

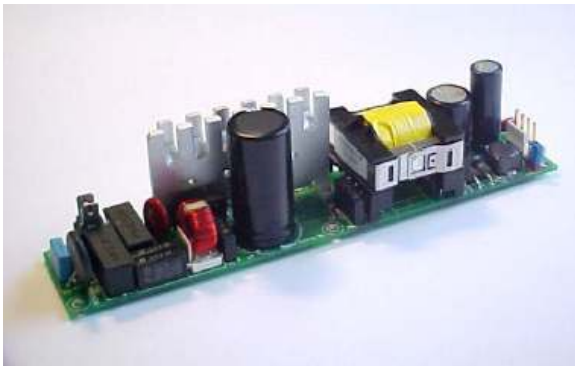
PRONTOflow Power-AC series

AC Power Regulator Board

Features

- Wide AC power inputs of 90-265VAC 50/60 Hz
- Generates isolated, regulated 48VDC
- Input power filter
- Output voltage adjustable (via PWM signal) from 24V to 48V continuously
- Output voltage fuse protection
- Output filter to minimize switching noise emission
- Small size; Ideal for 1U applications
- Designed to operate over wide temperature ranges

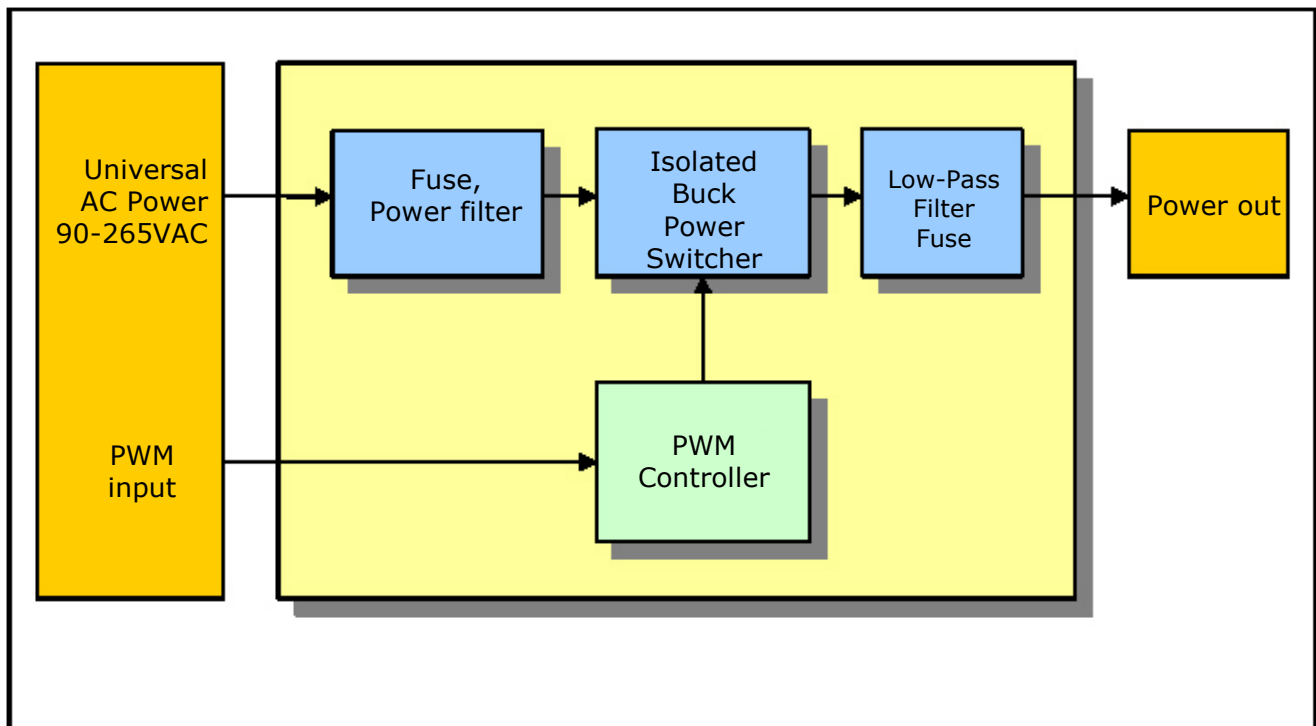
About PRONTOflow



The PRONTOflow POWER-AC is an off-the-shelf power regulator board designed to be used with PRONTOflow CONTROL, CONTROL-LT and MONITOR boards for power conditioning and speed control of DC fans. This power board is designed for use in a 1U or larger fan tray and can power up to nine high performance fans.

POWER-AC accepts a universal AC power input of 90-265VAC and generates regulated 48VDC. PWM signal may be used to further regulate the output voltage for speed control of 3-wire fans. Input and output filters minimize conducted noise back to the power source and emitted switching noise.

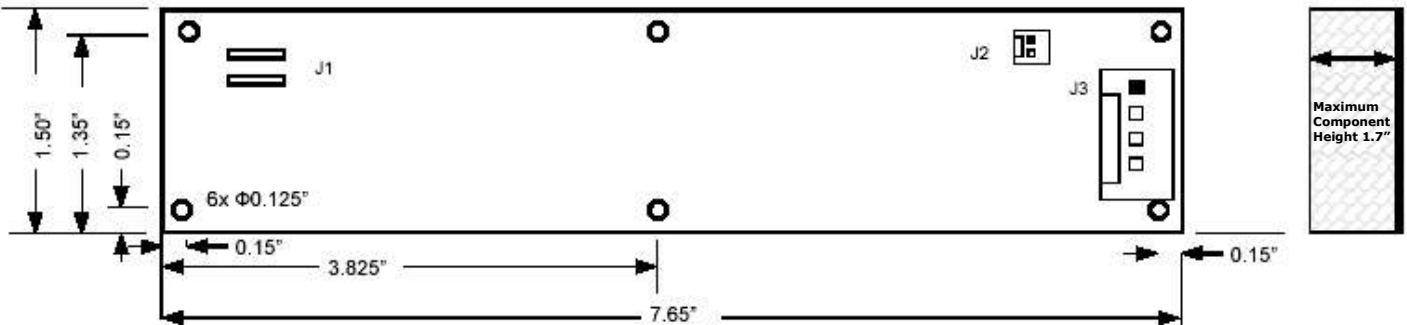
Functional Block Diagram



Electrical Specifications

Description	Min	Typ	Max	Units	Comments
Input Voltage	90	115/220	265	Vac	
Line Frequency	47	50/60	63	Hz	
Output Voltage	36	48	49	Vdc	Controllable with PWM input
Output Ripple Voltage	-	0.5	1.0	Vdc	20 MHz Bandwidth
Output Current	-	-	2.0	Adc	
Output Power	-	-	100	W	
Conducted EMI -	-	-	-	-	Designed to meet CISPR22B / EN55022B
Safety	-	-	265	-	Designed to Meet IEC950,UL1950 Class II

Mechanical Dimensions



Electrical Connections

J1: Power Connector.
0.25" spade lugs

Pin#	Signal
1	AC in
2	AC in

J2: PWM switch.
Molex: 22-11-2022

Pin#	Signal
1	PWM+
2	PWM-

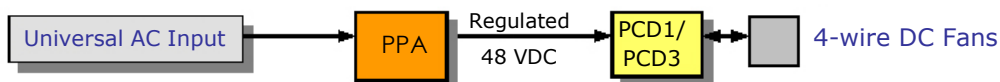
J3: Power output Connector
Molex: 26-61-4040

Pin #	Signal
1	V- OUT +
2	V-OUT +
3	V-OUT +
4	V-OUT +

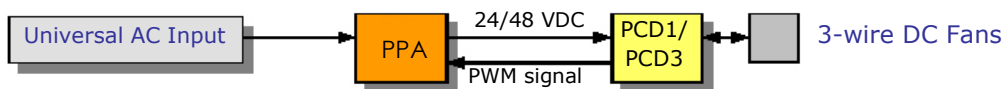
PWM switch is a signal that controls the voltage output from CONTROL, CONTROL-LT or MONITOR boards. Typically used with 3-wire fans for speed control.

Typical Applications

Multiple 4-wire fans under constant fan voltage and precise speed control



Multiple 3-wire fan speed control through voltage control



Four 3-wire fan speed monitoring and high/low speed control

