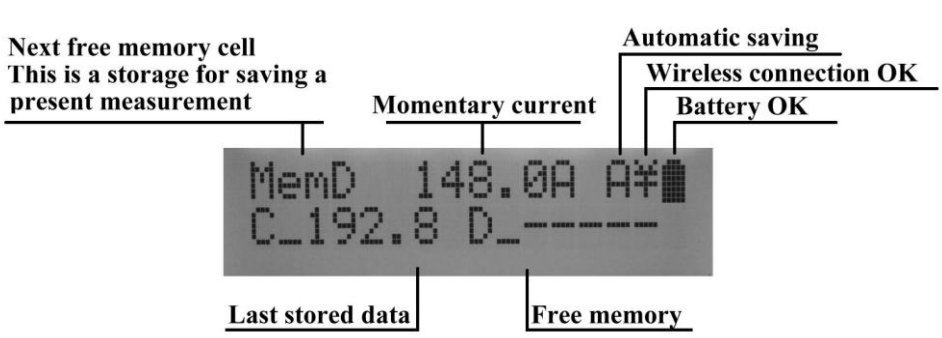
Press the  button to turning on.



After a short login message, the device contacting with the ammeter. Shows the incoming data and start the collection of measured values.



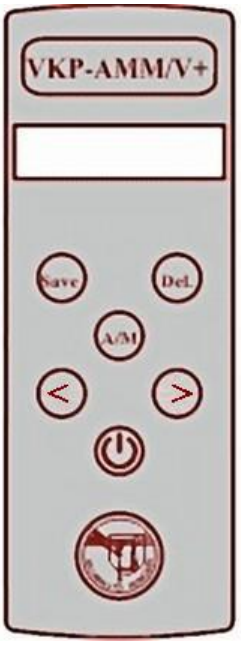
Contents of the display



Top line: Next memory slot (0 to 9, A to F), actual measured current, saving method (Automatic/Manual), status of wireless connection, battery status (if there is no wireless connection a'----'shown here).

Bottom line: Memory-block of saved value, Actual measured current (192.8A), remained memory blocks from 0 to 9 and from A to F.

Buttons and measurement



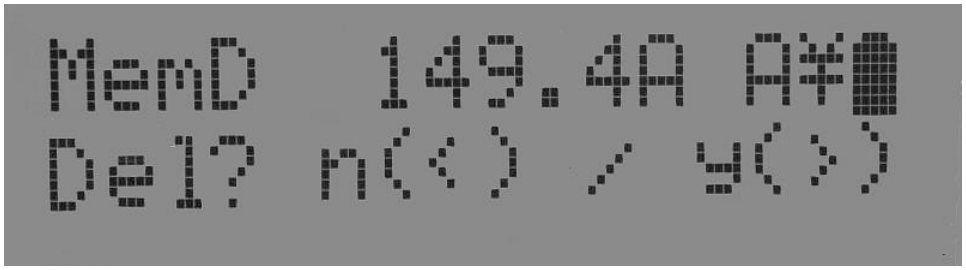
A/M : Select an automatic (A) or a manual (M) saving.

In automatic mode the instrument stores the maximum measured value, and when the measured value drops to zero it saves it to the MemX location.The first value of the top line is the name of the memory block , X' is the name of the next empty memory block. In manual mode press **SAVE** button to save data. Without pressing it the value will **NOT** save.

When saving, the mark of the memory block increases by one. If all 16 memory blocks are full, the **MFull** message will shown. When the SAVE button is pressed, the current measured value is always saved, regardless of the A/M setting. The values will only be saved if the wireless connection exists and a valid measurement appears on the display. If there is '-----' or 'EEEEE' (overflow) message on the display, the value **WILL NOT** be saved into the memory. Short press on the < / > buttons: the saved memory values can be scrolled in the bottom line of the display. The contents of empty memory block are ' - - - - '.

Short press on the  button turning **ON** and **OFF** the backlight of the LCD display.

When all 16 memory blocks are full, the measurement still continues and displayed, but the values will not saved. To save these new values, delete the old memory content by a long press on the **DEL** button.



To confirm the deleting press the '**>**' or press '**<**' to cancel.

2.2. Maintenence and Repair

The device does not require any special maintenance, the probability of failures are low. Replace the batteries if they flat. Remove the batteries from the device if you do not want to use it for an extended period of time.

Field of application

The VKP-AMM ammeter having open type measuring probe is suitable for a fast measuring of the operating current of the LV and MV bus-type, cable- and overhead cable networks.

Process of measurement

For making a measurement the VKP-AMM/R receiver shall be turned on. The device can be turned on and off by pressing and holding (approx. 5 sec.) the ⏻ push-button. The parameters appearing in the display shows the readiness for operation but the RF connection is not established (Fig. 1).

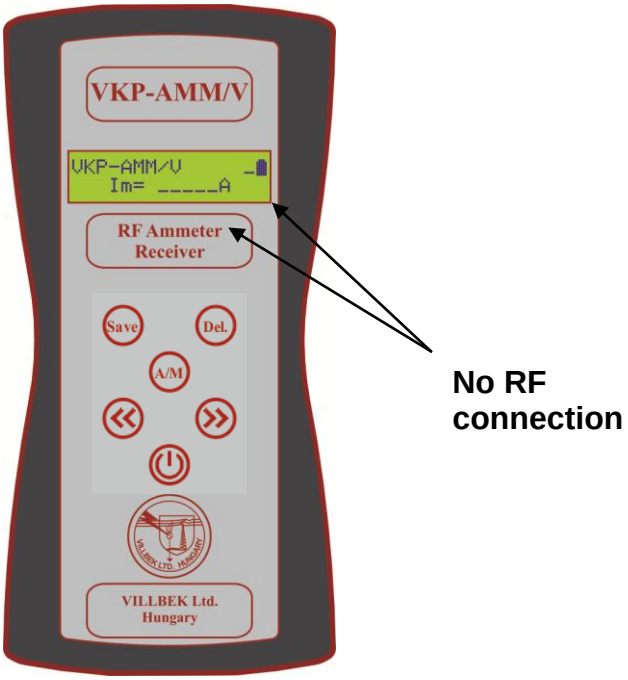


Fig. 1

Following this the VKP-AMM/T RF measuring probe shall be turned on. It can be turned on by pressing and holding (2-3 sec.) the button which is situated at the end of the measuring probe rod. The blinking LED under the push button indicates the turned-on status. After turning the device on the display gives information as shown in figure 2. This indicates that the RF connection is established.

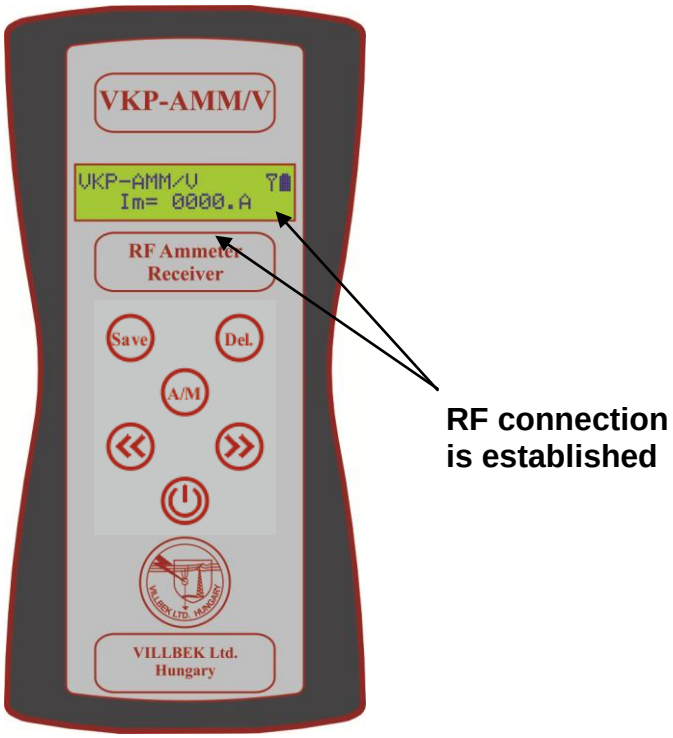


Fig. 2

The ammeter probe shall be used with an operating rod being suitable for the given voltage level. The measuring probe has appropriate insulation up to 36 kV nominal voltage. The accidental contact of the two-phase conductors will not result short-circuit.
The LCD display of the VKP-AMM/R receiver has a backlight, which can be turned on and off by pressing shortly the ⏻ push button.

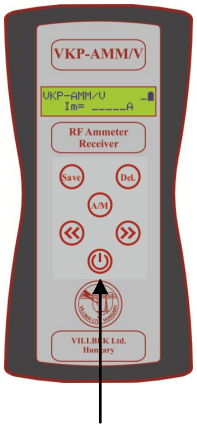
Possible measuring interferences

The transmitter and receiver units operate on freely usable frequencies (permission is not required). This frequency band is used by other systems as well (alarm, central lock, car alarm etc.), so it may happen that in the proximity of such devices the frequency of the ammeter transmitter will interfere with the signal coming from other transmitter. In this case the receiver may lose the signal of the transmitter. These interferences cannot result wrong measurement.

If the measurement is performed in such an environment where the phase conductors (bus-bars) are close to each other, the open-type measuring probe shall be positioned in such way, that the adjacent phase conductor will be as far as possible. If it is too close the magnetic field of the external phase may adulterate the measuring result. The low battery energy level is indicated by the devices. The energy level of the battery of the receiver is shown by a battery icon situated in the upper right corner of the LCD display.

For the transmitter the low battery level is indicated by a rapid blinking of the power-on LED.

Receiver



On-off button

Transmitter

On-off button

Power-on LED

Screw off for replacing the battery

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