Type: TR-AC-01

Microprocessor controlled units

Further technical details can be found in Chapter 10 Document 10-100-R0
CORROCONTROL OUTPUT REGULATOR (CCOR)

The variable output controller units are equipped with a specially designed microprocessor which can be set to operate the transformer rectifiers in any one of the following three automatic output control modes:

- **Constant voltage mode**
  automatically maintains **DC output voltage** at a preset level. Level can be continuously adjusted from any value between zero and maximum rating
- **Constant current mode**
  automatically maintains **DC output current** at a preset level. Level can be continuously adjusted from any value between zero and maximum rating
- **Potential control mode**
  automatic control to maintain the **structure-to-electrolyte potential** at preset level in response by a signal from a reference electrode

Other features

- operating mode is selectable by four programmed buttons on the front panel
- modern 1 MHz switcher with efficiency up to 90% at 24 -10 A
- protection against current surges in operation mode
- all data input and measuring values are displayed on a 2-line alphanumeric LCD display
- failure indication by LED
- built-in current interrupter for on/off measurements
- menu settings and readings programmable in different languages
- in case of network power failure, the unit automatically reverts to the last programmed operating mode. All preset values are retained.

The transformer rectifier is mounted on a 19“ rack convenient indoor or outdoor installation (depending on type of enclosure).
All transformer rectifier control modules are provided on printed circuit boards.

Parallel operation

The transformer rectifiers can be connected in parallel to increase the DC output power if required.

Master-slave parallel operation

One master unit can drive 4 slave units. A slave unit can drive 4 further slave units. In parallel operation, the output current will be distributed equally amongst the slave units. The master-slave combination functions can be adjusted or programmed via the master unit.

Technical data

AC input	single or three phase 230 V ± 10 %, 50 or 60 Hz single or three phase 400 V ± 10 %, 50 or 60 Hz other voltages or frequencies on request
DC output	up to 50 A, up to 50 V, max. 2.5 kW
Control method	Standard: Constant voltage, stepless adjustment
Protection class	depending on enclosure
Temperature	ambient temperature: max 50° C, min. -20° C
Current limit	protection against current overloading
Thermal protection	a thermostat disconnects the output in case of unit overheating

Options

- Manually controlled output regulation devices
- Remote Monitoring and Control Systems (RMCS)