

MF150A Series

Features

- Universal AC input / full range: 85-264VAC 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, OTP
- LED indicator for power on
- Terminal block: vertical terminal / horizontal terminal / connector modes available (vertical terminal is standard)
- Peak current for motor applications: models 24V, 27V, 36V, 48V (optional)
- 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 × 50mm

General Specifications

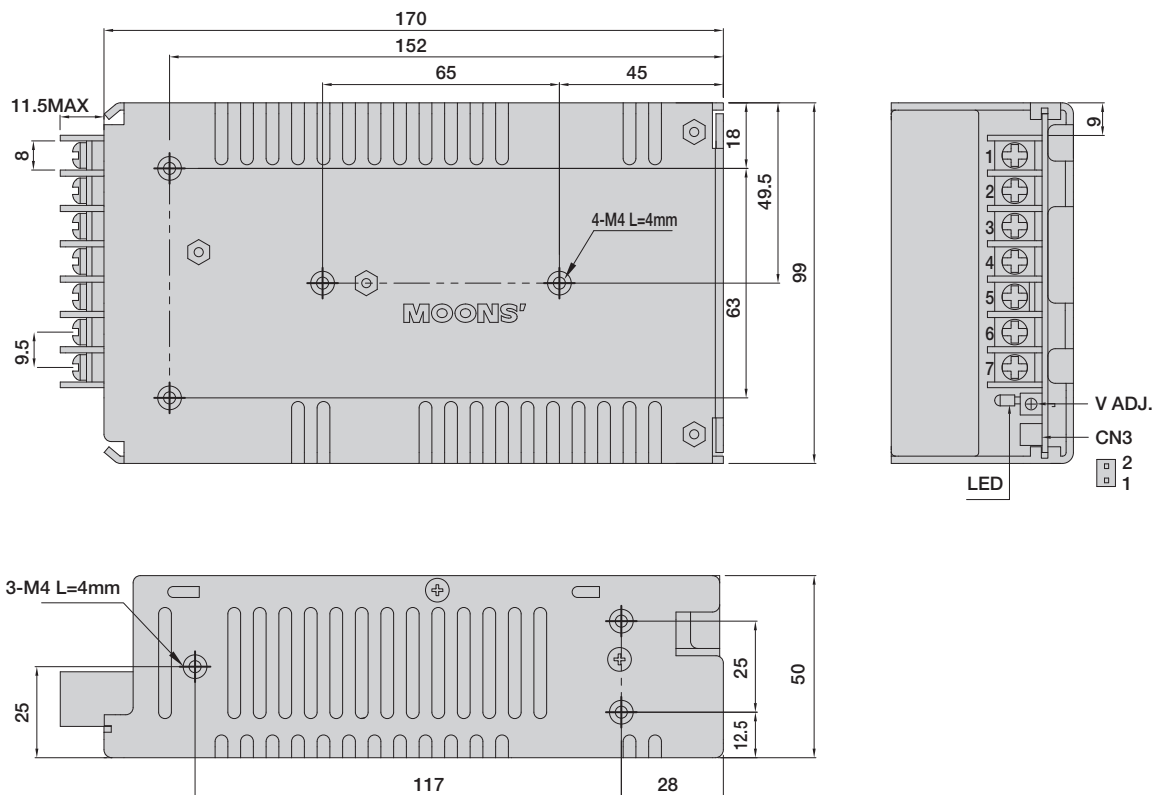
	MF150A 3AG	MF150A 5AG	MF150A 7AG	MF150A 12AG	MF150A 15AG	MF150A 24AG	MF150A 27AG	MF150A 36AG	MF150A 48AG
Rated output voltage	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V
Output current range	0~24A	0~24A	0~16A	0~12.5A	0~10A	0~6.3A	0~5.6A	0~4.2A	0~3.2A
Peak output current (optional)	-	-	-	-	-	9.5A	8.1A	6.3A	4.8A
Rated output power	79W	120W	120W	150W	150W	151W	151W	151W	154W
Output voltage Adj. range *1	2.97~3.63V	4.5~5.5V	6.75~8.25V	10.8~13.2V	13.5~16.5V	21.6~26.4V	24.3~29.7V	32.4~39.6V	43.2~52.8V
Ripple & noise (p-p) *1, *2	100mV	100mV	100mV	100mV	100mV	150mV	170mV	190mV	240mV
Line regulation *2	20mV	20mV	30mV	48mV	60mV	96mV	112mV	120mV	150mV
Load regulation *2	40mV	40mV	60mV	96mV	120mV	120mV	120mV	120mV	120mV
Output Voltage Tolerance *2	± 1 %								
Hold-up time (typical) *1	16ms / 20ms								
Input voltage range	85 ~ 264VAC (47-63Hz) or 120 ~ 370VDC								
Input current (typical) *1	1.3A / 0.7A	1.8A / 0.9A							
Inrush current (typical)	20A / 40A (cold start)								
Power factor (typical)	0.98 / 0.93	0.99 / 0.95							
Efficiency (typical) *1	71% / 73%	76% / 79%	79% / 81%	81% / 84%	81% / 84%	81% / 84%	81% / 84%	82% / 85%	83% / 86%
Leakage current (typical) *1	0.25mA / 0.5mA (MAX 0.75mA)								
Over current protection *3	105% - 150%								
Over voltage protection *4	3.79~4.95V	5.75~6.95V	8.62~10.13V	13.8~16.2V	17.2~20.3V	27.6~32.4V	31.2~36.8V	41.4~48.6V	55.2~64.8V
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	>100 MΩ 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, peak current output, over-temperature protection								
Weight (typical)	620g								
Reference Dimension (L x W x H)	170 x 99 x 50 (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: MF150A24AG-V



Pin Configuration

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

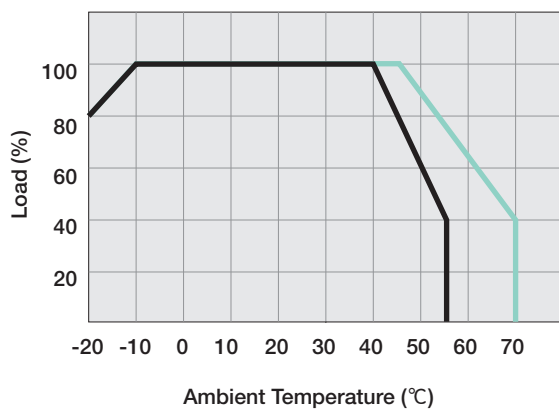
CN3: JST S2B-XH or Equivalent (optional)

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

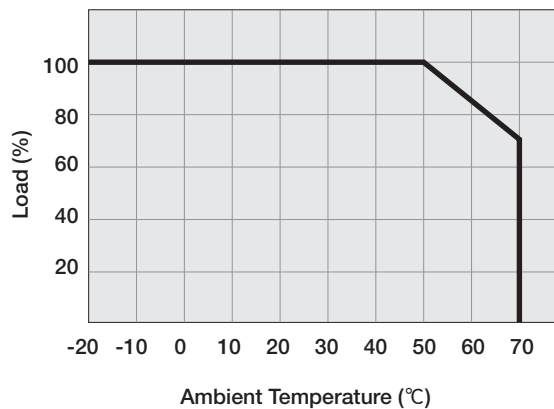
Derating Curve

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