



CLD50 SERIES

50 WATT DUAL OUTPUT LED POWER SUPPLY



Features

- * Universal AC Input Range 90-264Vac
- * High Active PFC >0.9
- * Low Inrush Current <5A
- * Low Profile for Easy Installation
- * Low Flicker for Lighting, with Low ripple & noise
- * Output Constant Current Design
- * Continuous Short Circuit Protection
- * Suitable for LED Lighting and Moving Sign Applications
- * Safety meet IEC/EN61347, PSE



| MODEL | Input Voltage Range | Output Operating Voltage | | Output Rated Current | Output Rated Power | Output Voltage Maximum | Ripple and Noise (max.) Note2 | Efficiency (Typical) Note3 |
|--------------------|---------------------|--------------------------|----------|----------------------|--------------------|------------------------|-------------------------------|----------------------------|
| CLD50D240 -C100 | 90-264Vac | V1 | 8-24VDC | 1000mA | 24W | 30VDC | 300mVpp | 85% |
| | | V2 | 8-24VDC | 1000mA | 24W | 30VDC | 300mVpp | |
| CLD50D420 -C060 | 90-264Vac | V1 | 18-42VDC | 600mA | 25.2W | 48VDC | 300mVpp | 86% |
| | | V2 | 18-42VDC | 600mA | 25.2W | 48VDC | 300mVpp | |

Note:

1. Nominal Input Voltage: 100Vac, 230Vac
2. Ripple and Noise are measured at rated current, 100Vac, $V_o=36Vdc$ (CLD50D420), 21V(CL D50D240) and 20MHz bandwidth with a 0.1uF ceramic capacitor.
3. Measured at rated current, 100Vac, $V_o=36Vdc$ (CLD50D420), 21Vdc(CL D50D240)

Specifications

All specifications are Typical at nominal line, full load and 25°C unless otherwise noted

INPUT SPECIFICATIONS:

AC Input Voltage 90~264Vac
 Frequency 50 to 60Hz
 Power Factor 100Vac/220Vac PF \geq 0.9 at 85%~100% Load
 Inrush Current 230Vac Cold start 20A max.
 After 400us <5A
 Leakage Current 3.5mA max.

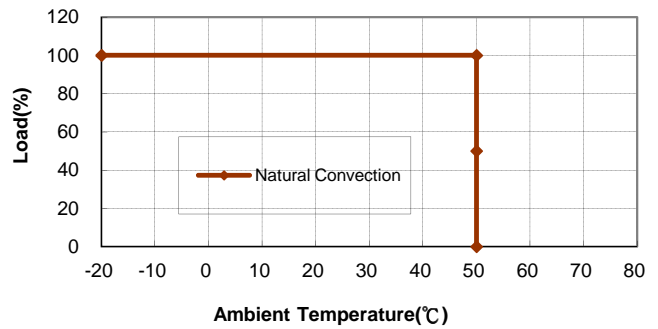
OUTPUT SPECIFICATIONS:

Maximum Output Voltage (note1) See Table.
 Constant Current Accuracy \pm 5% max.
 Current Line Regulation (note 2) \pm 5% max.
 Current Load Regulation (note 3) \pm 5% max.
 Over Voltage Protection Voltage Clamp by TVS
 Short Circuit Protection Constant Current with Auto Recovery
 Start up time 100Vac 1.6 second max.

GENERAL SPECIFICATIONS:

Efficiency See Table
 Temperature Coefficient \pm 0.03%/°C (0~50°C)
 Isolation voltage Input to output 3.75KVac
 Input to Ground 1.5KVac
 Isolation resistance Input to output 10⁸ Ω
 Operating Ambient Temperature -20 ~ 500
 Cooling Natural Convection
 Storage Temperature -40 ~ 85°C
 Operating Humidity 10%~80%RH Non-Condensing
 Operating Altitude Sea Level to 10000feet
 Vibration 0~500Hz, 2G 60min./1cycle, period for 3hours, 3 axes
 Shock 30g peak, half sine, 6 axes
 MTBF, MIL-HDBK-217F (25°C) 200Khrs typ.

CLD50 Derating Curve



SAFETY AND EMISSIONS:

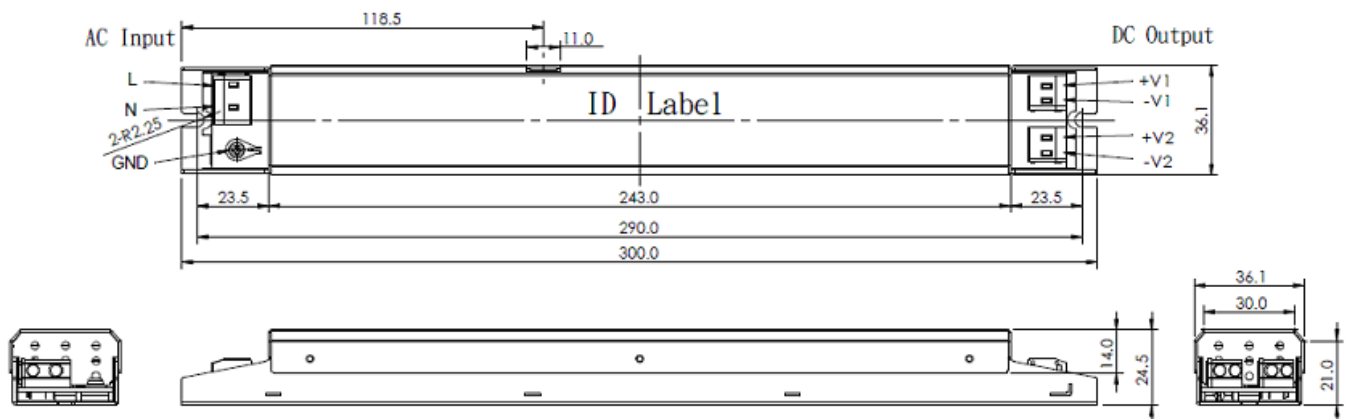
Safety meet UL8750, IEC/EN61347-1
 IEC/EN61347-2-13
 EMI EN55022/EN55015 Class
 EMS EN61547, EN61000-4-2,3,4,5,6,8,11
 EN61000-3-2 Harmonic
 Dimensions 300x36.1x24.5 mm
 Weight 230g
 Case Material Aluminum

NOTE:

1. Output voltage is measured at no load.
2. Current line regulation is measured from high line to low line.
3. Current load regulation is measured from high to low operating voltage.

Mechanical Specification

All Dimensions In mm
 Tolerance Millimeters: x.x= \pm 0.5, x.xx= \pm 0.25



Input Connector: WAGO 235-502 2Pin or Equivalent
 Output Connector: WAGO 235-402 2Pin or Equivalent