



Features :

- Universal AC input 88 - 264Vac
- Installed on DIN rail TS35 / 7.5 or 15
- Brown-out protection
- Protections: Short circuit / Over load / Over voltage
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- True DC OK signal output
- Withstand 2G vibration test
- High efficiency, long life and high reliability
- 3 years warranty
- UL508 (Industrial control equipment) listed
- UL1310 Class 2 Power unit / LPS pass

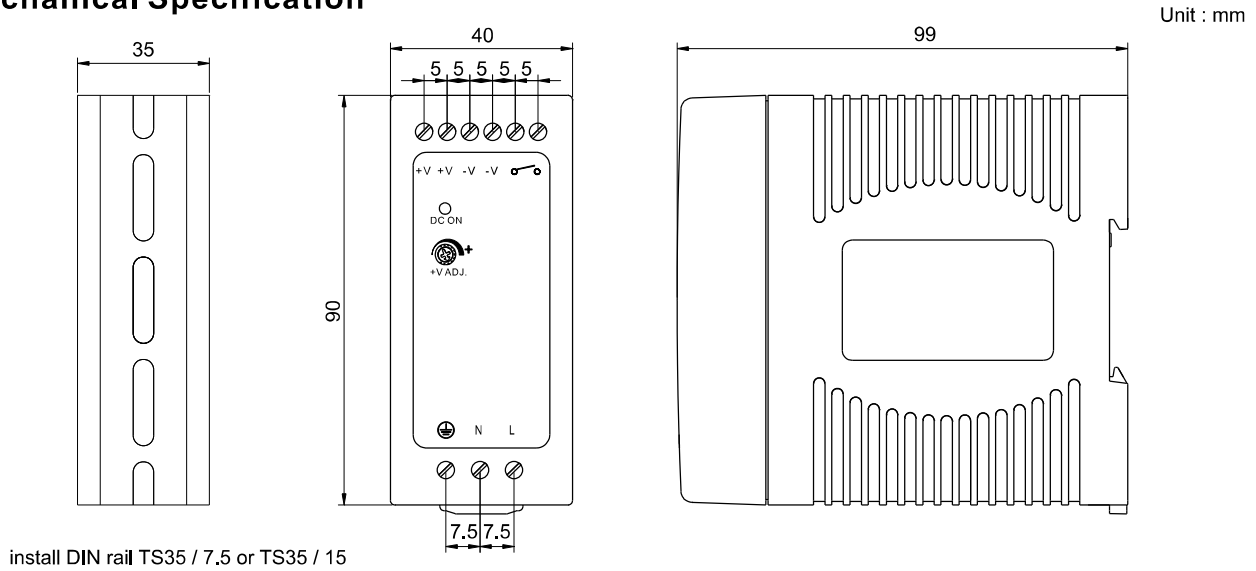


MODEL		DN-60-12	DN-60-15	DN-60-24	DN-60-48
Output	DC Voltage Range	12V	15V	24V	48V
	Rated Current	5A	4A	2.5A	1.25A
	Current Range	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A
	Rated Power	60W	60W	60W	60W
	Ripple & Noise (max.)	Note.2 100 mVp-p	100 mVp-p	120 mVp-p	180 mVp-p
	Voltage Adj. Range	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V
	Voltage Tolerance	Note.3 ±1%	±1%	±1%	±1%
	Line Regulation	±1%	±1%	±1%	±1%
	Load Regulation	±1%	±1%	±1%	±1%
	Setup, Rise Time	<800ms, <50ms/230Vac at full load			
Hold Up Time (Typ.)	> 32ms / 230VAC, >16ms / 115VAC at full load				
Input	Voltage Range	Note.4 88 ~ 264VAC	124 ~ 370VDC		
	Frequency Range	47Hz ~ 63Hz			
	Efficiency (Typ.)	86%	87%	87%	88%
	AC Current (Typ.)	1.3 A / 115VAC	0.6A / 230VAC		
	Inrush Current (Typ.)	COLD START 30A / 115VAC 60A / 230VAC			
Leakage Current	< 1mA / 230VAC				
Protection	Over Load	> 102 % rated output power Protection type : constant current limiting, automatically after fault condition is removed			
	Over Voltage	115% ~ 150% rated output voltage Protection type : latch-off mode			
Environment	Working Temp.	-20°C ~ +70°C (Refer to output load de-rating curve)			
	Working Humidity	20 ~ 90% R.H non-condensing			
	Storage Temp., Humidity	-40 ~ +85°C 10 ~ 95% R.H			
	Temp.Coefficient	±0.03%/°C (0 ~ 50°C)			
Safety & EMC	Vibration	10 ~ 500Hz, 2G 10min./1 cycle, period for 60 min. Each along X,Y,Z axes			
	Safety Standards	UL508, TUV EN60950-1 : 2006+A11, UL 1310 NEC class 2 compliant			
	Withstand Voltage	I/P - O/P : 4242 DC I/P - FG : 2121 DC 1 minute			
	Isolation Resistance	I/P - O/P, I/P - FG, O/P - FG: 100M Ω / 500VDC			
	EMI Conduction & Radiation	EN55022 : 2006 Class B			
	Harmonic Current	EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005			
Others	EMS Immunity	EN61204-3: 2000, EN55024:1998+A1: 2001+A2: 2003 light industry level, criteria A			
	DC OK signal	Relay contact (24VDC / 1A , 120VAC / 1A)			
Others	Connection	I/P 3 poles, O/P : 6 poles screw DIN terminal			
	MTBF(MIL-HDBK-217F)	944.6K HRS			
	Cooling	Free Air convection			
	Dimension (W*H*D)(mm)	40x90x99			
	Packing	0.3kg ; 27Pcs / 9.3kg			

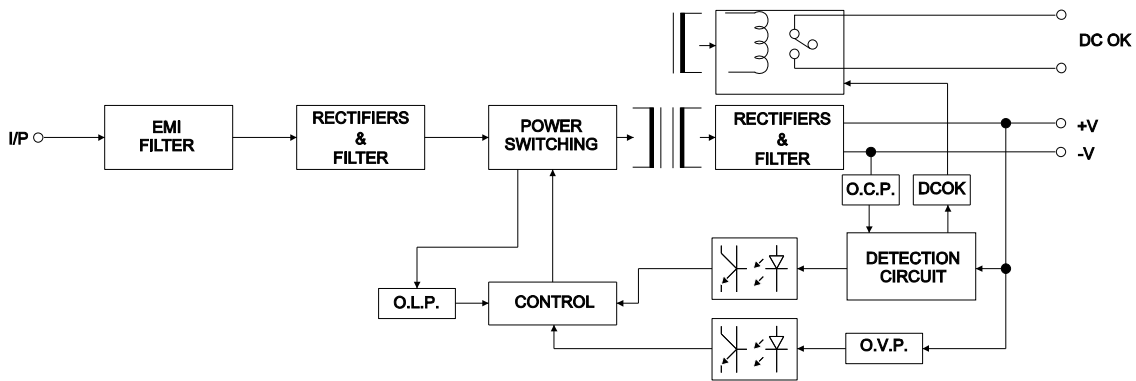
Note

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. De-rating may be needed under low input voltages. Please check the de-rating curve for more details.
5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Mechanical Specification



Block Diagram



DC OK Relay Contact

Contact Close	When the output voltage reaches the adjusted output voltage
Contact Open	When the output voltage drop below 90% output voltage
Contact Ratings (max.)	30V / 1A resistive load

De-rating Curve

