Features:

1. Wide input range (90-528VAC, 100-745VDC)
2. 55*45*21mm compact size
3. No load power consumption<0.5W
4. Protection type: short circuit/over load/over voltage
5. Operating temperature range: -40℃ to +85℃
6. 3000V isolation voltage
7. 100% high temperature burn-in and function test
8. 3 years warranty

RoHS CE 3 years Warranty

Selection Guide

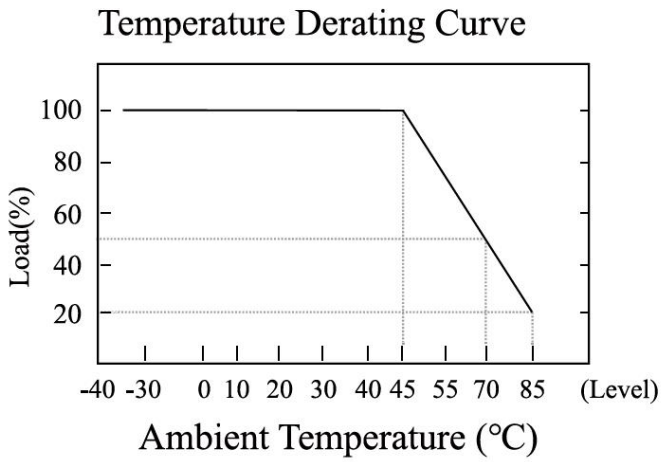
Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
QM10-26B03	90-528VAC 100-745VDC	6.6	3.3	2	50	74
QM10-26B05		10	5	2	50	75
QM10-26B09		10	9	1.11	50	76
QM10-26B12		10	12	0.83	50	78
QM10-26B15		10	15	0.66	50	80
QM10-26B24		10	24	0.42	50	82

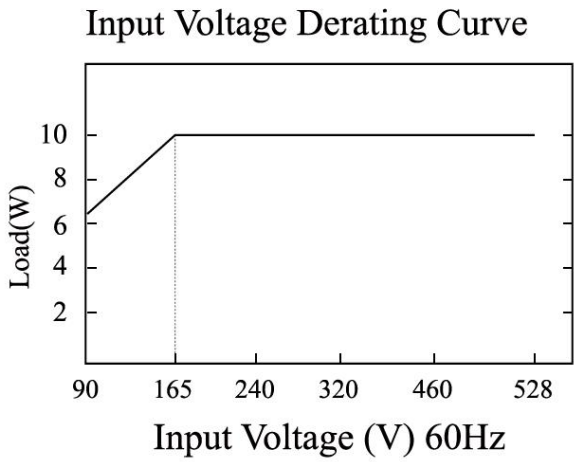
Specifications

OUTPUT	Voltage Tolerance	±2.0%					
	Line Regulation	±1.0%					
	Load Regulation	±1.0%					
	Setup, Rise Time (Typ.)	2000ms, 50ms/380VAC at full load					
	Hold Up Time (Typ.)	20ms/380VAC at full load					
	Ripple & Noise (Max.) (Note 2.)	100mV					
INPUT	Voltage Range	90-528VAC 100-745VDC					
	Frequency Range	47-440Hz					
	Current (Typ.)	120mA/380VAC 300mA/165VAC					
	Inrush Current (Typ.)	Cold boot 40A/380VAC					
	External Fuse Recommended	2A/500V					
	Leakage Current (Typ.)	<1mA/380VAC/50Hz					
PROTECTION	Over Load	≥110% load, recovers automatically after fault condition is removed					
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed					
	Over Voltage (Note 4.)	Output voltage off or clamp					
		Voltage	3.3/5VDC	9VDC	12VDC	15VDC	24VDC
		Range	≤7.5VDC	≤15VDC	≤16VDC	≤20VDC	≤30VDC
ENVIRONMENT	Working Temp.	-40°C to +85°C (Refer to "Derating curve")					
	Working Humidity	85%RH max					
	Storage Temp., Humidity	-40°C to +85°C, 10-95%RH					
	Temp. Coefficient	0.03%/ (0-50°C)					
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes					
SAFETY & EMC (NOTE 3.)	Safety Standards	UL1012, EN62368, UL62368					
	Isolation Voltage	I/P-O/P: 3000VAC I/P-FG: 1500VAC O/P-FG: 500VAC					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >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 2kV					
OTHERS	MTBF	300K hrs min. MIL-HDBK-217F (25°C)					
	Dimension	55*45*21mm (L*W*H)					
	Weight	70g/PCS 8.067kg/Carton					
	Package	112PCS/Carton					
	Carton Size	360*300*250mm					
NOTE	1. All parameters not specially mentioned are measured at nominal 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 and connected according to "typical application". Element parameters shall be the same as those measured in the suggestion form.						

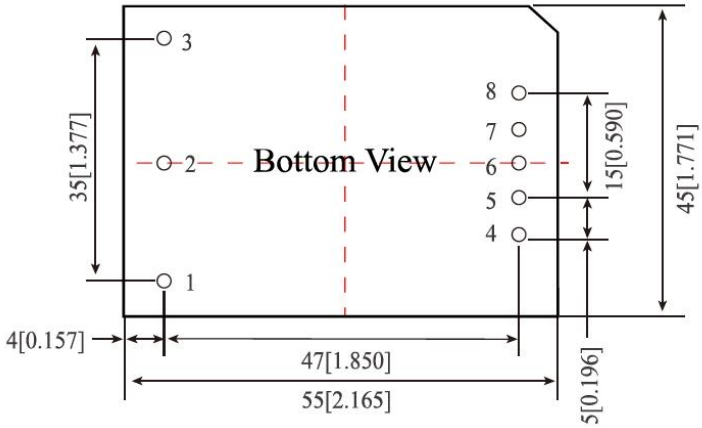
	3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.
	4. This series of overvoltage protection protects the subsequent circuit in case of module abnormality through the peripheral TVS tube.

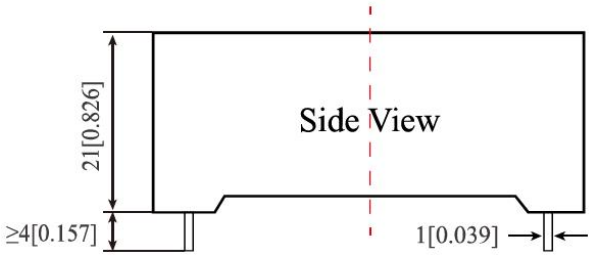
Derating Curve

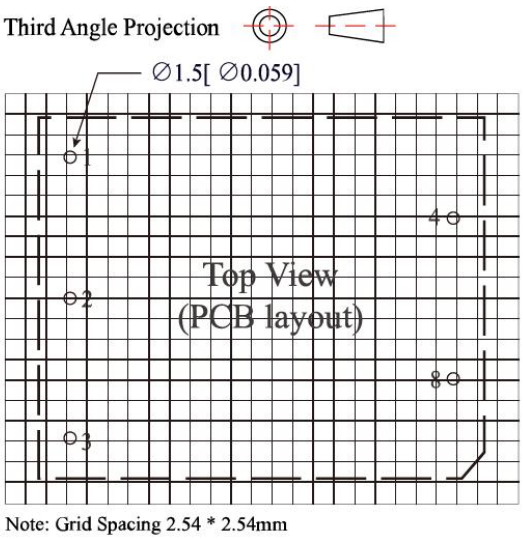




Dimensions & Function



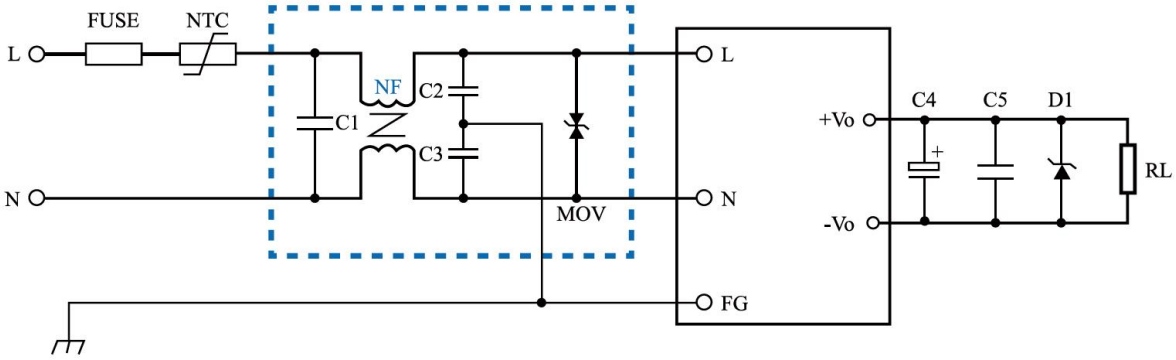




Pin	Function
1	FG
2	AC(N)
3	AC(L)
4	-Vo
5	No Pin
6	No Pin
7	No Pin
8	+Vo

NOTE: Unit size: mm[inch] Terminal tolerance: ±0.1mm Unmarked tolerances: ±0.5mm

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
QM10-26B03	2A/500V	Thermistor 10D-9	Common mode inductance 3-10mH 0.2-0.5A	Varistors 14D821K	104K/600V	102K/600V	104K/50V	470uF/16V	P6KE7.5A
QM10-26B05								470uF/16V	P6KE7.5A
QM10-26B09								150uF/16V	P6KE15A
QM10-26B12								120uF/16V	P6KE16A
QM10-26B15								120uF/25V	P6KE20A
QM10-26B24								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 Ta=25℃, 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.