RTW100W Specifications

ITEMS/UNITS \ MODEL			RTW03-25R	RTW05-20R	RTW12-8R4	RTW15-6R7	RTW24-4R2	RTW28-3R6	RTW48-2R1
Input	Voltage Range (Nominal: 100-240VAC)	V	AC85-265 (90% load derating in 90VAC or lower)						
	Frequency (Nominal: 50-60 single phase)	Hz	47-66						
	Power Factor (100/240VAC)(typ)		0.99/0.93						
	Efficiency (100VAC)(typ)	%	79	83	84	85			
	Efficiency (200VAC)(typ)	%	81	85	86	87			88
	Current (100-120/200-240VAC) (max)	A	1.5/0.75 (3.3V: 1.2/0.6)						
	Inrush Current (100/200VAC)(typ) (*1)	A	14/28						
	Leakage Current (100/240VAC) (max)	mA	0.45/0.6 (100VAC (Electrical Appliance and Material Safety Law) / 240VAC (UL, IEC))						
Output	Nominal Voltage	VDC	3.3	5	12	15	24	28	48
	Maximum Current (*2)	A	25	20	8.4	6.7	4.2	3.6	2.1
	Maximum Power	W	82.5	100	100.8	100.5	100.8		
	Maximum Line Regulation (Within input voltage range) (max/typ)		0.2%/0.1% (3.3V: 10mV/5mV)						
	Maximum Load Regulation (0-100% load) (max/typ)		0.4%/0.2% (3.3V: 20mV/10mV)						
	Temperature Coefficient (Ambient temperature -10℃ to +71℃) (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	35						
	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
Function	Over Current Protection (*6)	A	26.2-33.7	21-25	8.82-10.5	7.03-9.04	4.41-5.25	3.78-4.86	2.2-2.62
	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						
Environment	Operating Temperature	℃	-10 to +71						
	Storage Temperature	℃	-30 to +75						
	Operating Humidity	% RH	10-95 (the conditions of maximum 35℃ in wet bulb temperature and non-condensation should be ensured.)						
	Storage Humidity	% RH	10-95 (the conditions of maximum 35℃ 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/s² (2G) acceleration, 3 directions, 1h for each, in non-operation						
	Shock		Mounting A: 196m/s² (20G), Mounting B/C: 588m/s² (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 (TÜV), 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						
	Immunity		Complying with EN61000-4-2 Level2, 3, -3 Level3, -4 Level3, -5 Level3, 4, -6 Level3, -8 Level4, -11						
Mechanical	Weight without cover / with cover / type L (max)	g	380/450/380						
	Size (W x H x D) without cover / with cover / type L	mm	25 x 82 x 160/25 x 82 x 160/25 x 82 x 171.5						
Models of different	Detailed product name1 with cover		RTW03-25RC	RTW05-20RC	RTW12-8R4C	RTW15-6R7C	RTW24-4R2C	RTW28-3R6C	RTW48-2R1C
	Detailed product name2 type L		RTW03-25RL	RTW05-20RL	RTW12-8R4L	RTW15-6R7L	RTW24-4R2L	RTW28-3R6L	RTW48-2R1L

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) Intermittent operation 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-2002W

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