

Features:

1. Wide input range (85-528VAC, 120-750VDC)
2. 89*63*25mm compact size
3. No load power consumption<0.3W
4. Protection type: short circuit/over load/over voltage
5. Meet EN/IEC62368-1
6. 4000VAC isolation voltage
7. 100% high temperature burn-in and function test
8. 3 years warranty



3 years
Warranty

Selection Guide

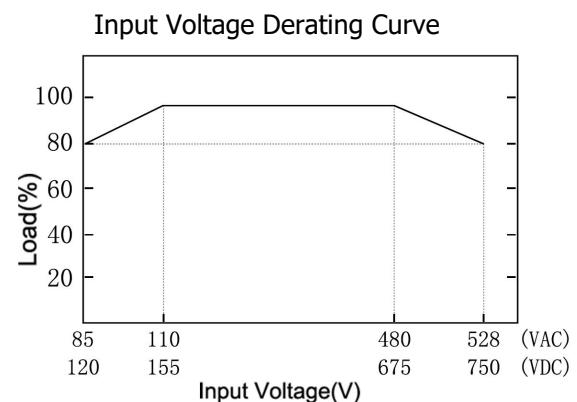
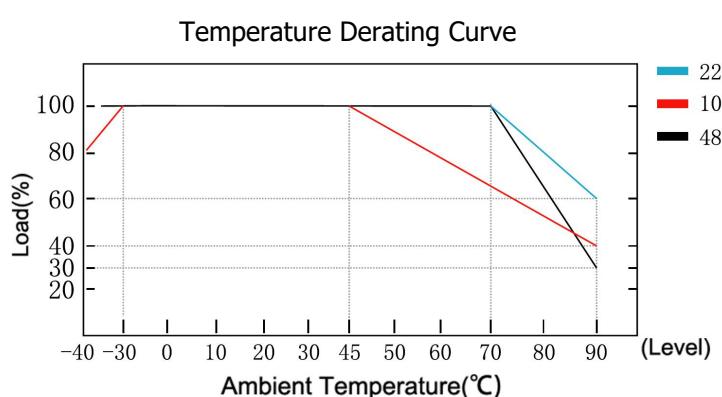
Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
QM30-26B05	85-528VAC 100-750VDC	30	5	6	50	82
QM30-26B12		30	12	2.5	50	84
QM30-26B15		30	15	2	50	85
QM30-26B24		30	24	1.25	50	87

Specifications

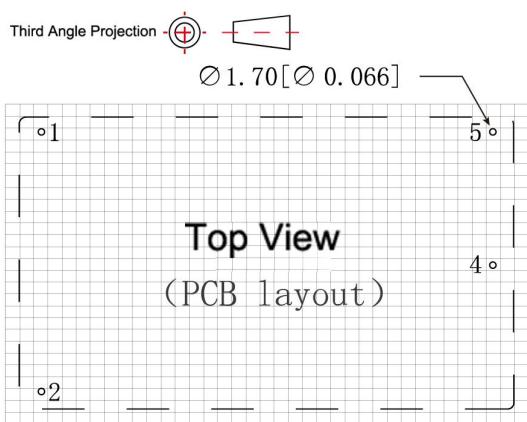
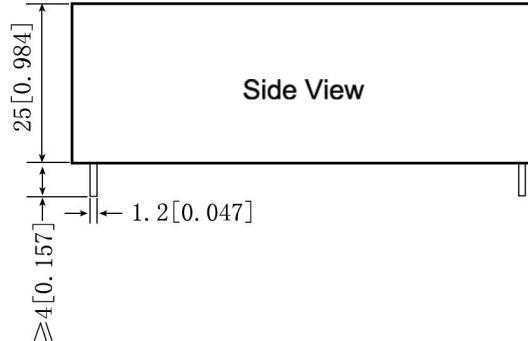
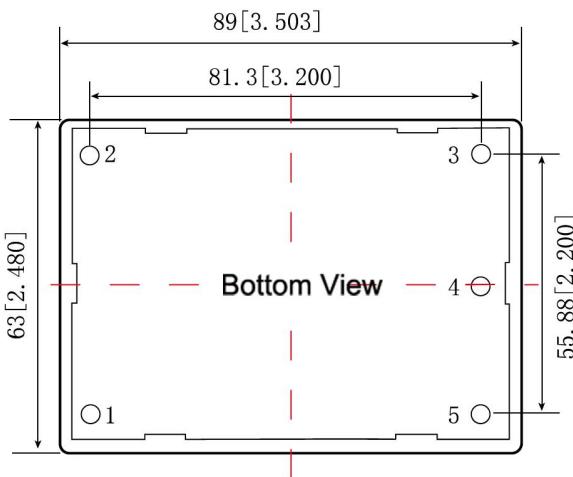
OUTPUT	Voltage Tolerance	±3.0%
	Line Regulation	±2.0%
	Load Regulation	±2.0%
	Setup, Rise Time (Typ.)	130ms, 30ms/380VAC at full load
	Hold Up Time (Typ.)	30ms/480VAC at full load
	Ripple & Noise (Max.) (Note 2.)	100mV
INPUT	Voltage Range	85-528VAC 100-750VDC
	Frequency Range	47-63Hz
	Current (Typ.)	500mA/115VAC 500mA/230VAC 400mA/480VAC
	Inrush Current (Typ.)	Cold boot, 20A/115VAC 40A/230VAC 50A/480VAC
	External Fuse Recommended	Slow-Blow , T2A/600V
	Leakage Current (Typ.)	<250µA/480VAC/50Hz
PROTECTION	Over Load	128%-155% load, recovers automatically after fault condition is removed
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed
	Over Voltage (Note 4.)	105%-120%,Hiccup mode
ENVIRONMENT	Working Temp.	-40°C to +90°C (Refer to "Derating curve")
	Working Humidity	95%RH max
	Storage Temp., Humidity	-40°C to +105°C,
	Temp. Coefficient	0.02% / (0-50°C)
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes
SAFETY & EMC (NOTE 3.)	Safety Standards	IEC62368, EN62368, UL62368
	Isolation Voltage	I/P-O/P: 4.0kVAC
	Isolation Resistance	I/P-O/P: >100M Ohms/500VDC 25°C 70% RH
	EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASS B (Refer to "Typical Application")
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV (Refer to "Typical Application")
	RF	IEC/EN 61000-4-3 (Refer to "Typical Application")
	EFT	IEC/EN 61000-4-4 level 4 4kV (Refer to "Typical Application")
	Surge	IEC/EN 61000-4-5 level 4 line-to-line 2kV / line-to-ground 4kV
OTHERS	MTBF	800K hrs min. MIL-HDBK-217F(25°C)
	Dimension	89*63*25mm (L*W*H)
	Weight	185g/PCS 8.88kg/Carton
	Package	48PCS/Carton
	Carton Size	360*300*250mm
NOTE	1. All parameters not specially mentioned are measured at nominal input, rated load ,TA=25°C and humidity < 75%.	
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor and connected according to "typical application". Element parameters shall be the same as those measured in the suggestion form.	

	3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.
	4. This series of overvoltage protection protects the subsequent circuit in case of module abnormality through the peripheral TVS tube.

Derating Curve



Dimensions & Function

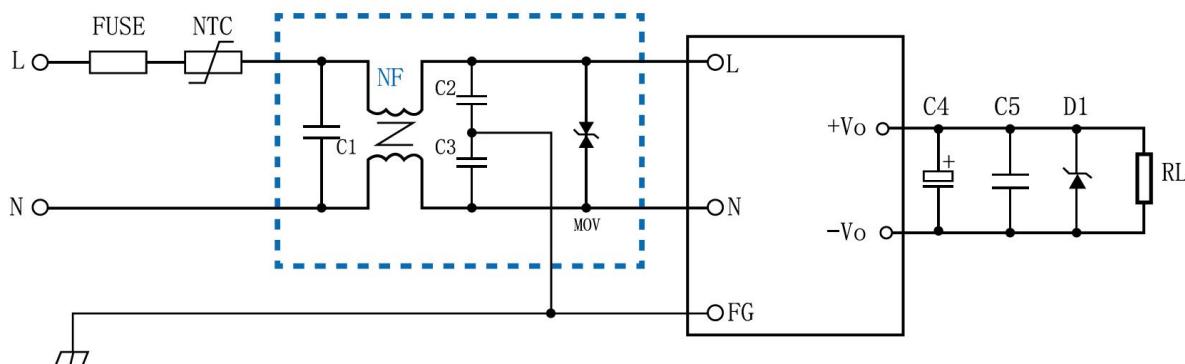


Pin	Function
1	AC(L)
2	AC(N)
3	No Pin
4	-Vo
5	+Vo

Note: Grid space 2.54*2.54mm

NOTE: Unit size: mm[inch] Terminal tolerance: $\pm 0.1\text{mm} [\pm 0.004]$ Unmarked tolerances: $\pm 0.5\text{mm}$

Typical Application



NOTE:

1. The output filter capacitor C4 is electrolytic capacitor. It is recommended to use high-frequency low-resistance electrolytic capacitor. Refer to the technical specifications provided by the manufacturers for capacity and current. The voltage drop of capacitor is more than 80%. C5 is to remove high frequency noise. D1 is the TVS tube recommended to be used for protecting the post-stage circuit (in case of module abnormality).
2. The dotted box in the figure shows the EMC filter connected to meet the higher EMC requirements. It can be omitted in general applications..

List Of Components

Position Model	FUSE	NTC	NF	MOV	C1	C2/C3	C5	C4	D1
QM30-26B05								470uF/16V	P6KE7.5A
QM30-26B12	T2A/600V	Thermistor 10D-9	Common mode inductance 3-10mH 0.2-0.5A	Varistors 14D821K	104K/600V	102K/600V	104K/50V	120uF/16V	P6KE16A
QM30-26B15								120uF/25V	P6KE20A
QM30-26B24								100uF/35V	P6KE30A

Notes:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at $T_a=25^{\circ}\text{C}$, humidity <75%RH, nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. AMCHARD reserves the right to make changes to the product at any time without notice.