



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, Vo=36Vdc(CLD50D420), 21V(CLD50D240) and 20MHz bandwidth with a 0.1uF ceramic capacitor.
3. Measured at rated current, 100Vac, Vo=36Vdc(CLD50D420), 21Vdc(CLD50D240)

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.

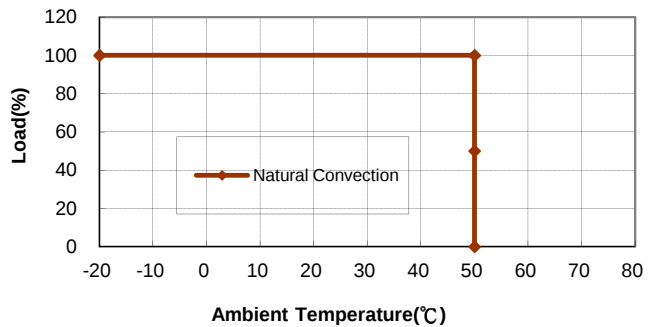
OUTPUT SPECIFICATIONS:

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 $\pm 0.03\%/^{\circ}\text{C}$ (0~50°C)
Isolation voltage Input to output 3.75KVac
Input to Ground 1.5KVac
Isolation resistance Input to output $10^8 \Omega$
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

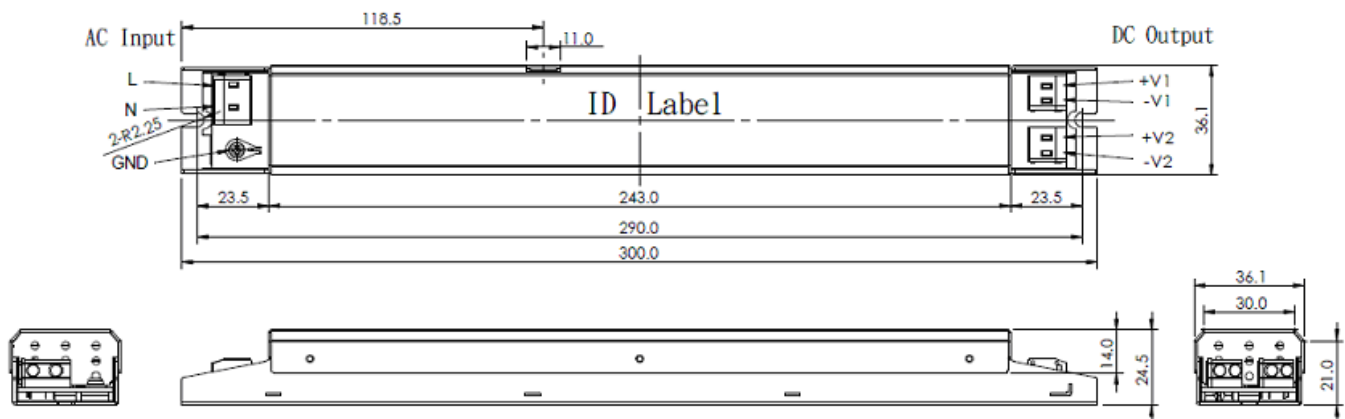
NOTE:

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= ± 0.5 , x.xx= ± 0.25



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