

Specification

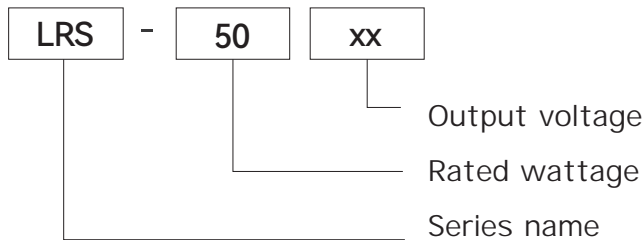
LRS-50

- product category: 50w single output power supply
- version No: ZTAO3.0
- release date: May 1st, 2025

Description

International full-range AC input, no-load power consumption <0.9W, small size 1U low appearance, protection types: short circuit/overload/overcurrent protection, natural air cooling, power start LED indicator light, 100% full-load burn-in test, 3-year warranty

Model Encoding



Features

- International full-range AC input
- no-load power consumption <0.9W
- small size 1U low appearance
- protection types: short circuit/overload/overvoltage
- air cooling
- power start LED indicatorlight
- 100% full-load burn-in test
- 3 years warranty

Application

Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



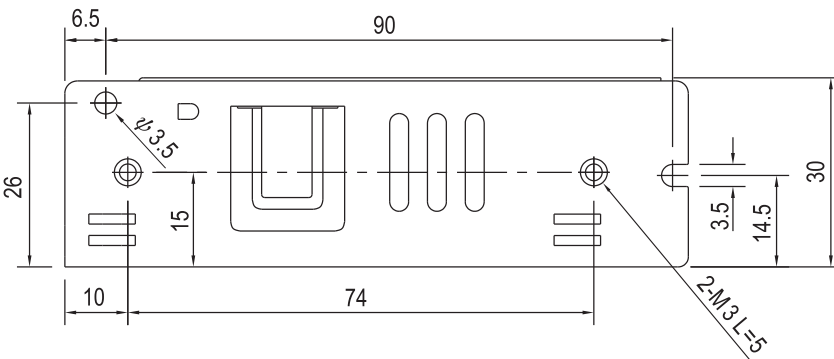
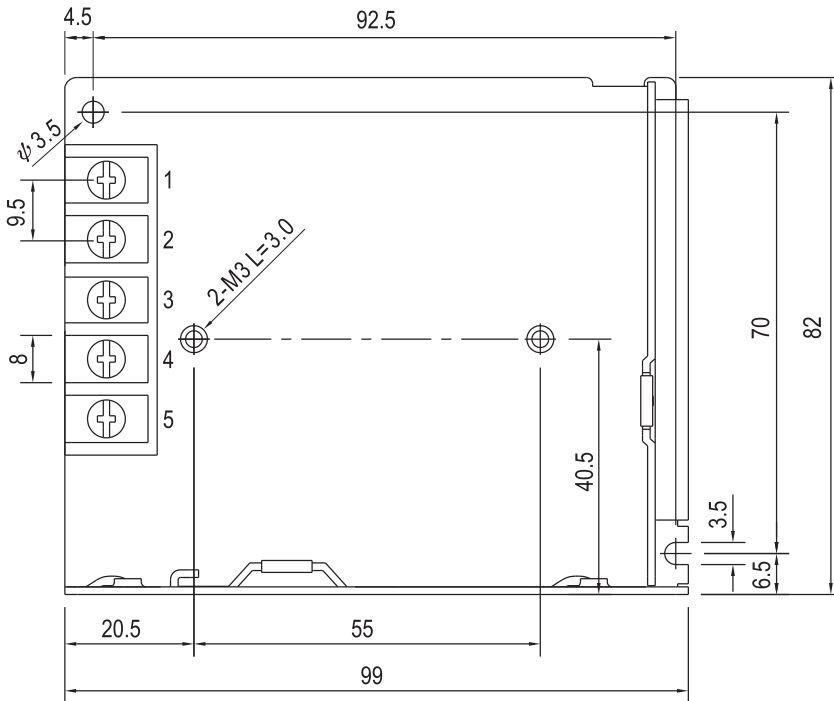
Model Specification

| Model | | LRS-50-5 | LRS-50-12 | LRS-50-15 | LRS-50-24 | LRS-50-36 | LRS-50-48 |
|-------------|-------------------------|--|------------|------------|------------|------------|------------|
| Output | DC Voltage | 5V | 12V | 15V | 24V | 36V | 48V |
| | Rated Current | 10A | 4.2A | 3.4A | 2.2A | 1.45A | 1.1A |
| | Current Range | 0~10A | 0~4.2A | 0~3.4A | 0~2.2A | 0~1.45A | 0~1.1A |
| | Rated Power | 50W | 50.4W | 51W | 52.8W | 52.2W | 52.8W |
| | Ripple&Noise(max.) | 80mVp-p | 100mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 150mVp-p |
| | Voltage ADJ. Range | 4.5~5.5V | 10.2~13.8V | 13.5~16.5V | 21.6~26.4V | 32.4~39.6V | 43.2~52.8V |
| | Voltage Tolerance | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% |
| | Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | Load Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | Setup,Rise time | 1000ms,30ms/230VAC 2000ms,30ms/115VAC at full load | | | | | |
| | Hold up time | 30mS/230VAC; 12mS/115VAC at full load | | | | | |
| Input | Voltage Range | 90~264VAC 127~370VDC | | | | | |
| | Frequency Range | 50~60HZ | | | | | |
| | Efficiency | 84% | 86% | 86% | 89% | 89% | 90% |
| | AC Current | 0.95A/115VAC 0.56A/230VAC | | | | | |
| | Inrush Current | < 1mA/240VAC | | | | | |
| Protection | Overload | 125~150% rated output power | | | | | |
| | | Hiccup protection, Recovers automatically after fault condition is removed | | | | | |
| | Over Voltage | 5.9~7.3V | 13.8~16.2V | 18.7~21.7V | 28.8~33.6V | 41.4~48.6V | 55.2~64.8V |
| Environment | Working Temp. | -20°C ~+65°C | | | | | |
| | Working Humidity | 20~90%RH non-condensing | | | | | |
| | Storage Temp., Humidity | -40~+80°C 10~95%RH, non-condensing | | | | | |
| | Vibration | 10~500HZ, 5G 10 min/1cycle,period for 60min, each along X、 Y、 Z axes | | | | | |
| Safety | Withstand Voltage | I / P - O / P :1.5KVAC; I / P - F G :1.5KVAC; O / P - F G :500VAC | | | | | |
| | Isolation Resistance | I/P-O/P、 I/P-FG、 O/P-FG:100 Ohms/500VDC/25°C /70%RH | | | | | |
| Others | Dimension | 99*82*30mm (L*W*H) | | | | | |
| | Packing | 0.2kg/pcs | | | | | |

Note

- All parameters Not specially mentioned are measured at 230VAC input,rated load and 25°C ambient temperature,
- Ripple&noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf&47uf parallel capacitor.
- Tolerance: includes set up tolerance,line regulation and load regulation
- Line regulation is measured from low line to high line at rated load
- Load regulation is measured from 0% to 100% rated load.
- Length of set up time is measured at cold first start,Turning ON/OFF the power supply very quickly may lead to increase of the set up time
- The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m(6500ft)

Mechanical Specification and Installation (mm)



Terminal Pin No. Assignment

| Pin | Assignment | Pin | Assignment |
|-----|------------|-----|--------------|
| 1 | AC/L | 4 | DC OUTPUT -V |
| 2 | AC/N - | 5 | DC OUTPUT +V |
| 3 | FG = | | |

| Pin | Function |
|-----|-------------|
| L | AC LINE |
| N | AC NETURAL |
| ⊖ | EARTH |
| -Vo | DC output - |
| +Vo | DC output + |
| | |
| | |
| | |
| | |

screw: M4*9.5
twisting force : 22Kgf.cn(2.2N.m)

螺丝: M4*9.5
扭力: 22Kgf.cn (2.2N.m)

8-M4 客户系统安装孔

安装螺丝: M4

安装扭力: 8Kgf.cn (0.8N.m)

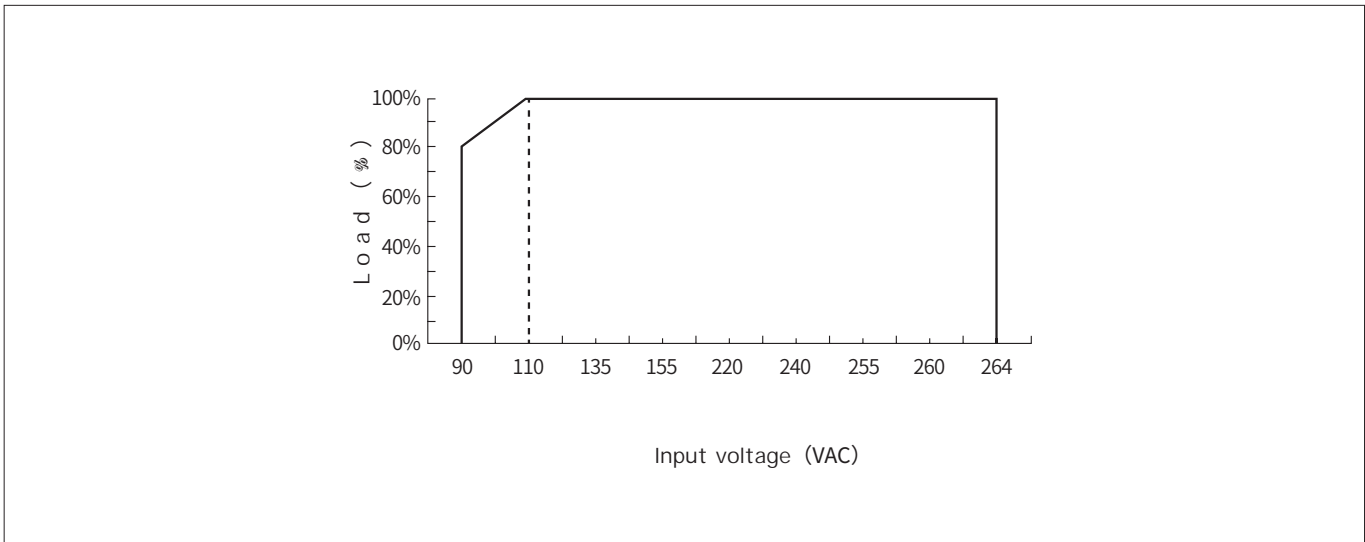
螺丝伸入机壳不大于 3mm

备注:

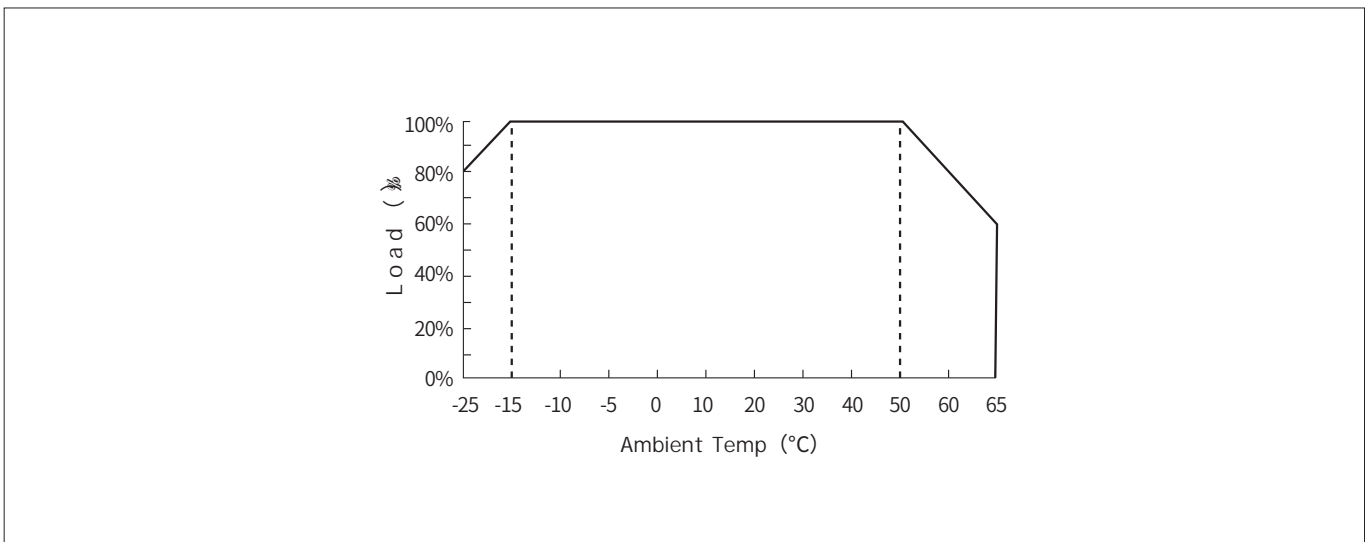
单位: mm[inch]; 未标注公差为 $\pm 0.5[\pm 0.020]$

characteristic curve

Input voltage VS Output load



AMBIENT TEMPERATURE VS Output Load



- Note:
- 1.If you need to know more detailed test data when applying, please contact our technical support to obtain the application notes of the corresponding product.
 - 2.This product is suitable for use in a natural air convection environment. If it is to be used in a closed environment, please contact our technical support personne