# **DC-DC Converters**

## DLS-11048DC-HW Series

110V to 48V DC Power Supply



- I High efficiency
- I High precision
- I Heavy duty applications

## DLS-11048DC-HW Series DC-DC Converter Datasheet 100-130 VDC Input and 48VDC output



### **Applications:**

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

#### **General Description:**

Nelso<sup>®</sup> is manufacturer of high precision, high reliability DC-DC Converter in Kolkata, India. This product is designed to provide 110V 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<br>Voltage | Output<br>Voltage | Output<br>Current | Efficiency | Ripple |
|----------------|------------------|-------------------|-------------------|------------|--------|
| DLS-11048DC-HW | 110V DC          | 48V DC            | 11-15A            | >80%       | <150mV |

#### **Electrical Specification:**

| Input Voltage:                       | 100V - 130V DC                         |  |  |  |
|--------------------------------------|--|--|--|--|
| Output Voltage:                      | 48V DC (Regulated)                     |  |  |  |
| Output Current / Wattage:            | 11 - 15A / 528W-720W                   |  |  |  |
| Reverse Polarity:                    | 200V DC                                |  |  |  |
| Line Regulation:                     | ±1%                                    |  |  |  |
| Load Regulation:                     | ± 5% at terminal block                 |  |  |  |
| Switching Frequency:                 | 80 KHz                                 |  |  |  |
| Efficiency:                          | >80% Typical                           |  |  |  |
| Topology:                            | Transformer isolated forward converter |  |  |  |
| Operating Temperature:               | -20 to 80 °C                           |  |  |  |
| Humidity:                            | Up to 95% RH                           |  |  |  |
| Cooling Process:                     | Forced convection cooling by fan       |  |  |  |
| Storage Temperature Range:           | - 55°C to + 105°C                      |  |  |  |
| Weight:                              | 1400gm                                 |  |  |  |
| Dimension (Length x Width x Height): | 242 x 155 x 95mm                       |  |  |  |

#### **Dimension and Pin Assignment**

