

# Model SCD-PS

## POWER OUTPUT MODULE

### 1      **Warning**

- ⚠ This instruction will be helpful in the installation, electronic specification, function specification and troubleshooting of the SCD-PS.
- ⚠ This is an OPEN TYPE SCD-PS series. The SCD-PS series should be kept in an enclosure away from airborne dust, high humidity, electric shock risk and vibration. Also, it is equipped with protective methods such as some special tools or keys to open the enclosure, so as to avoid the hazard to users and the damage to the SCD-PS series.
- ⚠ Never connect the AC main circuit power supply to any of the output terminals, as it will damage the SCD-PS series. Check all the wiring prior to power up. To avoid any electromagnetic noise, make sure the SCD-PS series is properly grounded ⚡.

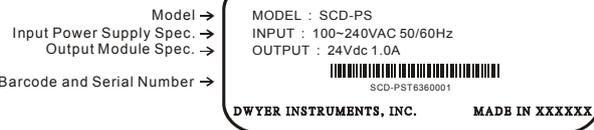
### 2      **Introduction**

#### 2.1 Model Explanation

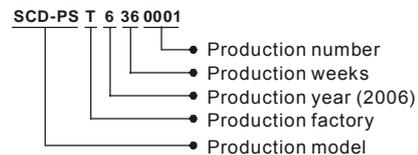
Thank you for choosing Love Control's SCD series. The Model SCD-PS is a power module and provides 24VDC and 1A current for output power. It is only used for Love SCD series. The Model SCD-PS is separated from the PLC MPU for better space utilization and easier installation.

#### SCD-PS

##### Nameplate Explanation

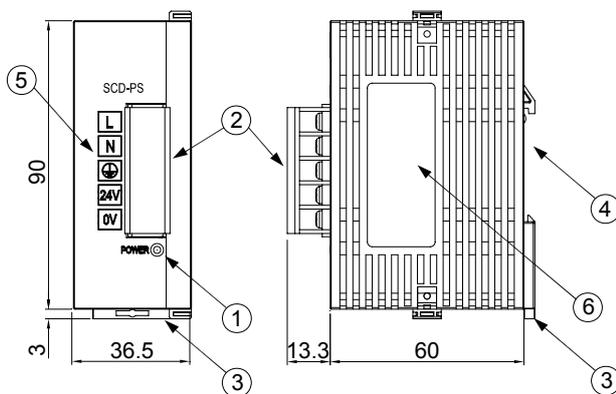


##### Serial Number



#### 2.2 Product Profile and Outline

#### SCD-PS



- 1 Power LED
- 2 Output/input terminal (fixed terminal)
- 3 DIN rail clip
- 4 DIN rail track (35mm)
- 5 I/O terminal label
- 6 Nameplate

### 3      **Function/Electrical Specification**

Item	Model	SCD-PS
Power Input		100~240 VAC (-15%~+10%), 50 / 60 Hz
Output Power		24VDC (±3%), output current: 1A max.
Ripple & Noise		Under 100mV <sub>p-p</sub> Typical at full load

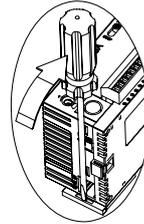
Item	Model	SCD-PS
Efficiency		78%~87% Typical at full load
Over Load / Short Circuit Protection		Auto Recovery
Grounding		The diameter of grounding wire cannot be smaller than the wire diameter of terminals L and N (All PLC units should be grounded directly to the ground pole).
Operation/Storage Environment		Operation: 0°C~55°C (Temperature), 50~95% (Humidity), Pollution degree 2; Storage: -25°C~70°C (Temperature), 5~95% (Humidity)
Agency Approvals		Underwriters Laboratories, Inc.: UL508 Listed (Industrial Control Equipment) European Community EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC
Weight (g)		158

## 4 Installation and Wiring

### 4.1 Mounting Arrangements and Wiring

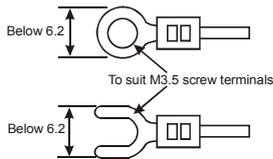
#### ■ DIN Rail Installation

The SCD-PS can be secured to a cabinet by using the DIN rail that is 35mm high with a depth of 7.5mm. When mounting the SCD-PS on the DIN rail, be sure to use the end bracket to stop any side-to-side motion of the SCD-PS, thus to reduce the chance of the wires being pulled loose. On the bottom of the SCD-PS is a small retaining clip. To secure the SCD-PS to the DIN rail, place it onto the rail and gently push up on the clip. To remove it, pull down on the retaining clip and gently pull the SCD-PS away from the DIN rail. Please see the figure on the right:



For heat dissipation. Make sure to provide a minimum clearance of 50mm between the unit and all sides of the cabinet. (as shown below)

#### ■ Wiring



#### Notes:

1. Please use O-type or Y-type terminals for I/O wiring terminals. The specification for the terminals is as shown on the left. Tighten PLC terminal screws to a torque of 5~8 kg-cm (4.3~6.9 in-lbs).
2. Please avoid tiny metal material enter SCD-PS when screwing and wiring. After finishing wire, remove the affix that pasted on the heat sink for heat dissipation.
3. Use Copper Conductors Only, 60°C.

### 4.2 Wiring Notes

#### ■ Environment

1. **DO NOT** store the SCD-PS in a dusty, smoky, or corrosive atmosphere.
2. **DO NOT** store the SCD-PS in an environment with high temperature or high humidity.
3. **DO NOT** install PLC on a shelf or on an unstable surface.

#### ■ Power Input Wiring

Power input of SCD-PS is AC input; following items should be noticed:

1. Connect the AC input (100VAC ~ 240VAC) to terminals L and N. Any AC110V or AC220V connected to the +24V terminal will permanently damage the SCD-PS.
2. Please use wires of 1.6mm and above for the grounding.
3. If the power-cut time is less than 10ms, the SCD-PS still operates unaffectedly. If the power-cut time is too long, the SCD-PS will stop operating and all the outputs will be Off.

## 5 Trial Run

#### ☼ Power indicator, Running and Test

The "POWER" LED at the front of SCD-PS will be lit (in green) if the power is on. If the indicator is not ON, it indicates that the power supply is not enough or short circuit. Please check your power wiring.

## 6 Troubleshooting

Judge the errors by the indicators on the front panel. When errors occurred on SCD-PS, please check:

#### ☼ 「POWER」 LED

The "POWER" LED at the front of the MPU will be lit (in green) if the power is on. If the indicator is not on when the MPU is powered up, please check if power supply is normal. If the indicator is not on when the MPU is powered up and with the input power being normal, it is an indication that the PLC is malfunction. Please have this machine replaced or have it repaired at a dealer near you.