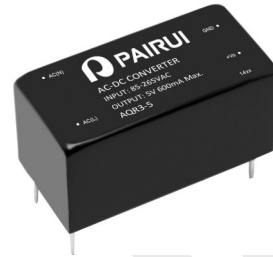


AQR-3 Series, 3Watt

FEATURES:

- ✓ Universal AC input range
- ✓ Short circuit, and over current protections
- ✓ Board in-line type installation
- ✓ High voltage isolation
- ✓ Compact size
- ✓ Metal case



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (mA)	Output power (W)
AQR3-5	85-265	5	600	3
AQR3-9		9	333	3
AQR3-12		12	250	3
AQR3-24		24	125	3
AQR3-D5		±5	±300	3
AQR3-D9		±9	±166	3
AQR3-D12		±12	±125	3
AQR3-D24		±24	±62	3

Notes: Above models are default to metal case.

ELECTRICAL

Input

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Input voltage	V_{in}	--	85	--	265	Vac
Input frequency	F_{line}	--	47	--	63	Hz
Efficiency	η	Full voltage, full load	--	75	--	%

Output

Output voltage accuracy	--	$V_{in}=100-240Vac$	--	1	--	%
Line regulation	$V_{out-line}$	V_{in} from 100Vac to 240Vac	--	0.2	--	%
Load regulation	$V_{out-load}$	20%-100% load	--	0.5	--	%

AQR-3 Series, 3Watt
ELECTRICAL
Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Ripple	V_{ripple}	--	--	--	120	mV
Turn-on delay time	--	--	--	1	--	S

Protection

Over current	Continuous Automatic Recovery
Short circuit	Continuous Automatic Recovery

Environment

Storage	$T_{storage}$	Humidity: 5% RH to 95% RH	-40	--	+105	°C
Ambient operating temperature	T_a	--	-25	--	+65	°C
Case temperature	T_c	--	--	--	+90	°C
Operating relative humidity	H_a	Non condensing	10	--	90	%
MTBF	T_{MTBF}	--	--	--	200	kHrs
Dimension(LxWxH)	38x18x18mm					
Weight	24.6g					

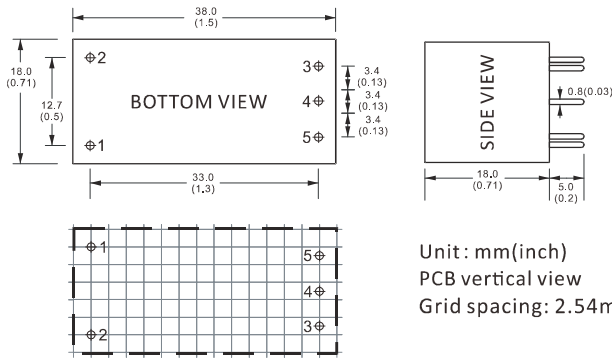
Safety

Isolation Voltage	Input-Output: 2500Vac \leq 1.5mA//1min
	Input-Case: 1500Vac \leq 1.5mA//1min
	output-Case: 1500Vac \leq 1.5mA//1min

Notes: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and V_{in} = 100Vac to 240Vac.

AQR-3 Series, 3Watt

MECHANICAL

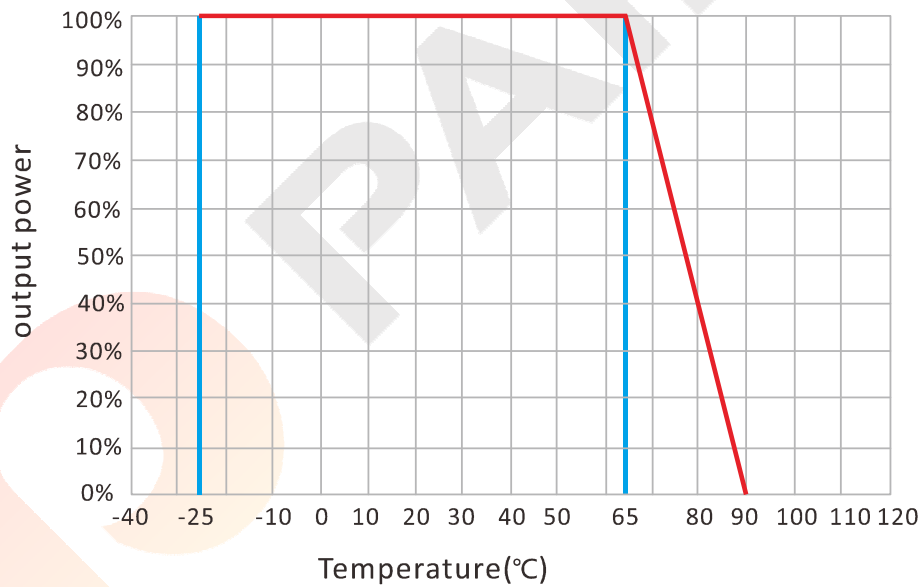


CONNECTION

PIN #	SINGLE	DUAL
1	AC(N)	AC(N)
2	AC(L)	AC(L)
3	+Vo	+Vo1
4	No Pin	COM
5	GND	-Vo2

Note: Unit is mm(inch).

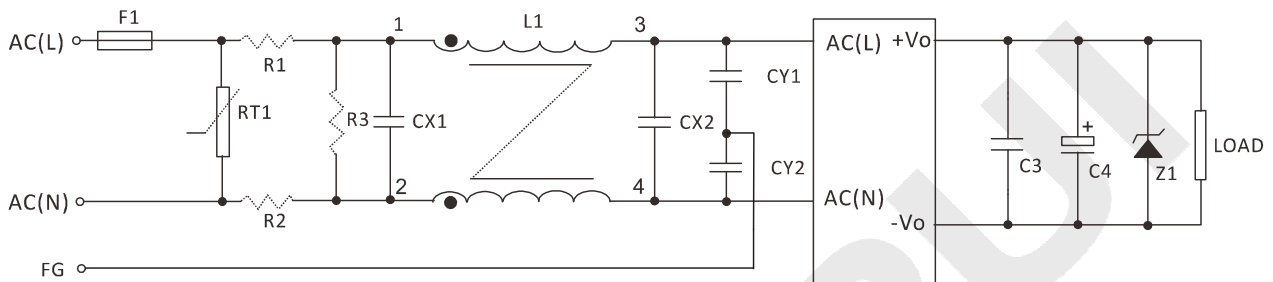
ELECTRICAL CURVE



AQR-3 Series, 3Watt

NOTE

RECOMMENDED TEST AND APPLICATION CIRCUIT



EMC RECOMMENDED APPLICATION CIRCUIT

	5VDC	9VDC	12VDC	24VDC
F1		T0.5A/250V		
RT1		7D471K		
R1, R2		2Ω/3W(or NTC 10D-9)		
R3		1MΩ/2W		
L1		L=3-10mH, I=0.2-0.5A		
CX1, CX2		0.15-1μF/300Vac		
CY1, CY2		102K/400Vac		
C3		1μF/50V		
C4	220uF/16V	100uF/25V	100uF/25V	47uF/35V
Z1	P6KE6.8A	P6KE16A	P6KE16A	P6KE33A