

# PKR-2 AND PKR-2M

## CONTROL INSTRUMENTS OF OLTC TRANSFORMERS



See full description, reviews, insights and additional options for the equipment on the website

x2

The device is available in two versions:

PKR-2	PKR-2M
<b>OLTC device check mode</b>	
dismantling	dismantling check and in-place check (DRM method)
<b>Built-in battery system</b>	
no	yes



Mode of in-place diagnostics (the DRM method) allows checking the technical condition of OLTC devices with current-limiting resistors without removing the contactor tank cover. The mode is based on the DRM method and consists in measuring the current strength through the winding in which the OLTC device is included. This diagnostics allows obtaining contactor switching oscillograms for a wide range of switching devices, except for the reactor type.



**Generating oscillograms** of switching of resistor type OLTC contactor allows identifying delays in operation, non-simultaneous actuation of phases, bouncing at switching.



To **produce circle charts**, these devices are equipped with a special sensor. Its interfacing with shafts of various drives is provided by a set of axles and bushings, while their installation is carried out without the use of any tool by simply putting on the shaft protrusion length.



### BASIC FEATURES

Measuring range of time intervals	0.01 ÷ 1200 sec
Accuracy	$\pm(3+t_x) \times 10^{-4}$ sec
Minimum grade value	$\pm 0.1$ ms
Measuring range of angular movement	$2^\circ \div 360^\circ$
Accuracy	$\pm 0.56^\circ$
Measuring range of DC current	1 ÷ 4 A
Measuring range of DC electric voltage	1 ÷ 20 V
Measuring range of DC resistance	1 ÷ 20 $\Omega$
Accuracy	$\pm 5\%$
Sampling frequency of resistance measurement per channel	10 $\pm 0.1$ kHz
Maximum circle chart registration time	20 min
Maximum DRM oscillogram registration time	20 min
Power supply (integrated battery)	Lithium-ion battery
Battery charging time	2.5 h
Built-in battery run time on a full charge	2 ÷ 8 h
PC connection	USB and USB host
Display	TFT color graphic touch, 640x480 pixels
Power consumption in standby mode	< 15 W
Power consumption in measurement mode	< 210 W
Power supply (mains voltage)	~ 150-242 V, 50 Hz = 150-300 V
Dimensions	360x290x165 mm
Weight of PKR-2 / PKR-2M	5.1 / 6.1 kg
Ingress protection	IP 64 (device cover closed) IP 20 (device cover open)
Temperature range when working with the device	from -20°C to +40°C
Warranty period	3 years
Verification period	3 years
Calibration period	3 years
Interface and user's manual language	Russian / English

$t_x$  - measured time interval, s

AUTO

Oscillography and circle charts are recorded **for three phases simultaneously**. Working with the devices will not require any connection of additional elements, all adjustments to the particular OLTC device are done automatically.



For convenience of direct connection to the OLTC contacts (without using the DRM method), when there is a partial or full oil discharge, the devices are fitted with special long probes.



With the help of instruments, reactor type OLTC devices under static conditions can be checked. The user rotates slowly the drive shaft with the handle, and the display at this moment shows contact closures/openings in degrees and voltage and current values.



The measurement results are stored in the non-volatile memory of the devices, or on an external Flash drive, or they can be transferred to a computer. To present information in graphical or tabular form, the devices are equipped with a large color touch screen.

### STANDARD PACKAGE:

- Accompanying documents
- Measuring unit of PKR-2 / PKR-2M
- Measuring cable (3 pcs) complete with connector
- Short-circuiting cable with clamp (PKR-2M)
- DP22 angular movement transducer
- Clamp
- Handle to rotate the OLTC shaft
- Axle No. 10 with bushing
- Mains cable
- Grounding wire
- Fuses VP2B-1V-2A (2 pcs)
- Bag for transporting the device and accessories

\* **Optional accessories on request**