



### Caratteristiche

- Design ultra sottile con larghezza di 52,5 mm (3SU).
- Ingresso universale 85~264 V CA (277 V CA operativa)
- Nessun consumo di energia LOAD < 0,3 W
- Classe di isolamento II
- Passa LPS (fonte di alimentazione limitata)
- Tensione di uscita CC regolabile
- Protezioni: cortocircuito / sovraccarico / sovratensione
- Raffreddamento per convezione ad aria libera (temperatura di esercizio: -30~+70°C)
- Guida DIN TS-35/7.5 o 15 montabile
- Indicatore LED per l'accensione
- 3 anni di garanzia

### Applicazioni

- Sistema di controllo domestico
- Automazione degli edifici
- Sistema di controllo industriale
- Automazione di fabbrica
- Apparatı elettromeccanici

### CODICE GTIN

Cerca MW: <https://www.meanwell.com/serviceGTIN.aspx>

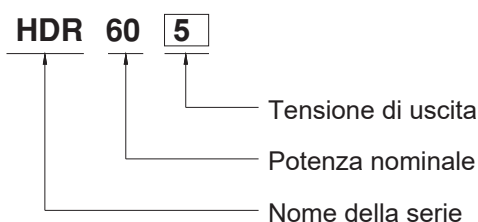
### Descrizione

HDR-60 è una serie di alimentatori economici ultra sottili da 15 W su guida DIN, adatti per essere installati su TS-35/7.5 o guide di montaggio TS-35/15. Il corpo è progettato 52,5 (3SU) di larghezza, che consente di risparmiare spazio all'interno degli armadi. L'intera serie adotta l'intera gamma AC ingresso da 85 V CA a 264 V CA (277 V CA operativa) ed è conforme a BS EN/EN61000-3-2, la norma dell'Unione Europea per la corrente armonica.

L'HDR-60 è progettato con un alloggiamento in plastica che può prevenire efficacemente i rischi elettrici dell'utente. Con efficienza di lavoro fino all'87%, l'intera serie può funzionare a temperatura ambiente compresa tra -30°C e 70°C in regime di convezione dell'aria.

Le funzioni di protezione complete e i relativi certificati per domotica e controllo industriale (IEC62368-1, UL508, UL62368-1, BS EN/EN61558-2-16) rendono HDR-60 un prodotto molto competitivo soluzione di alimentazione per applicazioni domestiche e industriali.

### Codifica del modello



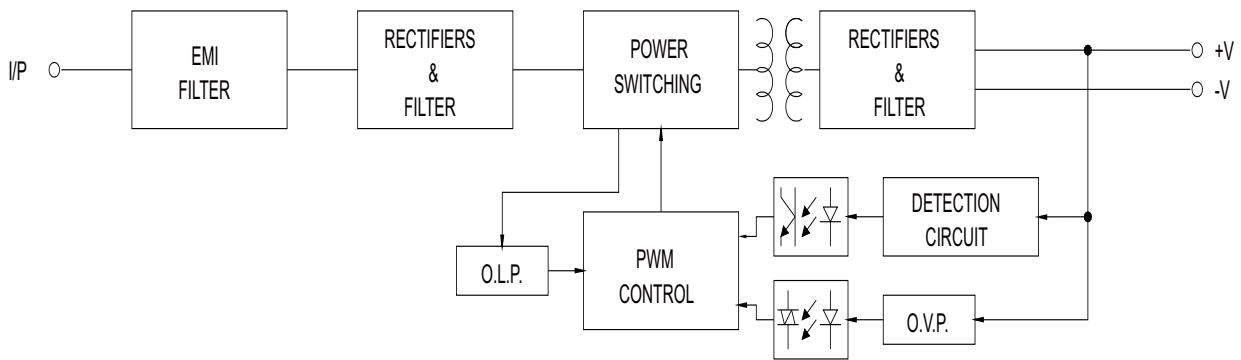


### SPECIFICHE

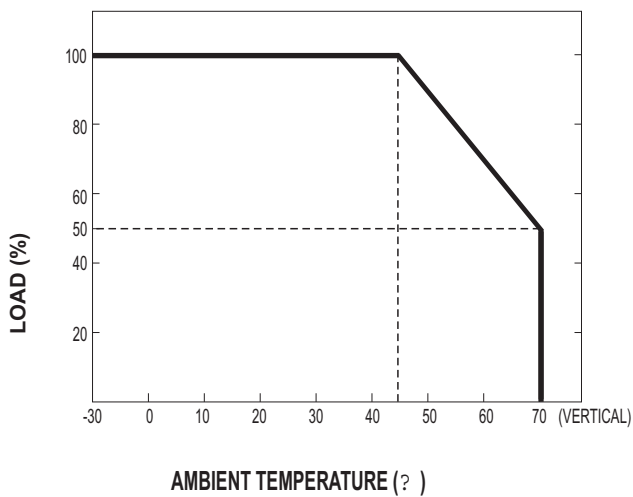
MODEL	HDR-60-5	HDR-60-12	HDR-60-15	HDR-60-24	HDR-60-48		
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	48V	
	RATED CURRENT	6.5A	4.5A	4A	2.5A	1.25A	
	CURRENT RANGE	0 ~ 6.5A	0 ~ 4.5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A	
	RATED POWER	32.5W	54W	60W	60W	60W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	5.0 ~ 5.5V	10.8 ~ 13.8V	13.5 ~ 18V	21.6 ~ 29V	43.2 ~ 55.2V	
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LINE REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	SETUP, RISE TIME	500ms, 50ms/230VAC	500ms, 50ms/115VAC at full load				
HOLD UP TIME (Typ.)	30ms/230VAC	12ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC (277VAC operational)		120 ~ 370VDC (390VDC operational)			
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	85%	88%	89%	90%	91%	
	AC CURRENT (Typ.)	1.2A/115VAC		0.8A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC		60A/230VAC			
PROTECTION	OVERLOAD	105 ~ 160% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~ 100% rated output voltage, recovers automatically after fault condition is removed					
	OVER VOLTAGE	5.75 ~ 6.75V	14.2 ~ 16.2V	18.8 ~ 22.5V	30 ~ 36V	56.5 ~ 64.8V	
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6					
	OPERATING ALTITUDE	2000 meters					
	OVER VOLTAGE CATEGORY	III ; According to EN61558, EN50178, EN60664-1, EN62477-1 ; altitude up to 2000 meters					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, UL508, TUV BS EN/EN61558-2-16, BS EN/EN61558-1, IEC62368-1, EAC TP TC 004, BSMI CNS14336-1, IS13252(Part1)/IEC60950-1 approved; Design refer to BS EN/EN62368-1					
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC EMISSION	Parameter	Standard			Test Level / Note	
		Conducted	BS EN/EN55032(CISPR32), CNS13438			Class B	
		Radiated	BS EN/EN55032(CISPR32), CNS13438			Class B	
		Harmonic Current	BS EN/EN61000-3-2			Class A	
		Voltage Flicker	BS EN/EN61000-3-3			-----	
	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, BS EN/EN61204-3					
		Parameter	Standard			Test Level / Note	
		ESD	BS EN/EN61000-4-2			Level 3, 8KV air; Level 2, 4KV contact, criteria A	
		Radiated Susceptibility	BS EN/EN61000-4-3			Level 3, criteria A	
		EFT/Burest	BS EN/EN61000-4-4			Level 3, criteria A	
		Surge	BS EN/EN61000-4-5			Level 4, 2KV/L-N, criteria A	
		Conducted	BS EN/EN61000-4-6			Level 3, criteria A	
Magnetic Field		BS EN/EN61000-4-8			Level 4, criteria A		
Voltage Dips and interruptions		BS EN/EN61000-4-11			> 95% dip 0. 5 periods, 30% dip 25 periods, > 95% interruptions 250 periods		
OTHERS	MTBF	3524.8K hrs min. Telcordia SR-332 (Bellcore) ; 927.6K hrs min.		MIL-HDBK-217F (25°C)			
	DIMENSION	52.5*90*54.5mm (W*H*D)					
	PACKING	190g;60pcs/13Kg/0.91CUFT					
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf &amp; 47µf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>						



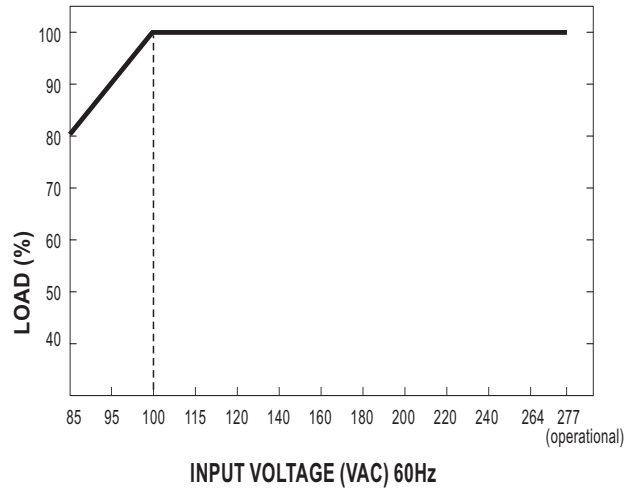
### Block Diagram



### Derating Curve



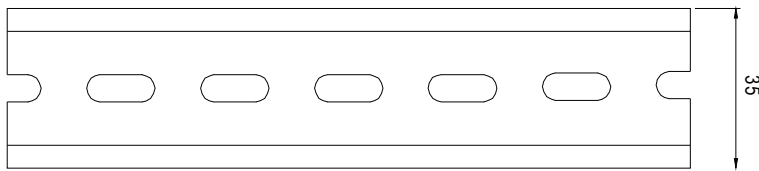
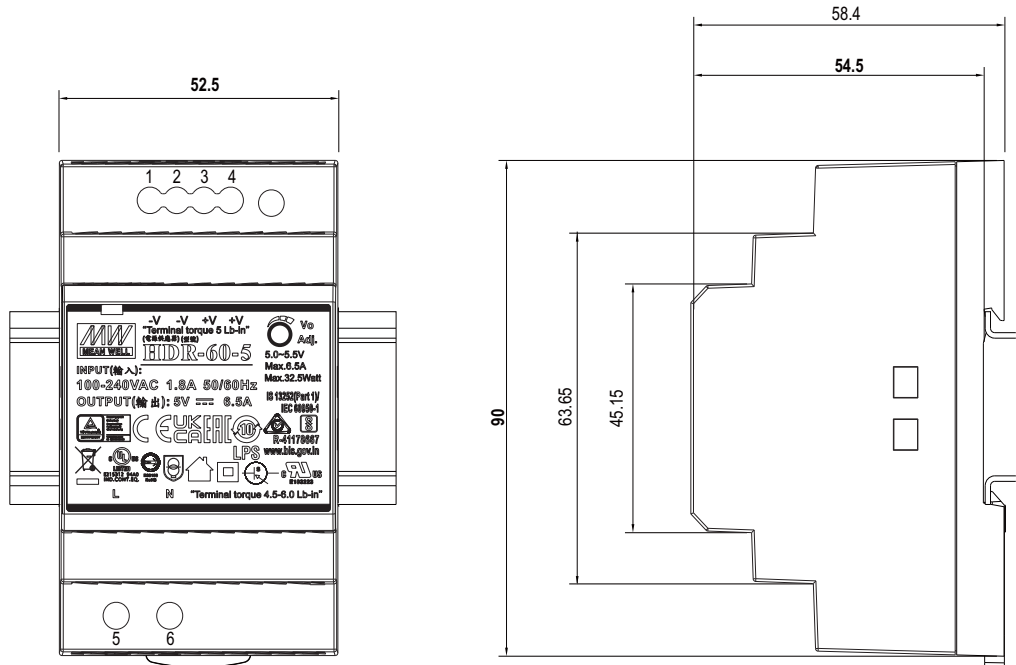
### Output Derating VS Input Voltage





### Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5\text{mm}$ )



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

### Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1,2	-V	5	AC/L
3,4	+V	6	AC/N