	PKV/U3.1 + MIKO-21	CIBANO 500 (OMICRON)
Price (Euro)		
TYPES OF TESTED CIRCUIT BREAKERS		
Oil	✔	
Vacuum	✔	✔
SF6	✔	✔
Electromagnetic	✔	
Air	✔	
GENERAL SPECIFICATIONS		
Number of tested breaks	20	using 3-contact modules CB MC2 – up to 6 breaks
Number of travel sensors channels	1	using the module of CB TN3 - 3 converter
The number of channels for travel control by resistance transducers	2	No data
Availability of galvanic isolation (Allows neglecting the side of high-voltage breaker earthing)	+	No data
Range of ambient temperature , °C	-15...+40 °C	-10 – +55 °C
Power voltage, V		
- AC, 50/60 Hz	100 - 242	100 - 240
- DC	100 - 340	-
Size, mm	300x140x400	580x386x229
Weight, kg	8	20
FUNCTIONS		
Control of linear travel of movable elements a of pole drive	✔	✔
Control of angular travel of movable elements of a pole drive	✔	✔
Air CB valve stroke test using resistance transducers	✔	✘
Automatic conversion of angular sensor data into contacts travel and speed parameters (under lack of travel control by a linear sensor)	✔	✘
Control of performances of electric magnets of circuit breaker control	✔	✔
Voltage control of an uninterruptable power supply network in the mode of breaker commutation; check of batteries condition in the uninterruptable power supply network	✔	No data
Life tests of circuit breakers (to be performed at works of HV circuit breaker manufacturers)	✔	✔
Determination of pole contacts position	✔	✔
Calculation of contact delay timing	✔	✔

Contact bounce calculation		✓	✓
At actuation from external "remote signal" of CB drive (as per RD 34.45-51.300-97)			
Time control of ON/OFF contacts		✓	✓
Control of movable contacts speed and travel		✓	✓
Requirements to CB tests (as per RD 34.45-51.300-97)			
Testing the trip-free switching device of CB in the programmable complex cycles OFF-ON, ON-OFF, OFF-ON-OFF		✓	No data
Multiple tests of circuit breakers		✓	✓
Test of minimum voltage of circuit breakers operation		together with PUV-controller	✓
SPECIFICATIONS			
Time of measurement, sec		0.001 ... 8	No data
Error of measuring the time intervals, msec		±0.1 ... ±0.3	No data
Range of speed measurements, m/sec		0.002 ... 20	No data
Error of speed measurement by linear travel sensor, %		±2	No data
Range of linear travel measurements, mm		±0.5 ... 900	No data
Discrete nature of linear travel measurements, mm		0.5	No data
Range of angle travels measurements		±0.09 ... 360°	No data
Discrete nature of measuring the angular travels		0.09°	No data
Range of resistance measurements	MIKO-21	1 micro ohm - 2 ohm	0.1 micro ohm - 300 mOhm
Range of test current amperage		1 – 200 A	10; 100 A
Error of measurements		±0.2%	±0.2%
Working temperature		-20 – +40 °C	-10 – +55 °C
Display		Color, graphic display 480x272 pixels	✗
Sensor screen		✓	✗
Communication with PC		USB/USB Flash	✗
Connection of USB Flash for storing the archive data		✓	✗
Instrument manipulation from PC		✓	✓
Analog-digital converter			
Availability of connections for clamp meters		✓	✗
Connection of an external shunt for accurate measurement of current amperage		✓	✗
Commutator block			
Ability to form complex automatic reclosure cycles: OFF-ON, ON-OFF, OFF-ON-OFF		✓	✓

Maximum commutated current	35 A	30 A
USER'S INTERFACE		
Integrated measurement templates to facilitate the instrument adjustment to specific models of circuit breakers	✓	✓
Ability to make your own template for circuit breaker measurements	✓	✗
Interface for data control and transfer		
RS-232 for connecting to COM port	✓	✗
LAN for connection to the local network or to PC at large distances	✓	✓
Computer software		
Independent operation of the instrument (without a notebook)	✗	✗
Instrument manipulation from PC	✓	✓
Technical analysis of tabular and graphic data (cursors, scaling, curves adjustment, automatic computation of parameters)	✓	✓
Curves overlapping function for visual analysis of differences in the data obtained	✓	No data
Automatic development of reports and support of reports base	✓	✓
Archiving the changes in PC and support of different data bases	✓	✓
Export of tabular data to Excel	✓	No data
Check of contacts position with primary resistors (owing to specific mode of the instrument operation)	✓	✗