

DC-DC Converters

DLS-1224DC-HWDIN Series

12V DC to 24V DC High Watt DIN Rail Type Power Supply



- *High efficiency*
- *High precision*
- *Heavy duty applications*

DLS-1224DC-HWDIN Series DC-DC Converter Datasheet

10-18 VDC Input and 24VDC output



Applications:

- Automotive
- Telecommunications
- Distributed power
- Defense
- Aerospace
- Medical
- And other applications requiring high efficiency

General Description:

Nelso® is manufacturer of high precision, high reliability DIN Rail type DC-DC Converter in Kolkata, India. This product is designed to provide 12V to 24V power conversion for heavy duty applications.

Features:

- Input-output isolation
- High efficiency
- High precision
- Wide input voltage range
- Over-voltage protection
- Under voltage protection
- Reverse polarity protection
- Voltage transient protection
- Over load protection
- Short circuit protection

Quick Reference Data:

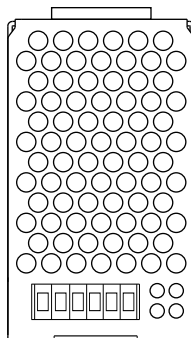
| Model No. | Input Voltage | Output Voltage | Output Current | Efficiency | Ripple |
|------------------|---------------|----------------|----------------|------------|--------|
| DLS-1224DC-HWDIN | 12V DC | 24V DC | 2-10A | >80% | <150mV |

Electrical Specification:

| | |
|--------------------------------------|--|
| Input Voltage: | 10V - 18V DC |
| Output Voltage: | 24V DC (Regulated) |
| Max. Output Current / Wattage: | 2 - 10A / 48W-240W |
| Reverse Polarity: | 100V DC |
| Line Regulation: | ±0.5% |
| Load Regulation: | ± 1% at terminal block |
| Switching Frequency: | 80 KHz |
| Efficiency: | >80% Typical |
| Topology: | Transformer isolated forward converter |
| Operating Temperature: | -20 to 60 °C |
| Humidity: | Up to 95% RH |
| Heat Sink Temperature: | 100°C |
| Storage Temperature Range: | - 55°C to + 105°C |
| Weight: | 800gm |
| Dimension (Length x Width x Height): | 114 x 63 x 125 mm |

Mechanical Dimension of DC-DC Converter

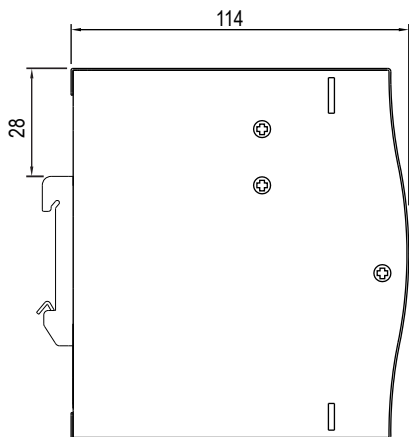
* All units are in "mm"



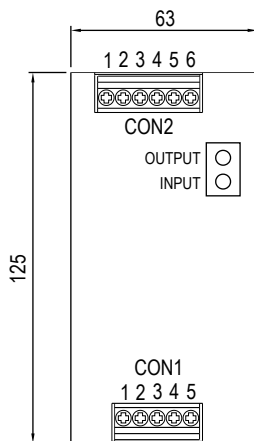
Top View

Terminal Pin No. Assignment (CON2)

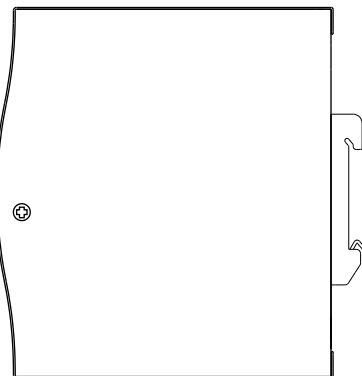
| Pin No. | Assignment |
|---------|---------------|
| 1,2,3 | DC Output +Vo |
| 4,5,6 | DC Output -Vo |



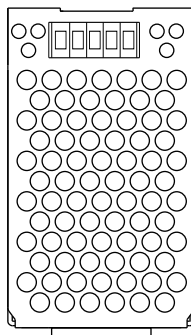
Side View



Front View



Side View



Bottom View

Terminal Pin No. Assignment (CON1)

| Pin No. | Assignment |
|---------|---------------|
| 1 | FG ⊕ |
| 2,3 | DC Input -Vin |
| 4,5 | DC Input +Vin |