



DC → DC SWITCHING POWER SUPPLY

DDP1120D SERIES

All the patents are held accountable counterfeiting.

Features



Green Power

- Standard/Din Rail Mounting Dual Purpose, meet EU EN 43880 installation dimension standard 4SU
- Width only 70mm(4SU)
- -20~+70°C wide working temperature, optional -40 °C
- No minimum load required
- DC output adjustable(±10%)
- Cooling by free air convection
- Can be installed on din rail TS-35/7.5 or 15
- Protections: Short circuit / Overload / Over voltage / Input reverse polarity / Input under voltage protection
- 4KVdc I/O isolation (Reinforced isolation)
- 3 years warranty

DIMENSIONS: 52.5(H)*90.7(D)*70(W)mm

WEIGHTS: 254g

Detail specifications

MODEL DDP1120D		B-12	B-24	B-48	C-12	C-24	C-48
OUTPUT	DC voltage	12V	24V	48V	12V	24V	48V
	Rated Current	10A	5A	2.5A	10A	5A	2.5A
	Current Range	0~10A	0~5A	0~2.5A	0~10A	0~5A	0~2.5A
	Rated Power	120W	120W	120W	120W	120W	120W
	Ripple&Noise(max.)	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p
	Voltage Adj. Range	10.8~13.2V	21.6~26.4V	43.2~52.8V	10.8~13.2V	21.6~26.4V	43.2~52.8V
	Voltage Tolerance	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Setup, Rise Time	500ms, 60ms@24Vdc			500ms, 60ms@48Vdc		
	Hold Up Time(Typ.)	Meet S1 level 6ms (full load), meet S2 level 10ms (70% load).			Meet S1 level 6ms (full load), meet S2 level 10ms (60% load).		
INPUT	Voltage Range	16.8~33.6Vdc			33.6~67.2Vdc		
	Efficiency(Typ.)	89%	89.5%	91%	89.5%	91%	92%
	DC Current(Typ.)	5.6A@24Vdc			2.8A@48Vdc		
	Inrush Current(Typ.)	5A@24Vdc			5A@48Vdc		
PROTECTION	Overload	105~135% rated output power.					
		Protection type: Recovers automatically after fault condition is removed.					
	Over Voltage	14.4~16.8V	28.8~33.6V	56.7~67.2V	14.4~16.8V	28.8~33.6V	56.7~67.2V
		Protection type: Recovers automatically after fault condition is removed.					
	Reverse Polarity	By internal MOSFET, no damage, recovers automatically after fault condition removed.					
	Under Voltage Lockout	24Vin: Power ON ≥ 16.8V, OFF ≤ 16.5V			48Vin: Power ON ≥ 33.6V, OFF ≤ 33V		



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CE Standards

EN 55032, EN 61000-3-3,
(EN 61000-4-2, EN 61000-4-3,
EN 61000-4-4, EN 61000-4-5,
EN 61000-4-6, EN 61000-4-8),
IEC 62368-1(LVD),
Heavy Industry level, criteria A

Safety Standards



UL 508 Design
Reference
CE Marking

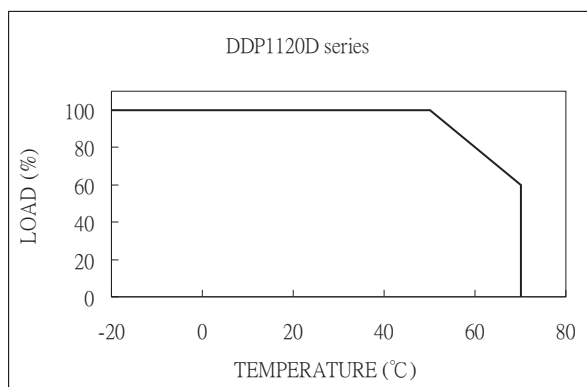
Environments

Operating Temperature	-20 ~ 70°C, Ambient
Operating Humidity	20 ~ 90% RH, No Condensing
Storage Temperature	-20 ~ 85°C, Ambient
Vibration	2G, 10~500Hz, 3 axes

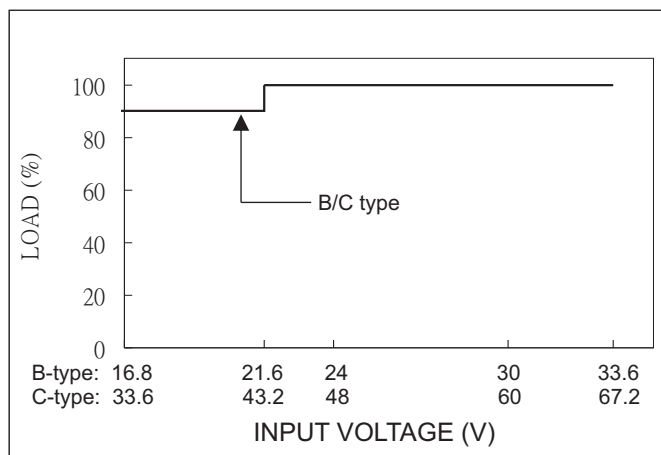
NOTE

1. Each output can provide up to maximum load, but total load can not exceed rated output power.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 20% to 100% of rated load at 24VDC/48VDC input.
4. Ripple & Noise are measured with 20MHz oscilloscope at 24VDC/48VDC by using a 20cm long 12" twisted pair-wire with a 0.1uF/630V metal capacitor & a 47uF electrolytic capacitor parallel on the test point.
5. Efficiency is measured at rated load and 24VDC/48VDC input.
6. Hold-up time is measured at rated load and 24VDC/48VDC input.
7. Output Voltage Adjustable is measured on 5% of rated load.
8. When placing an order, model name is composed of "series name" and "model name on top of the specification form". For example, model name of B-12 of the order on top of the specification form is DDP1120DB-12.
9. Reign Power reserve the right to change specifications at any time without notice.

Derating Curve



Output Derating VS Input Voltage



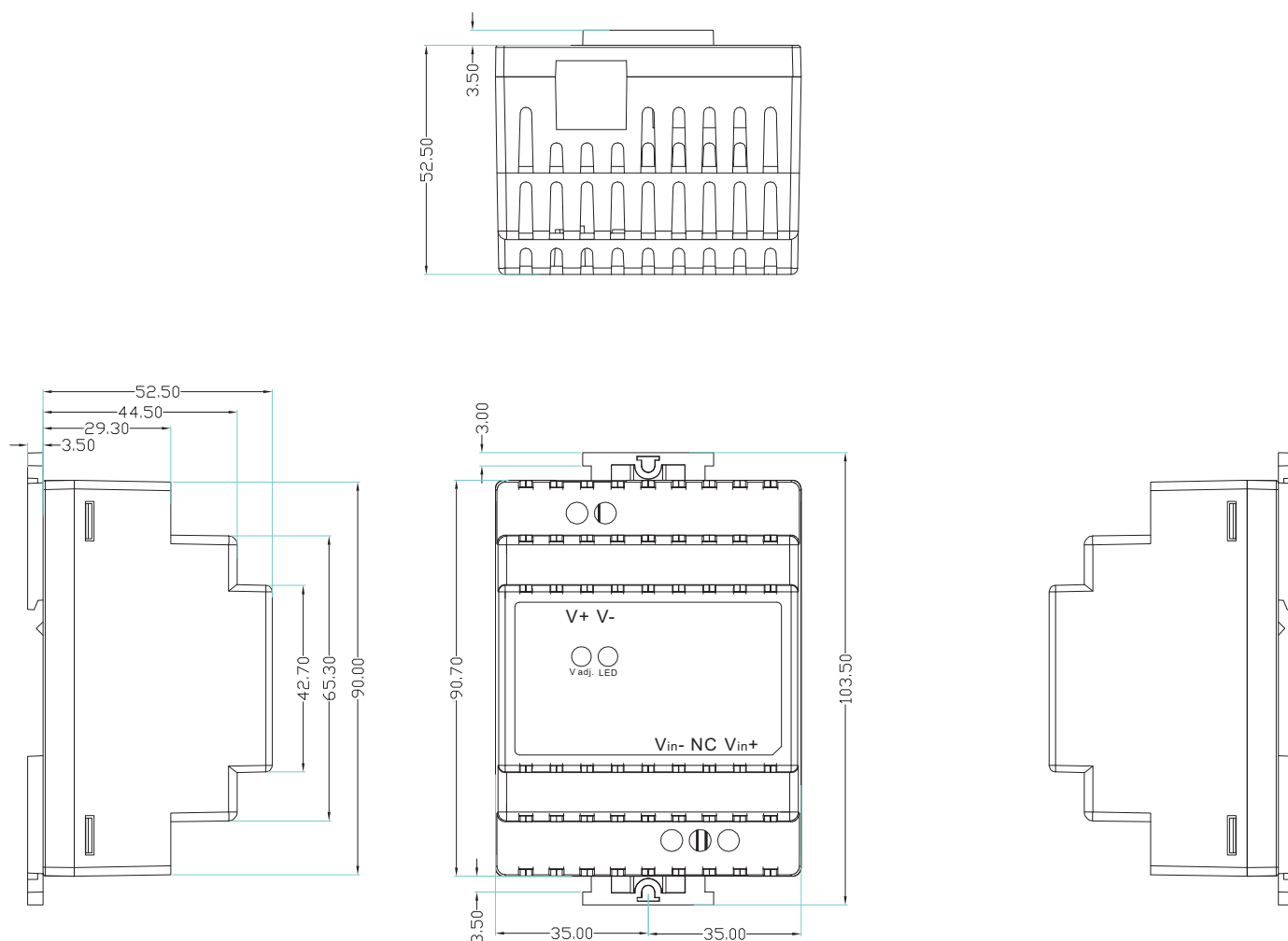


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Mechanical Details



Panel Designation

CASE NO. : DLP1100D

UNIT : mm

DIMENSION : 52.5(H)*90.7(D)*35(W)

MATERIAL : PLASTIC

COLOR : BLACK

Symbol	Description
V _{in-}	DC Negative Input Terminal
V _{in+}	DC Positive Input Terminal
NC	No connection
V ₋	DC Negative Output Terminal
V ₊	DC Positive Output Terminal
LED	Green LED Indicator
V adj.	Potentiometer For Output Voltage