



### Caractéristiques M

- Largeur seulement 17.5mm
- (1SU) Plage d'entrée ultra large 4:1
- Température de fonctionnement étendue -40+85 °C Pas de charge minimale requise
- Sortie DC réglable (T 10%)
- Refroidissement par convection d'air libre
- Peut être installé sur rail DIN TS-35/7.5 ou 15 Protections : Court-circuit / Surcharge / Surtension /
  - Inversion de polarité d'entrée /
  - Protection contre la sous tensiond'entrée Isolation E/S 4KVdc (isolation renforcée)
- 3 ans de garantie



### M Applications

- Système de contrôle industriel
- Équipement de fabrication de semi-conducteurs
- Automatisation d'usine
- Électromécanique Réseau sans fil
- Système de télécommunication ou de transmission de données

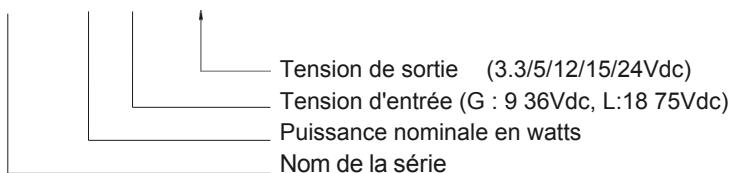
### Description de la série DDR-15

La série DDR-15 est un convertisseur DC- DC de 15W de type rail DIN dont les principales caractéristiques sont les suivantes : installation facile sur rail DIN, largeur ultra fine (17,5 mm), tension d'entrée ultra large 4:1, température de fonctionnement large -40+85°C, isolation E/S 4KVdc, tension de sortie réglable (+ 10 %) et fonctions de protection complètes... etc.

Cette série a deux options d'entrée : 9-36V /18 75V et plusieurs options de sortie : 3,3V / 5V / 12V / 15V / 24V et peut être utilisée pour le contrôle industriel, le contrôle de sécurité, le système de communication et d'autres domaines. Les applications appropriées sont les régulateurs DC buck/boost, l'augmentation du niveau d'isolation du système et la compensation de la chute de tension le long du câble...etc.

### Modèle Codage

DDR - 15 G - 24





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	1.25A	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									
	RIPLE & 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%									
	LOAD REGULATION	±1.5%	±1%	±0.5%	±0.5%									
	SETUP, RISE TIME	120ms, 85ms at full load												
INPUT		G-type: 8ms@24Vdc input												
	EXTERNAL CAPACITANCE LOAD (Max.)	3300 μF	3300 μF	1200 μF	1200 μF 680 μF									
	Note.4	9 ~ 36Vdc												
	EFFICIENCY (Typ.)	84%	84%	85%	85% 86%									
		0.8A/24Vdc												
	INRUSH CURRENT (Typ.)	16A/24Vdc												
	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed												
	OVERVOLTAGE	3.8~ 4.7V	5.75~ 7V	13.8~ 16.2V	17.25~ 20.25V 28.8~ 32.4V									
	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°C (Refer to "Derating Curve")												
	WORKING HUMIDITY	5 ~ 95% RH non-condensing												
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 95% RH non-condensing												
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)												
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6												
SAFETY & EMC (Note 5)	OPERATING ALTITUDE	2000 meters												
	SAFETY STANDARDS													
	WITHSTAND VOLTAGE	I/P-O/P: 4KVdc												
	ISOLATION RESISTANCE	I/P-O/P>100M Ohms / 500Vdc / 25°C / 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										
OTHERS	Magnetic Field	EN61000-4-8	Level 4, 30A/m ; criteria A											
	MTBF	907K hrs min. MIL-HDBK-217F (25°C)												
	DIMENSION													
NOTE	PACKING	68g; 160pcs/12Kg/1.19CUFT												
	1. All parameters NOT specially mentioned are measured at 24VDC 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 0.1 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a> )													
	6. 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).													



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
	CURRENT RANGE	0 ~ 4.5A			
	RATED POWER	15W	15W	15W	15W
	RIPLLE & NOISE (max.) Note.2	50mVp-p			
	VOLTAGE ADJ. RANGE	3.0 ~ 3.6V	4.5 ~ 5.5V	9 ~ 13.2V	13.5 ~ 16.5V
	VOLTAGE TOLERANCE Note.3	±2.0%			±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.5%			±0.5%
	SETUP, RISE TIME	120ms, 85ms at full load			
INPUT		L-type: 16ms@48Vdc input			
	EXTERNAL CAPACITANCE LOAD (Max.)	3300 μF	3300 μF	1200 μF	1200 μF
	Note.4	18 ~ 75Vdc			
PROTECTION	EFFICIENCY (Typ.)	84%	85%	86%	86%
		0.4A/48Vdc			
	INRUSH CURRENT (Typ.)	15A/48Vdc			
ENVIRONMENT	OVERLOAD	110 ~ 150% rated output power			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVERVOLTAGE	3.84-7V	5.75 ~ 7V	13.8 ~ 16.2V	17.25 ~ 20.25V
		Protection type : Shut down o/p voltage, re-power on to recover			28.8 ~ 32.4V
SAFETY & EMC (Note 5)	REVERSE POLARITY	By internal MOSFET, no damage, recovers automatically after fault condition removed			
	UNDER VOLTAGE LOCKOUT	Power ON ≥ 18V, OFF ≤ 17V			
	WORKING TEMP.	-40 ~ +85°C (Refer to "Derating Curve")			
	WORKING HUMIDITY	5 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 95% RH non-condensing			
OTHERS	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)			
	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 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°C / 70% RH			
	EMC EMISSION	Parameter	Standard	Test Level/ Note	
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		
DIMENSION	MTBF	907K hrs min.	MIL-HDBK-217F (25°C)		
	DIMENSION				
	PACKING	68g; 160pcs/12Kg/1.19CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 48VDC 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 0.1 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a> )				
	6. 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).				

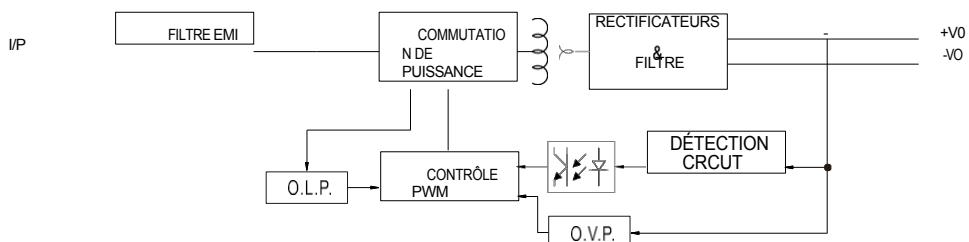


Convertisseur DC-DC 15W pour rail DIN

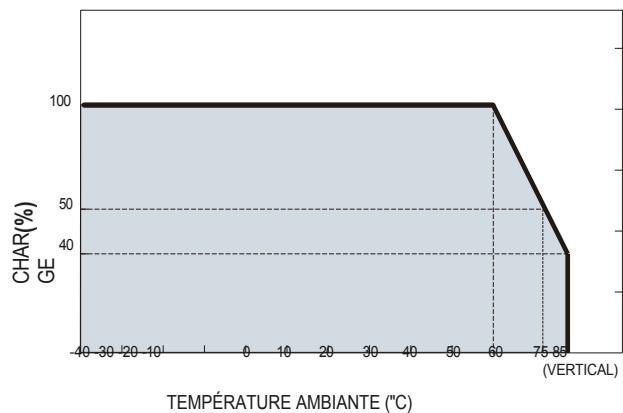
DDR-1 série

#### Bloc diagramme B

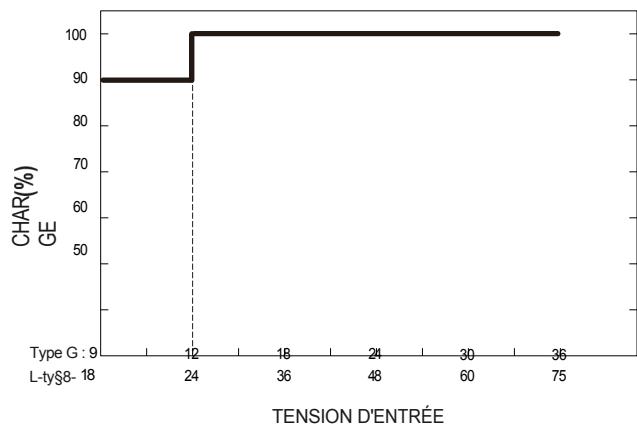
fosc : 100KHz



#### Courbe de dégressivité B

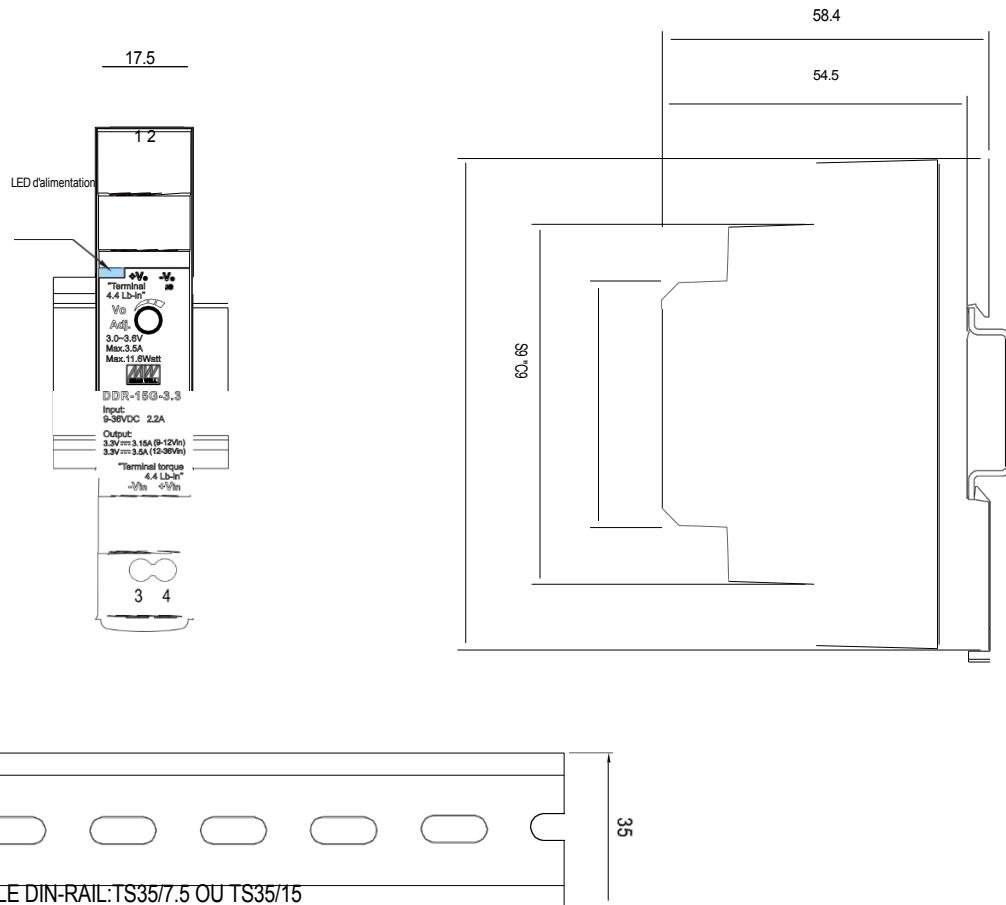


#### B Déclassement de la sortie tension d'entrée VS



**B Spécification mécanique**

(Unité : mm , tolérance+ 0.5mm)

**Affectation des numéros de broches des bornes**

N° de broche	Affectation
1	Sortie DC *Vo
2	Sortie DC -Vo
3	Entrée DC -Vin
4	Entrée DC +Vin

**B Manuel d'installation**Veuillez vous référer à : <http://www.meanwell.com/manual.html>

This document has been automatically translated. The translation may contain errors or inaccuracies. In case of doubt, please refer to the original version of document or contact us.