M Merkmal

- Breite nur 52,5 mm (3SU) 4:1
- ultraweiter Eingangsbereich
- -40 +85 "C breite Arbeitstemperatur Keine
- Mindestlast erforderlich
- DC-Ausgang einstellbar (T 10%)
- Kühlung durch freie Luftkonvektion
- Kann auf DIN-Schiene TS-35/7,5 oder 15 montiert werden
- Schutzfunktionen: Kurzschluss / Überlast / Überspannung / Eingang Verpolung / Eingangsunterspannungsschutz 4KVdc
- E/A-Isolierung (verstärkte Isolierung)
- 3 Jahre Garantie

M Anwendungen

- Industrielles Steuerungssystem
- Halbleiterfertigungsanlagen
- Fabrikautomation
- Elektromechanisches
- Drahtlosnetzwerk
- Telekommunikations- oder Datenkommunikationssystem

Beschreibung

Die Serie DDR-60 ist ein 60-W-DC-Gleichstromwandler für die DIN-Schiene mit folgenden Hauptmerkmalen: einfache Installation auf der DIN-Schiene, ultraschmale Breite (52,5 mm), ultrabreite Eingangsspannung von 4:1, Betriebstemperatur von -40 bis +85 °C, E/A-Isolierung von 4 kVdc, einstellbare Ausgangsspannung (+ 1,0 %) und vollständige Schutzfunktionen... usw.

Diese Serie hat zwei Eingangsoptionen: 9 36V /18 75V und verschiedene Ausgangsoptionen: 5V / 12V / 15V / 24V und kann für industrielle Steuerung, Sicherheitskontrolle, Kommunikationssysteme und andere Bereiche verwendet werden. Geeignete Anwendungen sind DC-Abwärts-/Aufwärtsregler, die Erhöhung des Isolationsniveaus des Systems und die Kompensation des Spannungsabfalls entlang des Kabels...usw.

Modell Kodierung DDR

- 60 G - 24

Ausgangsspannung (5/12/15/24Vdc)
Eingangsspannung (G : 9 36Vdc, L:18 75Vdc)
Nennleistung
Name der Serie

SPECIFICATION

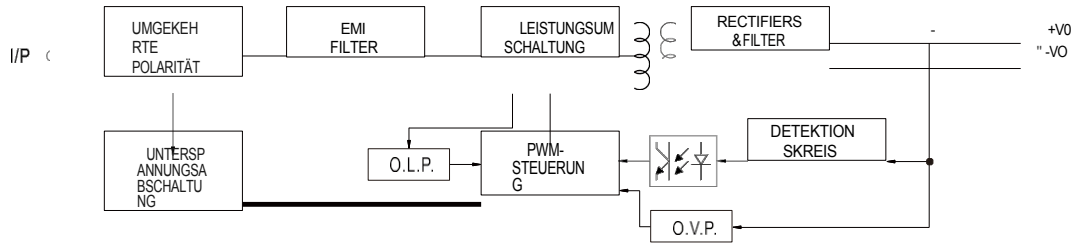
MODEL		DDR-60G-5	DDR-60G-12	DDR-60G-15	DDR-60G-24	DDR-60L-5	DDR-60L-12	DDR-60L-15	DDR-60L-24
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	5V	12V	15V	24V
	RATED CURRENT	10.8A	5A	4A	2.5A	12A	5A	4A	2.5A
	CURRENT RANGE	0 ~ 10.8A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 12A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A
	RATED POWER	54W	60W	60W	60W	60W	60W	60W	60W
	RIPPLE & NOISE (max.) Note.2	60mVp-p				60mVp-p	75mVp-p	75mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	9 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 28V	4.5 ~ 5.5V	9 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 28V
	VOLTAGE TOLERANCE Note.3	±2.0%				±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%	±0.5%	±0.5%	±0.5%	±1.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	120ms, 85ms at full load							
		G-type: 5ms@24Vdc input				L-type: 10ms@48Vdc input			
	EXTERNAL CAPACITANCE LOAD (Max.)	6800μF	4700μF	3300μF	2200μF	6800μF	4700μF	3300μF	2200μF
INPUT	VOLTAGE RANGE Note.4	9 ~ 36Vdc				18 ~ 75Vdc			
	EFFICIENCY (Typ.)	87.5%	91%	91%	91%	87.5%	91%	92%	92%
		3A /24Vdc				1.5A /48Vdc			
	INRUSH CURRENT (Typ.)	20A /24Vdc				20A /48Vdc			
PROTECTION	OVERLOAD	105 ~ 135% rated output power							
		Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75~ 7V	13.8~16.2V	17.25 ~ 20.25V	28.8~ 34V	5.75~ 7V	13.8~16.2V	17.25~ 20.25V	28.8~ 34V
		Protection type : Shut down o/p voltage, re-power on to recover							
	REVERSE POLARITY	By internal MOSFET, no damage, recovers automatically after fault condition removed							
	UNDER VOLTAGE LOCKOUT	24Vin (G-type):Power ON≥9V , OFF≤8.5V							
		48Vin (L-type):Power ON≥18V , OFF≤17V							
ENVIRONMENT	WORKING TEMP.	-40 ~ +85℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	5 ~ 95% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 5 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~60℃)							
	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6							
	OPERATING ALTITUDE	2000 meters							
SAFETY & EMC (Note 5)	SAFETY STANDARDS	IEC 62368-1 (LVD), AS/NZS 62368.1 approved; Design refer to UL508							
	WITHSTAND VOLTAGE	I/P-O/P:4KVdc							
	ISOLATION RESISTANCE	I/P-O/P>100M Ohms / 500Vdc / 25℃/ 70% RH							
	EMC EMISSION	Parameter	Standard	Test Level/ Note					
		Conducted	EN55032	Class A					
		Radiated	EN55032	Class A for 1m I/O cable , Class B for 30cm I/O cable					
		Voltage Flicker	EN61000-3-3	----					
	EMC IMMUNITY	EN55024 , EN61000-6-2(EN50082-2)							
		Parameter	Standard	Test Level / Note					
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 3, 6KV contact; criteria A					
		Radiated	EN61000-4-3	Level 3, 10V/m ; criteria A					
		EFT / Burst	EN61000-4-4	Level 3, 2KV ; criteria A					
		Surge	EN61000-4-5	Level 3, 1KV/Line-Line ; criteria A					
		Conducted	EN61000-4-6	Level 3, 10V ; criteria A					
		Magnetic Field	EN61000-4-8	Level 4, 30A/m ; criteria A					
OTHERS	MTBF	61.1K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION								
	PACKING	216g; 60pcs/14Kg/0.97CUFT							

NOTE

1. All parameters NOT specially mentioned are measured at normal input (G:24Vdc, L:48Vdc), rated load and 25℃ of ambient temperature
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μf & 47 μf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the derating curve for more details.
5. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft)

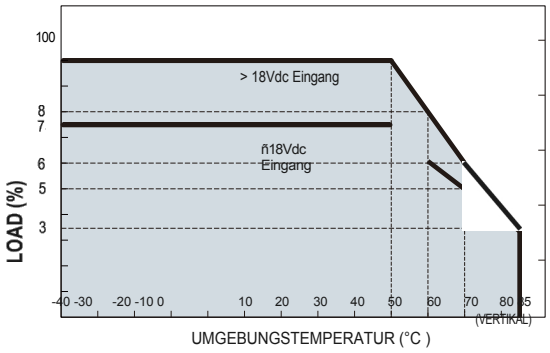
B Blockdiagramm

fosc : 130KHz

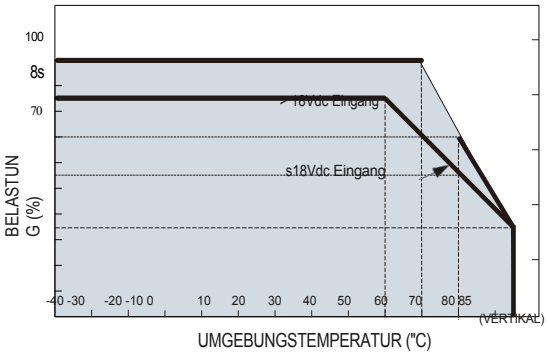


B Derating-Kurve

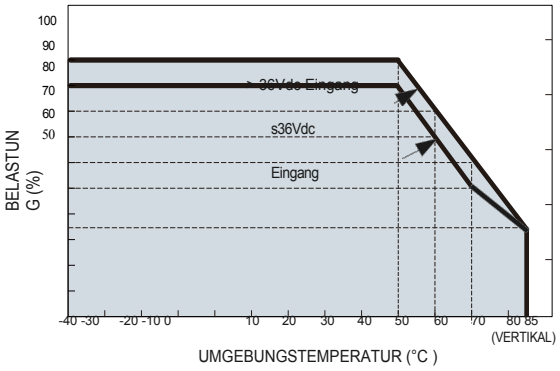
DDR-60G-5



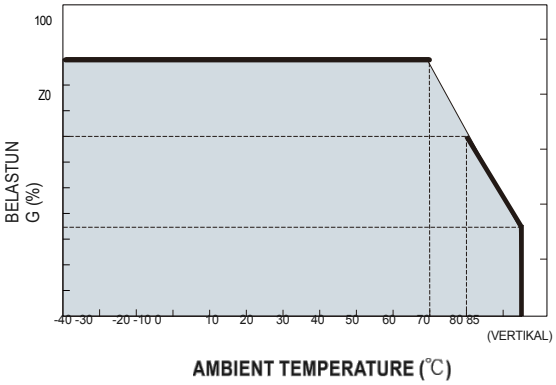
DDR-60G-12/15/24



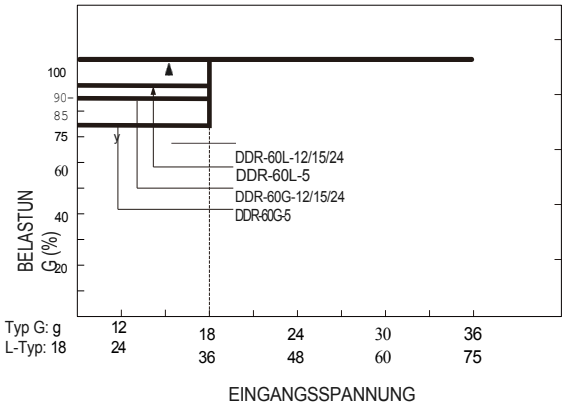
DDR-60L-5



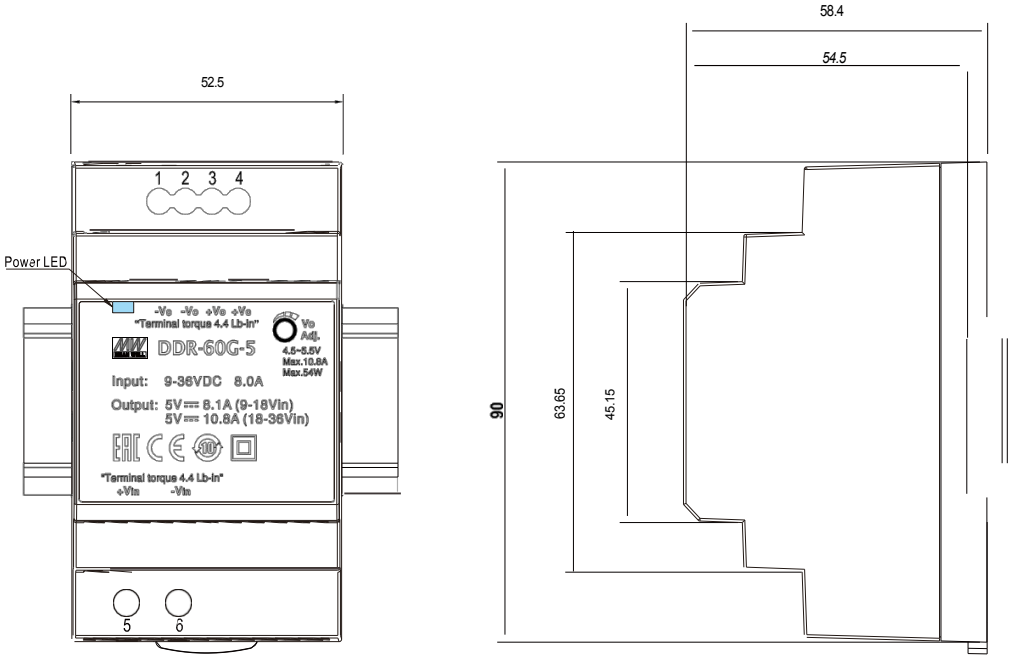
DDR-60L-12/15/24

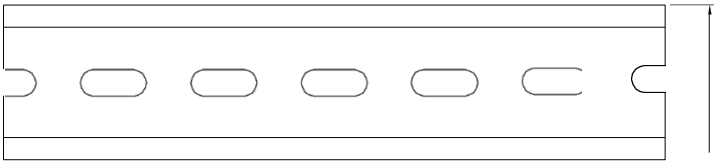


B Ausgangsderating VS Eingangsspannung



B Mechanische Spezifikation





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

PinNo.	Zuweisung
1,2	DC-Ausgang -Vo
3,4	DC-Ausgang +Vo
5	DC-Eingang +Vin
6	DC-Eingang -Vin

B Installationshandbuch

Siehe: http://www.meanwell.com/manual.html