

Electronic DC Load

Made in Europe 

IEC-BUS
compatible with
Interface Series
INT 2

Power 10 000 W and 20 000 W Cooled by cooling liquid Series EL10 000, EL20 000

Constant I-Mode, U- Mode

P- Mode or G- Mode

All Modes ext. programmable

Nominal value indication and presetting
of all Modes

Auto change to true values

Stand-alone use and intended for 19" rack

Option: Installed Interface



Input:

Input voltage 230 V_{AC} ± 10 %, 50 ÷ 60 Hz (115V opt)

Load voltage see table

Load current see table

Power see table

Regulation:

Set point accuracy ≤ 0,1% I_{max}, U_{max}

(Voltage range ± 20%) ≤ 1% G_{max}, P_{max}

Rise time (10 ÷ 90% typ. 100 μs

nominal value change) at I-Mode

Temperature coefficient ≤ 0,1%/K I_{max}

(after 15 min. working time,
const. ambient temp. and
const. input voltage)

Protection:

Overload protection power limit P_{max} + 5%

Overvoltage protection power shutdown U_{Lmax} + 5%

Thermal protection power shutdown, manual reset

Overcurrent current limit I_{max} + 20%

Safety for load circuit and
reverse polarity protection fuse and wattless current diode
for I_L ≤ 400 A

Environmental Conditions:

Humidity max. 70 %, non condensing

Operating temperature + 15 °C ÷ + 35 °C

Cooling cooling liquid, temp. controlled

Coolant pressure 3 bar ≤ P ≤ 6 bar

Coolant temperature +12 °C ≤ θ ≤ +20 °C

Safety:

Safety standard EN61010

Isolation

AC input - load input: U_L ≤ 60 V: 1 kV_{rms}

U_L > 60 ÷ 160 V: 1,5 kV_{rms}

U_L > 160 ÷ 800 V: 2,5 kV_{rms}

AC input - ground: 1 kV_{rms}

Load input - ground: U_L ≤ 60 V: 500 V_{rms}

U_L > 60 ÷ 160 V: 1 kV_{rms}

U_L > 160 ÷ 800 V: 2,5 kV_{rms}

EMC:

Input EMI filter EN50081-1

Input immunity EN50082-1

Operation and Control:

Manual adjust:

Adjustment

current, voltage, power and
conductance (see table):
each 2 levels (max., min.)
each over 2 channels adjustable
I- and G-Mode coarse/fine
selectable

Pulse-generator I, U, P, G

Programming

100 Hz or 1 kHz switch-selected,
waveform: square-wave 1 : 1
ext. voltage (reference - U_L)
0 ÷ 10 V ≅ 0 ÷ I_{max}
0 ÷ 10 V ≅ 0 ÷ U_{max}
0 ÷ 10 V ≅ 0 ÷ P_{max}
0 ÷ 10 V ≅ 0 ÷ G_{max}
any waveform, frequency
range 0 ÷ 5 kHz (3 dB)

Parallel operation

Monitor Signals

same units
current-, voltage-, power- and
conductance-monitor,
signal undervoltage,
sum alarm signals for overcurrent,
temp. limit, overload or
overvoltage

Indication

Instruments

overcurrent, temp. limit,
overload, over- and under-
voltage each 1 LED
LED digital for voltage,
current/conductance and power
3½ dig., accuracy 0,2% ± 1d

Connectors:

Input

Euro - plug rear side
with switch front side
type DIX SE50

Load

female plug incl.
I_L ≥ 250 A contact rail
each pole 2 x M10

Ext. programming

Coolant

25 pole Sub D female plug
R 3/4 AG

Physical Specifications:

Dimensions

w x h x d

Weight

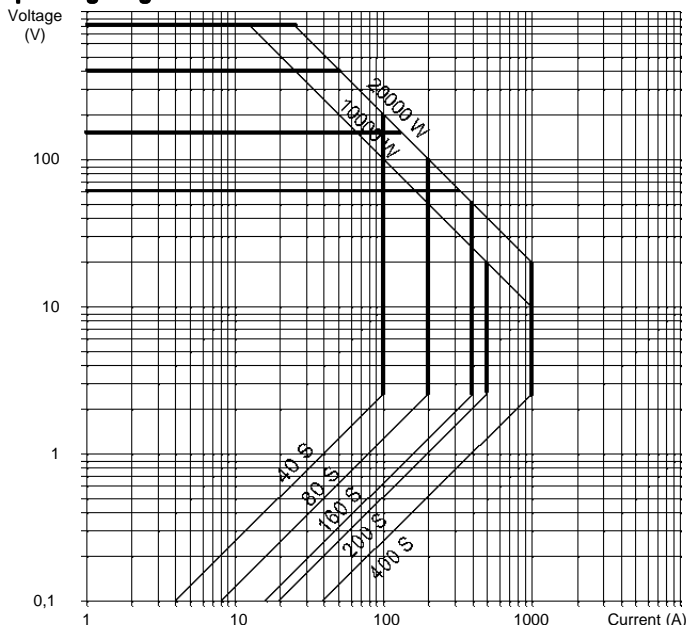
520 x 305 x 760 mm

EL10000: ca. 45 kg

EL20000: ca. 65 kg

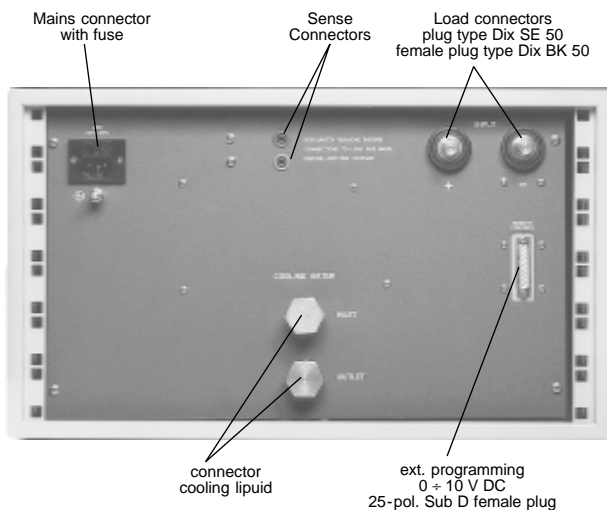
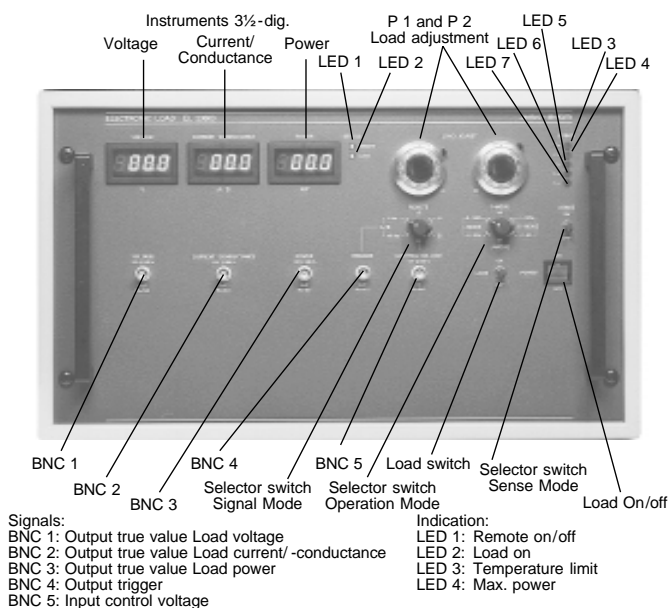
Power (W)	Load voltage (V)	Load current (A)	Load current in the operating range		Conductance max. (S)	Model Number
			from 0,1 V (A)	to 2,5 V (A)		
10000	2,5 ÷ 60	0,01 ÷ 200	8	200	80	EL10000/60/200
10000	2,5 ÷ 60	0,01 ÷ 500	20	500	200	EL10000/60/500
10000	2,5 ÷ 60	0,01 ÷ 1000	40	1000	400	EL10000/60/1000
10000	2,5 ÷ 160	0,01 ÷ 100	4	100	40	EL10000/160/100
10000	2,5 ÷ 160	0,01 ÷ 200	8	200	80	EL10000/160/200
10000	2,5 ÷ 160	0,01 ÷ 500	20	500	200	EL10000/160/500
10000	2,5 ÷ 160	0,01 ÷ 1000	40	1000	400	EL10000/160/1000
10000	2,5 ÷ 400	0,01 ÷ 100	4	100	40	EL10000/400/100
10000	2,5 ÷ 400	0,01 ÷ 200	8	200	80	EL10000/400/200
10000	2,5 ÷ 800	0,01 ÷ 100	4	100	40	EL10000/800/100
10000	2,5 ÷ 800	0,01 ÷ 200	8	200	80	EL10000/800/200
20000	2,5 ÷ 60	0,01 ÷ 400	16	400	160	EL20000/60/400
20000	2,5 ÷ 60	0,01 ÷ 1000	40	1000	400	EL20000/60/1000
20000	2,5 ÷ 160	0,01 ÷ 200	8	200	80	EL20000/160/200
20000	2,5 ÷ 160	0,01 ÷ 400	16	400	160	EL20000/160/400
20000	2,5 ÷ 160	0,01 ÷ 1000	40	1000	400	EL20000/160/1000
20000	2,5 ÷ 400	0,01 ÷ 100	4	100	40	EL20000/400/100
20000	2,5 ÷ 400	0,01 ÷ 200	8	200	80	EL20000/400/200
20000	2,5 ÷ 400	0,01 ÷ 400	16	400	160	EL20000/400/400
20000	2,5 ÷ 800	0,01 ÷ 100	4	100	40	EL20000/800/100
20000	2,5 ÷ 800	0,01 ÷ 200	8	200	80	EL20000/800/200
20000	2,5 ÷ 800	0,01 ÷ 400	16	400	160	EL20000/800/400

Operating range:



Option:

Autorange current-/voltage-const.
Installed Interface Euro-Card INT2E



Signals:
 BNC 1: Output true value Load voltage
 BNC 2: Output true value Load current/ -conductance
 BNC 3: Output true value Load power
 BNC 4: Output trigger
 BNC 5: Input control voltage

Indication:
 LED 1: Remote on/off
 LED 2: Load on
 LED 3: Temperature limit
 LED 4: Max. power

LED 5: Max. load current
 LED 6: Max. load voltage
 LED 7: Min. load voltage