Caratteristica M

Larghezza di soli 17,5 mm (1SU)
Campo di ingresso ultra ampio
4:1
-Temperatura di esercizio compresa tra -40 e
+85" C Nessun carico minimo richiesto
Uscita DC regolabile (T 10%)
Raffreddamento per convezione ad
aria libera

- Può essere installato su guida DIN TS-35/7,5 o 15 Protezioni:
  Cortocircuito / Sovraccarico / Sovraccarico di tensione /
  Inversione di polarità in ingresso /
  Protezione da sottotensione in ingresso
  Isolamento I/O 4KVdc (isolamento rinforzato)
- 3 anni di garanzia

M Applicazioni

Sistema di controllo industriale
Apparecchiature per la produzione di semiconduttori
Automazione di fabbrica
Elettromeccanica Rete wireless
Sistema di telecomunicazione o datacom

Descrizione del prodotto

La serie DDR-15 è un convertitore CC-CC da 15W su guida DIN con caratteristiche principali quali la facilità di installazione su guida DIN, la larghezza ultra sottile (17,5 mm), la tensione di ingresso ultra ampia 4: 1, la temperatura di funzionamento ampia -40 +85" C, l'isolamento I/O a 4KVdc, la tensione di uscita regolabile (+ 10%) e le funzioni di protezione complete... ecc.

Questa serie dispone di due opzioni di ingresso: 9-36V /18 75V e varie opzioni di uscita: 3,3V / 5V / 12V / 15V / 24V e può essere utilizzata per il controllo industriale, il controllo di sicurezza, il sistema di comunicazione e altri campi. Le applicazioni più adatte sono il regolatore buck/boost DC, l'aumento del livello di isolamento del sistema e la compensazione della caduta di tensione lungo il cavo... ecc.

Codifica del modello

DDR - 15 G - 24

- 24 — Tensione di uscita (3,3/5/12/15/24Vdc)
- G — Tensione di ingresso (G : 9 36Vdc, L:18 75Vdc)
- 15 — Potenza nominale
- DDR — Nome della serie

MEAN WELL

15W DIN Rail Type DC-DC Converter

DDR-15 series

SPECIFICATION

MODEL		DDR-15G-3.3	DDR-15G-5	DDR-15G-12	DDR-15G-15	DDR-15G-24
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V
	RATED CURRENT	3.5A	3A	125A	1A	0.63A
	CURRENT RANGE	0 ~ 3.5A	0 ~ 3A	0 ~ 1.25A	0 ~ 1A	0 ~ 0.63A
	RATED POWER	11.6W	15W	15W	15W	15W
	RIPPLE & NOISE (max.) Note.2	50mVp-p	50mVp-p	60mVp-p	75mVp-p	
	VOLTAGE ADJ. RANGE	3.0 ~ 3.6V	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%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%	±1%	±0.5%	±0.5%	
	SETUP, RISE TIME	120ms, 85ms at full load				
		G-type: 8ms@24Vdc input				
	EXTERNAL CAPACITANCE LOAD (Max.)	3300 μF	3300 μF	1200 μF	1200 μF	680 μF
INPUT	Note.4	9 ~ 36Vdc				
	EFFICIENCY (Typ.)	84%	84%	85%	85%	86%
		0.8A /24Vdc				
	INRUSH CURRENT (Typ.)	15A /24Vdc				
PROTECTION	OVERLOAD	110 ~ 150% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	3.8~ 4.7V	5.75~ 7V	13.8~ 16.2V	17.25 ~ 20.25V	28.8~ 32.4V
		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	Power ON≥9V , OFF≤8.5V				
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					
	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 B		
		Radiated	EN55032	Class B		
		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	907K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION					
	PACKING	68g; 160pcs/12Kg/1.19CUFT				

NOTE

1. All parameters NOT specially mentioned are measured at 24VDC input, 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).

MEAN WELL

15W DIN Rail Type DC-DC Converter

DDR-15 series

SPECIFICATION

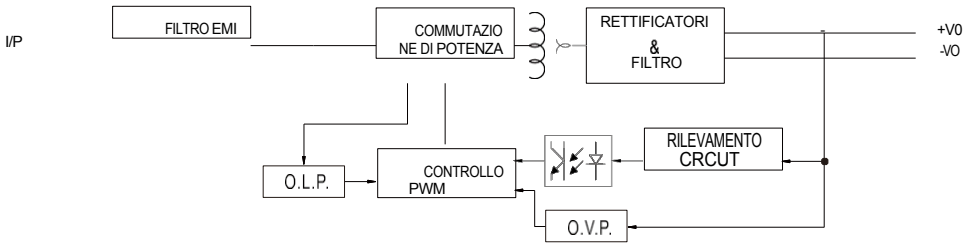
MODEL		DDR-15L-3.3	DDR-15L-5	DDR-15L-12	DDR-15L-15	DDR-15L-24
OUTPUT	DC VOLTAGE	3.3V				
	RATED CURRENT	4.5A	3A	1.25A	1A	0.63A
	CURRENT RANGE	0 ~ 4.5A				
	RATED POWER	15W	15W	15W	15W	15W
	RIPPLE & NOISE (max.) Note.2	50mVp-p				
	VOLTAGE ADJ. RANGE	3.0 ~ 3.6V	4.5 ~ 5.5V	9 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 28V
	VOLTAGE TOLERANCE Note.3	±2.0%				±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%				±0.5%
	SETUP, RISE TIME	120ms, 85ms at full load				
		L-type: 16ms@48Vdc input				
	EXTERNAL CAPACITANCE LOAD (Max.)	3300 μF	3300 μF	1200 μF	1200 μF	680 μF
INPUT	Note.4	18 ~ 75Vdc				
	EFFICIENCY (Typ.)	84%	85%	86%	86%	87%
		0.4A /48Vdc				
	INRUSH CURRENT (Typ.)	15A /48Vdc				
PROTECTION	OVERLOAD	110 ~ 150% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	3.84~7V	5.75 ~ 7V	13.8 ~ 16.2V	17.25 ~ 20.25V	28.8~ 32.4V
		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	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 B		
		Radiated	EN55032	Class B		
		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	907K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION					
	PACKING	68g; 160pcs/12Kg/1.19CUFT				

NOTE

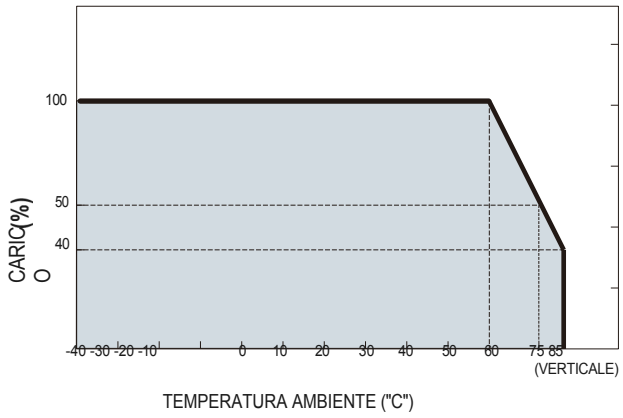
1. All parameters NOT specially mentioned are measured at 48VDC input, rated load and 25℃ of ambient temperature
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μf & 47 μf parallel capacitor
3. Tolerance : includes set up tolerance, line regulation 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).

Schema a blocchi B

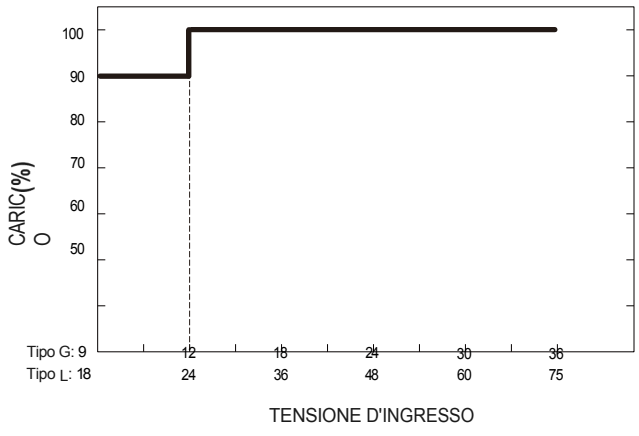
fosc.: 100KHz



B Curva di declassamento

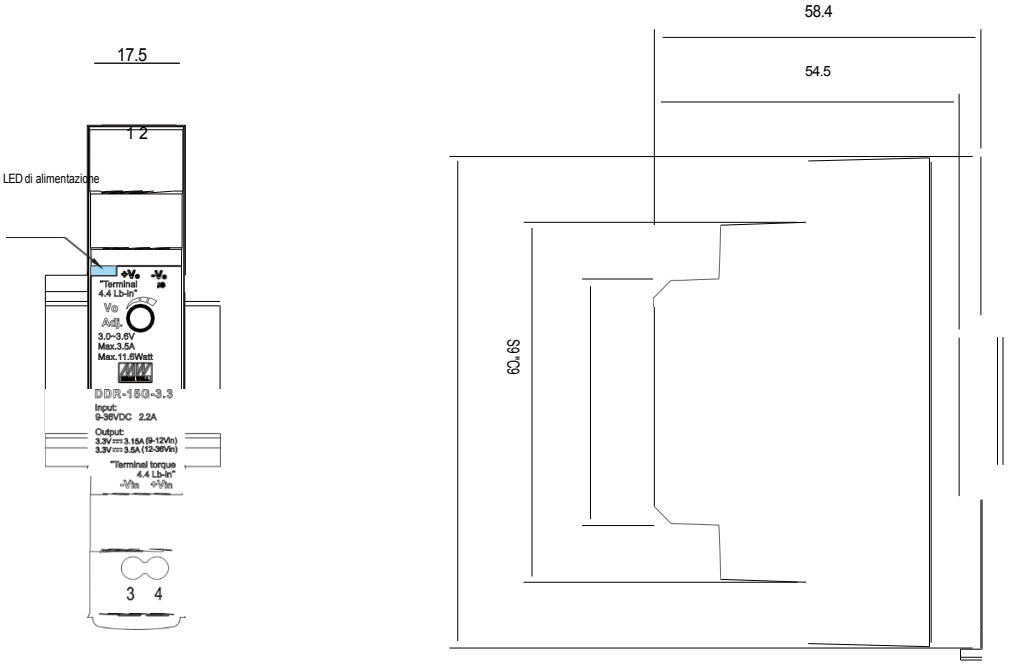


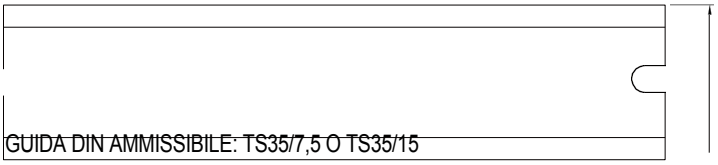
B Declassamento dell'uscita VS tensione d'ingresso



B Specifiche meccaniche

(Unità: mm, tolleranza+ 0,5 mm)





Assegnazione dei pin dei morsetti

Numero di pin	Assegnazione
1	Uscita CC *Vo
2	Uscita CC -Vo
3	Ingresso DC -Vin
4	Ingresso DC +Vin

B Manuale di installazione

Fare riferimento a: http://www.meanwell.com/manual.html