

Electronic DC Load

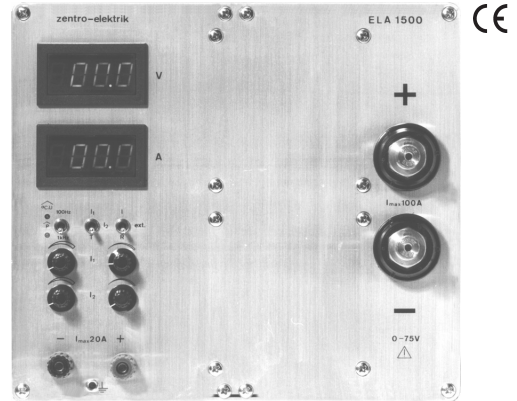
ELA Series

Power 1500 W

Constant I- Mode or R- Mode
 Master - Slave Mode
 Ext. programmable constant
 Ext. programmable with
 R- Module, P- and R constant

Options a.o.:

Installed IEEE488.2 (GPIB) / RS232* / USB*
 interface with Lab-View Driver (Series INT2E)
 Installed USB Interface with driver software
 External CAN Open Interface (on request)
 R- Module
 Front-End Unit
 *selectable RS232 or USB



Units for Laboratory and Test

Input:

Input voltage 230 V_{AC} -10 % + 6 %, 50 – 60 Hz
 Load voltage see table
 Load current see table
 Power see table

Regulation:

Set point accuracy $\leq 0,1 \% I_{max}$
 (Voltage change $\pm 20\%$)
 Rise time (10 – 90%
 nominal value change at
 I-Mode) $\leq 100 \mu s$
 Temperature coefficient
 (after 15 min. working time,
 const. ambient temp. and
 const. input voltage) $\leq 0,1 \% / K I_{max}$
 within 8 hours

Protection:

Overload protection power limit,
 short circuit protection
 Overvoltage protection power shutdown U_{Lmax} +10%
 Thermal protection power shutdown, auto recovery
 Reverse polarity protection wattless current diode and fuse;

Environmental Condition:

Operating temperature 0 – +35°C
 Cooling int. fans, temperature controlled

Safety:

Safety standard EN 61010-1
 Isolation
 AC input - load input: U_L > 60 – 110 V: 2,3 kV_{rms}
 AC input - ground: 1,35 kV_{rms}
 Load input - ground: U_L ≤ 100 V: 500 rms
 U_L > 100 – 110 V: 820 V_{rms}

EMC:

Input EMI filter EN61000-6-3
 Input immunity EN61000-6-1

Operation and Control:

Manual adjust:
 Adjustment current and resistance:
 each 2 levels (max., min.) mit je 1
 each with pot. coarse, fine
 Pulse-generator I, R 100 Hz or 1 kHz switch-selected,
 waveform: square-wave 1:1

Programming

ext. voltage (reference -U_L)
 0 – 10 V $\hat{=}$ 0 – I_{max}
 any waveform,
 frequency range:
 0 – 20 kHz (3 dB)
 Option R - Module:
 ext. voltage 0 – 10 V $\hat{=}$
 power constant 0 – P_{max},
 ext. voltage 0 – 10 V $\hat{=}$
 resistance constant R_{min} – R_{max},

$$\frac{3,5 V}{I_{max}} = R_{min} \quad \frac{2000 V}{I_{max}} = R_{max}$$

Master - Slave - Mode
 Parallel operation
 Monitor Signals
 digital signal:

two same units, see drawing
 same units
 current Monitor 0 – 10 V,
 overtemp., overload,
 over- and undervoltage
 R-Module: analog 0 – 10 V for
 voltage and current,
 digital overload and overtemp.
 overvoltage and overtemp.,
 overload each 1 LED
 LED digital for voltage and
 current 3½-dig.,
 accuracy: 0.2% \pm 1d

Indication

Instruments

Connectors:

Input Euro - plug with switch,
 rear side
 Load I ≤ 20 A: banana jack 4 mm \varnothing
 I > 20 A: high current plugs
 type DIX SE50
 female plug included

Physical Specifications:

Dimensions in addition with INT2E: w+30mm
 w x h x d
 Weight see table

Power (W)	Load voltage (V)	Load current (A)	Load resistance (W)	Weight (kg)	Model Number
1500	1 - 40	0 - 199	0,02 - 10 k	12	ELA1500/40/200D
1500	1 - 75	1 - 100	0,02 - 10 k	12	ELA1500/75/100D

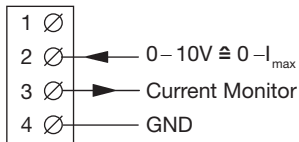
Options:

- Sub front panel colour al. anodized
- R - Modul
- Sub D connector (with Option R-Modul Sub D connector standard)
- Installed IEEE 488.2 Interface Euro-Card INT2E
- Cable for external Interface INT2

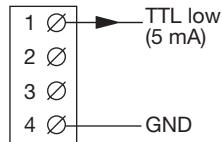
1 T = 5,08 mm, 1 U = 44,45 mm

Connections:

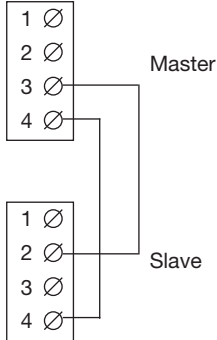
Ext. programming



Output for Signal overvoltage, over-load and overtemp.



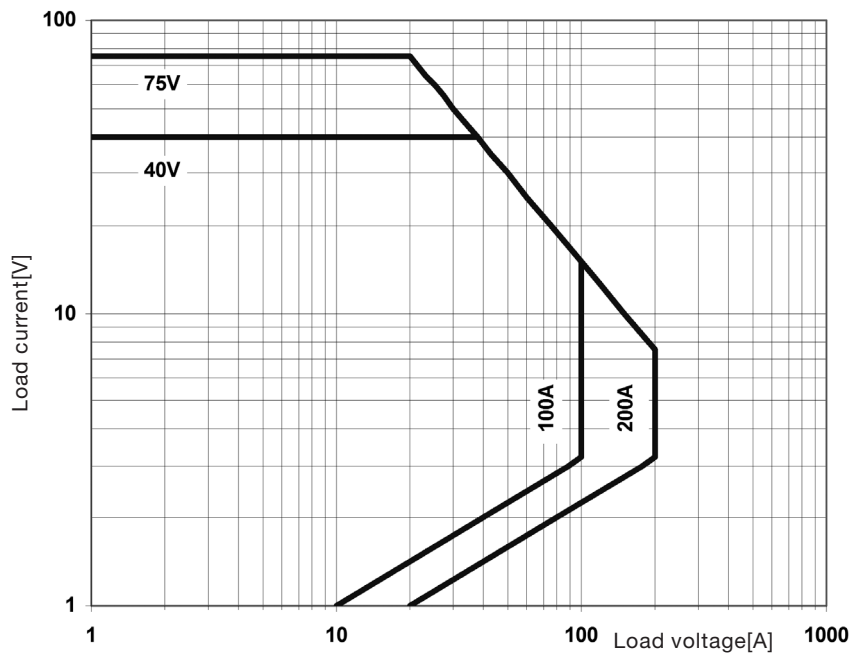
Master - slave - Mode



To parallel load terminals

Connections on the rear side of the unit
Attention! Load cable with min. area
25 mm² / units at 100 A
50 mm² / units at 200 A

Operating range:



ELA 1500...

