



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

RPL 60W Type 60 Watt

input range AC 90V up to AC 264V 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 61000-6-3, EN 55011 class B, EN 55022 class B (Telecom)
 - interference immunity EN 61000-6-2: 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 1205 W	0500-00001205W	AC 90-264V or DC 100-375V	DC 11-15V	DC 12V (power pack)	5.00A
RPL 242.5 W	0500-000242.5W		DC 21-29V	DC 24V (power pack)	2.50A
RPL 481.25 W	0500-00481.25W		DC 45-58V	DC 48V (power pack)	1.25A
RPL 1205 WL	0520-0001205WL		DC 11-15V	DC 13,7V (battery charger)	5.00A
RPL 242.5 WL	0520-00242.5WL		DC 21-29V	DC 27,4V (battery charger)	2.50A
RPL 481.25 WL	0520-0481.25WL		DC 45-58V	DC 54,8V (battery charger)	1.25A

- Options:**
- series diode on output side: additional letter - S (for example RPL 242.5W-S)
 - instead of interference contact: temperature compensation additional letter – T (for example RPL 242.5W-T)



Technical Data	60W					
	RPL 1205W	RPL 1205WL	RPL 242.5W	RPL 242.5WL	RPL 481.25W	RPL 481.25WL
INPUT						
Rated voltage, U _{1nominal}	AC 100V - 240V					
Voltage range, U _{1min} -U _{1max}	AC 90V - 264V or DC 100V - 375V					
Frequency	45-65 Hz					
Overvoltage protection	Varistor AC 275V					
Rated current typical, I _{1nominal}	0.7A at AC 230V 1.2A at AC 115V					
Highest transient pulse Ta=25°C	< 25A at AC 230V < 13A at AC 115V					
Highest transient pulse Ta=55°C	< 55A at AC 230V < 29A at AC 115V					
Internal fuse (instrument fuse)	T3.15A with high breaking capacity					
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					
OUTPUT						
	Power pack	Charger	Power pack	Charger	Power pack	Charger
Rated voltage U _{2nominal}	DC 12V	DC 13.7V	DC 24V	DC 27.4V	DC 48V	DC 54.8V
Voltage range U _{2min} - U _{2max}	DC 11-15V adjustable		DC 21-29V adjustable		DC 45-58V adjustable	
Rated current I ₂ (at U _{2nominal}) Ta = -25...+55°C	5.0A	5.0A	2.5A	2.5A	1.25A	1.25A
Overload-, short circuit-, no-load protection	Yes					
Overcurrent limitation	5.6A	5.0A	3.0A	2.8A	1.8A	1.5A
Short circuit current	< 5A		< 3A		< 2A	
Overvoltage protection	Yes					
Residual ripple f = 20Hz...300 kHz	< 20mV eff.					
Line control U _{1min} - U _{1max}	< 0.2 %					
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.					
SIGNAL DATA						
LED status reports	U ₂ > 0.9xU ₂ -must value (voltage control): LED green					
Input DS (Disable): output remote switch-off / -on,	external signal, „+“ to DS, „-“ to - 10-29V: output OFF, 0-2.5V: Output ON (option -F)					
Noise output (not available for option -T)	U ₂ > 0.9xU ₂ -must value: connection COM-NO					
Potential free change-over contact DC 24V/0.5A, AC 30V/0.1-0.5 A	U ₂ -actual value < 0.9xU ₂ -must value: connection COM-NC					
Temperature controlled charging, option -T	connection external NTC-resistor 10k with B=3977K to COM-NO					
REGULATIONS						
Mains harmonics limitation comp. EN 61000-3-2	Not necessary					
Noise emission	EN 61000-6-3					
Noise immunity	EN 61000-6-2					
Safety	EN 60950 class I					
Test mark / approbation						
Test voltage input / housing	AC 2.5kV (type test), AC 2kV (type test)					
Test voltage input / output	AC 3kV (type test), AC 2kV (type test)					
Test voltage output / housing	DC 500V (type test)					
Humidity	85% RH IEC 68-2-30					
Vibration & shock	ETS 300 019-2-4, class 4M5					
OPERATION SPECIFICS						
Efficiency typical	82% at AC 230V		83% at AC 230V		84% 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.	0500-00001205W	0520-0001205WL	0500-000242.5W	0520-00242.5WL	0500-000481.25W	0520-00481.25WL
MECHANICS						
Housing construction	aluminum/steel					
Assembly	Snap onto mounting rail comp. DIN EN 60715					
Installation position	Several fitting positions possible					
Measurements approx. W x H x D in mm	ca. 50 x 106 x 87					
Weight approx. in kg	ca. 0.4					