

## Models and Ratings

Output Power	Output 1		Output 2		Output 3		Model Number <sup>(2)</sup>
	Voltage	Current Min/Max <sup>(3)</sup>	Voltage	Current Min/Max	Voltage	Current Min/Max	
60 W	5.0 V	0.0 A/12.00 A					ECM60US05
	7.0 V	0.0 A/8.60 A					ECM60US07
	9.0 V	0.0 A/6.70 A					ECM60US09
	12.0 V	0.0 A/5.00 A					ECM60US12
	15.0 V	0.0 A/4.00 A					ECM60US15
	18.0 V	0.0 A/3.30 A					ECM60US18
	20.0 V	0.0 A/3.00 A					ECM60US20
	24.0 V	0.0 A/2.50 A					ECM60US24
	28.0 V	0.0 A/2.14 A					ECM60US28
	33.0 V	0.0 A/1.80 A					ECM60US33
	48.0 V	0.0 A/1.25 A					ECM60US48
	+5.0 V	0.5 A/8.00 A	+12.0 V	0.1 A/3.0 A			ECM60UD21
	+5.0 V	0.5 A/8.00 A	+15.0 V	0.1 A/2.5 A			ECM60UD22
	+5.0 V	0.5 A/8.00 A	+12.0 V	0.1 A/3.0 A	-12.0 V	0.0 A/0.5 A	ECM60UT31
	+5.0 V	0.5 A/8.00 A	+24.0 V	0.1 A/1.5 A	-12.0 V	0.0 A/0.5 A	ECM60UT32
	+5.0 V	0.5 A/8.00 A	+15.0 V	0.1 A/2.5 A	-15.0 V	0.0 A/0.5 A	ECM60UT33
	+3.3 V	0.5 A/8.00 A	+5.0 V	0.1 A/1.5 A	+12.0 V	0.0 A/0.5 A	ECM60UT34
	+5.0 V	0.5 A/8.00 A	+3.3 V	0.1 A/1.5 A	+12.0 V	0.0 A/0.5 A	ECM60UT35

### Notes

- V<sub>2</sub> will track a change in V<sub>1</sub> by the same percentage change in voltage as V<sub>1</sub> is trimmed.
- To receive unit with cover fitted, add suffix '-C' to model number. For Class I operation only.
- A 120% peak load can be taken for up to 100 ms with a 25% duty cycle. Average load not to exceed 60 W.

## Mechanical Details

**3D MODELS AVAILABLE ONLINE**

4.00 (101.6)  
3.75 (95.25)  
2.00 (50.8)  
1.75 (44.45)  
0.25 x 0.32 faston ground tab  
4 x ø0.156 (3.96) mounting holes  
ø0.312 (7.92) clearance top and bottom  
V Adj.

1.20 (30.5)  
0.14 (3.5)  
SMD component height

Input Connector J1	
Pin 1	Line
Pin 2	Neutral

J1 mates with Molex housing 43061-0003 & Molex series 5194 crimp terminals. Ground (0.25 faston) tab standard.

Output Connector J2		
Pin	Single	Multi
1	V1	+V1
2	V1	+V1
3	RTN	RTN
4	RTN	RTN
5	NC	V3
6	NC	+V2

J2 mates with Molex housing 43061-0006 & Molex series 5194 crimp terminals.

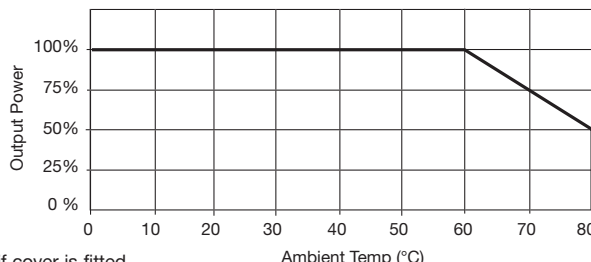
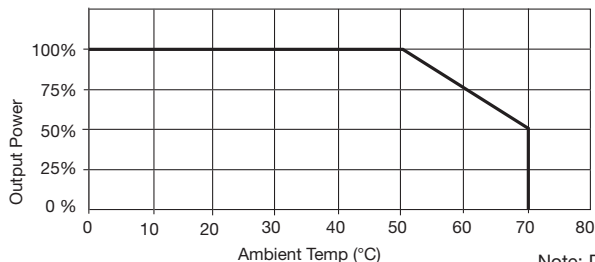
### Notes

- All dimensions in inches (mm). Tolerance .xx = ±0.02 (0.50); .xxx = ±0.01 (0.25)
- Weight: 0.33 lbs (150 g) approx.
- Cable harnesses with 300 mm wire available.  
For single output models, order part number ECM40/60S LOOM†.  
For multi-output models, order part number ECM40/60DT LOOM†.
- Mating connector kit available. Order part number ECM40/60 CONKIT†.
- Covers available. Order part number ECM40/60 COVER^†. Cover dimensions are 4.49 x 2.52 x 1.52 (114 x 64 x 38.5).
- Selected single output models available in a 3" x 5" footprint for OEM quantities. Contact sales for details.
- 3D drawing files available from [www.xppower.com/cad.php](http://www.xppower.com/cad.php).

## Derating Curves

All ECM60 models convection-cooled

All ECM60 models with 5 CFM



Note: Derate by 10% if cover is fitted

Consult longform datasheet for installation information regarding optimum thermal ratings in convection-cooled applications.

## Models and Ratings

### Single Output Models

Output Voltage	Output Current			Model Number <sup>(1)</sup>
	Minimum	Maximum	with 5 CFM Cooling	
3.3 V	0.0 A	15.0 A	20.0 A	ECM100US03
5.0 V	0.0 A	15.0 A	20.0 A	ECM100US05
7.0 V	0.0 A	11.4 A	14.3 A	ECM100US07
9.0 V	0.0 A	8.8 A	11.1 A	ECM100US09
12.0 V	0.0 A	7.5 A	8.3 A	ECM100US12
15.0 V	0.0 A	6.0 A	6.6 A	ECM100US15
18.0 V	0.0 A	5.0 A	5.5 A	ECM100US18
24.0 V	0.0 A	4.1 A	4.1 A	ECM100US24
28.0 V	0.0 A	3.6 A	3.6 A	ECM100US28
33.0 V	0.0 A	3.0 A	3.0 A	ECM100US33
48.0 V	0.0 A	2.1 A	2.1 A	ECM100US48

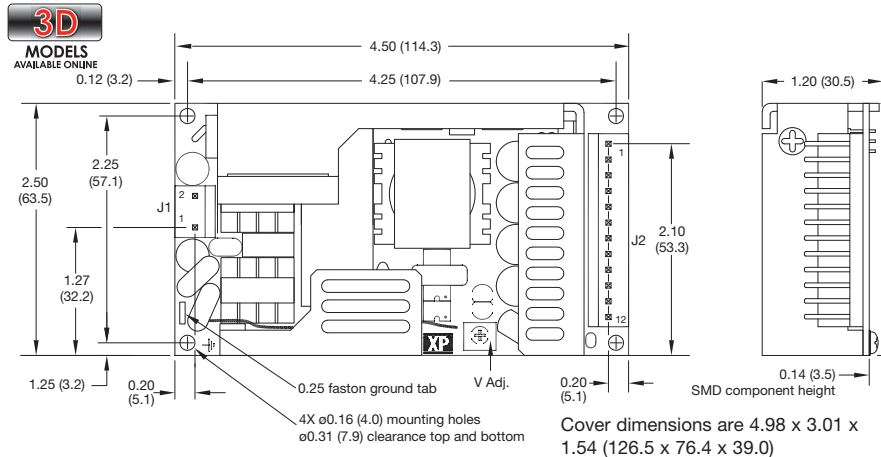
### Multi Output Models

Output Power		Output 1		Output 2		Output 3		Output 4		Model Number <sup>(1)</sup>
Convection Cooled	Forced Air 5 CFM	Voltage	Current Min/Max	Voltage	Current Min/Max	Voltage	Current Min/Max	Voltage	Current Min/Max	
80 W	100 W	+5.0 V	0.0 A/12.0 A	+12.0 V	0.0 A/3.0 A					ECM100UD21
80 W	100 W	+5.0 V	0.0 A/12.0 A	+15.0 V	0.0 A/3.0 A					ECM100UD22
75 W	100 W	+5.0 V	0.5 A/10.0 A	+12.0 V	0.0 A/3.0 A	-12.0 V	0.0 A/0.8 A			ECM100UT31
80 W	100 W	+5.0 V	0.5 A/10.0 A	+24.0 V	0.0 A/2.0 A	-12.0 V	0.0 A/0.8 A			ECM100UT32
80 W	100 W	+5.0 V	0.5 A/10.0 A	+15.0 V	0.0 A/3.0 A	-15.0 V	0.0 A/0.8 A			ECM100UT33
65 W	100 W	+3.3 V	0.5 A/10.0 A	+5.0 V	0.0 A/5.0 A	+12.0 V	0.0 A/0.8 A			ECM100UT34
70 W	100 W	+5.0 V	0.5 A/10.0 A	+3.3 V	0.0 A/5.0 A	+12.0 V	0.0 A/0.8 A			ECM100UT35
80 W	100 W	+5.0 V	0.5 A/10.0 A	+12.0 V	0.0 A/3.0 A	-5.0 V	0.0 A/0.8 A			ECM100UT36
70 W	100 W	+5.0 V	0.5 A/10.0 A	+15.0 V	0.0 A/3.0 A	-5.0 V	0.0 A/0.8 A			ECM100UT37
65 W	100 W	+5.0 V	0.5 A/10.0 A	+3.3 V	0.1 A/5.0 A	+12.0 V	0.0 A/0.8 A	-12.0 V	0.0 A/0.5 A	ECM100UQ41
60 W	100 W	+3.3 V	0.5 A/10.0 A	+5.0 V	0.1 A/5.0 A	+12.0 V	0.0 A/0.8 A	-12.0 V	0.0 A/0.5 A	ECM100UQ42
80 W	100 W	+5.0 V	0.5 A/10.0 A	+24.0 V	0.1 A/2.0 A	+12.0 V	0.0 A/0.8 A	-12.0 V	0.0 A/0.5 A	ECM100UQ43
80 W	100 W	+5.0 V	0.5 A/10.0 A	+24.0 V	0.1 A/2.0 A	+15.0 V	0.0 A/0.8 A	-15.0 V	0.0 A/0.5 A	ECM100UQ44
80 W	100 W	+5.0 V	0.5 A/10.0 A	+12.0 V	0.1 A/3.0 A	-12.0 V	0.0 A/0.8 A	-5.0 V	0.0 A/0.5 A	ECM100UQ45
80 W	100 W	+5.0 V	0.5 A/10.0 A	+15.0 V	0.1 A/3.0 A	-15.0 V	0.0 A/0.8 A	-5.0 V	0.0 A/0.5 A	ECM100UQ46

### Notes

- To receive unit with cover fitted, add suffix '-C' to model number. For Class I operation only.
- Output 3 available with opposite polarity for OEM quantities.

## Mechanical Details



Input Connector J1	
Pin 1	Line
Pin 2	Neutral

J1 mates with Molex housing 43061-0003 and Molex series 5194 crimp terminals. Ground (0.25 faston) tab standard.

Output Connector J2		
Pin	Single	Multi
1	V1	+V1
2	V1	+V1
3	V1	+V1
4	V1	+V1
5	V1 RTN	RTN
6	V1 RTN	RTN
7	V1 RTN	RTN
8	V1 RTN	RTN
9	NOT USED	+V2
10	NOT USED	+V2
11	NOT USED	±V3
12	NOT USED	-V4

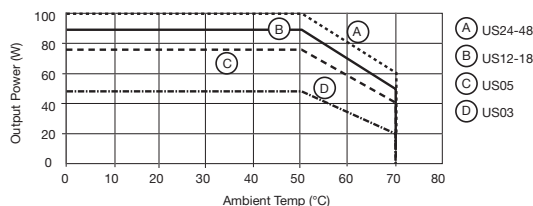
J2 mates with Molex housing 43061-0012 and Molex series 5194 crimp terminals.

### Notes

- All dimensions in inches (mm). Tolerance .xx = ±0.02 (0.50); .xxx = ±0.01 (0.25)
- Weight: 0.4 lbs (180 g) approx.
- Cable harnesses with 300 mm wire available. For single output models, order part number ECM100S LOOM†. For multi-outputs (dual and triple output only), p/n ECM100DT LOOM†.
- Mating connector kit available for single output models. Order part number ECM100S CONKIT†^.
- Covers available. Order part number ECM100 COVER†^.
- Available in a 3" x 5" footprint for OEM quantities. Contact sales for details.
- 3D drawing files available from [www.xppower.com/cad.php](http://www.xppower.com/cad.php).

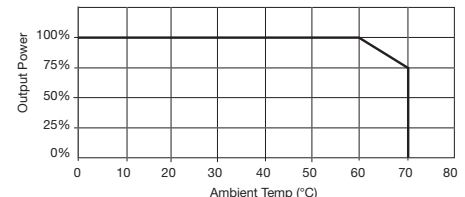
## Derating Curves

### All ECM100 single output models convection-cooled



- Note:
- Derate by 10% if cover is fitted.
  - For multi output convection-cooled operation above +50 °C derate linearly to 50% at +70 °C.

### All ECM100 models with 5 CFM



Consult longform datasheet for installation information regarding optimum thermal ratings in convection-cooled applications.

