

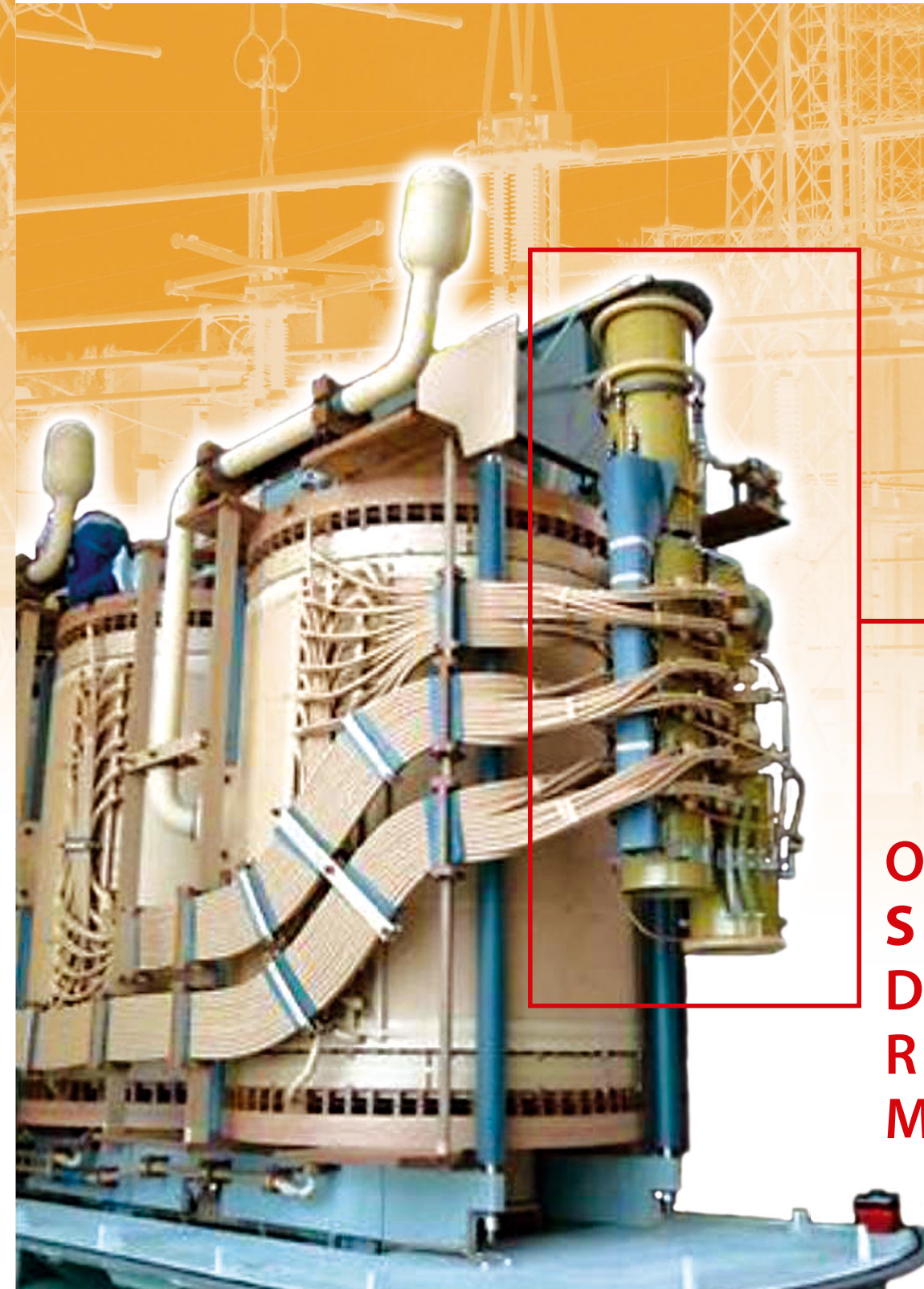
# INTERFACE TM 1800 OSDRM 20

**STEVO** Electric bvba

# INTERFACE TM 1800 OSDRM 20

## TECHNICAL DATA

Overview	Specifications are subject to changes without any prior notification	
Environment	<b>Application</b>	For use in industrial environment and in High voltage sub-stations
	<b>Box</b>	ABS robust
	<b>Temperature</b>	
	<i>Working</i>	+0°C to 50°C (32°F to 122°F)
	<i>Stock &amp; Transport</i>	-55°C à +85°C (-67°F to +185°F)
Protection	<b>Humidity</b>	IP41 5% - 95% RH, non condensing Working or non working
	<b>Transport</b>	ISTA 2A (Modules in a carrying case)
Compatibility	<b>EMC</b>	EN 61326:1997+ A1:1998 + A2:2001
	<b>Safety</b>	EN 61010-1:2001
Certifications	<b>CB-Certificat</b>	IEC 61010-1:2001 (incl. All national variants) CE
Master Controller	<b>Mains supply</b>	85V – 264V AC 50/60Hz 120V – 380V DC
	<b>Power</b>	Max 600W
	<b>Output voltage</b>	Adjustable: 3 – 18 DC/ Max. 40A
	<b>Weight</b>	14,8 kg
	<b>Dimensions</b>	53cm x 43cm x 22cm
Remote controller	<b>Weight</b>	4,8 kg
	<b>Dimensions</b>	35cm x 29,5cm x 15cm
Connection cables set	<b>Current injection cables</b>	2x16 black/red length 20m
	<b>Measurement cables</b>	current/voltage 2xH07RNF-2x1,5 length 15m
	<b>Master/Remote system</b>	LI2YCY PIMF 8x2x0,5 length 15m
	<b>Control cable</b>	5x1 length 2m
	<b>Cable for system Master/TM1800</b>	Multi cable length 2m
	<b>Earth wiring cable</b>	6m
Accessories	<b>Amperemetric grip</b>	0,05-10A/1 – 100A
	<b>Temperature sensor</b>	



**O** On load  
**S** Static  
**D** Dynamic  
**R** Resistant  
**M** Measurement

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**OLTC – STATIC RESISTANCE MEASUREMENT**  
**OLTC – DYNAMIC RESISTANCE MEASUREMENT**



### OLTC's

belong to the power transformers and are of major importance for operation, exploitation and management of a modern electrical network. A OLTC is an active part of the power transformer and is operated several times per day. This equipment is responsible for 40% of the faults on power transformers. Since maintenance is an important strategy base as established by the managers of the electrical network, the need arises to have complete measurement equipment in order to have the possibility of getting relevant measurements on the equipment in question.

### Overview.

The OSDRM 20 has been developed as interface for the use of the TM1800



For this application the TM1800 must be equipped with a sequencer program.

### Application.

Measurements of OLTC on power transformers. Innovative approach: Fully automated measurements, static as well as dynamic, of all relevant resistances.

### Building.

For the composition and the structure of the OSDRM 20 interface special attention was paid to a compact form and user-friendliness.

The interface OSDRM 20 comprises the following modules:

- Master Controller
- Remote Controller
- Sequencer Software TM1800
- Set of binding cables
- Accessories: Amperometric grip and temperature sensor.

All the modules are portable. The connection of system OSDRM 20 as well as the installation can be done quickly and is autodidactic. Non-cumbersome and easy transport.

### Master Controller



- HMI - Operator terminal
- Tactile colour screen
- Display of all measurements in progress
- Include all safety aspects

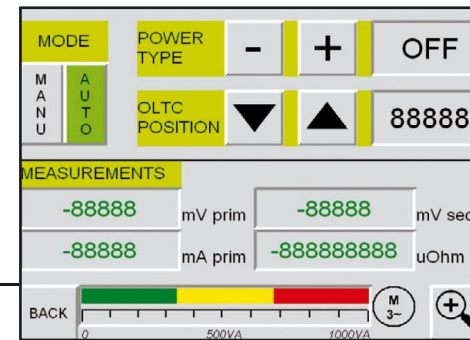
### Remote Controller



- Connection to the OLTC control unit
- Orders and operations indicators
- Acoustic warning of operations and in case of danger

### Safety

During the development of the OSDRM 20 particular care was taken to the aspects concerning safety – automatic discharge and protection surge absorber, health and environment.



### Control dialog window:

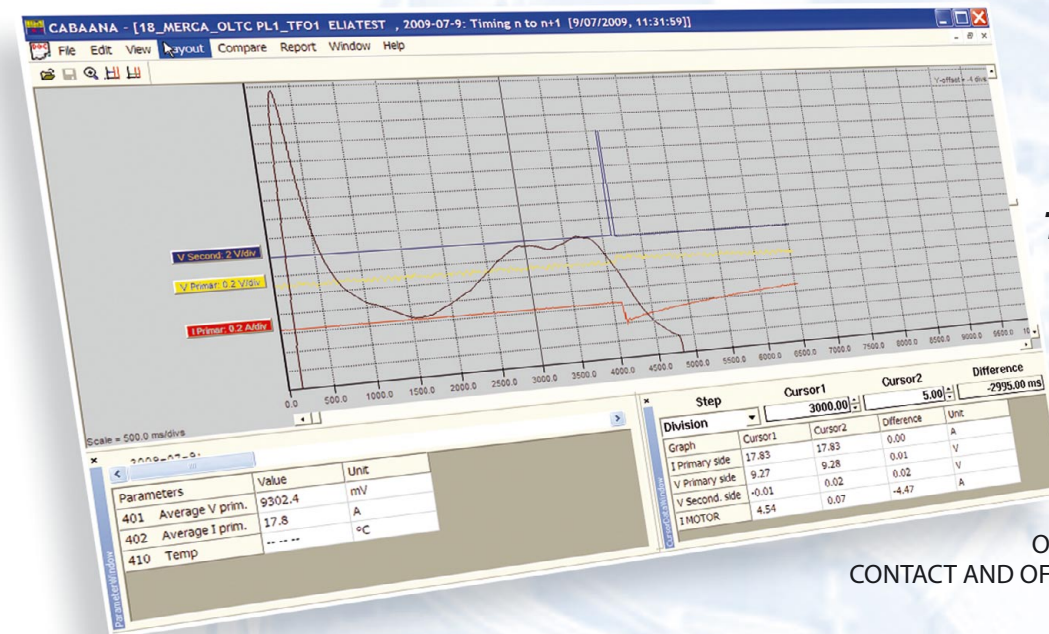
- Injection current control
- Display of primary voltage
- Display of secondary voltage
- Automatic resistance calculus
- Display of the drive motor power
- Control OLTC by stud

### Remark

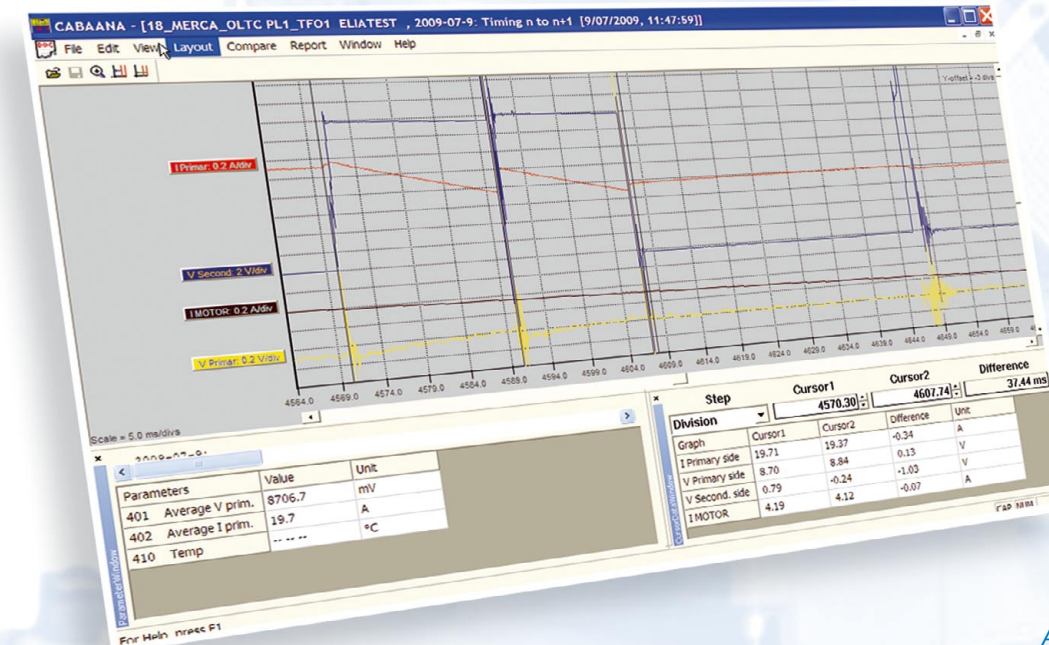
Special versions are possible upon request, subject to the technical possibilities.

### Analyses examples

Global print-out of an OLTC adjustment cycle.



Possibility of making a zoom on specific details, for example the course of a change of stud



### RECORD OF THE FOLLOWING DATA'S:

- PATH OF THE PRIMARY CURRENT
- PRIMARY VOLTAGE DISTRIBUTION
- SECONDARY VOLTAGE DISTRIBUTION
- MOTOR CURRENT PATH
- OPENING AND CLOSING OF THE SELECTION CONTACTS
- OPENING AND CLOSING OF THE MAIN CONTACT AND OF SWITCHING RESISTANCE CONTACTS
- MEASUREMENTS ON INTERRUPTS
- MEASUREMENT OF THE RESISTANCE VALUE FOR EACH STUD
- MEASUREMENT OF MECHANICAL TROUBLES