

# MF100A Series

## Features

- Universal AC input / full range: 84-264VAC or 120-370VDC
- Active PFC filter build-in, PF>0.95, compliance to EN61000-3-2
- Safety: UL / TUV / CB / CE
- Protections: SCP, OCP, OVP
- LED indicator for power on
- Terminal block: vertical terminal / horizontal terminal / connector modes available (vertical terminal is standard)
- Remote ON / OFF control (optional)
- 100% full load burn-in test
- Compact size, high performance, high reliability
- RoHS compliant
- 2-year warranty



single output  
170 × 99 × 44mm

## General Specifications

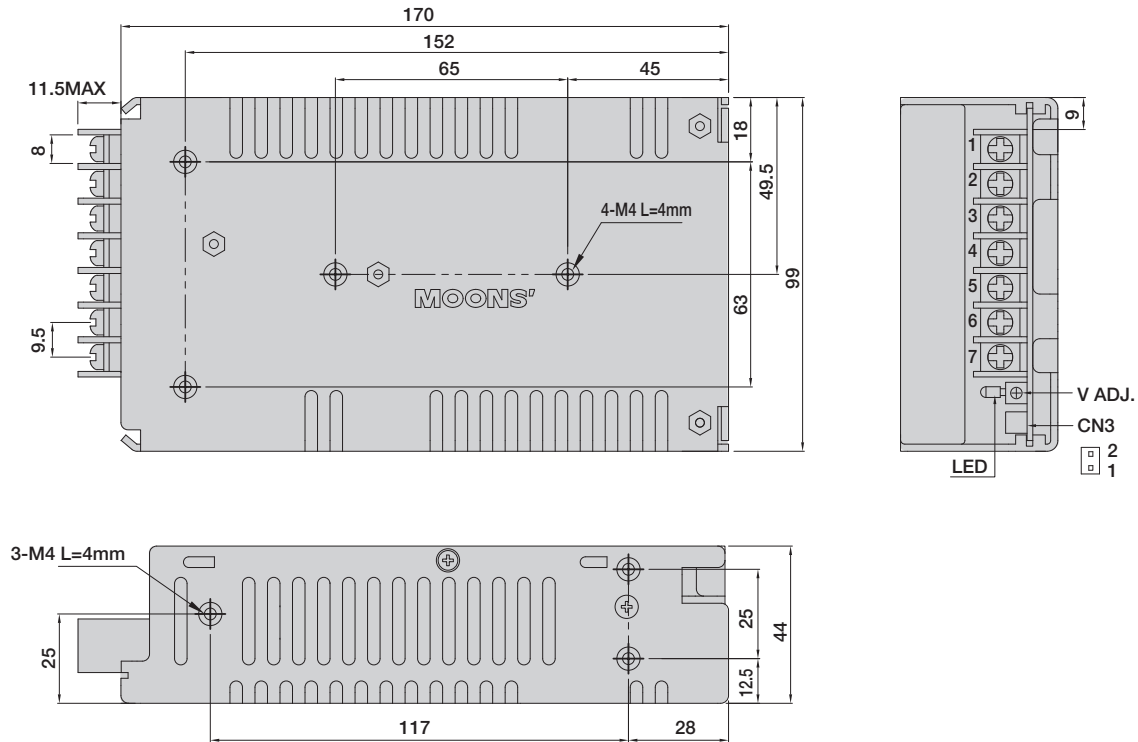
	MF100A 3AG	MF100A 5AG	MF100A 7AG	MF100A 12AG	MF100A 15AG	MF100A 24AG	MF100A 27AG	MF100A 36AG	MF100A 48AG
Rated output voltage	3.3 V	5 V	7.5 V	12 V	15 V	24 V	27 V	36 V	48 V
Output current range	0~20 A	0~20 A	0~13.4 A	0~8.5 A	0~6.7 A	0~4.3 A	0~3.8 A	0~2.9 A	0~2.1 A
Rated output power	66 W	100 W	100 W	102 W	100 W	103 W	102 W	104 W	101 W
Output voltage Adj. range *1	2.97~3.63 V	4.5~5.5 V	6.75~8.25 V	10.8~13.2 V	13.5~16.5 V	21.6~26.4 V	24.3~29.7 V	32.4~39.6 V	43.2~52.8 V
Ripple & noise (p-p) *1, *2	100 mV	100 mV	100 mV	100 mV	100 mV	150 mV	170 mV	190 mV	240 mV
Line regulation *2	20 mV	20 mV	30 mV	48 mV	60 mV	96 mV	112 mV	120 mV	150 mV
Load regulation *2	40 mV	40 mV	60 mV	96 mV	120 mV	120 mV	120 mV	120 mV	120 mV
Output voltage tolerance *2	± 1 %								
Hold-up time (typical) *1	16ms / 20ms								
Input voltage range	85 ~ 264 VAC (47-63Hz) or 120 ~ 370 VDC								
Input current (typical) *1	0.9A / 0.5A	1.2A / 0.6A							
Inrush current (typical) *1	20A / 40A (cold start)								
Power factor (typical)	0.98 / 0.93	0.99 / 0.95							
Efficiency (typical) *1	70% / 71%	75% / 77%	78% / 81%	79% / 82%	80% / 83%	81% / 84%	81% / 84%	81% / 84%	81% / 84%
Leakage current (typical) *1	0.25mA / 0.5mA (MAX 0.75mA)								
Over current protection *3	105% - 150%								
Over voltage protection *4	3.79~4.95 V	5.75~6.95 V	8.62~10.13 V	13.8~16.2 V	17.2~20.3 V	27.6~32.4 V	31.2~36.8 V	41.4~48.6 V	55.2~64.8 V
Temperature coefficient	< 0.02% /°C								
Operating temperature	- 20 ~ + 70°C (Refer to output derating curve)								
Operating humidity	20 ~ 90 %RH (Non-condensing)								
Storage temperature	- 30 ~ +85°C								
Storage humidity	10 ~ 95%RH (Non-condensing)								
Cooling method	Cooling by free air convection / external colling fan								
Withstand voltage	Input / output: 3.0kVAC (20mA); input / FG : 2.0kVAC (20mA); output / FG : 500VAC (20mA), 1 minute								
Isolation resistance	>100MΩ output / FG:500VDC Ta=25°C and 70%RH								
Vibration	10 - 55Hz, 10min. 1 cycle, 2G constant; X, Y, Z axes 1 hour each								
Safety standards	UL60950-1, CSA60950-1, EN60950-1, GB4943								
EMI conduction & radiation *5	Compliance to FCC-Class B, EN55011/EN55022-B, CISPR22 Class B								
EMS immunity *5	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11								
Optional function	Remote ON/OFF control								
Weight (typical)	550 g								
Reference Dimension (L x W x H)	170 × 99 × 44 (mm)								

### Note:

- \*1 All parameters not specially mentioned are measured at 115 / 230VAC input, rated load and 25 °C of ambient temperature.
- \*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 OCP type: constant current limiting, recovers automatically after fault condition is removed (hiccup mode customizable)
- \*4 OVP type: shutdown output voltage, re-power on to recover.
- \*5 The power supply is considered as a component to be installed into a final equipment which should be re-confirmed to meets EMC directives.

## Mechanical Outline (unit: mm)

Model Number: MF100A24AG-V



### Pin Configuration

Pin No.	Output
1	AC / L
2	AC / N
3	FG $\downarrow$
4,5	DC output - V
6,7	DC output +V

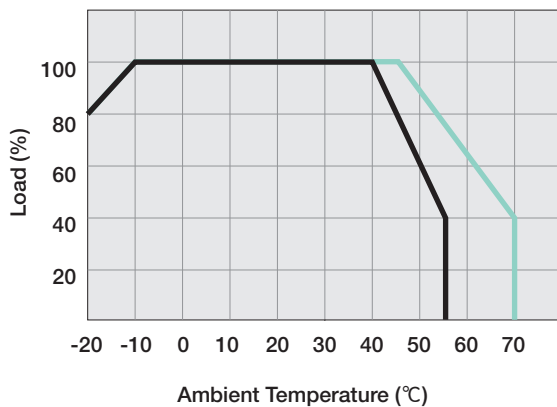
### CN3: JST S2B-XH or Equivalence(Optional)

Pin No.	Output	Matching Conn.	Matching Pin.
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

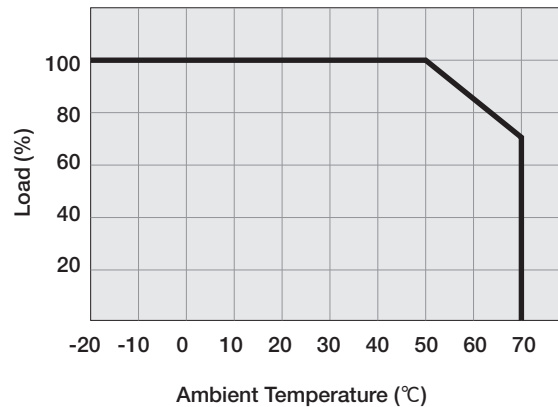
## Derating Curve

### Convection

— 3.3V; 5V — Others



### Force-air Cooling (at 18 CFM or 1.2 m/s)



numbering system

LED driver  
- Outdoor  
- PU series

LED driver  
- Outdoor  
- MU series

LED driver  
- Outdoor  
- Other series

LED driver  
- Indoor  
- PE series

LED driver  
- Indoor  
- Other series

LED driver  
- Intelligent series

general power supplies  
- MF series

general power supplies  
- MS series