# SNDHS50A

SNDH S

50 A 05





Series name
 Single output
 Output wattage

(A) A: DC60-160V

⑤Output voltage

®Optional
 C : with Coating
 R : with Remote ON/OFF

Please refer to Instruction manual 7.

MODEL	SNDHS50A05	SNDHS50A12	SNDHS50A15	SNDHS50A24
MAX OUTPUT WATTAGE[W]	50.0	50.4	51.0	50.4
DC OUTPUT	5V 10A	12V 4.2A	15V 3.4A	24V 2.1A

#### **SPECIFICATIONS**

	MODEL		SNDHS50A05	SNDHS50A12	SNDHS50A15	SNDHS50A24			
	VOLTAGE[V]		DC60 - 160						
INPUT	CURRENT[A]	*1	0.55typ	0.55typ	0.55typ	0.55typ			
	EFFICIENCY[%]	*1	83.0typ	85.0typ	85.0typ	85.0typ			
	VOLTAGE[V]		5	12	15	24			
	CURRENT[A]		10	4.2	3.4	2.1			
	LINE REGULATION[mV]		10max	24max	30max	48max			
	LOAD REGULATION[mV]		150max	100max	100max	100max			
		0 to +95℃ *2	80max	120max	120max	120max			
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	150max	150max	150max			
		0 to 15% Load *2	160max	240max	240max	240max			
OUTPUT		0 to +95℃ *2	160max	200max	200max	200max			
	RIPPLE NOISE[mVp-p]	-20 to 0°C *2	250max	280max	280max	280max			
		0 to 15% Load *2	300max	300max	300max	300max			
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	150max	240max			
	TEMPERATURE REGULATION[IIV]	-20 to +95℃	100max	240max	300max	480max			
	DRIFT[mV]	*3	20max	40max	60max	90max			
	START-UP TIME[ms]		200max (DCIN 110V, Io=10	0%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		4.50 - 5.50	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40			
	OUTPUT VOLTAGE SETTING[V]		5.00 - 5.15	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96			
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recovers automatically						
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	CTION[V]	6.30 - 7.60	13.90 - 17.55	17.25 - 21.75	27.60 - 34.80			
OTHERS	REMOTE SENSING		None						
	REMOTE ON/OFF (R	(C)	Optional (Required external power source)						
	INPUT-OUTPUT, RC	*5	AC3,000V 1minute, Cutoff of	current = 15mA, DC500V 50N	<i>I</i> Ω min (20±15℃)				
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 15mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
ISOLATION	OUTPUT, RC-FG	*5	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
	OUTPUT-RC	*5	AC100V 1minute, Cutoff cui	rrent = 25mA, DC100V 10M9	Ω min (20±15℃)				
	OPERATING TEMP.,HUMID.AND A	LTITUDE *6	-20 to +95°C (Aluminum base plate	of the power module), 20 - 95%RH (	Non condensing) (Refer to DERATING	G CURVE), 3,000m (10,000 feet) max			
ENVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +95°C, 20 - 95%RH (	Non condensing), 9,000m (3	0,000 feet) max				
LIAVIKONWILIAI	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT		196.1m/s² (20G), 11ms, onc	ce each along X, Y and Z axis	3				
SAFETY	AGENCY APPROVA	LS	UL60950-1, C-UL, EN60950	0-1					
	CONDUCTED NOISE (at only	y DC input)	Complies with FCC-A, VCC	I-A, CISPR22-A, EN55011-A	, EN55022-A				
OTHERS	CASE SIZE/WEIGHT		61.5×44.5×150mm [2.42>	< 1.75 × 5.91 inches] (W × H >	KD) / 270g max				
OTHERS	COOLING METHOD		Conduction cooling (e.g. he	at radiation from the aluminu	m base plate to the attached	heat sink)			

At rated input(DC110V) and rated load.

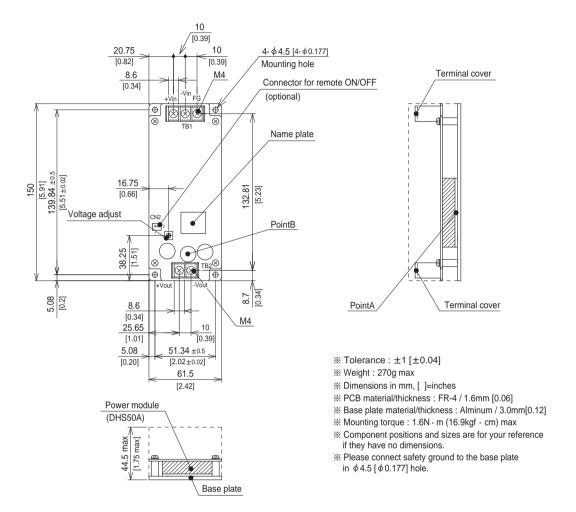
 $Ripple \ and \ ripple \ noise \ is \ measured \ by \ using \ measuring \ board \ with \ capacitor \ of \ 22 \ \mu \ F \ at \ 150 \ mm \ [5.91 \ inches] \ from \ output \ terminal.$ Refer to the instruction manual 3.2.

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

Refer to the instruction manual 4.6.

Applicable when remote control (optional) is added. Refer to the instruction manual 6.2.





# SNDHS100A

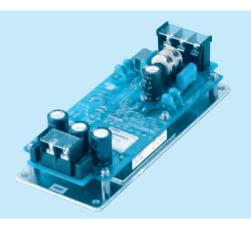
SNDH S

SNDHS100A15

100 A 5







SNDHS100A05

Series name
 Single output
 Output wattage

(4) A : DC60-160V ⑤Output voltage

SNDHS100A24

®Optional
 C : with Coating
 R : with Remote ON/OFF

Please refer to Instruction manual 7.

MODEL	SNDHS100A05	SNDHS100A12	SNDHS100A15	SNDHS100A24
MAX OUTPUT WATTAGE[W]	100.0	100.8	100.5	100.8
DC OUTPUT	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A

SNDHS100A12

## **SPECIFICATIONS**

MODEL

	INIODEL		SINDICATION	SNUHSTOUATZ	SNUHSTOUATS	SNDH3100AZ4			
	VOLTAGE[V]		DC60 - 160						
INPUT	CURRENT[A]	*1	1.1typ	1.1typ	1.1typ	1.1typ			
	EFFICIENCY[%]	*1	84.0typ	87.0typ	87.0typ	87.0typ			
	VOLTAGE[V]		5	12	15	24			
	CURRENT[A]		20	8.4	6.7	4.2			
	LINE REGULATION[mV]		10max	24max	30max	48max			
	LOAD REGULATION[mV]		150max	100max	100max	100max			
		0 to +95℃ *2	80max	120max	120max	120max			
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	150max	150max	150max			
		0 to 15% Load *2	160max	240max	240max	240max			
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +95℃ *2	160max	200max	200max	200max			
OUIFUI		-20 to 0°C *2	250max	280max	280max	280max			
		0 to 15% Load *2	300max	300max	300max	300max			
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	150max	240max			
	TEMPERATURE REGULATION[IIV]	-20 to +95℃	100max	240max	300max	480max			
	DRIFT[mV] *3		20max	40max	60max	90max			
	START-UP TIME[ms]		200max (DCIN 110V, Io=10	0%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		4.50 - 5.50	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40			
	OUTPUT VOLTAGE SETTING[V]		5.00 - 5.15	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96			
	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically						
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	CTION[V]	6.30 - 7.60	13.90 - 17.55	17.25 - 21.75	27.60 - 34.80			
OTHERS	REMOTE SENSING		None						
	REMOTE ON/OFF (R	C)	Optional (Required external power source)						
	INPUT-OUTPUT, RC	*5	AC3,000V 1minute, Cutoff current = 15mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 15mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
	OUTPUT, RC-FG	*5	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
	OUTPUT-RC	*5	AC100V 1minute, Cutoff current = 25mA, DC100V 10M $\Omega$ min (20±15 $^{\circ}$ C)						
	OPERATING TEMP.,HUMID.AND A		, ,	1 // (	<b>0</b> / (	G CURVE), 3,000m (10,000 feet) max			
ENVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	, ,	Non condensing), 9,000m (30	· · · · · · · · · · · · · · · · · · ·				
	VIBRATION		, ,,,	Bminutes period, 60minutes e	<u> </u>				
	IMPACT			ce each along X, Y and Z axis	:				
SAFETY	AGENCY APPROVA		UL60950-1, C-UL, EN60950						
	CONDUCTED NOISE (at only			I-A, CISPR22-A, EN55011-A	•				
OTHERS	CASE SIZE/WEIGHT		-	<1.75 × 5.91 inches] (W × H ×	, ,				
	COOLING METHOD		Conduction cooling (e.g. hea	at radiation from the aluminur	m base plate to the attached	heat sink)			

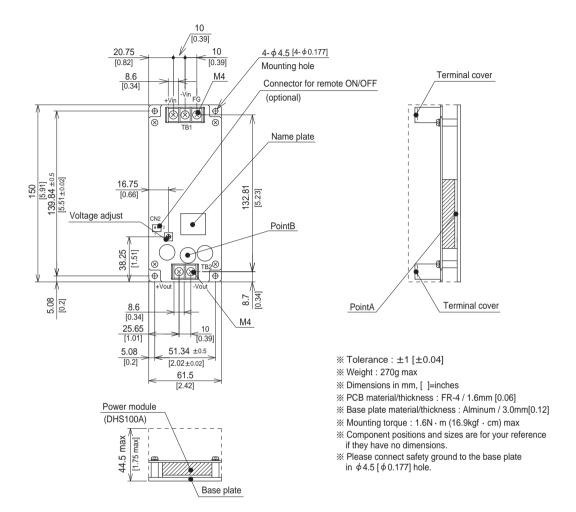
 $Ripple \ and \ ripple \ noise \ is \ measured \ by \ using \ measuring \ board \ with \ capacitor \ of \ 22 \ \mu \ F \ at \ 150 \ mm \ [5.91 \ inches] \ from \ output \ terminal.$ Refer to the instruction manual 3.2.

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

Refer to the instruction manual 4.6.

Applicable when remote control (optional) is added. Refer to the instruction manual 6.2.





# SNDHS200A

200 A 6 SNDH S

SNDHS200A15



eco



SNDHS200A05

Series name
 Single output
 Output wattage

(A) A: DC60-160V ⑤Output voltage

SNDHS200A24

®Optional
 C : with Coating
 R : with Remote ON/OFF

Please refer to Instruction manual 7.

MODEL	SNDHS200A05	SNDHS200A12	SNDHS200A15	SNDHS200A24
MAX OUTPUT WATTAGE[W]	200.0	200.4	201.0	201.6
DC OUTPUT	5V 40A	12V 16.7A	15V 13.4A	24V 8.4A

SNDHS200A12

## **SPECIFICATIONS**

MODEL

	WODEL		SINDIIISZUUAUS	ONDITOZOUATZ	SHDIISZUUAIS	GIADITOZOUAZA			
	VOLTAGE[V]		DC60 - 160						
INPUT	CURRENT[A]	*1	2.1typ	2.1typ	2.1typ	2.1typ			
	EFFICIENCY[%]	*1	87.0typ	87.0typ	87.0typ	87.0typ			
	VOLTAGE[V]		5	12	15	24			
	CURRENT[A]		40	16.7	13.4	8.4			
	LINE REGULATION[mV]		10max	24max	30max	48max			
	LOAD REGULATION[mV]		150max	100max	100max	100max			
		0 to +95℃ *2	80max	120max	120max	120max			
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	150max	150max	150max			
		0 to 15% Load *2	160max	240max	240max	240max			
OUTPUT		0 to +95℃ *2	160max	200max	200max	200max			
001701	RIPPLE NOISE[mVp-p]	-20 to 0°C *2	250max	280max	280max	280max			
		0 to 15% Load *2	300max	300max	300max	300max			
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	150max	240max			
		-20 to +95℃	100max	240max	300max	480max			
	DRIFT[mV]	*3	20max	40max	60max	90max			
	START-UP TIME[ms]		200max (DCIN 110V, lo=10	0%)	_				
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		4.50 - 5.50	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40			
	OUTPUT VOLTAGE SETTING[V]		5.00 - 5.15	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96			
	OVERCURRENT PROTECTION		Works over 105% of rating a	and recovers automatically					
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	CTION[V]	6.30 - 7.60	13.90 - 16.35	17.25 - 20.25	27.60 - 32.40			
OTHERS	REMOTE SENSING		Provided						
	REMOTE ON/OFF (R	C)	Optional (Required external power source)						
	INPUT-OUTPUT, RC	*5	AC3,000V 1minute, Cutoff current = 15mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 15mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)						
1002/11011	OUTPUT, RC-FG	*5	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)						
	OUTPUT-RC	*5	AC100V 1minute, Cutoff cui	rrent = 25mA, DC100V 10M9	2 min (20±15℃)				
	OPERATING TEMP.,HUMID.AND A		` .			G CURVE), 3,000m (10,000 feet) max			
ENVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	,	Non condensing), 9,000m (3	· · · · · · · · · · · · · · · · · · ·				
	VIBRATION			minutes period, 60minutes ea					
	IMPACT			ce each along X, Y and Z axis	3				
SAFETY	AGENCY APPROVA		UL60950-1, C-UL, EN60950						
	CONDUCTED NOISE (at only	<u> </u>	•	I-A, CISPR22-A, EN55011-A					
OTHERS	CASE SIZE/WEIGHT		•	<1.75×5.91 inches](W×H×	, ,				
	COOLING METHOD		Conduction cooling (e.g. he	at radiation from the aluminu	m base plate to the attached	heat sink)			

At rated input(DC110V) and rated load.

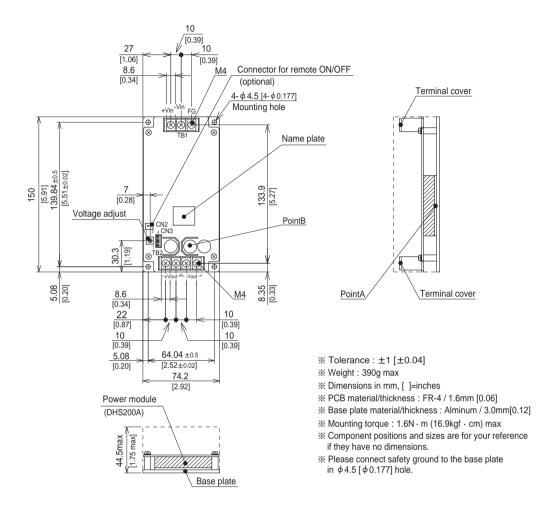
Ripple and ripple noise is measured by using measuring board with capacitor of 22 µF at 150mm [5.91 inches] from output terminal.

Refer to the instruction manual 3.2.

Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

Refer to the instruction manual 4.6. Applicable when remote control (optional) is added. Refer to the instruction manual 6.2.





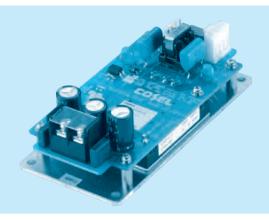
SNDH S

SNDHS50B03 SNDHS50B05 SNDHS50B12 SNDHS50B15 SNDHS50B24 SNDHS50B28

50 B s



eco



- Series name
  Single output
  Output wattage
- (4) B : DC200-400V
- ⑤Output voltage
- ®Optional
  C: with Coating
  R: with a function not to need external power source

MODEL	SNDHS50B03	SNDHS50B05	SNDHS50B12	SNDHS50B15	SNDHS50B24	SNDHS50B28
MAX OUTPUT WATTAGE[W]	33.0	50.0	50.4	51.0	50.4	50.4
DC OUTPUT	3.3V 10A	5V 10A	12V 4.2A	15V 3.4A	24V 2.1A	28V 1.8A

## **SPECIFICATIONS**

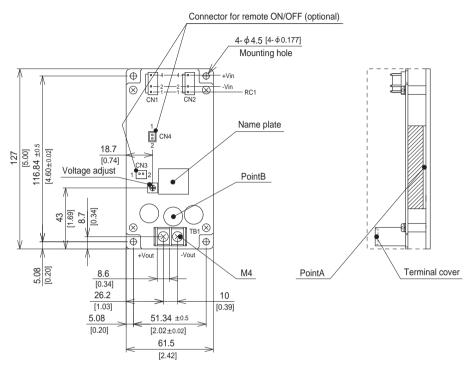
MODEL

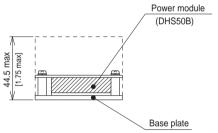
	MODEL		31100330003	31101330603	SNDUSSUBIZ	SINDHOSSIDIS	31101330624	SNDHSSUBZO		
	VOLTAGE[V]		DC200 - 400 (Pre	pare another power	r supply to the RC1	terminal *5)				
INPUT	CURRENT[A]	*1	0.15typ	0.22typ	0.22typ	0.22typ	0.22typ	0.22typ		
	EFFICIENCY[%]	*1	76.0typ	79.0typ	82.0typ	82.0typ	82.0typ	82.0typ		
	VOLTAGE[V]		3.3	5	12	15	24	28		
	CURRENT[A]		10	10	4.2	3.4	2.1	1.8		
	LINE REGULATION[mV]		10max	10max	24max	30max	48max	56max		
	LOAD REGULATION[mV]		150max	150max	100max	100max	100max	100max		
		0 to +95℃ *2	80max	80max	120max	120max	120max	120max		
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	120max	150max	150max	150max	150max		
		0 to 15% Load *2	160max	160max	240max	240max	240max	240max		
LITBUT		0 to +95℃ *2	160max	160max	200max	200max	200max	200max		
DUTPUT	RIPPLE NOISE[mVp-p]	-20 to 0°C *2	250max	250max	280max	280max	280max	280max		
		0 to 15% Load *2	300max	300max	300max	300max	300max	300max		
	TEMPED ATURE REQUIL ATIONSVI	0 to +50°C	35max	50max	120max	150max	240max	280max		
1	TEMPERATURE REGULATION[mV]	-20 to +95℃	66max	100max	240max	300max	480max	560max		
	DRIFT[mV] *3		16max	20max	40max	60max	90max	90max		
	START-UP TIME[ms]		200max (DCIN 28	0V, Io=100%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		2.97 - 3.63	4.50 - 5.50	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40	25.20 - 30.80		
	OUTPUT VOLTAGE SETTING[V]		3.30 - 3.40	5.00 - 5.15	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	28.00 - 29.12		
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recovers automatically							
PROTECTION	OVERVOLTAGE PROTEC	CTION[V]	4.20 - 5.70	6.30 - 7.60	13.90 - 17.55	17.25 - 21.75	27.60 - 34.80	32.20 - 40.60		
IRCUIT AND	REMOTE SENSING		None							
	REMOTE ON/OFF (R	C1) *6	Provided (Logic H : ON, L :OFF) Required external power source							
	INPUT-OUTPUT, RC2	2 *8	AC3,000V 1minute	e, Cutoff current = 1	10mA, DC500V 50N	MΩ min (20±15℃)				
SOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)							
SOLATION	OUTPUT, RC2-FG	*8	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)							
	OUTPUT-RC2	*8	AC100V 1minute,	Cutoff current = 25	mA, DC100V 10M	Ω min (20±15℃)				
	OPERATING TEMP., HUMID. AND A	LTITUDE *7	-20 to +95°C (Aluminun	n base plate of the powe	r module), 20 - 95%RH (	Non condensing) (Refer	to DERATING CURVE),	3,000m (10,000 feet) r		
NVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +95°C, 20 -	95%RH (Non cond	lensing), 9,000m (3	0,000 feet) max				
INVIRONWENT	VIBRATION		10 - 55Hz, 19.6m/	s² (2G), 3minutes p	eriod, 60minutes e	ach along X, Y and	Z axis			
	IMPACT		196.1m/s² (20G),	11ms, once each al	long X, Y and Z axis	3				
SAFETY	AGENCY APPROVA	LS	UL60950-1, C-UL	, EN60950-1						
OTHERS	CASE SIZE/WEIGHT		61.5×44.5×127r	nm [2.42×1.75×5	.0 inches] (W×H×	D) / 220g max				
JINEKO	COOLING METHOD		Conduction coolin	g (e.g. heat radiation	on from the aluminu	m base plate to the	attached heat sink	)		

- At rated input(DC280V) and rated load.
- Ripple and ripple noise is measured by using measuring board with capacitor of 22  $\mu$ F at 150mm [5.91 inches] from output terminal. Refer to the instruction manual 3.2.
- Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output. Refer to the instruction manual 4.6.
- Refer to the instruction manual 2, 4.4

- Refer to the instruction manual 4.4
- Refer to the instruction manual 6.2
- "RC2" is applicable to an option not to need external power source.







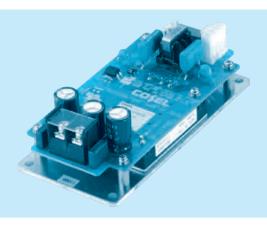
- \*\* Tolerance : ±1 [±0.04]
- ※ Weight : 220g max
- ※ PCB material/thickness: FR-4 / 1.6mm [0.06]
- Base plate material/thickness : Alminum / 3.0mm[0.12]
- Screw tightening torque: 1.6N ⋅ m (16.9kgf ⋅ cm) max
- Component positions and sizes are for your reference if they have no dimensions.
- \* Please connect safety ground to the base plate in φ4.5 [φ0.177] hole.

| SNDHS100B03 | SNDHS100B05 | SNDHS100B12 | SNDHS100B15 | SNDHS100B24 | SNDHS100B28

# SNDHS100B

100 SNDH S





- Series name
  Single output
  Output wattage
- (4)B: DC200-400V
- ⑤Output voltage
- ®Optional
  C: with Coating
  R: with a function not to need external power source

MODEL	SNDHS100B03	SNDHS100B05	SNDHS100B12	SNDHS100B15	SNDHS100B24	SNDHS100B28
MAX OUTPUT WATTAGE[W]	66.0	100.0	100.8	100.5	100.8	100.8
DC OUTPUT	3.3V 20A	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A	28V 3.6A

## **SPECIFICATIONS**

MODEL

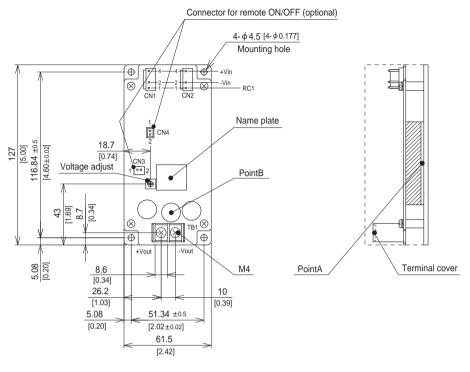
	MODEL		CHETTOTODOS	314D113100D03	3ND113100D12	3140113100013	3ND113100D24	314D113100D20		
	VOLTAGE[V]		DC200 - 400 (Pre	pare another power	supply to the RC1	terminal *5)				
INPUT	CURRENT[A]	*1	0.30typ	0.44typ	0.42typ	0.42typ	0.42typ	0.42typ		
	EFFICIENCY[%]	*1	78.0typ	81.0typ	84.0typ	85.0typ	85.0typ	85.0typ		
	VOLTAGE[V]		3.3	5	12	15	24	28		
	CURRENT[A]		20	20	8.4	6.7	4.2	3.6		
	LINE REGULATION[	mV]	10max	10max	24max	30max	48max	56max		
	LOAD REGULATION[mV]		150max	150max	100max	100max	100max	100max		
		0 to +95℃ *2	80max	80max	120max	120max	120max	120max		
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	120max	150max	150max	150max	150max		
		0 to 15% Load *2	160max	160max	240max	240max	240max	240max		
OUTPUT		0 to +95℃ *2	160max	160max	200max	200max	200max	200max		
OUIPUI	RIPPLE NOISE[mVp-p]	-20 to 0°C *2	250max	250max	280max	280max	280max	280max		
		0 to 15% Load *2	300max	300max	300max	300max	300max	300max		
	TEMPEDATURE RECUII ATIONI//I	0 to +50°C	35max	50max	120max	150max	240max	280max		
	TEMPERATURE REGULATION[mV]	-20 to +95℃	66max	100max	240max	300max	480max	560max		
	DRIFT[mV] *3		16max	20max	40max	60max	90max	90max		
	START-UP TIME[ms]		200max (DCIN 28	0V, Io=100%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		2.97 - 3.63	4.50 - 5.50	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40	25.20 - 30.80		
	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	28.00 - 29.12		
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recovers automatically							
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	CTION[V]	4.20 - 5.70	6.30 - 7.60	13.90 - 17.55	17.25 - 21.75	27.60 - 34.80	32.20 - 40.60		
OTHERS	REMOTE SENSING		None							
	REMOTE ON/OFF (R	C1) *6	Provided (Logic H : ON, L :OFF) Required external power source							
	INPUT-OUTPUT, RC2	2 *8	AC3,000V 1minute	e, Cutoff current = 1	10mA, DC500V 50N	1Ω min (20±15 $℃$ )				
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)							
ISOLATION	OUTPUT, RC2-FG	*8	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)							
	OUTPUT-RC2	*8	AC100V 1minute,	Cutoff current = 25	mA, DC100V 10M	2 min (20±15℃)				
	OPERATING TEMP.,HUMID.AND A	LTITUDE *7	-20 to +95°C (Aluminun	n base plate of the power	r module), 20 - 95%RH (l	Non condensing) (Refer t	o DERATING CURVE),	3,000m (10,000 feet) max		
ENVIRONMENT	STORAGE TEMP., HUMID. AND	ALTITUDE	-20 to +95°C, 20 -	95%RH (Non cond	ensing), 9,000m (3	0,000 feet) max				
LIA A IL/O MINIEM I	VIBRATION		10 - 55Hz, 19.6m/	s <sup>2</sup> (2G), 3minutes p	period, 60minutes e	ach along X, Y and	Z axis			
	IMPACT		196.1m/s² (20G),	11ms, once each al	ong X, Y and Z axis	•				
SAFETY	AGENCY APPROVA	LS	UL60950-1, C-UL	, EN60950-1						
OTHERS	CASE SIZE/WEIGHT		61.5×44.5×127n	nm [2.42×1.75×5.	0 inches] (WXHX	D) / 220g max				
OTHERS	COOLING METHOD		Conduction coolin	g (e.g. heat radiatio	n from the aluminu	m base plate to the	attached heat sink	)		

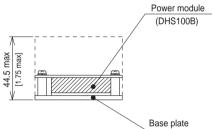
- At rated input(DC280V) and rated load.
- Ripple and ripple noise is measured by using measuring board with capacitor of 22 µF at 150mm [5.91 inches] from output terminal.
- Refer to the instruction manual 3.2. Drift is the change in DC output for an eight hour period after a half-hour warm-up at  $25^{\circ}$ C, with the input voltage held constant at the rated input/output.
- Refer to the instruction manual 4.6.
- Refer to the instruction manual 2, 4.4

- Refer to the instruction manual 6.2
- "RC2" is applicable to an option not to need external power source.









- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 220g max
- ※ Dimensions in mm, [ ]=inches
- ※ PCB material/thickness : FR-4 / 1.6mm [0.06]
- Base plate material/thickness: Alminum / 3.0mm[0.12]
- Screw tightening torque: 1.6N ⋅ m (16.9kgf ⋅ cm) max
- \* Component positions and sizes are for your reference
- if they have no dimensions.
  ※ Please connect safety ground to the base plate in φ4.5 [φ0.177] hole.

SNDHS250B03 | SNDHS250B05 | SNDHS250B07 | SNDHS250B12 | SNDHS250B15 | SNDHS250B24 | SNDHS250B28 | SNDHS250B48

# SNDHS250B

250 SNDH S





- Series name
  Single output
  Output wattage
- (4)B: DC200-400V ⑤Output voltage
- ®Optional
  C: with Coating
  R: with a function not to need external power source

MODEL	SNDHS250B03	SNDHS250B05	SNDHS250B07	SNDHS250B12	SNDHS250B15	SNDHS250B24	SNDHS250B28	SNDHS250B48
MAX OUTPUT WATTAGE[W]	165.0	250.0	247.5	252.0	247.5	252.0	252.0	249.6
DC OUTPUT	3.3V 50A	5V 50A	7.5V 33A	12V 21A	15V 16.5A	24V 10.5A	28V 9.0A	48V 5.2A

#### **SPECIFICATIONS**

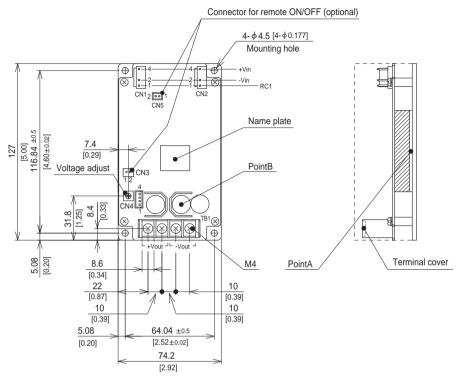
MODEL

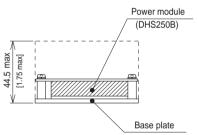
	WIODEL		CHDITOZOODOO	ONDITIO230D03	ONDINOZOODO	3ND113230D12	ONDITIOE SUB TO	ONDITIO230D24	ONDINOZOODZO	ONDITIO230B40	
	VOLTAGE[V]		DC200 - 400	(Prepare anoth	ner power supp	ly to the RC1	erminal *5)				
INPUT	CURRENT[A]	*1	0.67typ	1.0typ	1.0typ	1.0typ	1.0typ	1.0typ	1.0typ	1.0typ	
	EFFICIENCY[%]	*1	86.0typ	88.0typ	86.0typ	86.0typ	86.0typ	86.0typ	86.0typ	87.0typ	
	VOLTAGE[V]		3.3	5	7.5	12	15	24	28	48	
	CURRENT[A]		50	50	33	21	16.5	10.5	9.0	5.2	
	LINE REGULATION[	mV]	10max	10max	20max	24max	30max	48max	56max	96max	
	LOAD REGULATION	[mV]	150max	150max	150max	100max	100max	100max	100max	100max	
		0 to +95℃ *2	80max	80max	100max	120max	120max	120max	120max	200max	
	RIPPLE[mVp-p]	-20 to 0°C *2	120max	120max	130max	150max	150max	150max	150max	250max	
		0 to 15% Load *2	160max	160max	200max	240max	240max	240max	240max	400max	
OUTPUT		0 to +95℃ *2	160max	160max	200max	200max	200max	200max	200max	250max	
OUTPUT	RIPPLE NOISE[mVp-p]	-20 to 0°C *2	250max	250max	280max	280max	280max	280max	280max	400max	
		0 to 15% Load *2	300max	300max	300max	300max	300max	300max	300max	500max	
	TEMPERATURE REGULATION[mV]	0 to +50°C	35max	50max	70max	120max	150max	240max	280max	480max	
	TEMPERATURE REGULATION[IIV]	-20 to +95℃	66max	100max	140max	240max	300max	480max	560max	960max	
	DRIFT[mV] *3		16max	20max	30max	40max	60max	90max	90max	180max	
	START-UP TIME[ms]		200max (DCI	N 280V, Io=10	0%)						
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		2.97 - 3.63	4.50 - 5.50	6.75 - 8.25	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40	25.20 - 30.80	43.20 - 52.80	
	OUTPUT VOLTAGE SET	TING[V]	3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	28.00 - 29.12	48.00 - 49.92	
	OVERCURRENT PROT	ECTION	Works over 105% of rating and recovers automatically								
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC	CTION[V]	4.20 - 4.85	6.30 - 7.30	8.70 - 10.20	13.90 - 16.35	17.25 - 20.25	27.60 - 32.40	32.20 - 37.80	55.20 - 64.80	
OTHERS	REMOTE SENSING		Provided								
	REMOTE ON/OFF (R	C1) *6	Provided (Logic H : ON, L :OFF) Required external power source								
	INPUT-OUTPUT, RC2	<b>2</b> *8	AC3,000V 1m	ninute, Cutoff o	urrent = 10mA	, DC500V 50M	$\Omega$ min (20±1	5℃)			
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)								
ISOLATION	OUTPUT, RC2-FG	*8	AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20±15 $^{\circ}$ C)								
	OUTPUT-RC2	*8	AC100V 1mir	nute, Cutoff cur	rent = 25mA, I	OC100V 10MΩ	! min (20±15°	C)			
	OPERATING TEMP.,HUMID.AND A	LTITUDE *7	-20 to +95°C (Alu	minum base plate	of the power modu	le), 20 - 95%RH (N	lon condensing) (R	Refer to DERATING	CURVE), 3,000m	(10,000 feet) max	
ENVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +95℃,	20 - 95%RH (	Non condensin	g), 9,000m (30	,000 feet) max	(			
LIA A IL/O MINIEM I	VIBRATION		10 - 55Hz, 19	).6m/s² (2G), 3i	minutes period	, 60minutes ea	ch along X, Y	and Z axis			
	IMPACT		196.1m/s <sup>2</sup> (20	OG), 11ms, onc	e each along )	(, Y and Z axis					
SAFETY	AGENCY APPROVA	LS	UL60950-1, C	C-UL, EN60950	)-1						
OTHERS	CASE SIZE/WEIGHT		74.2×44.5×	127mm [2.92>	<1.75×5.0 inc	hes](W×H×D	) / 310g max				
UTHERS	COOLING METHOD		Conduction c	ooling (e.g. hea	at radiation fro	m the aluminur	n base plate to	the attached l	neat sink)		
	•										

- At rated input(DC280V) and rated load.
- Ripple and ripple noise is measured by using measuring board with capacitor of 22 µ F at 150mm [5.91 inches] from output terminal.
- Refer to the instruction manual 3.2. Drift is the change in DC output for an eight hour period after a half-hour warm-up at  $25^\circ\!\!\mathrm{C}$ , with the input voltage held constant at the rated input/output.
- Refer to the instruction manual 4.6.
- Refer to the instruction manual 2, 4.4

- Refer to the instruction manual 6.2
- "RC2" is applicable to an option not to need external power source.







- % Tolerance : ±1 [±0.04]
- ※ Weight : 310g max
- ※ Dimensions in mm, [ ]=inches
- ※ PCB material/thickness: FR-4 / 1.6mm [0.06]
- Base plate material/thickness: Alminum / 3.0mm[0.12]
- Screw tightening torque: 1.6N⋅m (16.9kgf ⋅ cm) max
- \*\*Component positions and sizes are for your reference if they have no dimensions.
- % Please connect safety ground to the base plate in  $\phi 4.5 [\phi 0.177]$  hole.