



# Switch Power Packs, Battery Chargers, DC-DC-Converters

## RPL 30W Type 30 Watt

*input range AC 85V up to AC 265V or DC 100V up to DC 375V*

Easy adjustment of wide range output voltage on front plate via potentiometer.

Units RPL operate either in constant voltage operation or in constant current operation, therefore allowing application as battery chargers also.


Custom makes on special request

- Special features:**
- output voltage DC 12, 24 or 48V, wide range adjustment
  - connection in series and parallel
  - high efficiency
  - compact and robust design in plastic housing
  - easy fitting onto DIN-rail
  - protection class I
  - interference emission EN 50081-1, EN 55011 class B, EN 55022 class B (Telecom)
  - interference immunity EN 50082-2: ESD, electromagnetic irradiation, Burst, conducted interference immunity, mains voltage dips
  - overcurrent limiter and short-circuit protection
  - overtemperature protection
  - inrush current limiter, enabling application of conventional circuit breakers.
  - overvoltage limiter
  - status display: LED
  - all power packs series RPL can also apply as **chargers** (type ...WL) or **DC-DC-converters** (reverse polarity protection on input available).



Article No. and Voltages					
Type	Article No.	Input voltage range	Output voltage range	Output rated voltage	Output rated current
RPL 122.5 W	0500-0000122.5W	AC 85-265V or DC 100-375V	DC 11-15V	DC 12V (power pack)	2.50A
RPL 241.25 W	0500-000241.25W		DC 23-29V	DC 24V (power pack)	1.25A
RPL 480.65 W	0500-000480.65W		DC 45-58V	DC 48V (power pack)	0.65A
RPL 122.5 WL	0520-00012.25WL		DC 11-15V	DC 13.7V (battery charger)	2.25A
RPL 241.25 WL	0520-00241.25WL		DC 23-29V	DC 27.4V (battery charger)	1.15A
RPL 480.65 WL	0520-00480.65WL		DC 45-58V	DC 54.8V (battery charger)	0.60A



Technical Data	30W					
	RPL 122.5W	RPL 122.5WL	RPL 241.25W	RPL 241.25WL	RPL 480.65W	RPL 480.65WL
<b>INPUT</b>						
Rated voltage, U <sub>1nominal</sub>	AC 100V - 240V					
Voltage range, U <sub>1min</sub> -U <sub>1max</sub>	AC 85V - 264V or DC 100V - 375V					
Frequency	45-65 Hz					
Overvoltage protection	varistor AC 275V					
Rated current typical, I <sub>1nominal</sub>	0.32A at AC 230V   0.61A at AC 115V					
Highest transient pulse Ta=25°C	< 25A at AC 230V   < 13A at AC 115V					
Highest transient pulse Ta=55°C	< 50A at AC 230V   < 26A at AC 115V					
Internal fuse (instrument fuse)	T1.25A					
Recommended external fuse	circuit breaker C6, B10					
Maximal switching rate	30 switching cycles per hour					
Mains failure bridging time	> 50ms at AC 230V   > 10ms at AC 115V					
Protection against reverse polarity DC-input	Yes					
<b>OUTPUT</b>						
	<b>Power pack</b>	<b>Charger</b>	<b>Power pack</b>	<b>Charger</b>	<b>Power pack</b>	<b>Charger</b>
Rated voltage U <sub>2nominal</sub>	DC 12V	DC 13.7V	DC 24V	DC 27.4V	DC 48V	DC 54.8V
Voltage range U <sub>2min</sub> - U <sub>2max</sub>	DC 10-15V adjustable		DC 21-29V adjustable		DC 45-58V adjustable	
Rated current I <sub>2</sub> (at U <sub>2nominal</sub> ) Ta = -25...+55°C	2.5A	2.3A	1.25A	1.15A	0.65A	0.6A
Overload-, short circuit-, no-load protection	Yes					
Overcurrent limitation	2.7A	2.3A	1.3A	1.15A	0.7A	0.6A
Short circuit current	< 5A		< 3A		< 2A	
Overvoltage protection	Yes					
Residual ripple f = 20Hz...300 kHz	< 20mV eff.					
Line control U <sub>1min</sub> - U <sub>1max</sub>	< 0.15 %					
Load control Load change 10% <-> 90%	< 0.5% (< 1.5% option -S)					
Overshoot / control time Load leap 10%<->90%	< 3.0% < 3ms					
Temperature stability	< 0.03% / K					
Series- and parallel operation	Yes. Series operation up to output voltage DC 150V max.					
<b>SIGNAL DATA</b>						
LED status reports	LED green					
<b>REGULATIONS</b>						
Mains harmonics limitation comp. EN 61000-3-2	Not necessary					
Noise emission	EN 61000-6-3, EN 55022 class B					
Noise immunity	EN 61000-6-2					
Safety	EN 60950 class I					
Test mark / approbation						
Test voltage input / output	AC 3kV (type test), AC 2kV (type test)					
Humidity	85% RH IEC 68-2-30					
Vibration & shock	ETS 300 019-2-4, class 4M5					
<b>OPERATION SPECIFICS</b>						
Efficiency typical	80% at AC 230V		82% at AC 230V		82% at AC 230V	
Protection comp. VDE 0470/EN60529	IP 20					
Protection class comp. IEC 536, VDE 0106 T1	I					
Overtemperature protection	Yes					
Ambient temperature, 2 cm beneath unit	-25° up to +55°C					
Storage temperature	-40° up to +85°C					
Cooling	Natural convection					
Article no.	0500-0000122.5W	0520-000122.5WL	0500-000241.25W	0520-00241.25WL	0500-000480.65W	0520-00480.65WL
<b>MECHANICS</b>						
Housing construction	Synthetic material					
Assembly	Snap onto mounting rail comp. DIN EN 60715					
Installation position	Vertical					
Measurements approx. W x H x D in mm	ca. 40 x 80 x 85					
Weight approx. in kg	ca. 0.14					