

RTW50W Specifications

ITEMS/UNITS		MODEL	RTW03-12R	RTW05-10R	RTW12-4R3	RTW15-3R5	RTW24-2R2	RTW28-1R8	RTW48-1R1	
Input	Voltage Range (Nominal: 100-240VAC)	V	AC85-265							
	Frequency (Nominal: 50-60 single phase)	Hz	47-66							
	Power Factor (100/240VAC)(typ)		0.99/0.94							
	Efficiency (100VAC)(typ)	%	75	80	81	82				
	Efficiency (200VAC)(typ)	%	77	82	83	85				
	Current (100-120/200-240VAC) (max)	A	0.7/0.4 (3.3V: 0.6/0.3)							
	Inrush Current (100/200VAC)(typ) (*1)	A	14/28							
Leakage Current (100/240VAC) (max)	mA	0.45/0.6								
Output	Nominal Voltage	VDC	3.3	5	12	15	24	28	48	
	Maximum Current (*2)	A	12.5	10	4.3	3.5	2.2	1.8	1.1	
	Maximum Power	W	41.2	50	51.6	52.5	52.8	50.4	52.8	
	Maximum Line Regulation (Within input voltage range) (max/typ)		0.2%/0.1%							
	Maximum Load Regulation (0-100% load) (max/typ)		0.4%/0.2%							
	Temperature Coefficient (Ambient temperature -10°C to +71°C) (max/typ)	%	1.0/0.5							
	Warm Up Drift (max/typ) (*3)	%	0.5/0.2							
	Max Power Total Regulation (max/typ)	%	± 1.8/ ± 0.9							
	Maximum Ripple Voltage (max) (*4)	mVp-p	80	100			150	200		
	Maximum Ripple & Noise (max) (*4)	mVp-p	120	150			200	300		
	Start Up Time (100/240VAC)(typ) (*5)	ms	400/200							
	Hold-up Time (100/240VAC)(typ)	ms	55	30				35	30	
	Voltage Adjustable Range	VDC	2.6-4.0	4.0-5.8	9.6-13.2	12.0-16.5	19.2-26.4	22.4-30.8	38.4-52.8	
Over Current Protection (*6)	A	13.2-15.6	10.5-12.5	4.5-5.4	3.68-4.38	2.3-2.75	1.9-2.25	1.15-1.38		
Over Voltage Protection (*7)	VDC	4.2-5.2	6.0-6.9	13.7-15.7	17.0-19.0	27.0-30.5	32.0-35.0	55.0-60.0		
Over Temperature Protection		Not available								
Remote Sensing		Available								
Remote ON/OFF Control (*8)		Available								
Parallel Operation		Not available								
Series Operation		Applicable								
Operation Indicator		Available (green LED)								
Variable Output Voltage		Not available								
Monitoring Signal		Not available								
Operating Temperature	°C	-10 to +71								
Storage Temperature	°C	-30 to +75								
Environment	Operating Humidity	% RH	10-95 (the conditions of maximum 35°C in wet bulb temperature and non-condensation should be ensured.)							
	Storage Humidity	% RH	10-95 (the conditions of maximum 35°C in wet bulb temperature and non-condensation should be ensured.)							
	Vibration		5-10Hz, 10 minutes sweep, 10mm-p total amplitude, 3 directions, 1h for each, in non-operation 10-200Hz, 10 minutes sweep, 19.6m/s ² (2G) acceleration, 3 directions, 1h for each, in non-operation							
	Shock		Mounting A: 196m/s ² (20G), Mounting B/C: 588m/s ² (60G), 11 ± 5ms, 3 directions, 3 times for each, in non-operation							
Isolation	Withstand Voltage		For 1 minute at ordinary temperature and humidity Between input terminal and ground terminal: 2.0kVAC, 10mA cutout current Between input terminal and output terminal: 3.0kVAC, 10mA cutout current Between output terminal and ground terminal: 500VAC, 20mA cutout current							
	Isolation Resistance		In 500VDC and 100MΩ or over at ordinary temperature and humidity Between input terminal and ground terminal, between input terminal and output terminal, and between output terminal and ground terminal							
Standards	Safety Standards		Approved by UL60950-1, CSA C22.2 No.60950-1 (C-UL), EN60950-1 (TUV), complying with Electrical Appliance and Material Safety Law (meeting the regulations of creepage surface and spacial distance in item 8 of the appendix table)							
	PFHC		Complying with EN61000-3-2							
	EMI		Complying with FCC-Class B / VCCI-Class B / EN55011-B / EN55022-B							
Mechanical	Immunity		Complying with EN61000-4-2 Level2, 3, -3 Level3, -4 Level3, -5 Level3, 4, -6 Level3, -8 Level4, -11							
	Weight without cover / with cover / type L (max)	g	250/290/250							
	Size (W x H x D) without cover / with cover / type L	mm	22 x 82 x 124/22 x 82 x 124/22 x 82 x 134.5							
Models of different	Detailed product name1 with cover		RTW03-12RC	RTW05-10RC	RTW12-4R3C	RTW15-3R5C	RTW24-2R2C	RTW28-1R8C	RTW48-1R1C	
	Detailed product name2 type L		RTW03-12RL	RTW05-10RL	RTW12-4R3L	RTW15-3R5L	RTW24-2R2L	RTW28-1R8L	RTW48-1R1L	

With nominal input/output voltage, maximum output current, and Ta=25°C, if not specified separately.

(*1) In primary surge current, 25°C, and cold starting.

(*2) The maximum output current value is between -10°C and +40°C. For use in outside this temperature range, derating is needed.

(*3) 30min to 8h after the start of input voltage application.

(*4) 1.5 times the value in 100MHz and at between -10°C and 0°C.

(*5) In cold starting at between -20°C and 0°C, lowering of output voltage can occur. It may take 3 seconds or so until the voltage becomes stable.

(*6) Fixed current reduction system and automatically resumes when the causes are removed.

(*7) Output voltage shutdown system and resumes by restarting input (approximately 30s interval).

(*8) Use and nonuse can be switched by the internal switch.

Recommended EMC Filter



RSEL-2003W

Please refer to "TDK-Lambda EMC Filters" catalog.