

4.5" x 2.5" x 1.22"

- 70 Watts Output Power
- Universal 85-265VAC Input
- 1, 2, 3, and 4 Outputs
- Active Power Factor Correction
- 2.5VDC to 48VDC Outputs



Model Number	Output #1	Output #2	Output #3	Output #4
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### SINGLE OUTPUT

REL70-1001	2.5V/14A			
REL70-1002	3.3V/14A			
REL70-1003	5V/14A			
REL70-1004	12V/5.8A			
REL70-1005	15V/4.7A			
REL70-1006	24V/2.9A			
REL70-1007	28V/2.5A			
REL70-1008	48V/1.5A			

### DUAL OUTPUT

REL70-2001	3.3V/6A	5V/5A		
REL70-2002	5V/6A	12V/4A		
REL70-2003	5V/6A	24V/2A		
REL70-2004	12V/3A	-12V/3A		
REL70-2005	15V/3A	-15V/2A		

### TRIPLE OUTPUT

REL70-3001	5V/6A	12V/2A		-12V/2A
REL70-3002	5V/6A	15V/2A		-15V/2A

### QUAD OUTPUT

REL70-4001	3.3V/6A	5V/5A	12V/2A	-12V/2A
REL70-4002	5V/6A	3.3V/5A	12V/2A	-12V/2A
REL70-4003	5V/6A	3.3V/5A	15V/2A	-15V/2A
REL70-4004	5V/6A	-5V/5A	12V/2A	-12V/2A
REL70-4005	5V/6A	-5V/5A	15V/2A	-15V/2A
REL70-4006	5V/6A	24V/2A	12V/2A	-12V/2A
REL70-4007	5V/6A	24V/2A	15V/2A	-15V/2A

Medical Versions Available  
Contact Factory



## 70 Watt Open Frame Switching Power Supply with PFC

# REL70 series

### INPUT SPECIFICATIONS

Input Voltage, Full Range:	85-264 VAC
Active PFC	>0.95@115VAC
Input Frequency	47-63Hz.
Inrush Current	30A @ 115VAC, typ <b>4</b> 40A @ 230VAC, typ <b>4</b>
Leakage Current	<300uA @ 240VAC

### OUTPUT SPECIFICATIONS

Output Power	50W, Conv/70W Forced Air
Minimum Load Requirement	10%
Max Current (A, Peak)	See Model Selection Chart <b>7</b>
Initial Accuracy	+/-1%, typ
Voltage Adjust	± 8%, typ
Load Regulation	± 1%, typ
Cross Regulation	+/-5%
Line Regulation	± 0.5%, typ
Temperature Coefficient	± 0.02%/°C
Ripple/Noise	100mV Pk-Pk, typ
Overvoltage Protection	110-150%, Type <b>2 &amp; 3</b>
Remote Sense (Singles Only)	250mV compensation
Hold Up/Start Up Times	16mS/4Sec, typ
Short Circuit Protection	Continuous <b>4</b>
Current Limit	110-160% typ, Auto Recovery

### GENERAL SPECIFICATIONS

Input-Output Isolation	3000VAC <b>5</b>
Output-Ground Isolation	500VAC
Input-Ground Isolation	1500VAC
Efficiency (@ Full Load)	78%, typ (or See Chart/Curve)
Safety	UL60950/EN60950 Approved
EMC	EN55022/B, EN61000-3-2,3/A EN61000-4-2,3,4,5,6,8,11/Cr A

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

A **Blue Number** means see respective Specification

### ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	0 to +60 °C <b>4</b>
Relative Humidity	10-95%, Description <b>4</b>
Storage Temperature	-40 to +85 °C <b>4</b>
MTBF	100KHrs MIL-Std 217F
Shock & Vibration	To MIL-Std 810E

### PHYSICAL SPECIFICATIONS

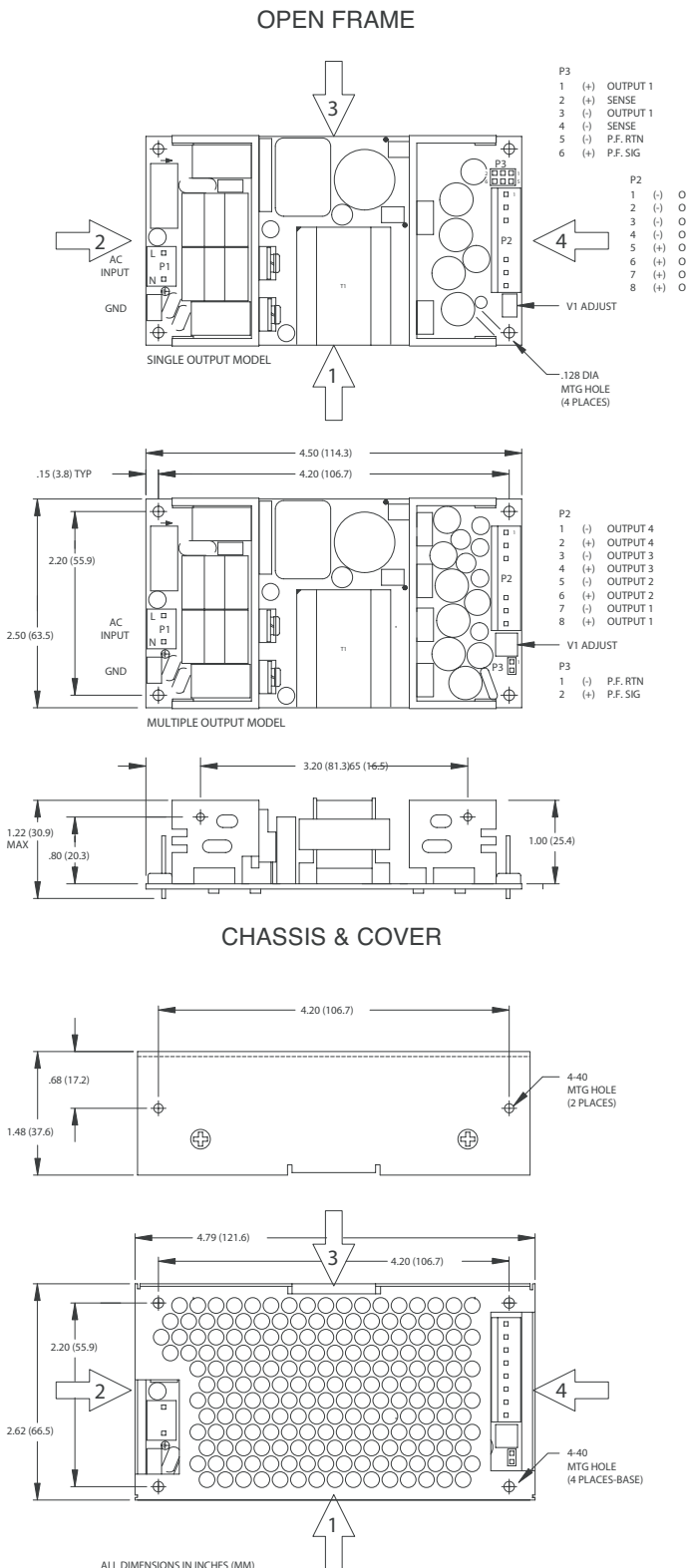
Dimensions	4.5"x2.5"x1.22"
Material Flammability	to UL94V-0
Construction	Open Frame
Weight	0.6lb

### SPECIFICATION NOTES

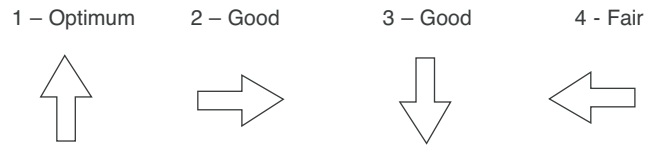
- 1) All specifications typical @ 25°C, Nominal Line & Load, unless otherwise noted.
- 2) O/P noise measured directly at pins/terminals with 0.1uFbypass, pk-pk @ 20MHz bandwidth.
- 3) Ripple and Noise dependant upon output voltage as specified per particular model.
- 4) These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted or implied.
- 5) Isolation for up to 1 minute duration.
- 6) No termination necessary with control pin to maintain constant "ON" operation (if applicable to this model)
- 7) Max load (peak) specified for 10mS max, 20% duty cycle, minimum load on all outputs

**Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.**

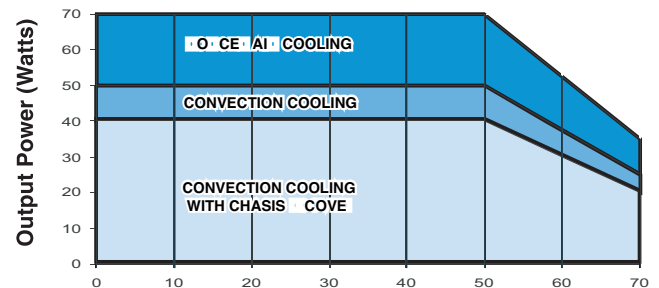
### MECHANICAL DIMENSIONS



### RECOMMENDED AIR FLOW DIRECTION



### THERMAL PERFORMANCE



### CONNECTOR SPECIFICATIONS

- P1 AC Input**
- .156 friction lock header mates with Molex 09-50-3031 crimp terminal housing with Molex 2478 crimp terminal
- P2 DC Output (Single)**
- .156 friction lock header mates with Molex 09-50-3181 crimp terminal housing with Molex 2478 crimp terminal
- P2 DC Output (Multiple)**
- .156 friction lock header mates with Molex 09-50-3181 crimp terminal housing with Molex 2478 crimp terminal
- G Ground**
- .187 quick disconnect terminal
- P3 P.F Sense (Single)**
- .100 breakaway header mates with Molex 22-55-2061 crimp terminal housing with Molex 71851 crimp terminal
- P3 Power Fail (Multiple)**
- .100 breakaway header mates with Molex 50-57-9002 crimp terminal housing with Molex 71851 crimp terminal