LinkPower™

LPS-DDR-12 & LPS-DDR-24

DC-DC Step-Down DIN Rail Converter



The LPS-DDR is an ultra-slim LPS-DDR-12 12V 24W to LPS-DDR-24 24V 36W DIN RAIL DC-DC step-down converter series, designed for installation on TS-35/7.5 or TS-35/15 mounting rails. The body is 35 mm (2SU) wide, allowing space savings inside cabinets.

The series accepts a full-range DC input of 48 to 60 VDC and meets BS EN/EN61000-3-2 requirements for harmonic current. The LPS-DDR uses a plastic housing to help protect users from electrical hazards. With working efficiency up to 90%, the series can operate from -30°C to +70°C under free-air convection. Protection functions and relevant certifications for home automation and industrial control ap

Key Features

- Ultra-slim design with 35 mm (2SU) width
- Universal input 48 – 60 VDC
- DC-DC Output, LPS-DDR-12 12V 24W to LPS-DDR-24 24V 36W
- No-load power consumption < 0.3 W
- Isolation class II
- Pass LPS (Limited Power Source)
- DC output voltage adjustable
- Protections: Short circuit / Overload / Overvoltage
- Cooling by free air convection (working temperature: -30 to +70°C)
- 4KVdc I/O isolation (Reinforced isolation)
- DIN rail TS-35/7.5 or TS-35/15 mountable
- LED indicator for power on
- 3-year warranty

Application

- Household control system
- Factory automation
- Building automation
- Electro-mechanical apparatus
- Industrial control system

Specifications

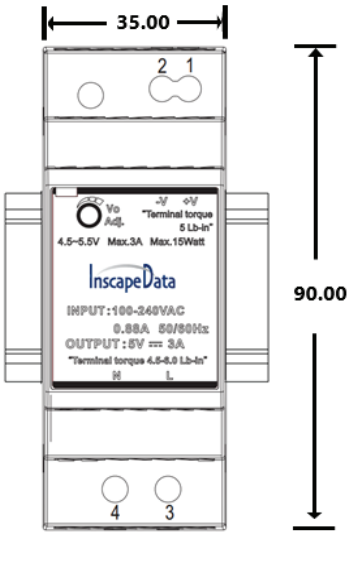
PARAMETER	LPS-DDR-12	LPS-DDR-24
DC Output Voltage	**12 V**	**24 V**
Rated Output Current	**2 A**	**1.5 A**
Output Current Range	**0–2 A**	**0–1.5 A**
Rated Output Power	**24 W**	**36 W**
Ripple & Noise (Max.)	**120 mVp-p**	**150 mVp-p**
Output Voltage Adjustment Range	**10.8–13.8 V**	**21.6–29 V**
Voltage Adjust Range	**9–14 V**	**24–28 V**
Overvoltage	**10.8–13.8 V**	**21.6–29 V**
Voltage Tolerance	**±1.0%**	**±1.0%**
Line Regulation	**±1.0%**	**±1.0%**
Load Regulation	**±1.0%**	**±1.0%**
Typical Efficiency	**89%**	**89.5%**

Common Input / Protection / Environment / Safety Data

PARAMETER	SPECIFICATION
Voltage Input Range	48–60 VDC
Frequency Range	47–63 Hz
Overload	Normally operates within 150% of rated output power for more than 3 seconds; then constant-current protection at 105–135% of rated output power with automatic recovery
Operating Temperature	−30 to +70°C (refer to derating curve)
Operating Humidity	20–90% RH, non-condensing
Storage Temperature / Humidity	−40 to +85°C; 10–95% RH, non-condensing
Operating Altitude	2,000 m
Isolation Resistance	I/P–O/P: 100 MΩ / 500 VDC / 25°C / 70% RH
Safety Standards	IEC 62368-1; UL 62368-1; EAC TP TC 004; AS/NZS 62368.1 approved; design refers to UL 508
MTBF	3670.4K hours min. — Telcordia SR-332 (Bellcore); 968.1K hours min. — MIL-HDBK-217F (25°C)

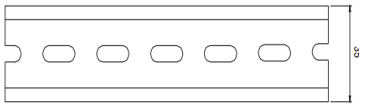
EMC COMPLIANCE
EMC Emissions: BS EN/EN 55032 (CISPR 32), CNS 15936; BS EN/EN 61000-3-2; BS EN/EN 61000-3-3. EMC Immunity: BS EN/EN 55035, BS EN/EN 61000-6-2, BS EN/EN 61204-3; including ESD, radiated susceptibility, EFT/burst, surge, conducted susceptibility, magnetic field, and voltage dips/interruption tests.

Mechanical Specification





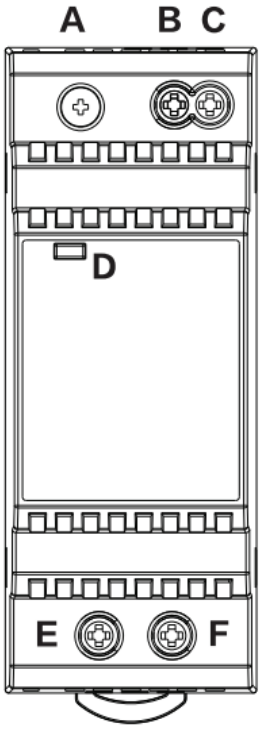
1. Size: L 94.2mm x W 35mm x H 58.4mm
2. Input: Screw lock wire terminals
3. Output: Screw lock wire terminals



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

Terminal Pin Assignment

ITEM	MARK	FUNCTION
A		Output Voltage Adjustment
B	V+	DC Output Positive
C	V−	DC Output Negative
D		Power Status Indicator
E	⊖	DC Negative Input
F	⊕	DC Positive Input



NOTE:

1. Please check whether the input and output cables are correct before powering on, so as not to damage the user equipment.
2. After plugging in, the power status indicator lights up. If it does not light up, please check whether the wiring is wrong. If there is no normal output, please send it for repair.
3. In actual use, if the required power does not match the selected model, please inform us in time so that the matching model can be replaced in time.
4. Do not install the power supply in a place with direct sunlight, high temperature, rain, or dust, and try to install it in a place with good ventilation and heat dissipation.
5. Install the power supply out of the reach of children.

InscapeData

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