

- Small current ripple
- Compact design
- Ignition-bias voltage
- Automatic changeover 115/230 V_{AC}



The current source EL284 is designed for the use with xenon short-arc lamps. Because of the small ripple of the output current of only 0.2 % the device is also suitable for high-quality applications. Besides the constant current for the lamps, the booster voltage for the ignition module is also generated. The device is designed for mounting in 19"-racks. The power factor is corrected passively. The changeover 115 V / 230 V_{AC} occurs automatically. The lamp can be switched by remote-control-inputs. The current mode will be shown at the front sided LED and is also available as a signal on the connectors. The ignition module is connected externally. Details on demand.

Options

Within the threshold values, voltage and current is adjustable to the application.

Threshold values

max. 200 W
 max. 9.5 A
 max. 24.5 V
 Further variations with higher voltages are possible.

Variation	Output	Ignition bias voltage	Design
184B	18.5 V / 5.4 A	90 V / 0.1 A	With front plate 10 TE
284B	21.5 V / 8.5 A	90 V / 0.2 A	Without front plate 14 TE

Input

Input voltage nom.	230 V _{AC} / 115 V _{AC}
Input voltage range	110 V _{AC} to 125 V _{AC} / 220 V _{AC} to 250 V _{AC}
Input current	< 4 A (110 V _{AC})
Input power	Max. output power + 20 %
Input frequency	47 Hz to 63 Hz
Inrush current	< 30 A _{pk} limited by thermistor
Holdup time	> 28 ms at nominal voltage and load

Output

Output voltage	E100I: 18.5 V	E200I: 21.5 V
Output current	E100I: 5.4 A	E200I: 8.5 A
Efficiency	typ. 80 %	
Ripple rms/pp	0.1 % rms, 1% pp (range 30 MHz)	
Dyn. Regulation	Voltage regulation ±2% Current regulation ±0.1%	load changeover 40% / 60%
Line regulation	0.02%	
Load regulation	1%	
Temperature coefficient	0.2%/K	

Ambient conditions

Temperature range	0 °C to 50 °C without power derating, 50 °C to 70 °C: Derating 2.5%/°C
Storage temperature range	-25 °C to +85 °C
Humidity	0% to 90% non-condensing

Standards

Low voltage directive	2006/95/EG
Safety	EN 60950-1
High-voltage test	By EN 60950-1
Clearance and creeping distances	8 mm input – output 4 mm input – chassis 2 mm output – chassis
Leakage current	< 3.5 mA
EMC	2004/108/EG
RFI	EN 55011 level B
Transient response	EN 61000-3-4
ESD	EN 61000-4-2: 8 kV
Burst	EN 61000-4-4: 4 kV
Appliance class	I
Ingress protection range	IP20

Protection

Power limiting	E200I: 200 W
Current limiting	Output current regulation adjustable E200I: 5.4 A to 8.5 A Ignition-bias voltage with PTC current limited
Over-voltage protection	40 V ± 2 V resettable by mains separation

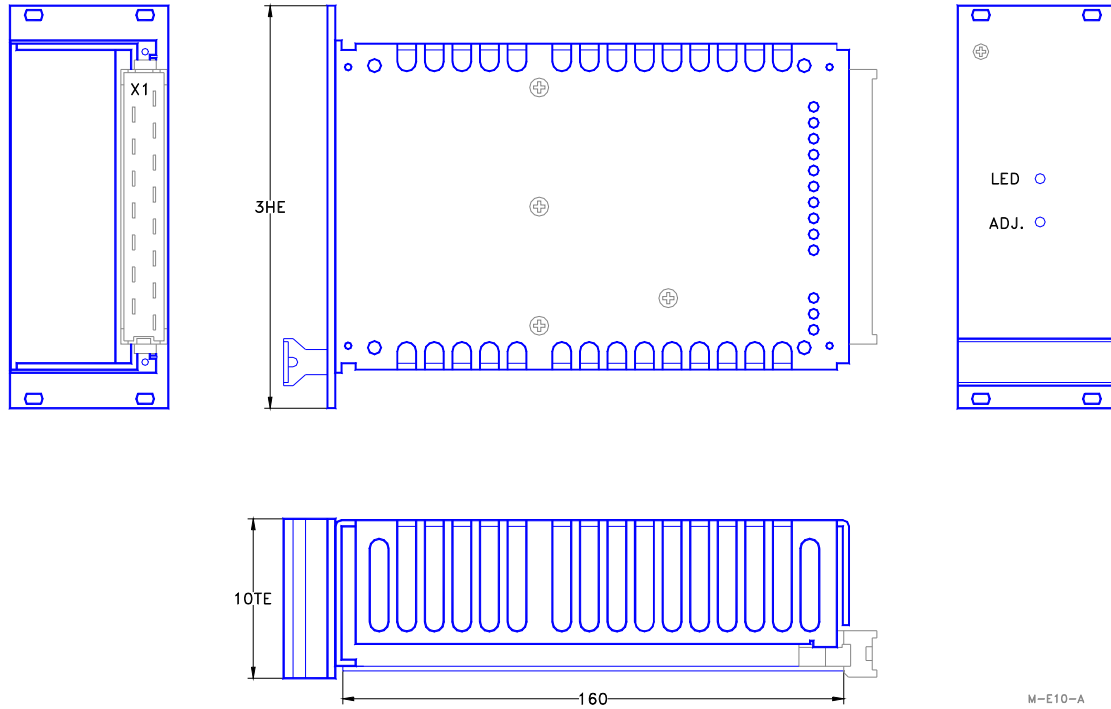
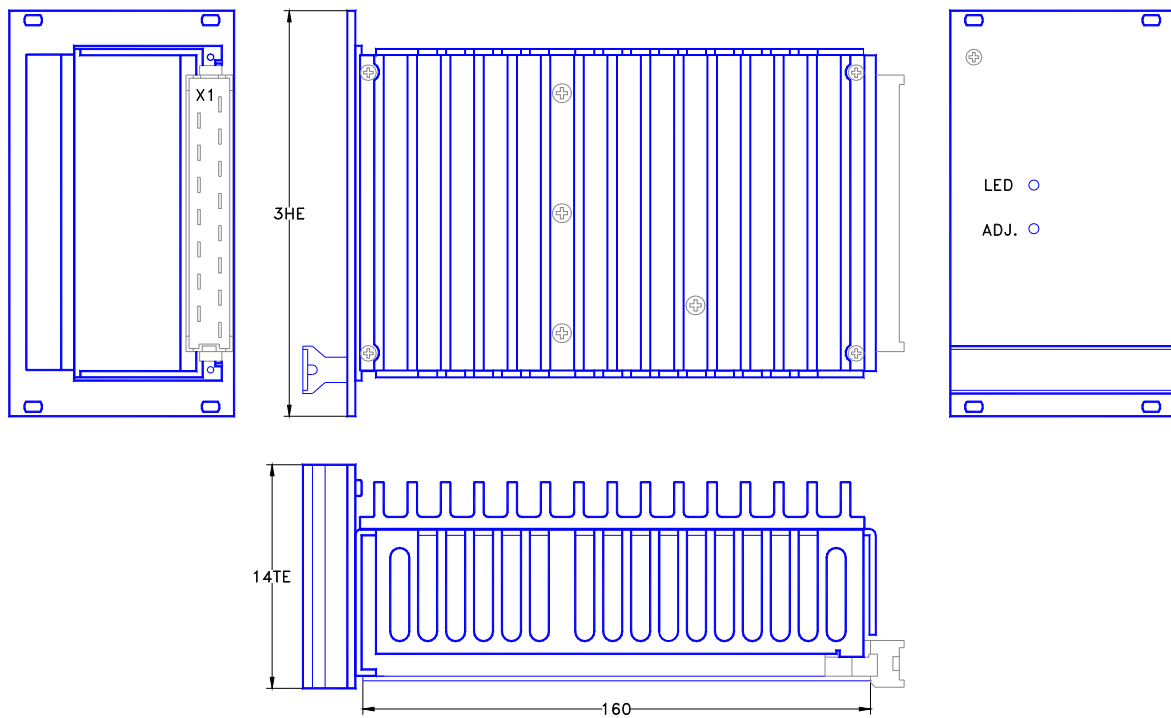
Interfaces and signals

Remote On/Off	TTL-compatible: 0 V or open -> „on“, 5 V -> „off“
Current regulation (I constant)	TTL-compatible: L-level – voltage regulation, H-level – current regulation

Mechanics / mounting

Measurements 3 U (see drawing)
 E100I: 10 HP, E200I: 14 HP

Weight 1.4 kg

EL184

EL284


connectors

Input / Output DIN 41612 H15

DIN 41612 H15	30 Neutral	26	22 Remote on/off	18	14 Output Lampe (0V)	10 0V	6 V1 (24 V)	
Earth 32	Line 28	24	I constant 20	V2 Zündger. (90 V) 16	0V 12	V1 (24 V) 8	V1 (24 V) 4	

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