

50-600W Single Output General Purpose Power Supplies

Features

- ◆ Low Cost
- ◆ Wide Range AC Input 85 - 265VAC (300VAC for 5s)
- ◆ UL508 Certification on Select Models
- ◆ Enclosed Construction
- ◆ Compact Size
- ◆ 7 Year Warranty



Key Market Segments & Applications



Specifications		RWS50B	RWS100B	RWS150B	RWS300B	RWS600B
AC Input Voltage range (1)	VAC	85 - 265VAC (47 - 63Hz), 300VAC for 5 seconds				
DC Input Voltage range	VDC	120 - 370VDC (330VDC for RWS600B)*				
Inrush Current (100 / 200VAC)	A	18 / 36	15 / 30	16 / 32	17 / 34	20 / 40
Power Factor (100 / 200VAC)	-	Meets EN61000-3-2 (0.95 / 0.9)				
Input Current (100/200VAC) (Typ)	A	1.1 / 0.7	1.3 / 0.7	1.9 / 1.0	3.8 / 2.1	7.2 / 4.0
Temperature Coefficient	-	<0.02%/°C				
Regulation	-	See sheet 2				
Overcurrent Protection	-	>105%, Constant Current Style				
Overvoltage Protection	V	115-140%, Cycle AC line to reset				
Hold Up Time (Typ at 100% load)	ms	20ms (RWS50B: 15ms at 100VAC input)				
Leakage Current (max)	uA	750uA maximum, typically 175uA at 115VAC, 63Hz				
Remote Sense	-	No				
Operating Temperature	-	-10 to +70°C, derate linearly to 20% load from 50 to 70°C (100-150W from 40 to 70°C) (3)				
Storage Temperature	-	-30 to +75°C				
Operating Humidity (non condensing)	%RH	30 - 90%RH				
Storage Humidity (non condensing)	%RH	10 - 90%RH				
Cooling	-	Convection		Internal Fan		
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.				
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC				
Vibration (non operating)	-	10 - 55Hz: 19.6m/s ² (sweep 1 min) X, Y, Z for 1 hour				
Shock	-	< 196.1 m/s ²				
Safety Agency Approvals (2)	-	UL / CSA(cUL) / IEC 60950-1 (2nd Ed), UL:508, CSA C22.2 No.107.1-01, CE Mark (Additionally evaluated to EN 60950-1)				
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC Class B, VCCI-B				
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11, IEC61000-6-2				
Weight (Typ)	g	230	400	480	900	1600
Size (WxHxD)	mm	82 x 34 x 81.5	94 x 39 x 108	94 x 41 x 128	102 x 41 x 170	120 x 61 x 190
	In	3.23 x 1.34 x 3.2	3.7 x 1.54 x 4.25	3.7 x 1.61 x 5.04	4.02 x 1.61 x 6.7	4.72 x 2.4 x 7.48
MTBF - Telcordia SR-332 issue 3**	Hours	4,170,949	1,978,533	2,235,743	2,027,824	2,157,340
Warranty	Yrs	Seven Years				

*Safety certified for AC input only ** 24V output model, 25°C ambient, full load, 230VAC input

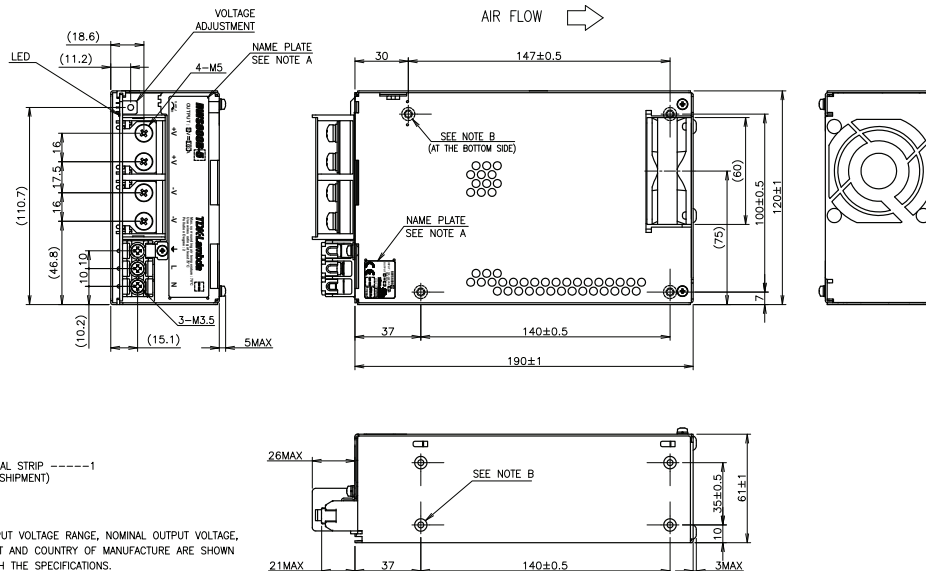
Notes:

- (1) See Instruction Manual for derating below 115VAC input
- (2) UL508 & CSA C22.2 No.107.1-01 on RWS50B-5, -12, -24, RWS100B-5, -12, -24, RWS150B-5, -12, -24, RWS300B-24 and RWS600B-24 only
- (3) RWS600B operates down to -20°C

Output Ratings

Model	Voltage	Adjust Range (V)	Max Current (A)	Max Output Power	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % 100/200VAC
RWS50B-5	5V	4.5-5.75V	10	50	40	20	120	77 / 79
RWS100B-5	5V	4.5-5.75V	14	70	40	20	120	77 / 79
RWS150B-5	5V	4.5-5.75V	21	105	40	20	120	77 / 79
RWS300B-5	5V	4.5-5.75V	50	250	40	20	120	75 / 78
RWS600B-5	5V	4.5-5.75V	100	500	70	20	120	74 / 77
RWS50B-12	12V	10.8-13.8V	4.3	51.6	96	48	150	82 / 84
RWS100B-12	12V	10.8-13.8V	8.5	102	96	48	150	82 / 84
RWS150B-12	12V	10.8-13.8V	13	156	96	48	150	84 / 87
RWS300B-12	12V	10.8-13.8V	25	300	96	48	150	79 / 82
RWS600B-12	12V	10.8-13.8V	50	600	96	48	150	81 / 84
RWS300B-15	15V	13.5-17.2V	20	300	120	60	150	81 / 84
RWS600B-15	15V	13.5-17.2V	40	600	120	60	150	81 / 84
RWS50B-24	24V	21.6-27.6V	2.2	52.8	192	96	150	86 / 87
RWS100B-24	24V	21.6-27.6V	4.5	108	192	96	150	85 / 87
RWS150B-24	24V	21.6-27.6V	6.5	156	192	96	150	86 / 89
RWS300B-24	24V	21.6-27.6V	12.5	300	192	96	150	85 / 88
RWS600B-24	24V	21.6-27.6V	25	600	192	96	150	84 / 88
RWS300B-36	36V	32.4-41.4	8.4	302.4	288	144	200	85 / 88
RWS600B-36	36V	32.4-41.4	16.7	601.2	288	144	200	84 / 88
RWS50B-48	48V	43.2-52.8	1.1	52.8	384	192	200	86 / 88
RWS100B-48	48V	43.2-52.8	2.1	100.8	384	192	200	85 / 87
RWS150B-48	48V	43.2-52.8	3.3	158.4	384	192	200	86 / 89
RWS300B-48	48V	43.2-52.8	6.3	302.4	384	192	200	85 / 88
RWS600B-48	48V	43.2-52.8	12.5	600	384	192	200	85 / 88

Outline Drawing (RWS600B)



Options

Suffix	Description
/CO2	Double Sided Board Coating
/R	Remote On/Off (RWS300B only)
/RFO	Remote On/Off, Remote Sense, Parallel Operation, DC Good Signal (RWS600B only)

Other TDK-Lambda Industrial Products

HWS	15W to 1500W Single output
LS	25W to 200W Single output low cost
SWS-L	600W to 1000W Single output, full featured

For Additional Information, please visit
us.tdk-lambda.com/lp/products/rwsb-series.htm

