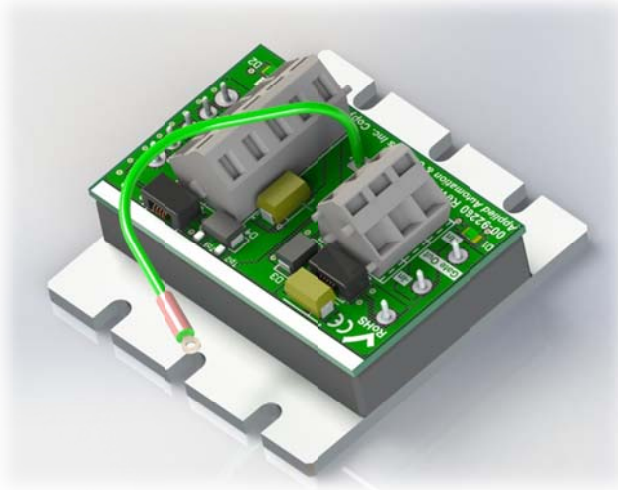


Applied Automation & Controls Inc

50Watt Wide Input Power Supplies



The Applied Automation & Control Wide Input Power Supplies are RoHS compliant self-contained modular power supply. All modules in this series are RoHS compliant and CE marked.

Other features include spring clamp wire terminals, LEDs for power indication, and surge suppression.

Voltage Output & Power Rating:

00-92250	5V Output	50W
00-92251	12V Output	50W
00-92252	15V Output	50W
00-92253	24V Output	50W
00-92254	48V Output	50W

Technical Specifications:

Environmental Specifications:

Operating Temperature:	-40C to 100C
Storage Temperature:	-55C to 125C
Thermal Shutdown:	110C
Relative Humidity:	To 95%

General Specifications:

Efficiency:	91%
MTBF (MIL-HDBK-217F):	380kHrs
Indicators:	LED x 2
Surge Protection:	Input & Output TVS
Serialization:	Each unit Serialized
Dimensions:	60x58x32mm

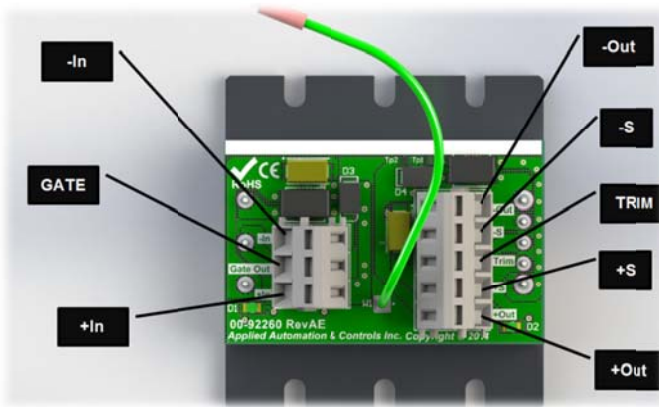
Input Output Specifications:

Input Voltage:	9-36VDC, 24V Nom
Current Limit:	150% of Nominal
Power Rating:	50W
Switch Frequency:	350kHz
Output Ripple:	< 0.3% pk-pk



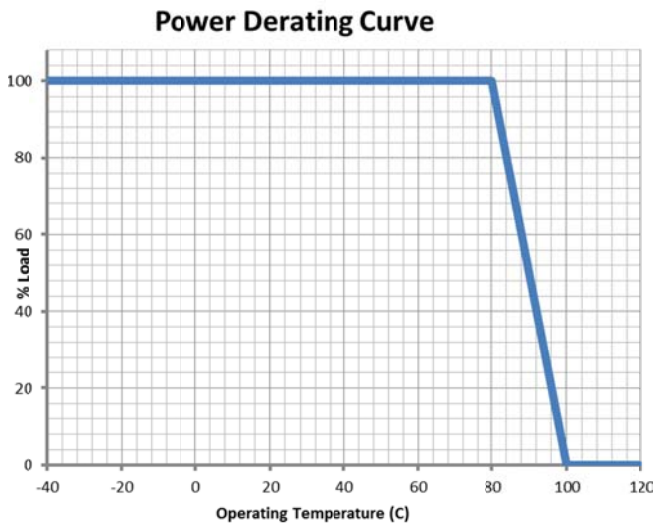
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Connection information:



Input Connector	
-In	Input Power Ground
Gate	External Control
+In	Input Power Positive; 9-36VDC
Output Connector	
-Out	Output Power Ground
-S / -Out	Secondary Output Power Ground
Trim	Trim Resistor connection
+S / +Out	Secondary Output Power Positive
+Out	Output Power Positive

Power Derating:



External ON/OFF Control:

The wide input power supply Gate control input is useful for applications where the module

power output needs to be controlled via a logic level signal.

Gate Logic Level	
0 to 1.2V	Module output OFF
3.5 to 24V	Module output ON
No Connection	Module output ON

Fault Protection:

The power supply is internally protected against over current and over temperature. As soon as an over condition occurs the power supply output turns off. Output power status is indicated by the LED D2. The power supply automatically turns on once the fault condition is corrected. A fault condition is indicated by a flashing LED D2.

Output Voltage Trim:

The output voltage can be trimmed up to +10% with a trim resistor connected between TRIM and -Out. The trim resistor value is

$$R = \frac{R_1(2.5 - 0.46(R_2/(R_2 + R_3)))}{V_{desired} - V_{nominal}} + \frac{R_2 R_3}{R_2 + R_3}$$

The output voltage can be trimmed down up to -10% with a trim resistor connected between TRIM and +Out. The trim resistor value is

$$R = \frac{R_1(V_{desired} - 2.5)}{V_{nominal} - V_{desired}} - R_2$$

	$V_{nominal}$	R_1 K Ω	R_2 K Ω	R_3 K Ω
00-92250	5	2.32	3.3	0
00-92251	12	9.1	51	5.1
00-92252	15	12	56	8.25
00-92253	24	20	100	7.5