AC-DC Power supply

DPS series



Feature

- 35 mm width of DIN Rail Installation method
- Low output voltage fluctuation rate
- Low heating due to high efficiency
- DC OK Signal Relay Output Built-in
- Protection function for overcurrent, overvoltage, and overheating
- Various products from 15 W to 240 W
- Output ON Pilot Lamp (LED)
- Input voltage: 100 – 240 V Free Voltage or automatic selection of 110/220V



Suffix code

Model	Code			Description
DPS-	☐	☐	☐	DPS Power supply (DIN Rail Type)
Power output	15			15 W
	30			30 W
	50			50 W
	75			75 W
	100			100 W
	120			120 W
	180			180 W
	240			240 W (※ Only DPS-240S-12 : 216 W)
Number of output voltage		S		1 Output (Single output)
Output voltage classification			05	5 V DC (DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S Exclude)
			12	12 V DC (DPS-180S Exclude)
			15	15 V DC (DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S Exclude)
			24	24 V DC
			48	48 V DC (DPS-15S, DPS-30S, DPS-50S Exclude)

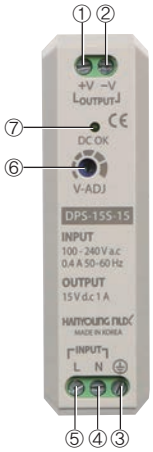
15 Watt
(5 V, 12 V, 15 V, 24 V DC)

DPS series

Specification

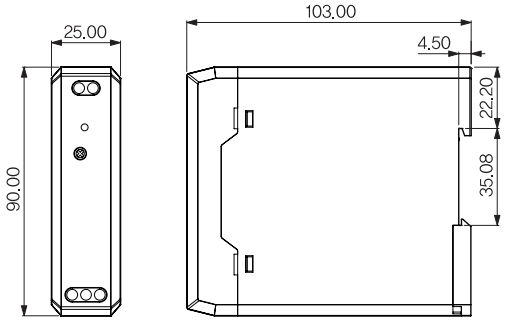
Model			DPS-15S-05	DPS-15S-12	DPS-15S-15	DPS-15S-24
Output	Rated output voltage		5 V	12 V	15 V	24 V
	Rated output current		3 A	1.2 A	1 A	0.63 A
	Rated power output		15 W			
	Peak current		3.6 A	1.44 A	1.2 A	0.75 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %	±1 %
	Ripple		80 ㎷ p-p max	120 ㎷ p-p max	120 ㎷ p-p max	150 ㎷ p-p max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %	±1 %
	Running time		200 ㎳ max (110 V AC, Io=100 %)			
	Remaining time		10 ㎳ min (110 V AC, Io=100 %)			
	Voltage fluctuation range		4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V
	Voltage setting range		±1 % max (Rated output voltage)			
Input	Input voltage		100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)			
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)			
	Current (A)	110 V AC	0.3	0.3	0.3	0.3
		220 V AC	0.16	0.16	0.16	0.16
	Efficiency	220 V AC	76 %	81 %	82 %	86 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
	Leakage current	110 V AC	0.35 ㎃ max			
		220 V AC	0.75 ㎃ max			
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection		6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.			
	Protection of output short		Auto Re-start			
	DC OK Signal		Green LED (ON when output voltage is normal)			
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current =10 ㎃, (Input – Output)			
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)			
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)			
Environment	Ambient temperature		- 25 ~ +50 ℃ (Refer to the derating curve of output load)			
	Ambient humidity		20 ~ 90 % RH (With no condensation)			
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)			
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance		150 ㎨, 3 times for each of 6 directions . (State of packing)			
	Weight		150 g	144 g	144 g	140 g

Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	DC output terminal
②	-V OUT	
③	⏚	FG
④	AC(N)	AC Input terminal
⑤	AC(L)	
⑥	V-ADJ	Output voltage variable volume
⑦	DC OK	Output indication LED

Dimension (Unit : ㎜)



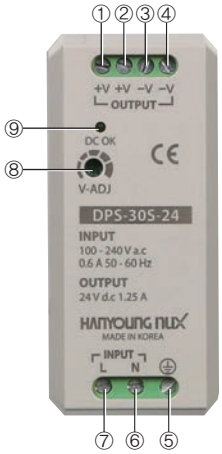
30 Watt
(5 V, 12 V, 15 V, 24 V DC)

DPS series

Specification

Model			DPS-30S-05	DPS-30S-12	DPS-30S-15	DPS-30S-24
Output	Rated output voltage		5 V	12 V	15 V	24 V
	Rated output current		6 A	2.5 A	2 A	1.25 A
	Rated power output		30 W			
	Peak current		7.2 A	3.0 A	2.4 A	1.5 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %	±1 %
	Ripple		80 ㎷ p-p max	120 ㎷ p-p max	120 ㎷ p-p max	150 ㎷ p-p max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %	±1 %
	Running time		200 ㎳ max (110 V AC, Io=100 %)			
	Remaining time		10 ㎳ min (110 V AC, Io=100 %)			
	Voltage fluctuation range		4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V
	Voltage setting range		±1 % max (Rated output voltage)			
Input	Input voltage		100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)			
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)			
	Current (A)	110 V AC	0.53	0.53	0.53	0.53
		220 V AC	0.3	0.3	0.3	0.3
	Efficiency	220 V AC	82 %	85 %	86 %	86 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
	Leakage current	110 V AC	0.35 ㎃ max			
		220 V AC	0.75 ㎃ max			
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection		6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.			
	Protection of output short		Auto Re-start			
	DC OK Signal		Green LED (ON when output voltage is normal)			
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)			
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)			
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)			
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)			
	Ambient humidity		20 ~ 90 % RH (With no condensation)			
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)			
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance		150 ㎪, 3 times for each of 6 directions (State of packing)			
	Weight		262 g	242 g	242 g	244 g

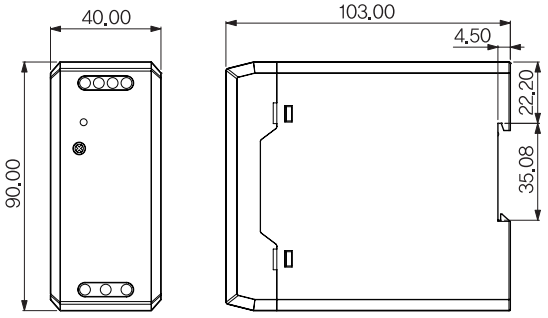
Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	⏚	FG
⑥	AC (N)	AC Input terminal
⑦	AC (L)	
⑧	V-ADJ	Output voltage variable volume
⑨	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

Dimension (Unit : ㎜)



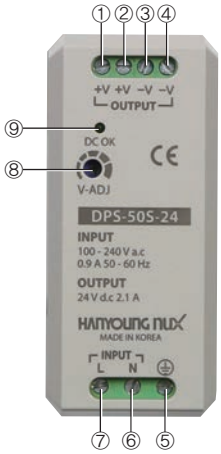
50 Watt
(5 V, 12 V, 15 V, 24 V DC)

DPS series

Specification

Model			DPS-50S-05	DPS-50S-12	DPS-50S-15	DPS-50S-24
Output	Rated output voltage		5 V	12 V	15 V	24 V
	Rated output current		10 A	4.2 A	3.4 A	2.1 A
	Rated power output		50 W			
	Peak current		12 A	5.04 A	4.08 A	2.52 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %	±1 %
	Ripple		80 ㎷ p-p max	120 ㎷ p-p max	120 ㎷ p-p max	150 ㎷ p-p max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %	±1 %
	Running time		200 ㎳ max (110 V AC, Io=100 %)			
	Remaining time		10 ㎳ min (110 V AC, Io=100 %)			
	Voltage fluctuation range		4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V
	Voltage setting range		±1 % max (Rated output voltage)			
Input	Input voltage		100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)			
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)			
	Current (A)	110 V AC	0.9	0.9	0.9	0.9
		220 V AC	0.5	0.5	0.5	0.5
	Efficiency	220 V AC	81 %	86 %	88 %	88 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)			
	Leakage current	110 V AC	0.35 ㎃ max			
		220 V AC	0.75 ㎃ max			
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection		6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.			
	Protection of output short		Auto Re-start			
	DC OK Signal		Green LED (ON when output voltage is normal)			
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)			
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)			
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)			
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)			
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)			
	Ambient humidity		20 ~ 90 % RH (With no condensation)			
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)			
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance		150 ㎪, 3 times for each of 6 directions (State of packing)			
	Weight		274 g	270 g	268 g	266 g

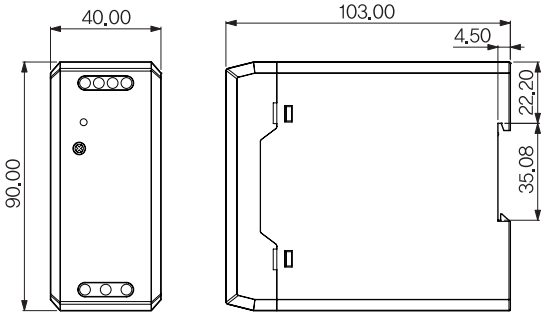
Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	⏚	FG
⑥	AC (N)	AC Input terminal
⑦	AC (L)	
⑧	V-ADJ	Output voltage variable volume
⑨	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

Dimension (Unit : ㎜)



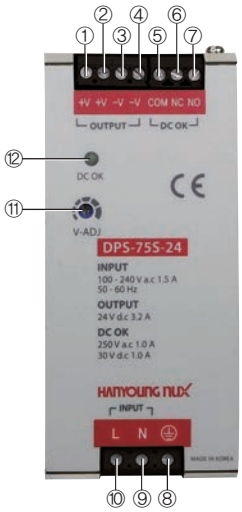
75 Watt
(12 V, 24 V, 48 V DC)

DPS series

Specification

Model			DPS-75S-12	DPS-75S-24	DPS-75S-48
Output	Rated output voltage		12 V	24 V	48 V
	Rated output current		6.25 A	3.13 A	1.57 A
	Rated power output		75 W		
	Peak current		7.5 A	3.8 A	1.9 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %
	Ripple		120 ㎷ max	150 ㎷ max	240 ㎷ max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %
	Running time		200 ㎳ max (110 V AC, Io=100 %)		
	Remaining time		10 ㎳ min (110 V AC, Io=100 %)		
	Voltage fluctuation range		11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V
	Voltage setting range		±1 % max (Rated output voltage)		
Input	Input voltage		100 - 240 V AC (※Designed voltage range : 85 - 264 V AC)		
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)		
	Current (A)	110 V AC	1.3	1.3	1.3
		220 V AC	0.71	0.71	0.71
	Efficiency	220 V AC	85 %	86 %	90 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
	Leakage current	110 V AC	0.35 ㎃ max		
		220 V AC	0.75 ㎃ max		
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current		
	Over voltage protection		14 - 18 V	30 - 34 V	59 - 63 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃		
	Protection of output short		Auto Re-start		
	DC OK Signal		Green LED (ON when output voltage is normal)		
	DC OK Output		Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)		
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)		
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)		
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)		
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)		
	Ambient humidity		20 ~ 90 % RH (With no condensation)		
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)		
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)		
	Shock resistance		150 ㎨, 3 times for each of 6 directions (State of packing)		
	Weight		536 g	528 g	524 g

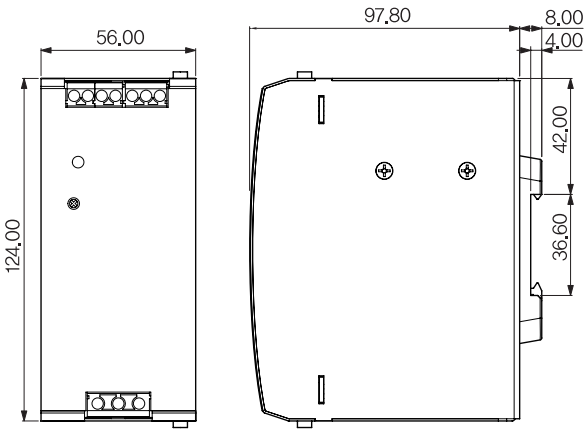
Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	
⑧	⏚	FG
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

Dimension (Unit : ㎜)



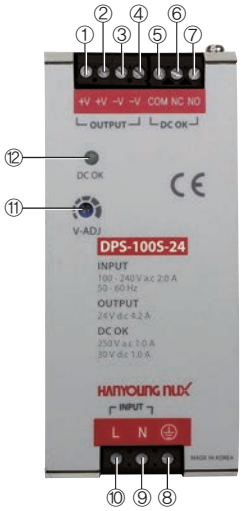
100 Watt
(12 V, 24 V, 48 V DC)

DPS series

Specification

Model			DPS-100S-12	DPS-100S-24	DPS-100S-48
Output	Rated output voltage		12 V	24 V	48 V
	Rated output current		7.5 A	4.2 A	2.1 A
	Rated power output		90 W	100 W	100 W
	Peak current		9.0 A	5.0 A	2.5 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %
	Ripple		120 ㎷ max	150 ㎷ max	240 ㎷ max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %
	Running time		200 ㎳ max (110 V AC, Io=100 %)		
	Remaining time		10 ㎳ min (110 V AC, Io=100 %)		
	Voltage fluctuation range		11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V
	Voltage setting range		±1 % max (Rated output voltage)		
Input	Input voltage		100 - 120 V AC / 200 – 240 V AC ※ Auto-select input		
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)		
	Current (A)	110 V AC	0.93	0.9	0.9
		220 V AC	1.72	1.7	1.7
	Efficiency	220 V AC	86 %	88 %	88 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
	Leakage current	110 V AC	0.35 ㎃ max		
		220 V AC	0.75 ㎃ max		
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current		
	Over voltage protection		14 - 18 V	30 - 34 V	59 - 63 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.		
	Protection of output short		Auto Re-start		
	DC OK Signal		Green LED (ON when output voltage is normal)		
	DC OK Output		Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)		
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)		
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)		
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)		
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)		
	Ambient humidity		20 ~ 90 % RH (With no condensation)		
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)		
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)		
	Shock resistance		150 ㎨, 3 times for each of 6 directions (State of packing)		
	Weight		556 g	558 g	562 g

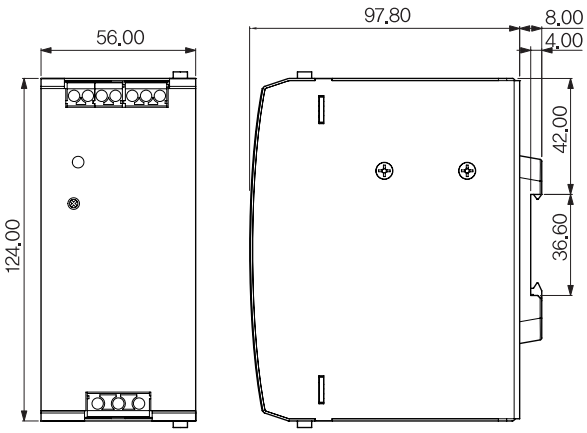
Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	
⑧	⏚	FG
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

Dimension (Unit : ㎜)



120 Watt
(12 V, 24 V, 48 V DC)

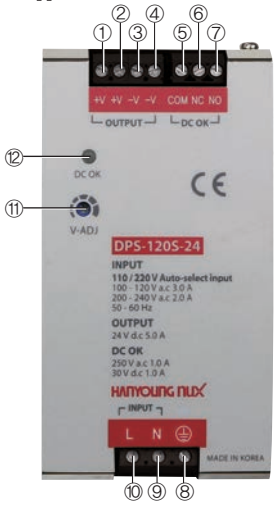
DPS series

Specification

Model			DPS-120S-12	DPS-120S-24	DPS-120S-48
Output	Rated output voltage		12 V	24 V	48 V
	Rated output current		10 A	5 A	2.5 A
	Rated power output		120 W		
	Peak current		12 A	6 A	3 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %
	Ripple		120 ㎷ max	150 ㎷ max	240 ㎷ max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %
	Running time		700 ㎳ max (110 V AC, Io=100 %)		
	Remaining time		30 ㎳ min (110 V AC, Io=100 %)		
	Voltage fluctuation range		11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V
	Voltage setting range		±1 % max (Rated output voltage)		
Input	Input voltage		100 - 120 V AC / 200 – 240 V AC ※ Auto-select input		
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)		
	Current (A)	110 V AC	2.1	2.1	2.1
		220 V AC	1.1	1.1	1.1
	Efficiency	220 V AC	83 %	87 %	88 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
	Leakage current	110 V AC	0.35 ㎃ max		
		220 V AC	0.75 ㎃ max		
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current		
	Over voltage protection		14 - 18 V	30 - 34 V	59 - 63 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.		
	Protection of output short		Auto Re-start		
	DC OK Signal		Green LED (ON when output voltage is normal)		
	DC OK Output		Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)		
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)		
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)		
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)		
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)		
	Ambient humidity		20 ~ 90 % RH (With no condensation)		
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)		
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)		
	Shock resistance		150 ㎨, 3 times for each of 6 directions (State of packing)		
	Weight		670 g	658 g	654 g

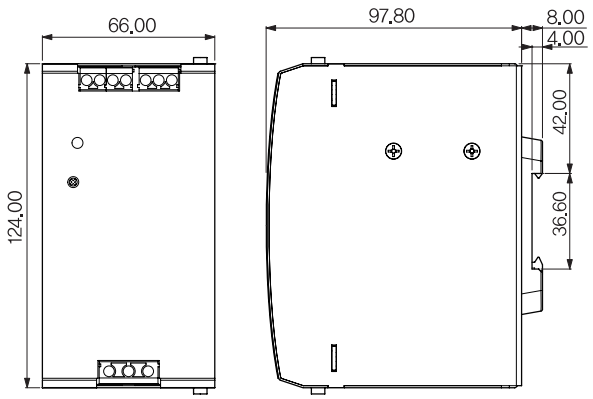
※ Auto-select input selects input voltage automatically wihout input output 100-120 V AC or 200 - 240 V AC.

Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	
⑧	⏚	FG
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

Dimension (Unit : ㎜)



※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

180 Watt
(12 V, 24 V, 48 V DC)

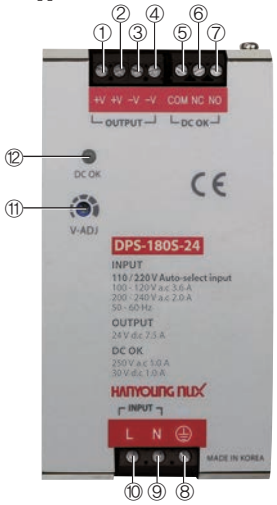
DPS series

Specification

Model			DPS-180S-24	DPS-180S-48
Output	Rated output voltage		24 V	48 V
	Rated output current		7.5 A	3.8 A
	Rated power output		180 W	180 W
	Peak current		9 A	4.6 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %
	Ripple		150 ㎷ max	240 ㎷ max
	Ambient temperature fluctuation		±1 %	±1 %
	Running time		700 ㎳ max (110 V AC, Io=100 %)	
	Remaining time		30 ㎳ min (110 V AC, Io=100 %)	
	Voltage fluctuation range		22.6 - 27.6 V	45.2 - 50.1 V
	Voltage setting range		±1 % max (Rated output voltage)	
Input	Input voltage		100 - 120 V AC / 200 – 240 V AC ※ Auto-select input	
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)	
	Current (A)	110 V AC	3.3	3.3
		220 V AC	91	91
	Efficiency	220 V AC	1.95 %	1.95 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)	
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)	
	Leakage current	110 V AC	0.35 ㎃ max	
		220 V AC	0.75 ㎃ max	
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current	
	Over voltage protection		30 - 34 V	59 - 63 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.	
	Protection of output short		Auto Re-start	
	DC OK Signal		Green LED (ON when output voltage is normal)	
	DC OK Output		Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)	
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)	
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)	
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)	
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)	
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)	
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)	
	Ambient humidity		20 ~ 90 % RH (With no condensation)	
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)	
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)	
	Shock resistance		150 ㎨, 3 times for each of 6 directions (State of packing)	
	Weight		682 g	680 g

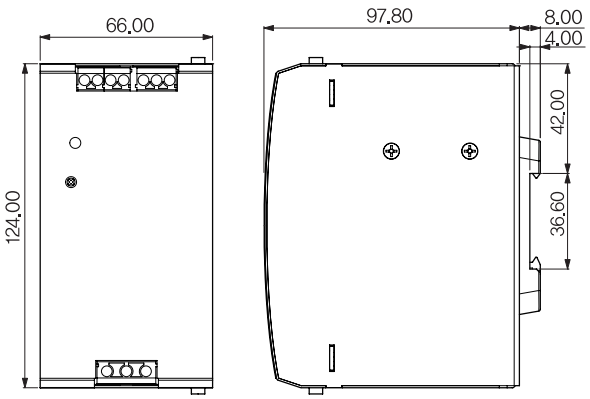
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Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	
⑧	⏚	FG
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

Dimension (Unit : ㎜)



※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device

240 Watt
(12 V, 24 V, 48 V DC)

DPS series

Specification

Model			DPS-240S-12	DPS-240S-24	DPS-240S-48
Output	Rated output voltage		12 V	24 V	48 V
	Rated output current		18 A	10 A	5 A
	Rated power output		216 W	240 W	
	Peak current		21 A	12 A	6 A
	Circuit voltage fluctuation rate		±0.5 %	±0.5 %	±0.5 %
	Load voltage fluctuation rate		±1 %	±1 %	±1 %
	Ripple		120 ㎷ max	150 ㎷ max	240 ㎷ max
	Ambient temperature fluctuation		±1 %	±1 %	±1 %
	Running time		700 ㎳ max (110 V AC, Io=100 %)		
	Remaining time		30 ㎳ min (110 V AC, Io=100 %)		
	Voltage fluctuation range		11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V
	Voltage setting range		±1 % max (Rated output voltage)		
Input	Input voltage		100 - 120 V AC / 200 – 240 V AC ※ Auto-select input		
	Input frequency		50 - 60 ㎐ (47 - 63 ㎐)		
	Current (A)	110 V AC	4.5	4.5	4.5
		220 V AC	2.4	2.4	2.4
	Efficiency	220 V AC	90 %	92 %	93 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 ℃, Io=100 % at Cold start)		
	Leakage current	110 V AC	0.35 ㎃ max		
		220 V AC	0.75 ㎃ max		
Protection function	Over current protection		Protective function performed within 110 ~ 200 % of the rated output current		
	Over voltage protection		16 - 18 V	28.5 - 33 V	56 - 59 V
	Overheating protection		Protection circuit is in operation when PWM controller's junction temperature is over 135~140℃.		
	Protection of output short		Auto Re-start		
	DC OK Signal		Green LED (ON when output voltage is normal)		
	DC OK Output		Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)		
ETC	Dielectric strength		2,700 V AC for 1 min, Detection current = 10 ㎃, (Input – Output)		
			1,500 V AC for 1 min, Detection current = 10 ㎃, (Input – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – FG)		
			500 V AC for 1 min, Detection current = 10 ㎃, (Output – DC OK)		
	Insulation resistance		50 ㏁ min. (Input – Output, FG), (Output – FG, DC OK)		
Environment	Ambient temperature		- 25 ~ +70 ℃ (Refer to the derating curve of output load)		
	Ambient humidity		20 ~ 90 % RH (With no condensation)		
	Storage temperature		- 40 ~ +85 ℃ (With no condensation)		
	Vibration resistance		10 - 55 ㎐, peak amplitude 0.375 ㎜, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)		
	Shock resistance		150 ㎨, 3 times for each of 6 directions (State of packing)		
	Weight		896 g	892 g	890 g

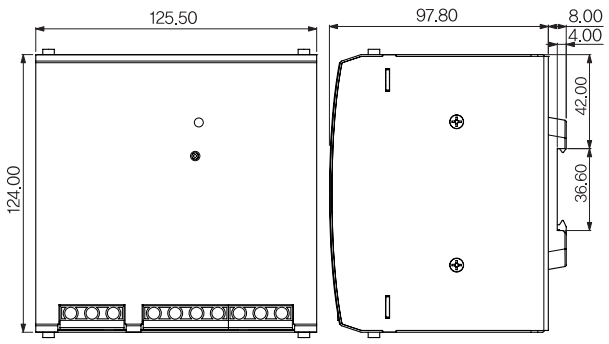
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⑨	AC (L)	AC Input terminal
⑩	AC (N)	
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⑫	DC OK	Output indication LED

Dimension (Unit : ㎜)



※ Terminal ① and ② are connected inside the device
Terminal ③ and ④ are connected inside the device