

RTW300W Specifications

ITEMS/UNITS		MODEL	RTW03-70RH	RTW05-60RH	RTW12-25RH	RTW15-20RH	RTW24-13RH	RTW28-11RH	RTW48-6R5H
Input	Voltage Range (Nominal: 100-240VAC)	V	AC85 - 265						
	Frequency (Nominal: 50-60 single phase)	Hz	47 - 66						
	Power Factor (100/240VAC)(typ)		0.99/0.93						
	Efficiency (100VAC)(typ)	%	83	84	83	85		86	
	Efficiency (200VAC)(typ)	%	86	87	86	88		89	
	Current (100/200VAC) (max)	A	4.0/2.0(3.3V:3.6/1.8) max						
	Inrush Current (100/200VAC)(typ) (*1)	A	15/30						
	Leakage Current (100/240VAC) (max)	mA	0.5/0.7						
Output	Nominal Voltage	VDC	3.3	5	12	15	24	28	48
	Maximum Current (*2)	A	70	60	25	20	13 (ピーク 20)	11	6.5
	Maximum Power	W	231	300		312		308	312
	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	220/120						
	Hold-up Time (100/240VAC)(typ)	ms	30/40	25/30	30/40	25/30	30/40		
	Voltage Adjustable Range	VDC	1.8 - 3.6	3.5 - 5.6	7.2 - 14.4	10.5 - 18.0	16.8 - 26.4	19.6 - 33.6	33.6 - 55.0
	Function	Over Current Protection (*6)	A	73.5 - 84.0	63.0 - 72.0	26.3 - 30.0	21.0 - 24.0		11.5 - 13.2
Over Voltage Protection (*7)		VDC	Vo+0.66 - 1.32	Vo+1.0 - 2.0	Vo+2.4 - 4.8	Vo+3.0 - 6.0	Vo+4.8 - 9.6	Vo+5.6 - 10.4	Vo+1.0 - 10
Over Temperature Protection			Not available						
Remote Sensing			Available						
Remote ON/OFF Control (*8)			Available						
Parallel Operation			Applicable (current balance function and master/slave operation are supported; synchronized operation is not supported)						
Series Operation			Available (green LED)						
Operation Indicator			Available						
Variable Output Voltage			Available (power fail signal)						
Low Output Voltage Dection (*7)			Available						
Environment		Operating Temperature	°C	-10 to +71					
	Storage Temperature	°C	-30 to +75						
	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, 10mmp-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		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, 40mA 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	1300/1200						
	Size (W x H x D) without cover / with cover / type L	mm	40 x 120 x 250/40 x 120 x 250						
Models of different	Detailed product name ¹ with cover		RTW03-70RL	RTW05-60RL	RTW12-25RL	RTW15-20RL	RTW24-13RL	RTW28-11RL	RTW48-6R5L

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) Fixed current reduction system; current is shut down if overload condition continues 15 seconds or over. Restarting input

Resumes after (approximately 30s interval) or resetting remote control. (Shutdown by low output voltage detection in 3/5/28V models)

(*6) The detection value tracks the set output voltage (Vo). Output voltage shutdown system,

Resumes by restarting input (approximately 30s interval) or resetting remote control.

(*7) Output is shut down in the condition of 60% or lower of the nominal voltage for 3.3V and 5V models. For 28V models, Output is shut down in the when the nominal voltage is 20% or lower. Other models do not have this function.

• All specifications are subject to change without notice.

Recommended EMC Filter



RSEN-2006W

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