

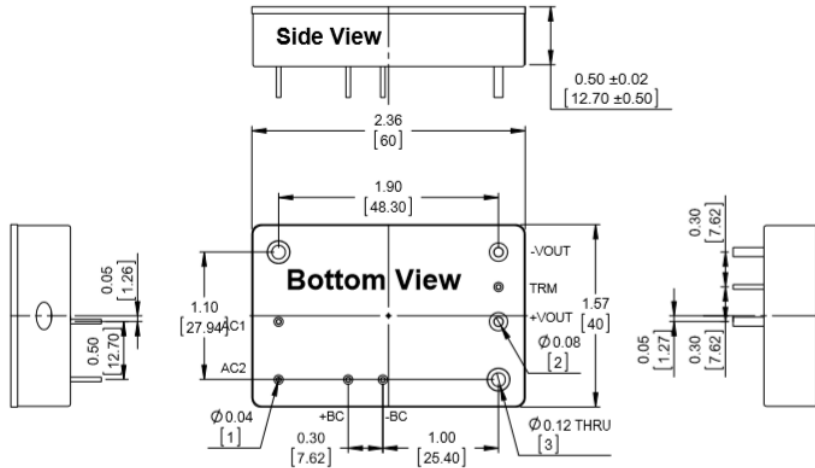
Model Selection Guide

All specifications are typical at 230Vac input, 100% load at Ta25°C unless otherwise noted

Model	Output			Efficiency @FL
	Voltage	Current	Power	
	(V)	(A)	(W)	Typ.(%)
ACQ100-120SV0	12	8.34	100.8	90

Mechanical Dimensions & Pin Assignments

Electrical Specifications



Input Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Operating Input Voltage ranges		90		264	Vac
Operating Input Frequency ranges		47		60	Hz
Input Current	at 115VAC 100% load at 230VAC 100% load		1.0 0.5		A
Inrush Current	at 230VAC	Limited by external components (Thermistor)			
Power Factor	at 115VAC 100% load at 230VAC 100% load		0.95 0.9		
Leakage Current	at 240VAC 60Hz 100% load			0.75	mA

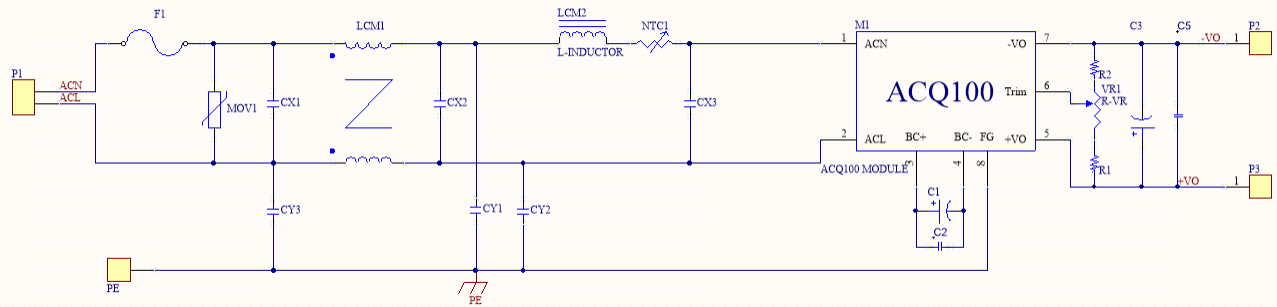
Output Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Output Voltage Accuracy	100% Load			± 1.5	%
Line Regulation	High line to low line			± 1	%
Load Regulation	0% to 100% load			± 1	%
Ripple and Noise	20MHz Bandwidth and with 10uF MLCC. Output Capacitor			2	%
Output Voltage Adjustment Range	adjustable by external resistor	11.4		12.6	V
Minimum Load		0			A
Hold Up Time		Setting by external capacitors between +BC & -BC			
Overvoltage Protection		110		140	%
Short-circuit Protection		Hiccup mode (Auto-Recovery)			

General Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Switching Frequency			130		KHz
Storage Temperature range		-55		125	°C
Operating Temperature	on aluminum base plate	-40		100	°C
Humidity (non condensing)				95	%
Isolation Voltage					
Input to Output		3000			Vac
Weight			72		g
Dimensions	2.36" x 1.57" x 0.5" (60.00 x40.00 x 12.70mm)				
Material	aluminum base with plastic case				

Recommended circuit diagram



No	Sch symbol	Description	rating	Manufacturer/ Part number
1	F1	Fuse	3.15A/250Vac	Littelfuse 39213150000
2	MOV1	Varistor	470V	Thinking TVR10471K
3	CX1、CX2	X Capacitor	0.47uF/310Vac	EPCOS B32922C3474K
	CX3	X Capacitor	0.68uF/250Vac	EPCOS B32922C3684K
4	LCM1	Common Mode Choke	25mH/1.5A	Amogreentech AMFN-16A-TH
5	LCM2	Common Mode Choke	200uH	CH112147
6	CY1、CY2、CY3	Y Capacitor	2200pF/250Vac	Murata DE1E3KX222M
7	NTC1	Thermistor	8R	Thinking SCK10103
8	C1	PFC boost capacitor	120uF/420Vdc	NIPPON CHEMI-CON EKXL421ELL121MM30S
9	C3	Output Capacitor	470uF/50Vdc	EKZN250ELL471MJC5S
10	C2	Bypass Capacitor	0.1uF/450Vdc	Murata GRM43DR72J104KW01L
	C5		1uF/100Vdc	Murata GRJ31CR72A105

Bill of materials