DEL2800
Electronic Load

Scope of Functions
The functional scope of the electronic loads from the DBL series includes five different operating modes: constant current (I Mode), constant resistance (R Mode), pulse current, dynamic load and short-circuit. These operating modes are normally used as defined loads for SDC sources such as power supplies, batteries, etc.

Operation
The unit is setup using the operating and display elements provided on the front panel. The main display element is the large LCD display. Here the measured values for current and voltage, time and ampere-hours, set values for current and resistance R as well as the respective operational mode are displayed. Adjustment of the set values is carried out using a rotary knob (under the display) or via the buttons – equally the navigation within the selection menus. Using the button-function of the rotary knob (ENTER function) in the parameter menu, the required line is activated. In the active line the respective parameter (e.g. preset value or operational mode) can be preset.

Using the “Stand-by” button or the corresponding menu point the unit can be turned off or turned on (in “Stand-by” mode parameters for an upcoming load condition can be preset).
While pressing the short-circuit button, the electronic load is switched to short-circuit current (for as long as the button is pressed). Using the BNC sockets, a voltage proportional to the load current can be applied for optional external applications.

Protective Circuit
Overload Protection
Analogue power-limit switching – on reaching the maximum power dissipation, the load current is reduced so that a constant power operation is achieved.
**DEL2800**

**Electronic Load**

**Overvoltage Protection:**
Digital monitoring – switches off the load current during overvoltage.

**Over Temperature Protection:**
With the aid of analogue temperature sensors, the heat sink temperature is monitored by the micro controller. The fan speed is adjusted accordingly. During over temperature the load current is reduced until eventual switch-off. This operational state is accompanied by an over temperature message in the display (however, the cooling airflow is maintained).

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<td>b) Load range</td>
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<td>Measurement accuracy</td>
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<td><strong>Load Current</strong></td>
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<td>Resolution (set value)</td>
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<td><strong>Resistance Range</strong></td>
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<td>(Range switching occurs automatically)</td>
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<td>0,05...0,5 Ω</td>
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Technical modifications and errors excepted

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