



MW350-DD series

350W Single Output DC-DC Converter



Features:

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by build-in DC fan
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

Model		MW350-DD-B				MW350-DD-C				
OUTPUT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V	
	RATED CURRENT	57A	27.5A	14.6A	7.3A	57A	27.5A	14.6A	7.3A	
	CURRENT RANGE	0 - 57A	0 - 27.5A	0 - 14.6A	0 - 7.3A	0 - 57A	0 - 27.5A	0 - 14.6A	0 - 7.3A	
	RATED POWER	285W	330W	350.4W	350.4W	300W	330W	350.4W	350.4W	
	RIPPLE + NOISE MAX.*	100mVp-p	120mVp-p	150mVp-p	200mVp-p	100mVp-p	120mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	4.5-5.5VDC	11-16VDC	23-30VDC	43-53VDC	4.5-5.5VDC	11-16VDC	23-30VDC	43-53VDC	
	VOLTAGE TOLERANCE**	±2.0%	±1.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.3%	±0.2%	±0.2%	±0.5%	±0.3%	±0.2%	±0.2%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
SETUP - RISE TIME	300ms, 50ms at full load									
INPUT	VOLTAGE RANGE	B: 19-36VDC		C: 36-72VDC		D: 72-144VDC				
	EFFICIENCY (typ.)	74%	80%	80%	84%	76%	81%	81%	82%	
	DC CURRENT (typ.)	14.4A/24V	16A/24V	17.6A/24V	17.6A/24V	7.6A/48V	8.8/48V	9.0/48V	9.0/48V	
	INRUSH CURRENT	C: 45A/48VDC		D: 45A/96VDC						
PROTECTION	OVERLOAD	105-135% rated output power Protection type: shut down o/p voltage, re-power on to recover.								
	OVER VOLTAGE	5.75-6.75V	16.8-20V	31.5-37.5V	53-65V	5.75-6.75V	16.8-20V	31.5-37.5V	53-65V	
ENVIRONMENT	WORKING TEMP.	-20 - +60°C (refer to "derating curve")								
	WORKING HUMIDITY	20-90% RH non-condensing								
	STORAGE TEMP. HUMIDITY	-40 - +85°C 10-95 RH								
	TEMP. COEFFICIENT	±0.03% / °C (0-50°C)								
	VIBRATION	10-500Hz, 2G 10 min./1 cycle, 60 min. each along X, Y, Z axes								
SAFETY AND EMC***	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)								
	WITHSTAND VOLTAGE	I/P-O/P: 1.5KVAC		I/P-FG: 1.5KVAC		O/P-FG: 0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B								
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8 light industry level, criteria A								
	MTBF	209.4K hrs min.		MIL-HDBK-217F (25°C)						
	DIMENSION	215x115x50mm (LxWxH)								
	PACKING	1.1KG; 12pcs/14.4KG/0.92CUFT								
All parameters NOT specially mentioned are measured at 24, 48, 96VDC input, rated load and 25°C of ambient temperature.										
*	Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF and 47uF parallel capacitor.									
**	Tolerance: includes set up tolerance, line regulation and load regulation.									
***	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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies"									



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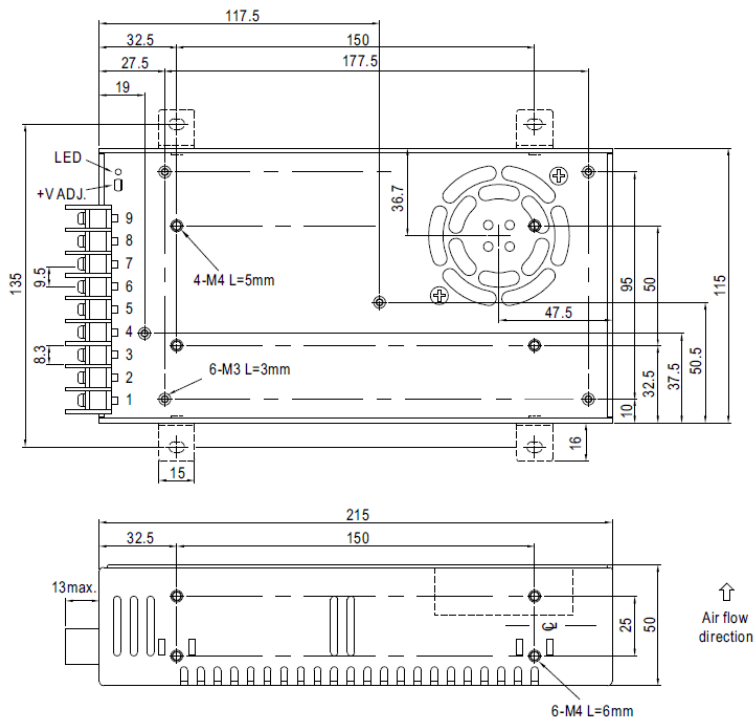
Features:

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by build-in fan
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

Model		MW350-DD-D			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	60A	29.2A	14.6A	7.3A
	CURRENT RANGE	0 - 60A	0 - 29.2A	0 - 14.6A	0 - 7.3A
	RATED POWER	300W	350.4W	350.4W	350.4W
	RIPPLE + NOISE MAX.*	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5-5.5VDC	11-16VDC	23-30VDC	43-53VDC
	VOLTAGE TOLERANCE**	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.3%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
SETUP - RISE TIME	300ms, 50ms at full load				
INPUT	VOLTAGE RANGE	B: 19-36VDC	C: 36-72VDC	D: 72-144VDC	
	EFFICIENCY (typ.)	78%	83%	87%	89%
	DC CURRENT (typ.)	6A/96V	6A/96V	6A/96V	6A/96V
	INRUSH CURRENT	C: 45A/48VDC		D: 45A/96VDC	
PROTECTION	OVERLOAD	105-135% rated output power Protection type: shut down o/p voltage, re-power on to recover.			
	OVER VOLTAGE	5.75-6.75V	16.8-20V	31.5-37.5V	53-65V
ENVIRONMENT	WORKING TEMP.	-20 - +60°C (refer to "derating curve")			
	WORKING HUMIDITY	20-90% RH non-condensing			
	STORAGE TEMP. HUMIDITY	-40 - +85°C 10-95 RH			
	TEMP. COEFFICIENT	±0.03% / °C (0-50°C)			
	VIBRATION	10-500Hz, 2G 10 min./1 cycle, 60 min. each along X, Y, Z axes			
SAFETY AND EMC***	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)			
	WITHSTAND VOLTAGE	I/P-O/P: 1.5KVAC	I/P-FG: 1.5KVAC	O/P-FG: 0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B			
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8 light industry level, criteria A			
	MTBF	209.4K hrs min.	MIL-HDBK-217F (25°C)		
	DIMENSION	215x115x50mm (LxWxH)			
	PACKING	1.1KG; 12pcs/14.4KG/0.92CUFT			
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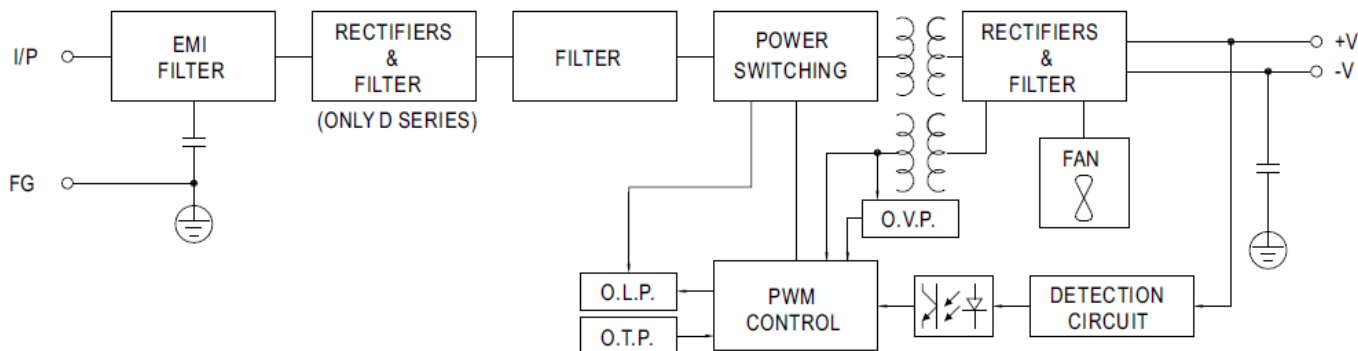
All measurements are in mm.

Mechanical specification

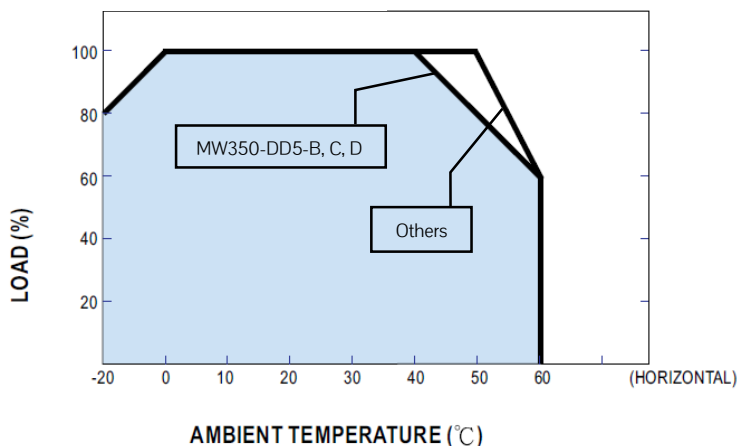


Terminal pin no. assignment	
Pin no.	Assignment
1	DC INPUT V+
2	DC INPUT V-
3	FG \perp
4, 5, 6	DC OUTPUT V-
7, 8, 9	DC OUTPUT V+

Block diagram



Derating curve



Static characteristics

