



## 50W to 600W Single Output General Purpose Power Supplies

Features	Benefits
• 10 Year e-cap Lifetime	• Better Field Reliability
• 7 Year Warranty	• Lower Cost of Ownership
• Global Safety Approvals	• Supports Worldwide Use
• Compact Size	• Easier System Integration



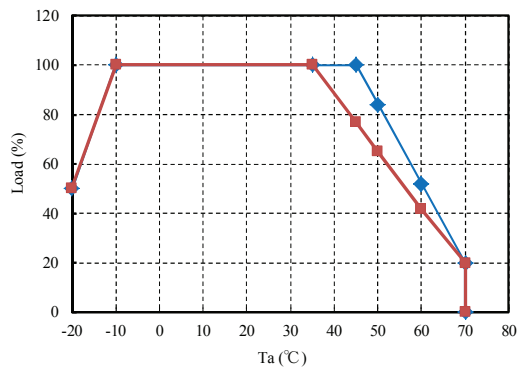
Specification		RWS50B	RWS100B	RWS150B	RWS300B	RWS600B
AC Input Voltage range (1)	VAC	85 - 265VAC (47 - 63Hz), 300VAC for 5 seconds				
Inrush Current (100 / 200VAC)	A	18 / 36	15 / 30	16 / 32	17 / 34	20 / 40
Power Factor (100 / 200VAC)	-	Meets EN61000-3-2				
Input Current (115/230VAC) (typ)	A	1.1 / 0.65	1.2 / 0.65 (5V model 0.9/0.45)	1.8 / 0.9 (5v model 1.3/0.7)	3.6 / 1.9 (5v model 3.1/1.6)	6.6 / 3.6 (5v model 6.2/3.2)
DC Input	VDC	120 - 370VDC				120 - 330VDC
Temperature Coefficient	-	<0.02%/°C				
Regulation	-	See table				
Overcurrent Protection	-	>105%, 5V & 12V constant current limit & hiccup autorecovery, 24V & 48V constant current limit with autorecovery				
Overvoltage Protection	V	115-140%, Cycle AC line to reset				
Hold Up Time (typ at full load)	ms	20ms				
Leakage Current (max)	uA	750uA maximum, typically 175uA at 115VAC, 63Hz				
Remote Sense	-	No				
Remote ON/OFF Control (4)	-	-	-	-	Option	Option
Parallel Operation	-	-	-	-	-	Option
Operating Temperature (1)	-	-20° to +70°C, derate above 45°C for 50W & 100W, 40°C for 150W & 50°C for 300W & 600W (see graphs below)				
Storage Temperature	-	-30° to +75°C				
Operating Humidity (non condensing)	%RH	30 - 90				
Storage Humidity (non condensing)	%RH	10 - 90				
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 <sup>2</sup> (sweep 1 min) X, Y, Z for 1 hour				
Shock	-	< 196.1 m/s <sup>2</sup>				
Safety Agency Approvals (2) (3)	-	IEC/EN/UL/CSA60950-1, IEC/EN/UL/CSA62368-1, UL508 and CE Mark				
Line Dips	-	SEMI-F47 (200VAC input)				
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC Class B, VCCI-B				
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11				
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
MTBF (5)	hours	4,170,949	1,978,533	2,235,743	2,027,824	2,157,340
Warranty	Yrs	7				

**Notes:** (1) See graphs below for derating at low line input voltage  
 (2) UL508 & CSA C22.2 No.107.1-01 on RWS50B-5, -12, -24, RWS100B-5, -12, -24, RWS150B-5, -12, -24 & RWS300B-24 only  
 (3) Consult Sales Office for use under DC Input conditions (4) External 5V source required, see instruction manual for details  
 (5) According to Telcordia document SR-332, issue 3, "Reliability Prediction Procedure for Electronic Equipment".  
 Conditions: ambient temp. 25deg C, 230Vac input, full load (figures shown for 24V models)

## Model Selector

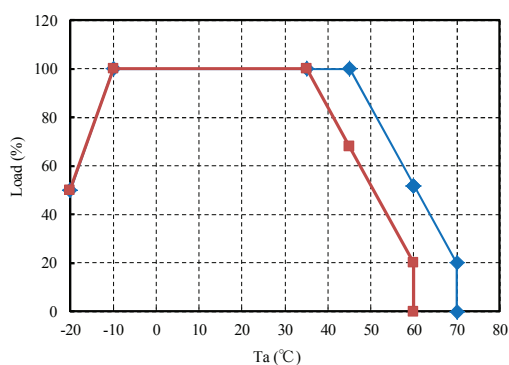
Model	Voltage	Adjust Range (V)	Max Current (A)	Max Output Power	Load Reg. (mV)	Line Reg. (mV)	Ripple Noise (mV)	Efficiency (typ) % 115/230VAC
RWS50B-5	5V	4.5-5.75	10	50	40	20	120	78 / 79
RWS100B-5	5V	4.5-5.75	14	70	40	20	120	77.5 / 79
RWS150B-5	5V	4.5-5.75	21	105	40	20	120	77.5 / 79.5
RWS300B-5	5V	4.5-5.75	50	250	40	20	120	75 / 78.5
RWS600B-5	5V	4.5-5.75	100	500	70	20	120	74 / 77.5
RWS50B-12	12V	10.8-13.8	4.3	51.6	96	48	150	83 / 84
RWS100B-12	12V	10.8-13.8	8.5	102	96	48	150	83 / 84
RWS150B-12	12V	10.8-13.8	13	156	96	48	150	84.5 / 87.5
RWS300B-12	12V	10.8-13.8	25	300	96	48	150	79.5 / 82.5
RWS600B-12	12V	10.8-13.8	50	600	96	48	150	82 / 84.5
RWS100B-15	15V	13.5-17.25	6.8	102	120	60	150	84 / 85
RWS150B-15	15V	13.5-17.25	10	150	120	60	150	84.5 / 87.5
RWS300B-15	15V	13.5-17.3	20	300	120	60	150	81.5 / 84.5
RWS600B-15	15V	13.5-17.3	40	600	120	60	150	82 / 84.5
RWS50B-24	24V	21.6-27.6	2.2	52.8	192	96	150	86 / 87
RWS100B-24	24V	21.6-27.6	4.5	108	192	96	150	86 / 87.5
RWS150B-24	24V	21.6-27.6	6.5	156	192	96	150	86.5 / 89.5
RWS300B-24	24V	21.6-27.6	12.5	300	192	96	150	85 / 88
RWS600B-24	24V	21.6-27.6	25	600	192	96	150	85 / 88.5
RWS150B-28	28V	25.2-32.2	5.4	151.2	224	112	180	86.5 / 89.5
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 / 88.5
RWS50B-48	48V	43.2-52.8	1.1	52.8	384	192	200	87 / 88
RWS100B-48	48V	43.2-52.8	2.1	100.8	384	192	200	86 / 87
RWS150B-48	48V	43.2-52.8	3.3	158.4	384	192	200	86.5 / 89.5
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 / 88.5

## Output Derating RWS50B Series



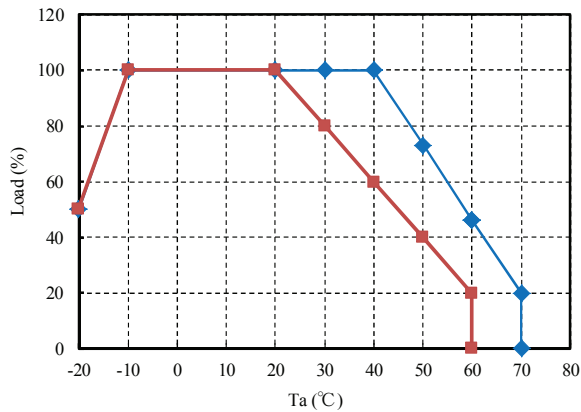
Ta (°C)	Load (%)	
	Mounting (A)	Mousing (B),(C),(D)
-20	50	50
-10 - +35	100	100
45	100	77
50	84	65
60	52	42
70	20	20

## Output Derating RWS100B Series



Ta (°C)	Load (%)	
	Mounting (A)	Mousing (B),(C),(D)
-20	50	50
-10 - +35	100	100
45	100	68
60	52	20
70	20	-

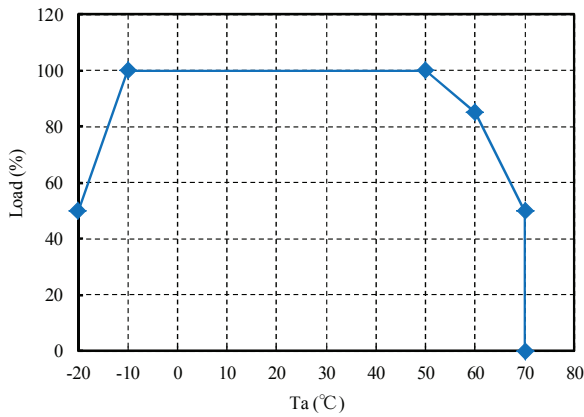
## Output Derating RWS150B Series



◆ Mounting (A)  
■ Mousing (B),(C),(D)

Ta (°C)	Load (%)	
	Mounting (A)	Mousing (B),(C),(D)
-20	50	50
-10 - +20	100	100
30	100	80
40	100	60
50	73	40
60	46	20
70	20	-

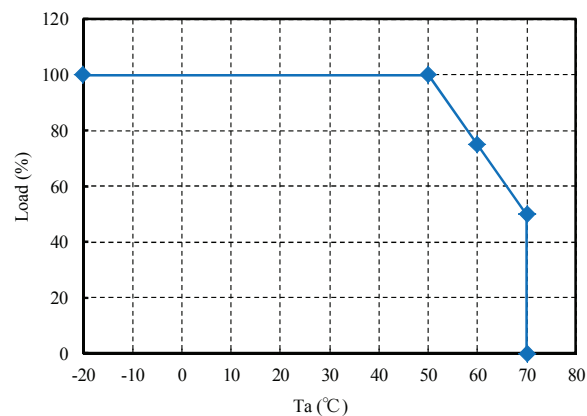
## Output Derating RWS300B Series



◆ Mounting (A)-(D)

Ta (°C)	Load (%)
	Mounting (A)-(D)
-20	50
-10 - +50	100
60	85
70	50

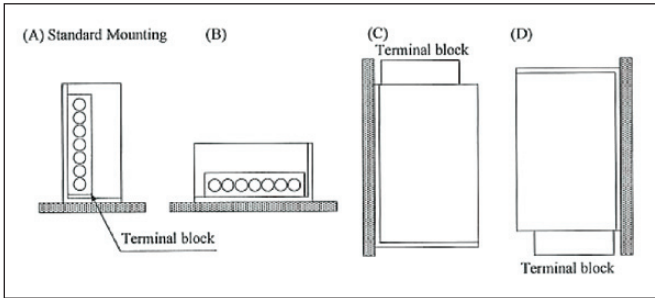
## Output Derating RWS600B Series



◆ Mounting (A)-(D)

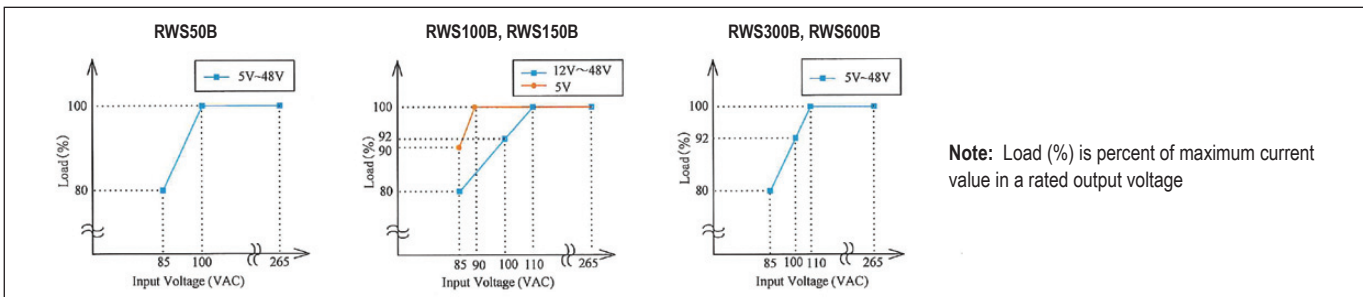
Ta (°C)	Load (%)
	Mounting (A)-(D)
-20 - +50	100
60	75
70	50

## Mounting Direction RWS-B Series

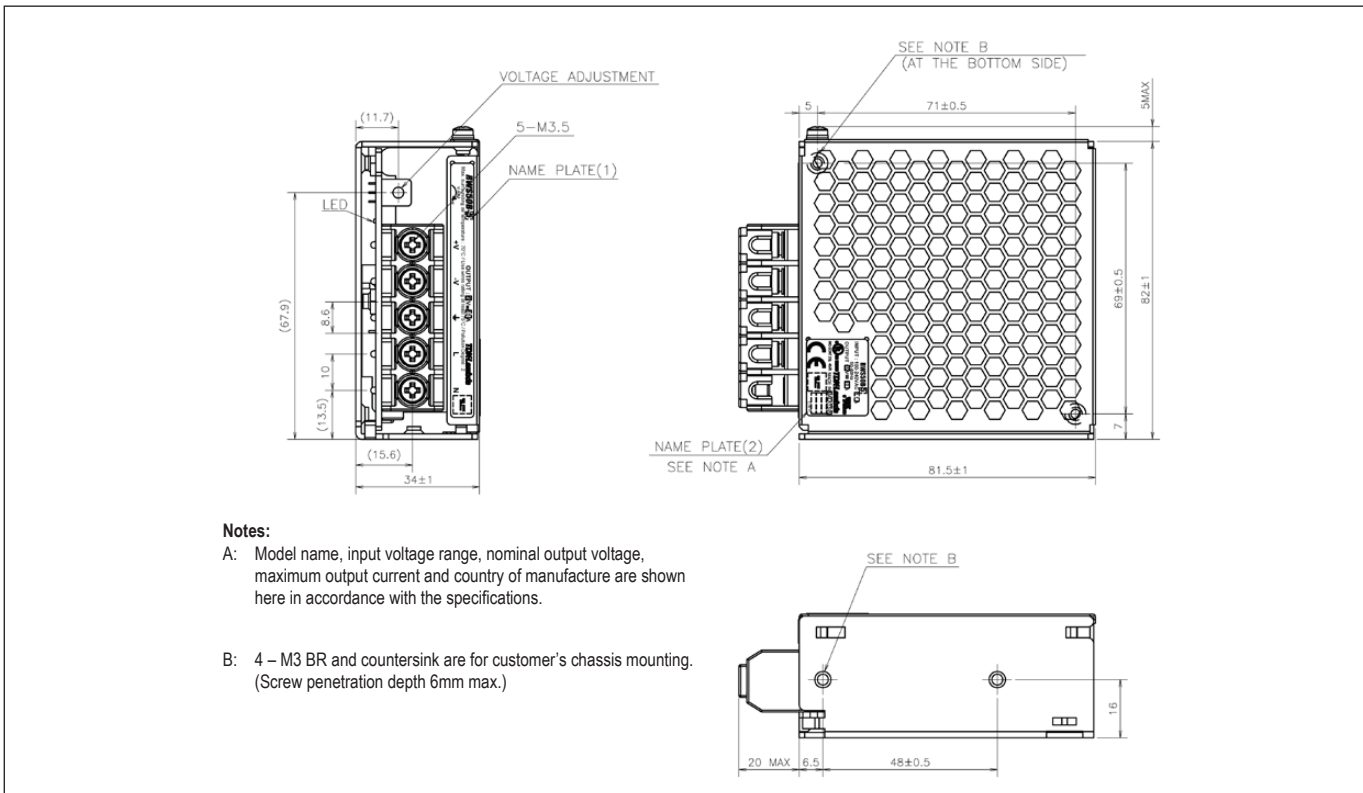


Options	
Suffix	Description
/CO2	Double Sided Board Coating
/R	Remote On/Off (RWS300B and RWS600B)
/RFO	Remote On/Off, Remote Sense, Parallel Operation, DC Good Signal (RWS600B only)
/FO	Remote Sense, Parallel Operation, DC Good Signal (RWS600B only)

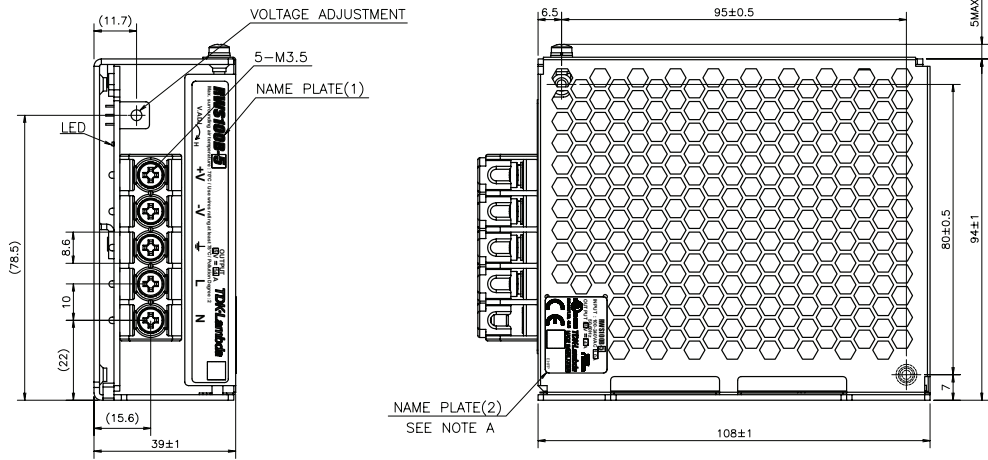
## Output Derating according to Input Voltage



## Outline Drawing RWS50B Series



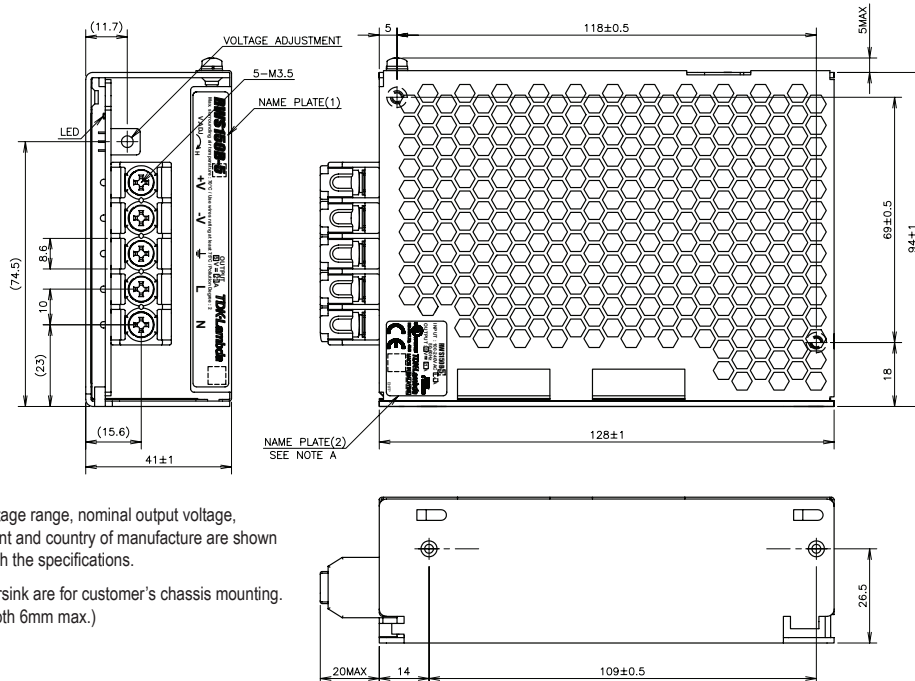
## Outline Drawing RWS100B Series



**Notes:**

- A: Model name, input voltage range, nominal output voltage, maximum output current and country of manufacture are shown here in accordance with the specifications.
- B: 4 – M3 BR and countersink are for customer's chassis mounting. (Screw penetration depth 6mm max.)

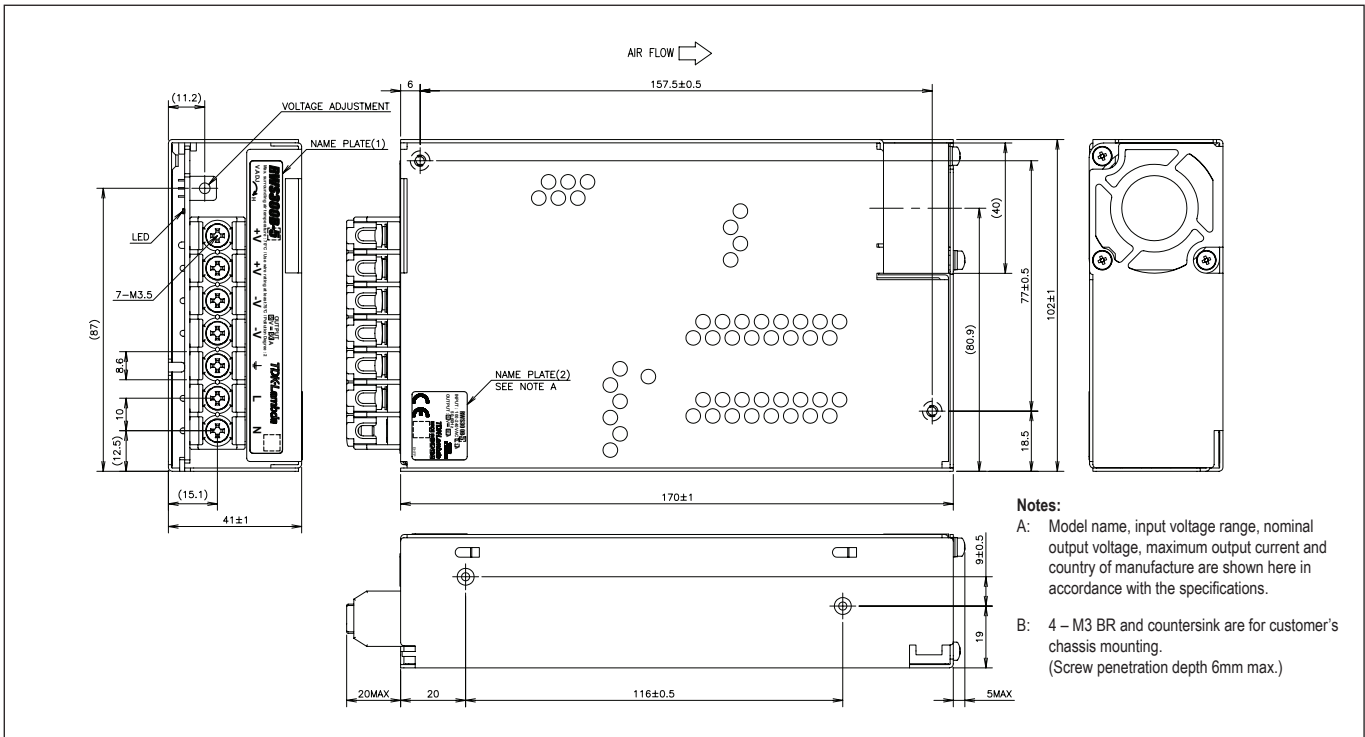
## Outline Drawing RWS150B Series



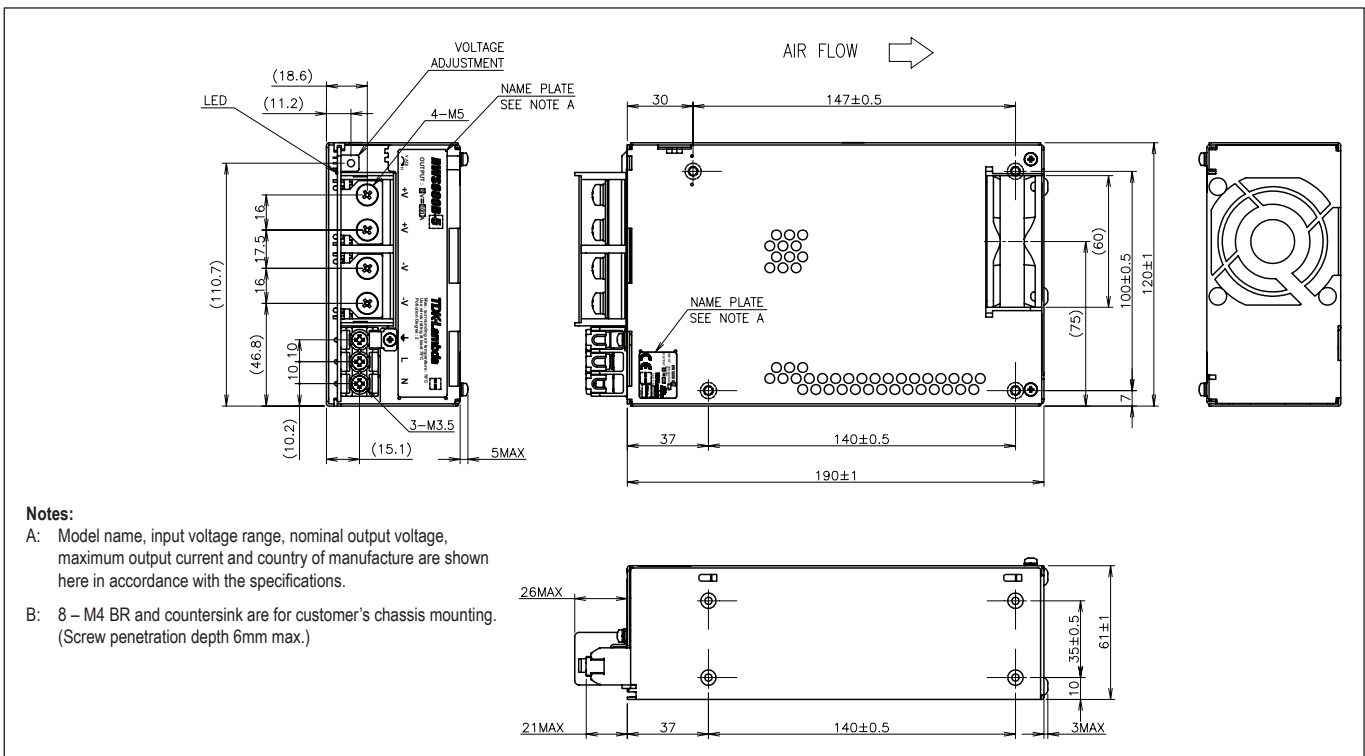
**Notes:**

- A: Model name, input voltage range, nominal output voltage, maximum output current and country of manufacture are shown here in accordance with the specifications.
- B: 4 – M3 BR and countersink are for customer's chassis mounting. (Screw penetration depth 6mm max.)

## Outline Drawing RWS300B Series



## Outline Drawing RWS600B Series





## TDK-Lambda France SAS

3 Avenue du Canada  
Parc Technopolis  
Bâtiment Sigma  
91940 les Ulis  
France  
Tel: +33 1 60 12 71 65  
Fax: +33 1 60 12 71 66  
france@fr.tdk-lambda.com  
www.fr.tdk-lambda.com



## Italy Sales Office

Via Giacomo Matteotti 62  
20092 Cinisello Balsamo (MI)  
Italy  
Tel: +39 02 61 29 38 63  
Fax: +39 02 61 29 09 00  
info.italia@it.tdk-lambda.com  
www.it.tdk-lambda.com



## Netherlands

info@nl.tdk-lambda.com  
www.nl.tdk-lambda.com



## TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40  
77855 Achern  
Germany  
Tel: +49 7841 666 0  
Fax: +49 7841 5000  
info.germany@de.tdk-lambda.com  
www.de.tdk-lambda.com



## Austria Sales Office

Aredstrasse 22  
2544 Leobersdorf  
Austria  
Tel: +43 2256 655 84  
Fax: +43 2256 645 12  
info@at.tdk-lambda.com  
www.de.tdk-lambda.com



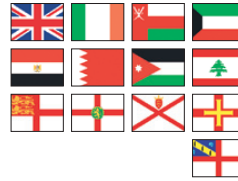
## Switzerland Sales Office

Eichtalstrasse 55  
8634 Hombrechlikon  
Switzerland  
Tel: +41 44 850 53 53  
Fax: +41 44 850 53 50  
info@ch.tdk-lambda.com  
www.de.tdk-lambda.com



## Nordic Sales Office

Haderslevvej 36B  
DK-6000 Kolding  
Denmark  
Tel: +45 8853 8086  
info@dk.tdk-lambda.com



## TDK-Lambda UK Ltd.

Kingsley Avenue  
Ilfracombe  
Devon EX34 8ES  
United Kingdom  
Tel: +44 (0) 12 71 85 66 66  
Fax: +44 (0) 12 71 86 48 94  
powersolutions@uk.tdk-lambda.com  
www.uk.tdk-lambda.com



## TDK-Lambda Ltd.

1 Alexander Yanai  
Segula  
Petah-Tikva  
Israel  
Tel: +9 723 902 4333  
Fax: +9 723 902 4777  
info@tdk-lambda.co.il  
www.tdk-lambda.co.il



## C.I.S.

### Commercial Support:

Tel: +7 (495) 665 2627

### Technical Support:

Tel: +7 (812) 658 0463

info@tdk-lambda.ru

www.tdk-lambda.ru

## Local Distribution

