

## DATASHEET 1313-20LV02

### Operating Modes Setting

Current:	Voltage:	Resistance:	Power:
0 ... 250 A	0 ... 6.67 V	0.7 Ω ... 0.9	0 ... 667 W
0 ... 750 A	0 ... 20 V	0.23 Ω ... 0.3	0 ... 2000 W



### Accuracy of the Manual Setting, without Presetting:

	of setting	of corresponding range
Voltage	±0.2%	±0.05%
Current	±0.3%	±0.1%

### Accuracy of Manual Setting with Presetting:

	of setting	of corresponding range
Voltage	±0.6%	±0.05%
Current	±0.7%	±0.1%
Resistance	±1.4%	±0.5% of current range
Power	±1.4%	±1%
Current Limitation	±1.4%	±0.3%
Trigger Voltage	±1.4%	±0.3%
Time Setting	±1.4%	±0.5% of B1 or B2
Time ranges for internal modulator		

B1	100ms
B2	1000ms

### Accuracy of Display:

	of measured value (real value)	of corresponding range
Voltage	±0.2%	±0.05%
Current	±0.2%	±0.05%

### Accuracy of Analog Programming:

0 ... 5V / 0 ... 10V for Current, Voltage, Power

	of setting	of corresponding range
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Voltage	<b>±0.2%</b>	<b>±0.1%</b>
Current	<b>±0.3%</b>	<b>±0.1%</b>
Power	<b>±2.5%</b>	<b>±1%</b>
Current Limitation *	<b>±1%</b>	<b>±0.4%</b>
Trigger Voltage *	<b>±1%</b>	<b>±0.4%</b>

\* only when option ZS08 is installed  
 Input impedance of the analog inputs: > 10kΩ  
 GND max. ±2V against negative load input <sup>1)</sup>

### Accuracy of Analog Monitor Outputs: 0 ... 10V for Current, Voltage, Power

	of the analog signal of the real value	offset voltage
Voltage	<b>±0.2%</b>	<b>±15mV</b>
Current	<b>±0.3%</b>	<b>±15mV</b>
Power	<b>±2.5%</b>	<b>±30mV</b>

GND max. ±2V against negative load input <sup>1)</sup>  
 Loading capacity minimum 2kΩ

### Accuracy of Setting Programming via Data Interface:

	of setting	of corresponding range
Voltage	<b>±0.2%</b>	<b>±0.05%</b>
Current	<b>±0.3%</b>	<b>±0.1%</b>
Resistance	<b>±1%</b>	<b>±0.5%</b> of current range
Power	<b>±1%</b>	<b>±1%</b>
Current Limitation	<b>±1%</b>	<b>±0.3%</b>
Trigger Voltage	<b>±1%</b>	<b>±0.3%</b>
Resolution Setting	<b>16 bit</b>	

### Accuracy of Measurement, Reading via Data Interface:

	of measured value (real value)	of corresponding range
Voltage	<b>±0.1%</b>	<b>±0.05%</b>
Current	<b>±0.2%</b>	<b>±0.05%</b>
Resolution Measurement	<b>18 bit</b>	
Reading Rate	<b>330ms</b> not triggerable	

### Accuracy of Measurement, Reading via Data Interface: Option ZS13

	of measured value (real value)	of corresponding range
Voltage	<b>±0.2%</b>	<b>±0.05%</b>
Current	<b>±0.2%</b>	<b>±0.05%</b>
Resolution Measurement	<b>13 bit</b>	
Reading Rate	<b>min. 200µs</b> (into memory) triggerable	

### Power

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Nominal Power **up to  $T_A = 21\text{ °C}$**   
 Derating **-1.2% / °C for  $T_A > 21\text{ °C}$**

**Input Impedance** > 50 kΩ at deactivated load input

**Input Capacitance** approx. 2μF / 1000W

**Operating Temperature** 5°C ... 40°C

**External Control**

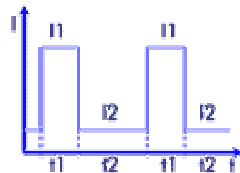
- Load Switching
- Trigger input and output
- Range switching
- Mode switching
- Emergency shutdown

**Protection Equipment**

- Current and power limitation
- Over-voltage protection up to 110% of rated voltage
- Protection against reverse polarity up to rated current (diode)
- Over-temperature deactivation
- Transient protection

**Vmin @ Imax** **175 mV**

**Modulator**



Puls t1: 100μs ... 1s  
 Puls t2: 100μs ... 1s  
 (in two ranges)  
 Load level: each 0 ... 100%

**Rise and Fall Time**  
<sup>2)</sup> **300 μs**

**Parallel Operation** up to 3 devices in master-slave operation (hardware-controlled)

**Cooling** infinitely variable controlled fans

**Noise max.** <sup>3)</sup> **62 dB(A)**

**Case** <sup>4)</sup>, **Weight** **19" / 5 HU, 48 kg**

**Mains Supply** 115/230V ± 10%, 50 ... 60Hz

**Power Consumption** **120 VA**

**Electric Safety** DIN EN 61010-1

**EMC, CE-Mark** DIN EN 61326-1  
 DIN EN 61000-3-2  
 DIN EN 61000-3-3

**Permissible Operating Voltages: Negative Load Input - Case**

Standard 125V AC

with Option ZS06 500V AC

**Colour**

Front Panel RAL7032 (pebble grey)

Sides, Lid

RAL7037 (stone grey)

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- 1) 500 V with option ZS06
- 2) Rise and fall time are defined as 10%...90% and 90%...10% of the maximum current (measured in constant current mode - FAST)
- 3) measured at the front panel at 1m distance
- 4) 1HU = 44.45mm