Important Characteristic Values

Enclosure	Sheet steel with scratch-resistant glass pane
Degree of protection	IP54
Designs	Wall-mounted fitting
	Panel-mounted fitting
	Standard mounting rail fitting
Supply voltages	AC/DC 88...264 V DC 18...72 V
Setpoint values	4
Setpoint value range	60...140 V
Freely programmable relays	9
Freely programmable binary inputs	14
Freely programmable LEDs	12
Interfaces	2 x RS 232
	1 x RS 485
	2 x E-LAN (RS 485)
Max. no. of E-LAN participants	255
Control technology connections	IEC 60870 -5 -101
	IEC 60870 -5 -103
	IEC 60870 -5 -104
	IEC 61850
	LONWorks
	MODBUS
	SPABUS
	PROFIBUS DP
	DNP 3.0

Sincerely, your distribution partner

$$t_{cir0x} = iQ_x - \left(iQ_{tot} \cdot \frac{S_x}{S_{tot}}\right)$$

REG - DA

Regulate Voltage Conveniently

With the additional functions:

- Recorder Mode
- Statistics Mode
- Transformer Monitor
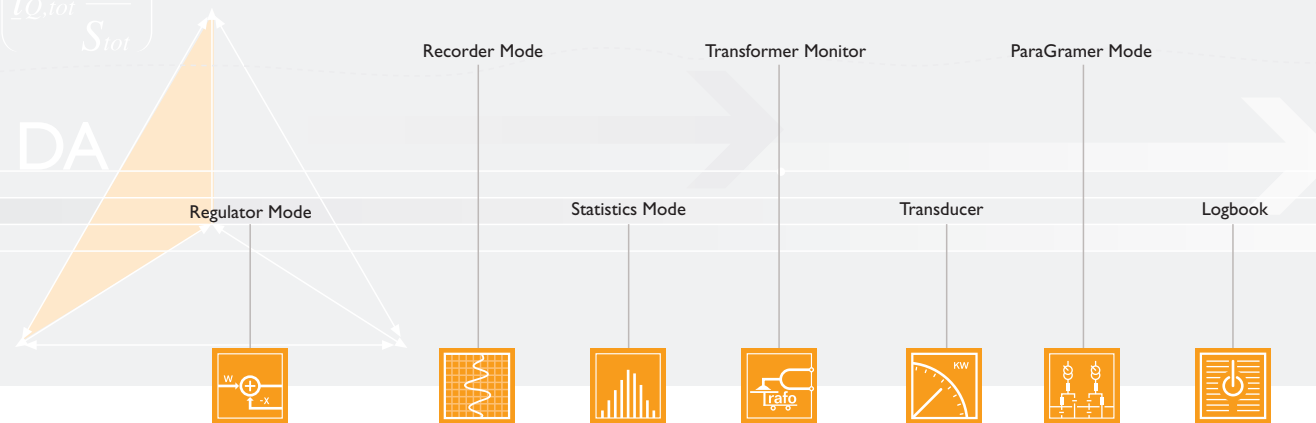- Transducer Mode
- ParaGramer Mode
- Logbook

Regulating. Controlling. Recording. Monitoring.

Innovation: Voltage Regulator with Integrated Transformer Monitor

$$i_{cirQx} = i_{Qx} - \left(i_{Q.tot} \frac{S_x}{S_{tot}} \right)$$

REG - DA

Recorder Mode   Transformer Monitor   ParaGramer Mode

Regulator Mode   Statistics Mode   Transducer   Logbook

REG - DA

The REG-DA voltage regulator has been designed for the regulation of stepping transformers in medium- and high-voltage networks. A multitude of freely programmable LEDs and inputs and outputs, a multi-tasking operating system and a highly efficient programming language make the REG-DA so convenient to use.

The REG-DA can also easily be integrated in a regulator assembly with all regulators of the **REGSys™** product range. The operator is provided with the right solution for all applications.

Regulator Mode

The REG-DA regulator offers various regulation procedures: Beside other known procedures (Z component and LDC), further methods are available for the compensation of online voltage drops. All information required for the regulation's evaluation are displayed on the monitor.

Recorder Mode

With the help of the recorder mode, the voltage can be represented in the form of a Yt diagram. The stepping position is also registered in accordance with temporal correlation. In failure cases, the failure point in time is selected via the keyboard or the PC. The failure can then be evaluated on the basis of the historical data. In addition to the voltage, further measuring values (e.g. current, voltage, oil or hotspot temperature) are recorded by means of a second channel.

Statistics Mode

For the regulation's evaluation, information as to the mere total number of steps per temporal unit is not sufficient.

Information as to which step was switched and the respective number of switching actions is indispensable. This information is provided by the statistics mode and therefore forms an important component for evaluating the regulation's quality and determining the revision cycles.

Transformer Monitor

The service life of a transformer essentially depends on the hotspot temperature. It is calculated on the basis of the oil temperature and current measurement in accordance with IEC 354.

Based on this calculation, the transformer monitoring module determines the transformer's residual service life and, simultaneously, can control up to six fan groups.

Transducer

The transducer function integrated in the REG-DA generates measuring values from three-phase networks which are operated with DC voltage or any other voltage. All measurands required for the electrical situation at the infeed point are displayed on the monitor in a clear structure. The measurands can also be output via mA outputs.

ParaGramer Mode

The parallel operation of transformers in accordance with the "Master-Follower" or the circulating reactive current minimization method, always requires certain directing expenditures. The ParaGramer function automates the parallel connection: It utilizes the switch image to facilitate the realization of transformer combinations and master changes in accordance with the opera-

tor's requirements. With the MSI (master-/slave-/independent) function, a transformer's function can be rapidly and reliably selected via a binary input or a keyboard.

Logbook

Here, all events that are indispensable for the clarification of failure cases are registered. In the event memory, the previously occurred events are stored chronologically with their respective time and date information.

Example: When was the regulator switched over from manual to automatic mode. Or when did the voltage underrun or exceed a certain limit value.

The **WinREG** program is available for convenient parameterization and programming.