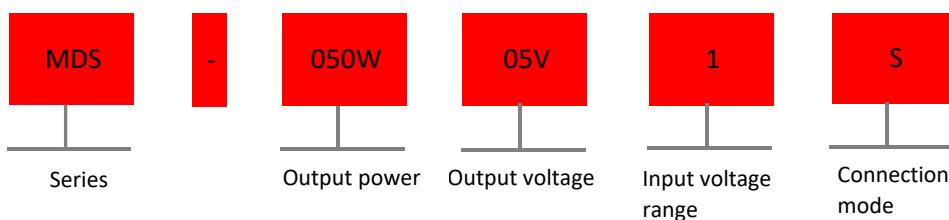


**MDS-050W□□S Series****▲ Specification**

Superior ripple performance  
2:1 wide range input  
100% full load burn-in test  
Protection: Over Voltage/Over load/Short circuit  
Power ON LED indicator  
TS 35 rail installation(with optional rail mounting bracket)  
Cooling by free air convection  
Seismic protection  
“Three pivot point”M4 installation  
Terminal with protective cover  
Alluminum case  
2 years warranty

**▲ Application**

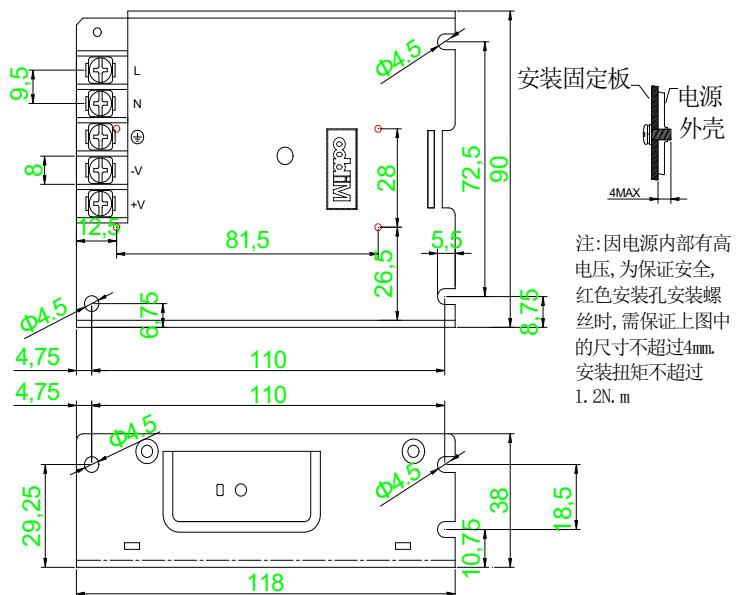
Industrial automation control system  
Intelligent control system  
Electronic instruments and devices  
LED power supply  
Household appliances

**▲ Model encoding**

## Specification

| Input                     |   |                     |                                   |
|---------------------------|---|---------------------|-----------------------------------|
| Input voltage             |   |                     | 1:9.2-18VDC 2:19-36VDC 3:36-72VDC |
| Input current (DC)        |   |                     | 7A/12V 3A/24V 1.5A/48V            |
| Output                    |   |                     |                                   |
| DC voltage (V)            | 5V  | 12V                 | 24V                               |
| Efficiency                | 78%   | 78%                 | 83%                               |
| Voltage ADJ range         | ±10%  |                     |                                   |
| Rated current(A)          | 10.0A   | 4.1A                | 2.1A                              |
| Rated power (W)           | 50W   | 50W                 | 50W                               |
| Ripple & noise(max )note2 | 80mVp-p   | 100mVp-p            | 120mVp-p                          |
| Voltage tolerance note3   | ±2%   | ±1%                 | ±1%                               |
| Line regulation note4     | ±0.5%   | ±0.3%               | ±0.3%                             |
| Load regulation note5     | ±0.5%   | ±0.3%               | ±0.3%                             |
| Setup, rise, hold up time | 10ms(at full load)  |                     |                                   |
| Status indicator          | Green LED   |                     |                                   |
| Protection                |   |                     |                                   |
| Over load                 | 120%-150% of the rated output power<br>Protection mode: Hiccup mode, recover automatically after fault condition is removed |                     |                                   |
| Over voltage (V)          | 5.6-6.8/10% of load   | 16.8-20/10% of load | 31.5-37.5/10% of load             |
|                           | Protection mode: Hiccup mode, recover automatically after fault condition is removed  |                     |                                   |
| Safety and EMC            |   |                     |                                   |
| Withstand voltage         | I/P-O/P:1.5KVAC   | I/P-FG:1.5KVAC      | O/P-FG:0.5KVAC                    |
| Insulation resistance     | I/P-O/P,I/P-FG,O/P-FG:100M Ohms   | 500VDC/25°C/70 % RH |                                   |
| Safety standard note 6    | 60950-1、GB4943.1  |                     |                                   |
| EMC emission              | Compliance to EN55022(CISPR22)Class B,EN61000-3-2,-3  |                     |                                   |
| EMC immunity              | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61000-6-1.light industry level,criteria A                                   |                     |                                   |
| Environment               |   |                     |                                   |
| Working temperature       | - 20~+70°C (Refer to derating curve)  |                     |                                   |
| Storage temperature       | - 20~+85°C  |                     |                                   |
| Storage humidity          | 10-95 % RH  |                     |                                   |
| Vibration resistance      | 10-500Hz,2G 10Min/Circle 60min in each X,Y,Z direction  |                     |                                   |
| Others                    |   |                     |                                   |
| MTBF                      | ≥360Khrs(9-18/18-36VDC) ≥370Khrs(36-72VDC) MIL-HDBK-217F(25°C)  |                     |                                   |
| Installation              | Screw in plate or install in TS35 rail with the accessory   |                     |                                   |
| Protection class          | IP20  |                     |                                   |
| Weight                    | About 0.28Kg  |                     |                                   |
| Dimension                 | 118*90*38mm(Length* Width*Height)   |                     |                                   |
| Data                      | Description   | Model               |                                   |
|                           | MDS 50W 10A 5V 9.2-18VDC  | MDS-050W05V1S       |                                   |
|                           | MDS 50W 10A 5V 18-36VDC   | MDS-050W05V2S       |                                   |
|                           | MDS 50W 10A 5V 36-72VDC   | MDS-050W05V3S       |                                   |
|                           | MDS 50W 4.1A 12V 9.2-18VDC  | MDS-050W12V1S       |                                   |
|                           | MDS 50W 4.1A 12V 18-36VDC   | MDS-050W12V2S       |                                   |
|                           | MDS 50W 4.1A 12V 36-72VDC   | MDS-050W12V3S       |                                   |
|                           | MDS 50W 2.0A 24V 9.2-18VDC  | MDS-050W24V1S       |                                   |
|                           | MDS 50W 2.0A 24V 18-36VDC   | MDS-050W24V2S       |                                   |
|                           | MDS 50W 2.0A 24V 36-72VDC   | MDS-050W24V3S       |                                   |
| Accessory                 | Description   | Model               |                                   |
| Rail Pin                  | TS35 mouting accessory  | MPS-F050B           |                                   |

## Installation instruction



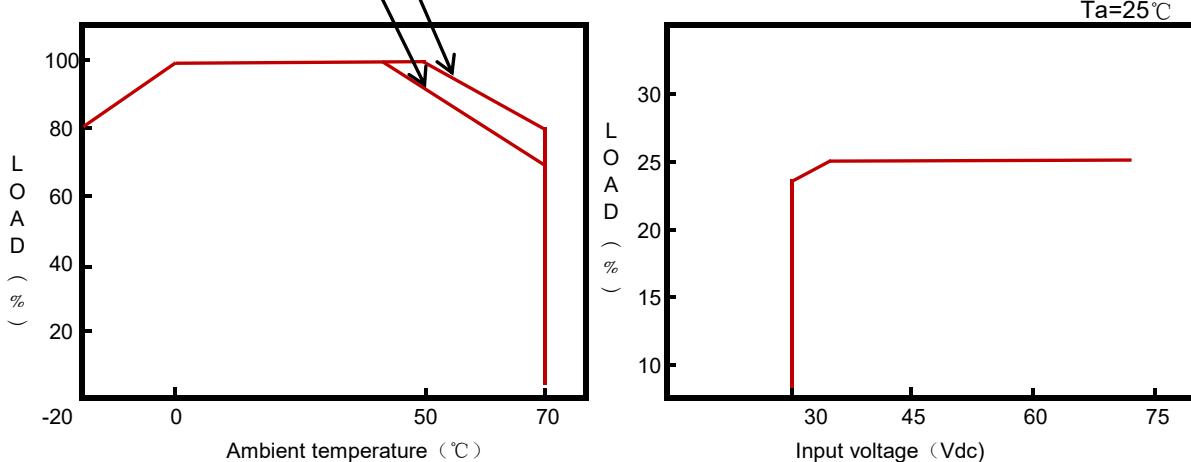
### 接线端子安装说明

| 端子排规格 | U形接线端子宽度 | 线材安装规格   | 最大扭矩        |
|-------|----------|----------|-------------|
| 95端子排 | 8mm MAX  | 22-12AWG | 1.2N.m(MAX) |

## Derating curve

Output :5V/12V/24V, Input:18-36VDC/36-72VDC

Output:5V/12V/24V, Input:9-18VDC



### Note:

- 1:All parameters NOT specially mentioned are measured at 24/48/96VDC, input, rated load and 25°C of ambient
- 2 .Ripple & noise are measured at 20MHZ of bandwidth by using a 12"twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor."
- 3.Tolerance:includes set up tolerance,line regulation and load regulation.
- 4.Line regulation is measured from High voltage to low voltage at rated load
- 5.Load regulation is measured from 0% to 100% rated load.
- 6.According to the requirements of GB4943.1,the power supply is only used in areas below sea level of 2000M and non-tropical climates.