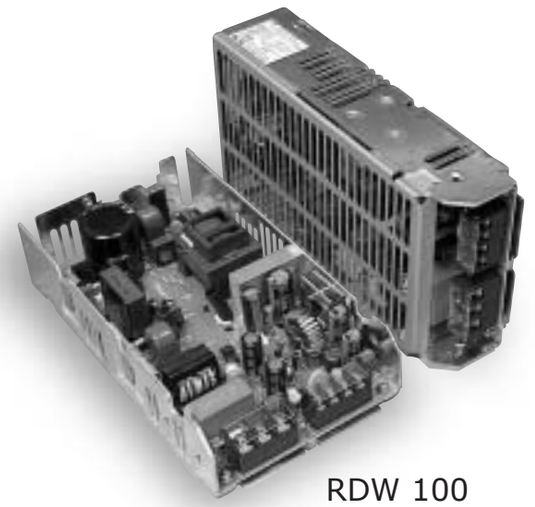
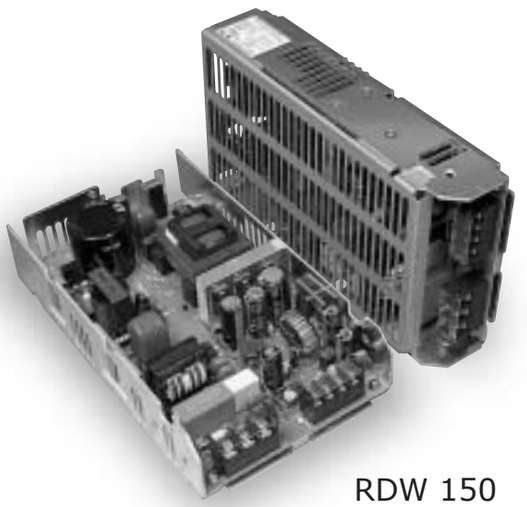
Rubycon

RDW SERIES



RDW 100



RDW 150

FEATURES

* Resonant switchers, power factor correction and main converter
* Power factor correction up to 0.99, meeting IEC61000-3-2(EN61000-3-2)
* 85 to 264VAC universal input
* High efficiency up to 85%
* Low EMI, meeting FCC B, CISPR B

APPLICATIONS

*Data/information processing equipment
*FA control equipment
*Measuring, inspection and testing equipment
*Communication equipment
*Optical equipment

SAFETY STANDARDS

UL1950 Recognized
CSA22.2 No.950 Certified (cUL)
EN60950 (TUV Certified)
CE mark (LVD only)

RDW SERIES GENERAL SPECIFICATIONS

	ITEM	
1	Input voltage range	85V ~ 264VAC
2	Input frequency range	47Hz ~ 63Hz
3	Operating temperature	-10 ~ 60℃ (Refer to Output derating)
4	Operating humidity	30 ~ 90%RH (Non condensing)
5	Storage temperature	-30 ~ 85℃
6	Storage humidity	10~95%RH (Non condensing)
7	Cooling	Convection or forced air cooling (Refer to Output derating)
8	Electric strength voltages	Input - Output 3000VAC 1 minute , Input - FG 1500VAC 1 minute , Output - FG 500VAC 1 minute
9	Insulation resistance	100MΩ MIN DC500V 25℃ 70%RH Input - Output, Input - FG, Output - FG
10	Leakage current	0.5mA MAX (240VAC, 50Hz)
11	Vibration	10 ~ 55Hz 2G (3 directions each 1 hour)
12	Shock	20 ms 20G (3 directions each 3 times)
13	Safety standards	UL1950, CSA950(cUL), EN60950(TUV) Approvals
14	Conduction noise	Meeting FCC Class B, EN55022 Class B, VCCI Class B
15	Harmonic distortion	Meeting EN61000-3-2
16	Mains surge	Meeting EN61000-4-5 Level 3 / 4KV(CM), 2KV(DM)

RDW100 SPECIFICATIONS

RDW100 SPECIFICATIONS

	ITEM	RDW100-52		RDW100-54	
1	Rated output DC voltage	(1) 5V	(2) 12V	(1) 5V	(2) 24V
2	Rated output DC current	4A	6.5A	4A	3.5A
3	Maximum output power	98W		104W	
4	Efficiency(120/230VAC,TYP) *1	80.3% / 80.6%		81.6% / 83.4%	
5	Input current *1	1.3A (100VAC), 0.6A (230VAC)			
6	Power factor *1	0.99 TYP (100VAC), 0.97 TYP (230VAC)			
7	Inrush current *2	21Apk MAX (120VAC), 42Apk MAX (240VAC)			
8	Initial setting accuracy *1	±0.5% MAX			
9	Maximum ripple noise	50mVpp(5V load), 70mVpp(12V, 24V load)			
10	Maximum line regulation	±0.1%			
11	Maximum load regulation	±0.5%(5V load), ±0.2%(12V, 24V load)			
12	Voltage tolerance ratio	±3% at line, load, time, temperature			
13	Hold-up time *1	20ms MiN after last AC line peak			
14	Over current protection *3	more than 105% A of rated current			
15	Over voltage protection *4	5.75V ~ (Detected 5V output)			
16	Dimensions	105(W) 190(D) 48(H) mm / 4.13"(W) 7.48"(D) 1.89"(H)			
17	Weight	740g / 1.63lb. TYP			

RDW150 SPECIFICATIONS

RDW150 SPECIFICATIONS

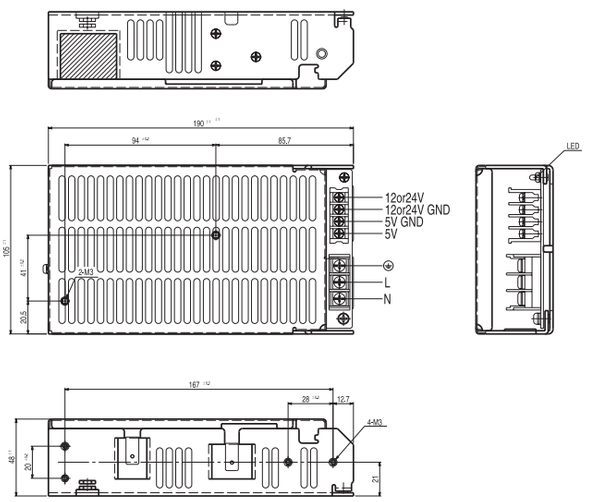
	ITEM	RDW150-52		RDW150-54	
1	Rated output DC voltage	(1) 5V	(2) 12V	(1) 5V	(2) 24V
2	Rated output DC current	14A	6A	14A	6A
3	Maximum output power	142W		160W	
4	Efficiency(120/230VAC,TYP) *1	81.5% / 83.6%		83.5% / 85.3%	
5	Input current *1	2.0A (100VAC), 0.9A (230VAC)			
6	Power factor *1	0.99 TYP (100VAC), 0.96 TYP (230VAC)			
7	Inrush current *2	21Apk MAX (120VAC), 42Apk MAX (240VAC)			
8	Initial setting accuracy *1	±0.5% MAX			
9	Maximum ripple noise	50mVpp(5V load), 70mVpp(12V, 24V load)			
10	Maximum line regulation	±0.1%			
11	Maximum load regulation	±0.7%(5V load), ±0.5%(12V, 24V load)			
12	Voltage tolerance ratio	±3% at line, load, time, temperature			
13	Hold-up time *1	20ms MiN after last AC line peak			
14	Over current protection *3	more than 105% A of rated current			
15	Over voltage protection *4	5.75V ~ (Detected 5V output)			
16	Dimensions	115(W) 202(D) 48(H) mm / 4.53"(W) 7.95"(D) 1.89"(H)			
17	Weight	900g / 1.98lb. TYP			

NOTES

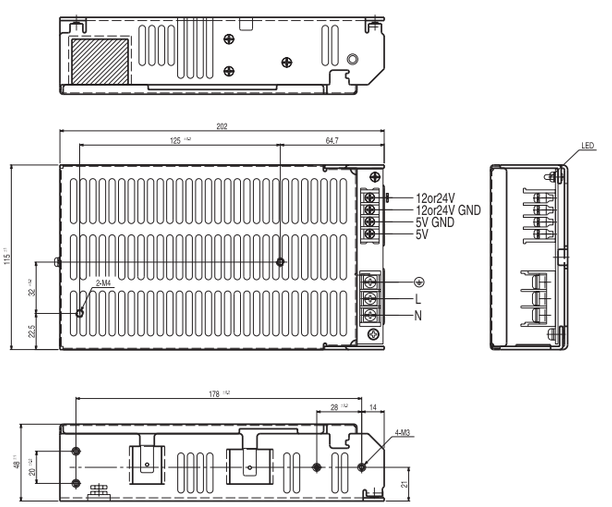
*1 When maximum output is worked
*2 When cold start works with rated voltage at 25℃ ambient temperature
*3 Recovers automatically within 3 seconds, after on input again
*4 Recovers on input again

RDW SERIES OUTLINE DRAWING

RDW 100



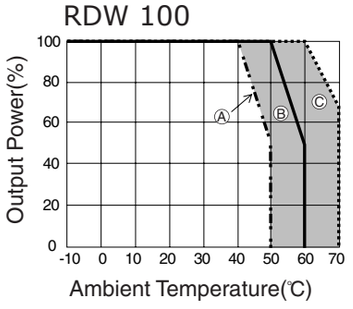
RDW 150



RDW SERIES OUTPUT DERATING

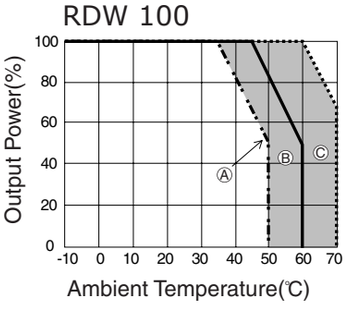
Vertical

RDW 100



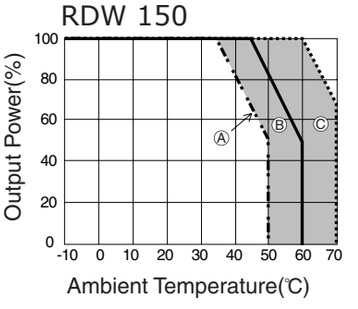
Horizontal

RDW 100



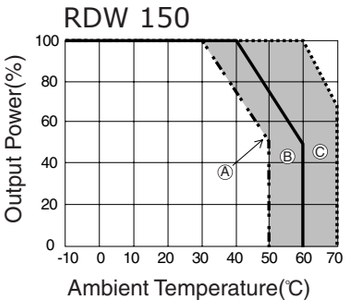
Vertical

RDW 150

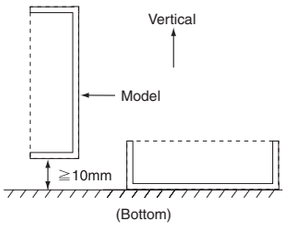


Horizontal

RDW 150



Mounting Direction(conv)



Ⓐ Conv. with Cover

Ⓑ Conv. Open Frame

Ⓒ F/Air