



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

RPL 125W Type 125 Watt

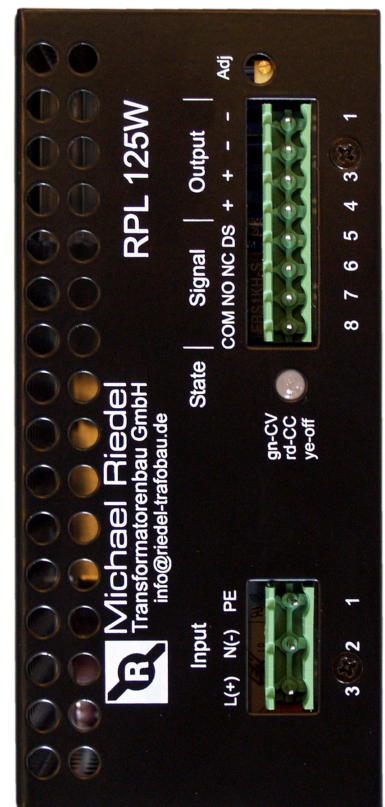
Wide input range AC 90V up to 264V or DC 100V up to 375V

Adjustment of wide range output voltage on front plate via potentiometer.

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

Custom makes on special request

- Special features:**
- output voltage DC 24V, wide range adjustment
 - switch in series and parallel
 - high efficiency
 - compact and robust design in metal housing
 - easy fitting onto DIN-rail, diverse installation positions possible
 - protection class I
 - noise emission EN 61000-6-3, EN 55011 class B, EN 55022 class B (Telecom)
 - noise immunity EN 61000-6-2: ESD, electromagnetic irradiation, burst, conducted noise immunity, mains voltage dips
 - overcurrent limitation and short circuit protection
 - overtemperature protection
 - inrush current limitation, enabling application of conventional circuit breakers.
 - overvoltage limitation
 - status display: tricolor LED
 - potential free noise output (change-over switch)
 - input DS (Disable) for remote output switch-on and switch-off
 - all power packs RPL also apply as **chargers** (type ...WL) or **DC-DC- converters** (reverse polarity protection available on input side).



Options:

series diode (decoupling diode) on output for redundancy- and UPS-systems:
additional letter 'S': for example RPL 2405W-S.
overload shut down, storing cut-off at overload:
additional letter 'D': for example RPL 2405W-D
temperature controlled charging:
additional letter 'T': for example RPL 2405WL-T
further options (other signal combinations, tropical insulation, increased vibration resistance, etc.) on request.



Technical Data	125W					
	RPL 1210W	RPL 1210WL	RPL 2405W	RPL 2405WL	RPL 482.5W	RPL 482.5WL
INPUT						
Rated voltage, U _{1nominal}	AC 100V-240V					
Voltage range, U _{1min} -U _{1max}	AC 90-264V or DC 100V-375V					
Frequency	45-65 Hz or 0Hz					
Overvoltage protection	varistor					
Rated current typical, I _{1nominal}	1.0A at AC 230V, 1.8A at AC 115V					
Highest transient pulse Ta=25°C	< 20A at AC 230V, < 10A at AC 115V					
Highest transient pulse Ta=55°C	< 50A at AC 230V, < 25A at AC 115V					
Internal fuse (instrument fuse)	6,3A time lag					
Recommended external fuse	line circuit breaker B10, B16					
Maximal switching rate	30 switching cycles per hour					
Mains failure bridging time	> 90ms at AC 230V, > 25ms at AC 115V					
Reverse polarity protection DC-input	Yes					
OUTPUT						
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 9-15V adjustable		DC 21-29V adjustable		DC 45-58V adjustable	
Rated current I ₂ (at U _{2nominal}) Ta = -25...+55°C	10,0A	8,8A	5,0A	4,8A	2,5A	A
Rated current I ₂ (at U _{2nominal}) Ta = -25...+45°C	12,0A	11,0A	6,0A	5,3A	2,75A	A
Overload-, short circuit-, no-load protection	yes					
Overcurrent limitation 4s / after 4s typical	12,5A / 11,5A	12,0A / 11,0A	6,1A / 5,3A	5,6A / 4,8A	A / A	A / A
Short circuit current 4s / after 4s typical	< 25A / < 13A		< 14A / < 7A		< A / < A	
Overload shut down, storing cut-off at overload. Option ,D'	unit switches off on output side after 4s overcurrent. Fault repair: switch off mains, check load and switch on mains again.					
Overvoltage protection	TVS 18V		TVS 36V		TVS 62V	
Residual ripple f=20Hz...300kHz	< 20mV eff.					
Line control U _{1min} - U _{1max}	< 0.15 %					
Load control Load change 10% <-> 90%	< 1,0% (< 3,0% option -S)		< 0.5% (< 1.5% option S)		< 0.5% (< 1.5% option S)	
Overshoot / control time Load leap 10% <-> 90%	< 3.0% < 3ms					
Temperature stability	< 0.02% / 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 U ₂ < 0.9xU ₂ -must value (current limitation): LED red unit connected to mains, output voltage switched off: LED yellow					
Input DS (Disable): output remote switch-off / -on	external signal, „+“ to DS, „-“ to -. 10-29V: output OFF, 0-2.5V: Output ON					
Noise output (not available for option ,T')	U ₂ > 0.9xU ₂ -must value: connection COM-NO					
Potential free change-over contact DC 24V or 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	yes					
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 / housing	AC 2.5kV (type test), AC 2kV (routine test)					
Test voltage input / output	AC 3kV (type test), AC 2kV (routine test)					
Test voltage output / housing	DC 500V (routine test)					
Humidity	85% RH IEC 68-2-30					
Vibration & shock	ETS 300 019-2-4, class 4M5					
OPERATION SPECIFICS						
Efficiency typical	typical 87% at AC 230V and 100%-load					
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 number	0500-	000001210W	00001210WL	000002405W	00002405WL	0000482.5W 000482.5WL
MECHANICS						
Housing construction	aluminum					
Assembly	snap onto mounting rail comp. DIN EN 60715, or screw-on					
Installation position	diverse installation positions possible					
Measurements W x H x D in mm	ca. 63 x 137 x 114					
Weight in kg	ca. 0,6					