MDS-100W□□S Series

▲Specification

superior ripple
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)
Efficient natural cooling
Seismic protection
"Three pivot point"M4 installation
Terminal block with protective cover
Alluminum case
3 years warranty

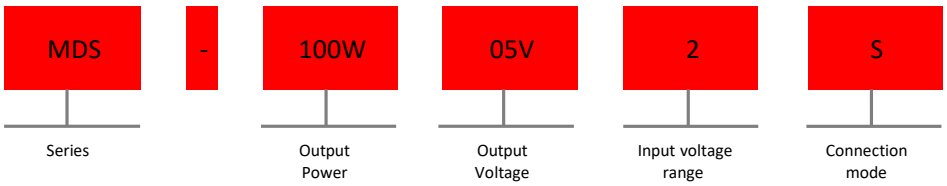
▲Application

Industrial automation control system
Intelligent control system
Electonic instruments and devices

LED power supply

Household appliances

▲Model encoding



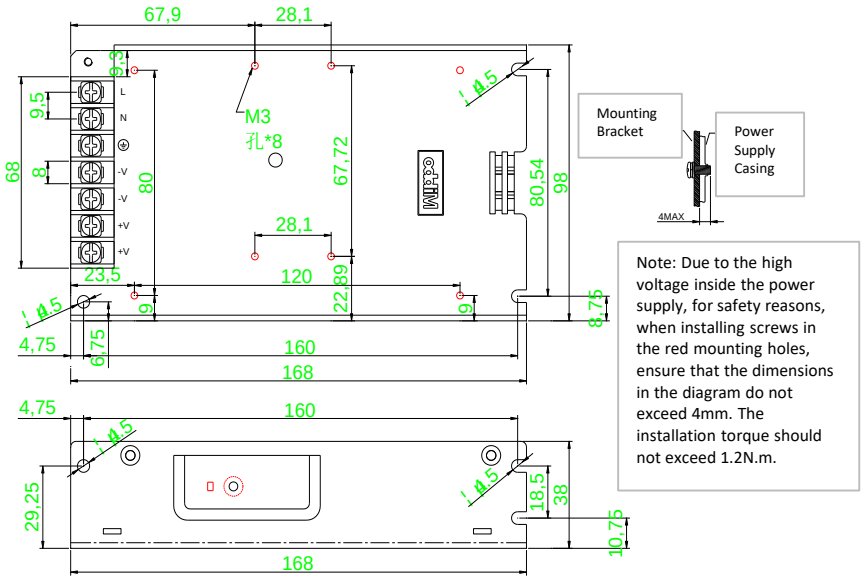
Mibbo

Specification

Input			
Input voltage	2:18-36VDC 3:36-72VDC 4:72-144VDC		
Input Current (DC)	4.8A/24V 2.4A/48V 1.8A/96V		
Output			
DC voltage (V)	5V	12V	24V
Efficiency	73%	77%	78%
Output voltage adjustment range	±10%		
Rated current (A)	20A	8.5A	4.2A
Rated power (W)	100W	102W	100.8W
Ripple & noise(max MVP-P)note2	100mVp-p	120mVp-p	150mVp-p
Voltage tolerance note3	±2%	±1%	±1%
Line regulation note4	±0.5%	±0.3%	±0.3%
Load regulation note5	±1%	±0.6%	±0.6%
Setup, rise time	2s 50ms(Models with input voltage range of 72-144VDC at full load)		
Hold up time	20ms(Models with input voltage range of 72-144VDC at full load)		
Status indicator	Green LED		
Protection			
Over load	110%-150% of the rated output power		
	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: Voltage clamping mode, normal output can be restored after removal and reboot		
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℃/70％RH		
Safety standard note 6	Reference EN IEC 62368-1、GB4943.1		
EMC emission	**Parameters**	**Standard**	**Test level**
	Conducted	EN 55032	Reference Class A
	Radiated	EN 55032	Reference Class A
	Voltage Flicker	EN 61000-3-3	Reference Class A
	Harmonic Current	EN IEC 61000-3-2	Reference Class A
EMC immunity	**Parameters**	**Standard**	**Test level**
	ESD	EN 61000-4-2	Level 3,8KV air;Level 2,4KV contact
	Radiated Susceptibility	EN 61000-4-3	Level 2,3V/m
	EFT/Burest	EN 61000-4-4	Level 3,2KV
	Surge	EN 61000-4-5	Level 3,2KV/Line-Line;Level3,4kV/Line-Lin
	Conducted	EN 61000-4-6	Level 2,3V
	Magnetic Field	EN 61000-4-8	Level 2,3V/m
	Voltage Dips and interruptions	EN 61000-4-11	<5% residual voltage for 0.5 cycles ,70% residual voltage for 25 cycles ,<5% residual voltage for 250
Environment			
Working temperature	-20～+60℃（>50℃ derating, refer to derating curve）		
Storage temperature	-20～+85℃		
Storage humidity	5-95％		
Vibration resistance	10-500Hz,2G 10Min/Circle 60min in each X,Y,Z direction		
Others			
MTBF	≥350Khrs(18-36/36-72VDC) ≥340Khrs(72-144VDC) MIL-HBDK-217F(25℃)		
Installation	Screw in plate or install in TS35 rail with the accessory		
Protection class	IP20		
Weight	About0.4Kg		
Dimension	168*98*38mm		

Data	Description	Model
	MDS 100W 20A 5V 18-36VDC	MDS-100W05V2S
	MDS 100W 20A 5V 36-72VDC	MDS-100W05V3S
	MDS 100W 20A 5V 72-144VDC	MDS-100W05V4S
	MDS 102W 8.5A 12V 18-36VDC	MDS-100W12V2S
	MDS 102W 8.5A 12V 36-72VDC	MDS-100W12V3S
	MDS 102W 8.5A 12V 72-144VDC	MDS-100W12V4S
	MDS 100.8W 4.2A 24V 18-36VDC	MDS-100W24V2S
	MDS 100.8W 4.2A 24V 36-72VDC	MDS-100W24V3S
	MDS 100.8W 4.2A 24V 72-144VDC	MDS-100W24V4S
Accessory	Description	Model
Rail Pin	TS35 mouting accessory	MPS-F050C

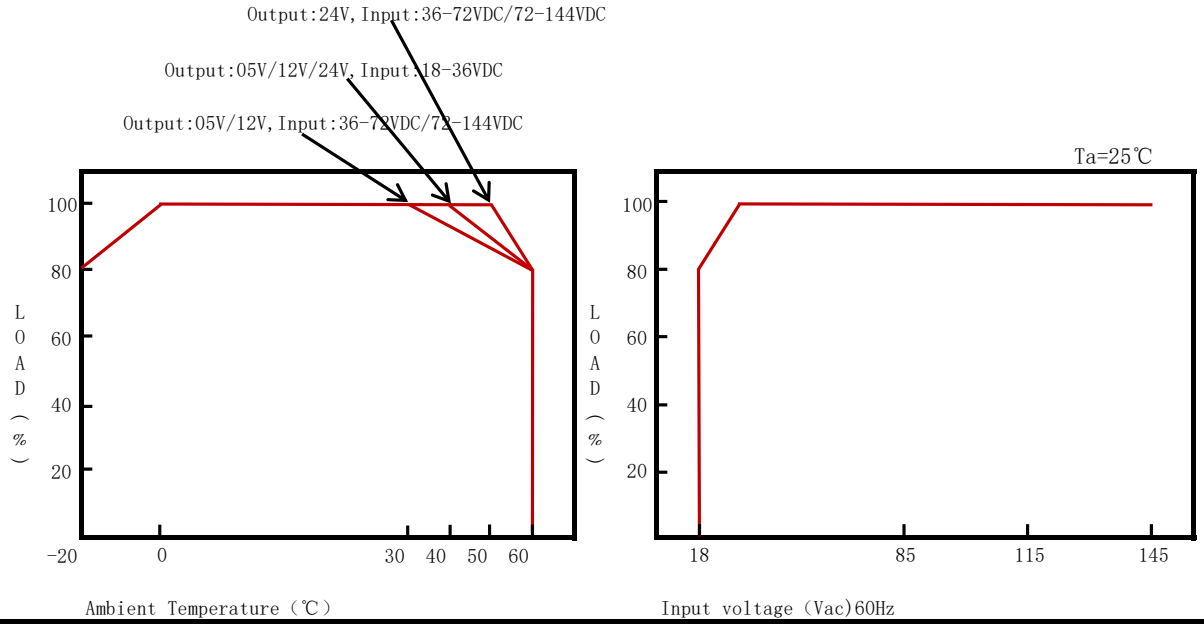
Installation instruction



Wiring Terminal Installation Instructions

Terminal Block	U-Terminal Width	Wire Installation	Max Torque
95	8mm MAX	22-12AWG	1.2N.m(MAX)

Temperature Curve



Note:

1:All parameters NOT specially mentioned are measured at input 24/48/96VDC, rated load and 25℃ ambient Temperature
2:Ripple & noise are measured at 20MHZ of bandwidth by using a "twisted pair-wire teminated 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