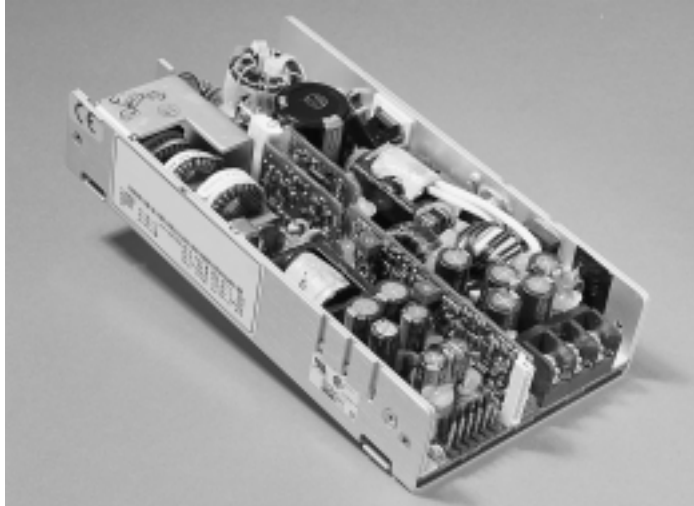


PFC Single & Multi Output

ACU SERIES

150 Watts



CE Marked LVD

•

Power Factor Corrected

•

Single Wire Current Share

•

Remote Sense

•

Low Profile

•

Adjustable Output Voltage

•

International Safety Approvals

Specification

Input Voltage	• 85-264 V AC
Input Frequency	• 47 to 63 Hz
Power Factor	• 0.95 to EN61000-3-2
Inrush current	• 35 A pk, 230 V AC, 100% load
Hold-up Time	• >17 ms
Input Current	• 3.0 A rms 85 V AC & 100% load
Transient Response	• 500 μ s to within 1% of initial set point due to a 50-100% load change, 5% max deviation
Turn-on Delay	• 2 s
Turn-on Rise Time	• 20 ms from 10-90%
Line Regulation	• See Tables
Load Regulation	• See Tables
Output Ripple & Noise	• See Tables
Overload Protection	• Auto recovery
Overvoltage Protection	• Latch style, available on V1 & V2 & V3 (except ACU150PT33)
Output Good	• TTL compatible signal available for V1 signal Is high when output is within 5% of nominal Signal shall remain low for 20 ms following loss of output good
Input Power Fail	• TTL compatible logic signal Time before regulation drop out due to loss of input power 5ms
Current Share	• Accuracy of 10% with up to 6 units in parallel available on V1 & V2
Remote Sense	• V1 & V2
Inhibit	• Output voltage is inhibited by application of an external (5 V) high signal
Efficiency	• 75% nominal
Operating Temperature	• 0 °C to +50 °C, derate linearly by 2.5%/°C to +70 °C max
Storage Temperature	• -55 °C to +80 °C
Relative Humidity	• 5-95% non-condensing
Isolation	• Input to output 2600 V DC
EMC	• EN55022 level B conducted
Safety Approvals	• EN60950, UL1950, CSA22.2 No. 234/950 Immunity EN61000-4-2 level 4, EN61000-4-3, 4, 5 Level 3

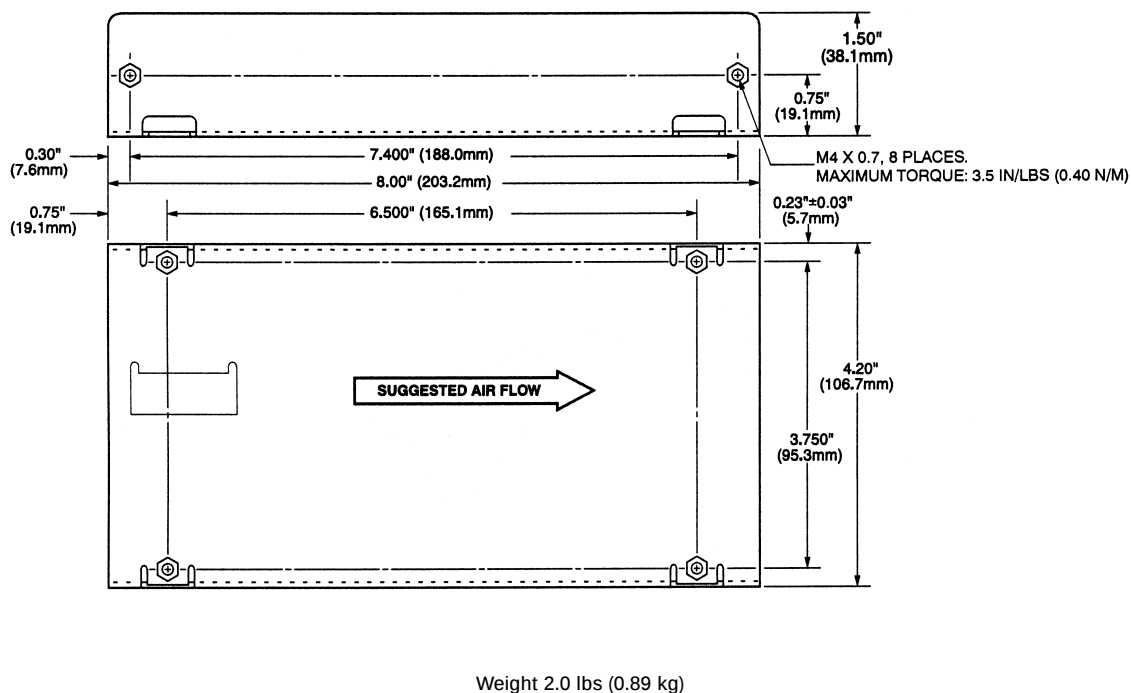
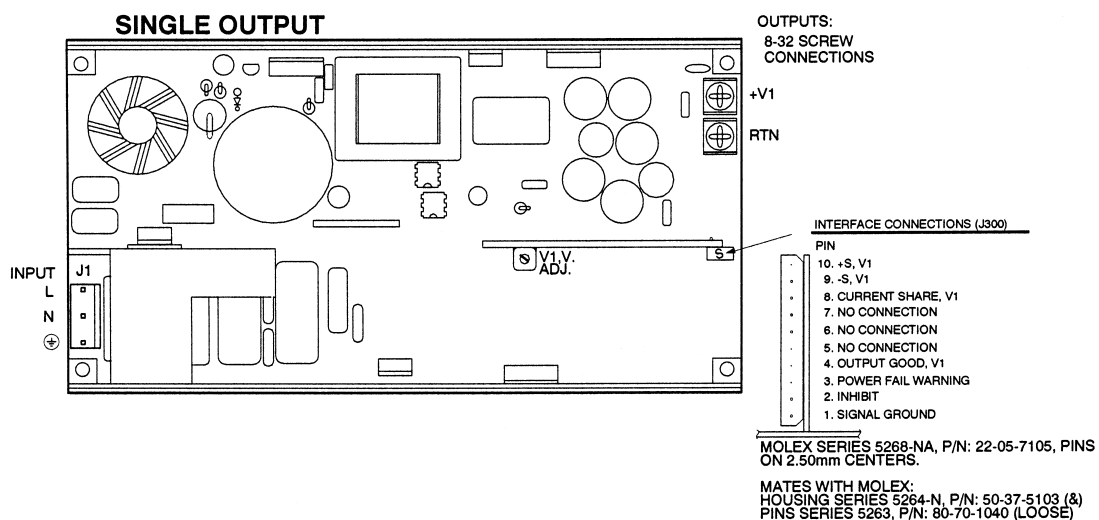
Output Voltage & Current Ratings								
Output Voltage	Initial Setting Accuracy	Adjustment Range	Output Current ⁽¹⁾		Regulation		Ripple & Noise Pk-Pk ⁽²⁾	Model Number
			Min	Max	Line	Load		
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.80 V	4.0 A	35.00 A	0.6%	1.5%	1.5%	ACU150PT33 ⁽⁷⁾
-5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V		20.00 A	0.4%	3.0%	1.0%	
+12.0 V	11.76 V to 12.24 V	10.80 V to 13.20 V		2.00 A	0.4%	3.0%	1.0%	
+5.0 V	4.98 V to 5.02 V	5.0 V to 5.5 V	4.0 A	17.5 A	0.4%	1.0%	1.0%	ACU150PT35
+12.0 V	11.94 V to 12.06 V	10.8 V to 5.5 V		4.0 A	0.4%	3.0%	1.0%	
+24.0 V	23.52 V to 24.48 V	FIXED		2.0 A	0.4%	3.0%	1.0%	
+5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V	3.0 A	30.00 A ⁽³⁾	0.4%	1.0%	1.0%	ACU150PQ40 ⁽⁷⁾
+12.0 V	11.94 V to 12.06 V	10.80 V to 13.20 V		8.00 A ⁽³⁾	0.4%	1.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V		3.00 A	0.4%	1.0%	1.0%	
5.0 V ⁽⁶⁾	4.98 V to 5.02 V	5.00 V to 5.50 V	0.3 A	2.00 A	0.4%	1.0%	1.0%	
+2.5 V	2.49 V to 2.51 V	2.25 V to 3.00 V	3.0 A	30.00 A ⁽³⁾	0.8%	2.0%	2.0%	ACU150PQ42
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.80 V		15.00 A ⁽³⁾	0.6%	1.5%	1.5%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V		4.00 A ⁽⁴⁾	0.4%	1.0%	1.0%	
5.0 V ⁽⁶⁾	4.98 V to 5.00 V	5.00 V to 5.50 V	0.3 A	2.00 A ⁽⁴⁾	0.4%	1.0%	1.0%	
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.80 V	2.0 A	30.00 A ⁽³⁾	0.6%	1.5%	1.0%	ACU150PQ43
+5.0 V	5.00 V to 5.04 V	5.00 V to 5.50 V		15.00 A ⁽³⁾	0.4%	1.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V		3.00 A ⁽⁴⁾	0.4%	7.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V	0.3 A	3.00 A ⁽⁴⁾	0.4%	7.0%	1.0%	
+5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V	3.0 A	30.00 A ⁽³⁾	0.4%	1.0%	1.0%	ACU150PQ45 ⁽⁷⁾
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.60 V		15.00 A ⁽³⁾	0.6%	1.5%	1.5%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V		3.00 A ⁽⁴⁾	0.4%	7.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V	0.3 A	3.00 A ⁽⁴⁾	0.4%	7.0%	1.0%	
12.0 V	11.97 V to 12.03 V	11.60 V to 16.00 V		15.00 A ⁽⁵⁾	0.1%	1.0%	1.0%	ACU150PS12
48.0 V	47.90 V to 48.10 V	45.00 V to 56.00 V		3.75 A ⁽⁵⁾	0.1%	1.0%	1.0%	ACU150PS48
24.0 V	23.95 V to 24.05 V	22.80 V to 29.20 V		7.50 A ⁽⁵⁾	0.1%	1.0%	1.0%	ACU150PS24

NOTES:

- Output current ratings are expressed with 300 LFM forced air.
- Maximum pk-pk noise expressed as a percentage of output voltage, 20 MHz bandwidth.
- Total current between V1 & V2 is 30 A, maximum rating.
- Total current between V3 & V4 is 5 A, maximum rating.
- Total power of 180 Watts.
- V3 & V4 are isolated and can be used as either positive or negative outputs.
- Available with a DC input of 36-75 V DC (replace 'P' in model number to '48' to order, example: ACU15048T33). See Table below.
- Add 'M' as a suffix to the model number to order chassis with M4 x 0.7" mounting inserts.

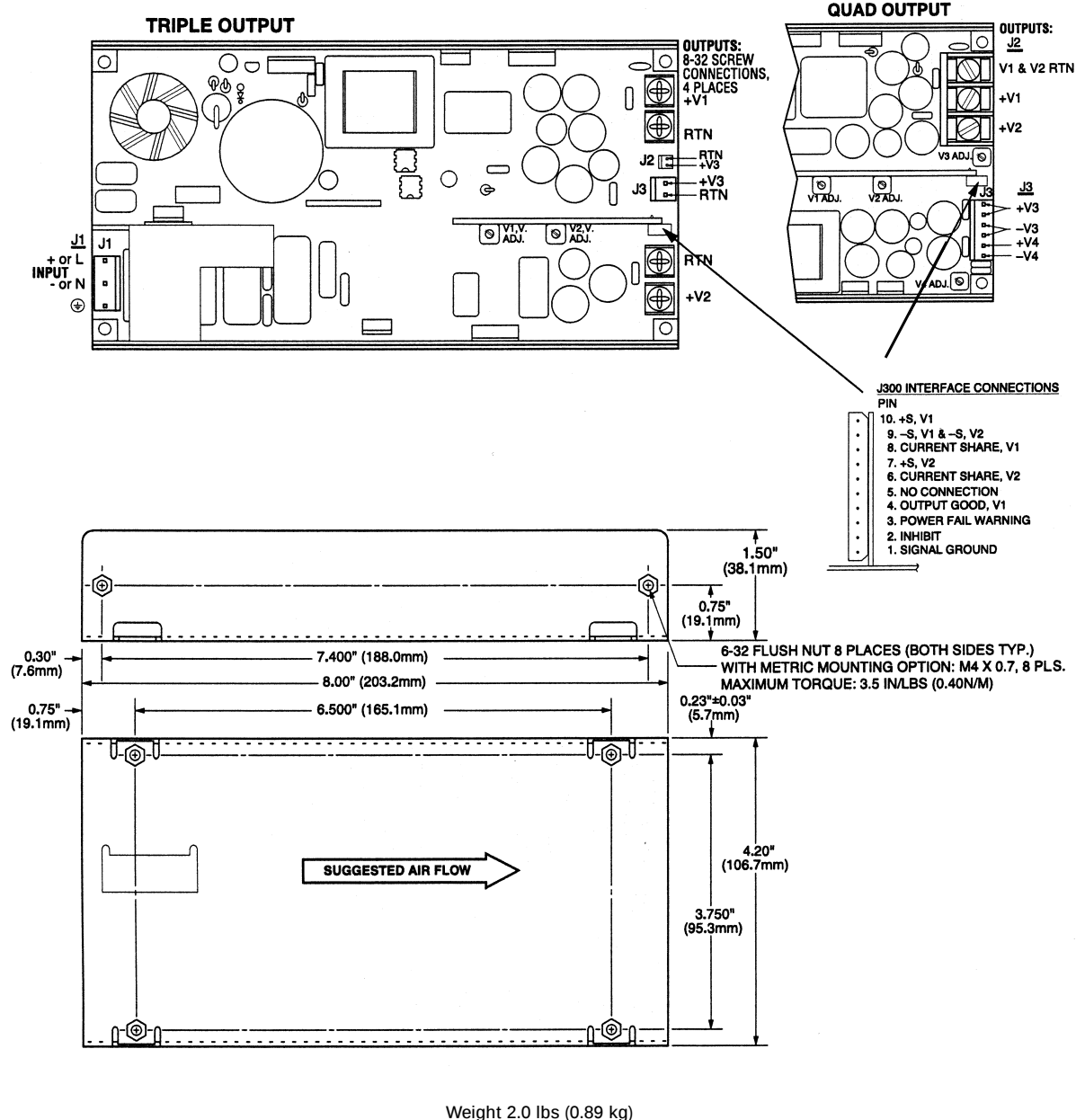
48 V DC Input Model Selection Chart							
Output Voltage	Initial Setting Accuracy	Adjustment Range	Output Current ⁽¹⁾	Regulation		Ripple & Noise Pk-Pk ⁽²⁾	Model Number
				Line	Load		
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.80 V	35.0 A	0.6%	1.5%	1.5%	ACU15048T33
+5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V	20.0 A	0.4%	3.0%	1.0%	
+12.0 V	11.76 V to 12.24 V	Fixed	2.0 A	0.4%	3.0%	1.0%	
+5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V	30.0 A ⁽³⁾	0.4%	1.0%	1.0%	ACU15048Q40
+12.0 V	11.94 V to 12.06 V	10.80 V to 13.20 V	8.0 A ⁽³⁾	0.4%	1.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V	3.0 A	0.4%	1.0%	1.0%	
5.0 V ⁽⁶⁾	4.98 V to 5.02 V	5.00 V to 5.50 V	2.0 A	0.4%	1.0%	1.0%	
+5.0 V	4.98 V to 5.02 V	5.00 V to 5.50 V	30.0 A ⁽³⁾	0.4%	1.0%	1.0%	ACU15048Q45
+3.3 V	3.28 V to 3.32 V	3.15 V to 3.60 V	15.0 A ⁽³⁾	0.6%	1.5%	1.5%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V	3.0 A ⁽⁴⁾	0.4%	7.0%	1.0%	
12.0 V ⁽⁶⁾	11.94 V to 12.06 V	10.80 V to 13.20 V	3.0 A ⁽⁴⁾	0.4%	7.0%	1.0%	

Mechanical Details - Single Output Models



Connectors

Connector	Molex Series	Housing	Pin Series	Pins (Loose)	Pins (Chain)	Wire Gauge
J1	41695	09-50-8051	6838	08-50-0189	08-50-0187	18-20 AWG
	41695	09-50-8051	2478	08-50-0105	08-50-0105	18-20 AWG
	2139	09-50-3051	2478	08-50-0105	08-50-0105	18-20 AWG
J300	5264-N	50-37-5103	5263	80-70-1039	80-70-1039	22-28 AWG

Mechanical Details - Triple & Quad Output Models**Connectors**

Connector	Molex Series	Housing	Pin Series	Pins (Loose)	Pins (Chain)	Wire Gauge
J1 (All Models)	41695	09-50-8051	6838	08-50-0189	08-50-0187	18-20 AWG
	41695	09-50-8051	2478	08-50-0106	08-50-0105	18-20 AWG
	2139	09-50-3051	2478	08-50-0106	08-50-0105	18-20 AWG
J2 (Triple Output)	5051-N	22-01-1022	2759	08-50-0114	08-50-0113	22-30 AWG
	5051	22-01-1022	2759	08-65-0805	08-65-0804	22-30 AWG
J3 (Triple Output)	41695	09-50-8021	6838	08-50-0189	08-50-0187	18-20 AWG
	41695	09-50-8021	2478	08-50-0106	08-50-0105	18-20 AWG
	2139	09-50-8021	2478	08-50-0106	08-50-0105	18-20 AWG
J3 (Quad Output)	41695	09-50-8021	6838	08-50-0189	08-50-0187	18-20 AWG
	41695	09-50-8021	2478	08-50-0106	08-50-0105	18-20 AWG
	2139	09-50-8021	2478	08-50-0106	08-50-0105	18-20 AWG
J300	5264-N	50-37-5103	5263	80-70-1040	08-70-1039	22-28 AWG