

# DC-DC Converters

## *DLS-2448DC-HWDIN Series*

*24V DC to 48V DC High Watt DIN Rail Type Power Supply*



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

# DLS-2448DC-HWDIN Series DC-DC Converter Datasheet

## 20-28 VDC Input and 48VDC 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 24V to 48V 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:

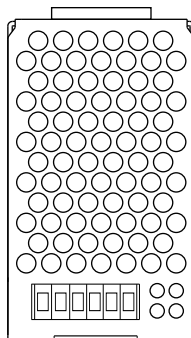
Model No.	Input Voltage	Output Voltage	Output Current	Efficiency	Ripple
DLS-2448DC-HWDIN	24V DC	48V DC	2-8A	>80%	<150mV

### Electrical Specification:

Input Voltage:	20V - 28V DC
Output Voltage:	48V DC (Regulated)
Max. Output Current / Wattage:	2 - 8A / 96W-384W
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

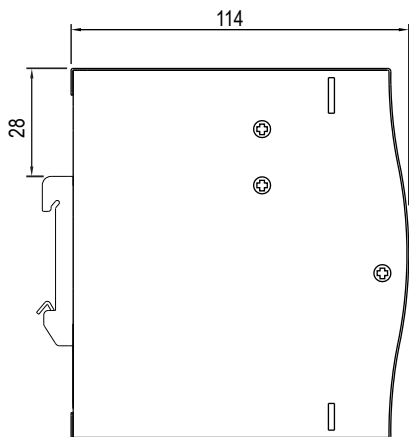
\* All units are in "mm"



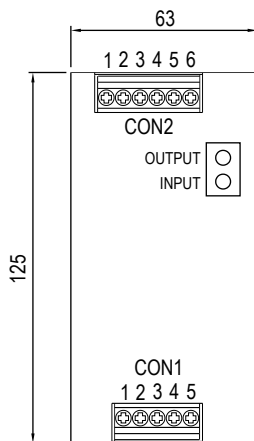
Top View

Terminal Pin No. Assignment (CON2)

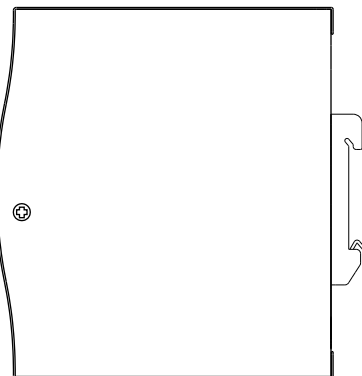
Pin No.	Assignment
1,2,3	DC Output +Vo
4,5,6	DC Output -Vo



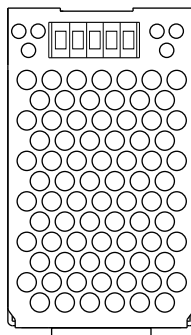
Side View



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