

Triple Output Switchers

15-60 Watts CPC Series



THE XPERTS IN POWER

- Low Profile
- Small, Compact PCB Format
- Isolated Auxiliary Outputs
- Low Noise
- 85-264 VAC Universal Input
- Optional Covers & Looms
- International Safety Approvals

Specification

Input

- Input Voltage • 85-264 VAC (110-370 VDC)
- Input Frequency • 47-440 Hz
- Inrush Current • 60 A max at 200 V input & full load (cold start)

Output

- Hold-Up Time • 10 ms min at 85 V input & full load (100 ms typical at 200 V input)
- Output Voltage • See Table, 5 V adjustable, V1 is isolated from V2 & V3
- Output Voltage Adjustment • 5 V \pm 5%
- Output Voltage Set Point • \pm 6% max
- Line Regulation • 0.4% max over specified input range
- Load Regulation • 2% 5 V output, 1% auxiliary outputs
- Ripple & Noise • 40 mV pk-pk typical (180 mV pk-pk max)
- Minimum Load • No minimum load - See Note 3
- Short Circuit & Overload Protection • Operates >105% of rating auto recovery
- Overvoltage Protection • Operates >115% of rating +5 V output Protection

General

- Switching Frequency • Variable frequency 40-400 kHz dependant on line & load
- Efficiency • 70-72% typical

Isolation

- Input to output 3000 VAC for 1 min, 500 VDC, 50 Mohm
- Input to earth 2000 VAC for 1 min, 500 VDC, 50 Mohm
- Output to earth 500 VAC for 1 min, 500 VDC, 50 Mohm

Leakage Current

- 0.75 mA max.

Mating Connectors

- Available as an option

Cable Looms

- Available as an option

Covers

- Available as an option

Environmental

Operating Temperature

- -10°C to +70°C, derate above +50 °C Consult Sales Office

Storage Temperature

- -20 °C to +75 °C

Relative Humidity

- 20-90% non-condensing

Vibration

- 10-55 Hz at 2 G, 3 mins period for 60 mins along X, Y & Z axis

Shock

- 20 G for 11 ms, once on X, Y & Z axis

EMC & Safety

EMC

- FCC curve B, EN55022B

Safety Approvals

- Approved to UL1950, IEC950, CSA22.2 No.234, EN60950

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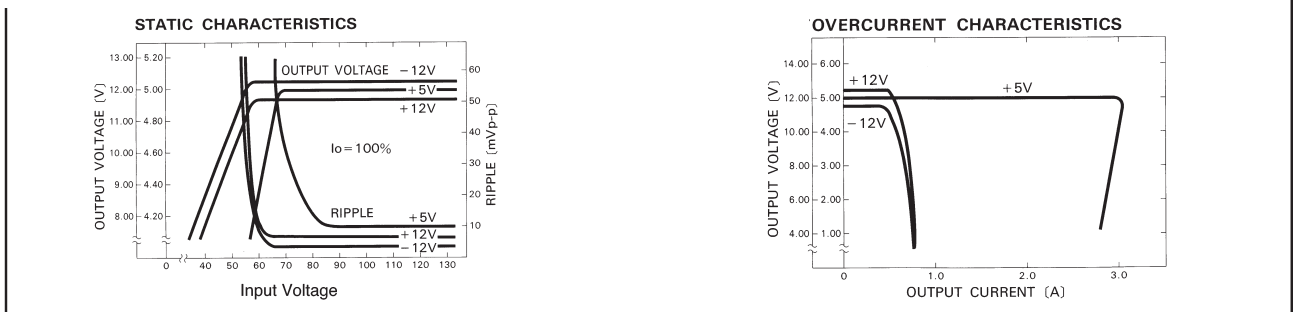
sales@xpplc.com

OUTPUT VOLTAGE & CURRENT RATINGS				CPC
Output Power	Output 1 ⁽¹⁾	Output Ratings Output 2 ⁽²⁾	Output 3 ⁽²⁾	Model Number
15 W	+5 V @ 2.0 A (3.0 A pk)	+12 V @ 0.3 A (0.6 A pk)	-12 V @ 0.2 A (0.30 A pk)	CPC15UT1
15 W	+5 V @ 2.0 A (3.0 A pk)	+15 V @ 0.3 A (0.6 A pk)	-15 V @ 0.2 A (0.30 A pk)	CPC15UT2
30 W	+5 V @ 3.0 A (4.5 A pk)	+12 V @ 1.2 A (2.0 A pk)	-12 V @ 0.3 A (0.45 A pk)	CPC30UT1
30 W	+5 V @ 3.0 A (4.5 A pk)	+15 V @ 1.0 A (2.0 A pk)	-15 V @ 0.3 A (0.45 A pk)	CPC30UT2
60 W	+5 V @ 5.0 A (7.0 A pk)	+12 V @ 2.5 A (3.5 A pk)	-12 V @ 0.5 A (0.70 A pk)	CPC60UT1
60 W	+5 V @ 5.0 A (7.0 A pk)	+15 V @ 2.0 A (3.5 A pk)	-15 V @ 0.5 A (0.70 A pk)	CPC60UT2

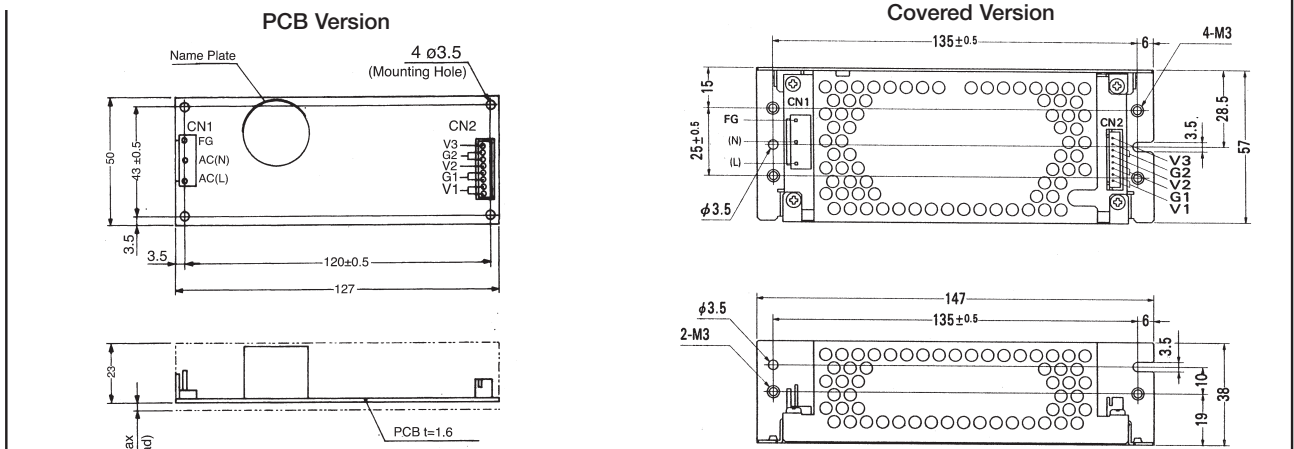
Notes

1. Isolated from 2 & 3.
2. Linear regulated.
3. The specified output currents are available for a maximum duration of 10 s if the average current level is below rating and the total power is below rating for the unit. Outputs 2 & 3 may be loaded to 80% of their rated current when +5 V is not loaded. 'FG' terminal should be used as AC input earth. It is isolated from the DC output.
4. Mating input & output connectors are available. Example: order as CPC30 CON KIT for 30 watt models.
5. Loom kit option: comprising of 2 x 300 mm length cable looms, one terminated with a mating connector for input and the other for output terminals.
6. Cover option: wrap around chassis & safety cover supplied as a kit or fitted.

Operating Characteristics



Mechanical Details - 15 Watt Models



Fuse Rating 250 V T2 A

I/O Connector	Mating Connector (Terminal)
CN1	B3P5-VH VHR-5N (SVH-21T-1.1 or SVH-21-P1.1)
CN2	B8B-XH-A XHP-8 (BXH-001T-P0.6 or SXH-001T-P0.6)

Mfr: JST

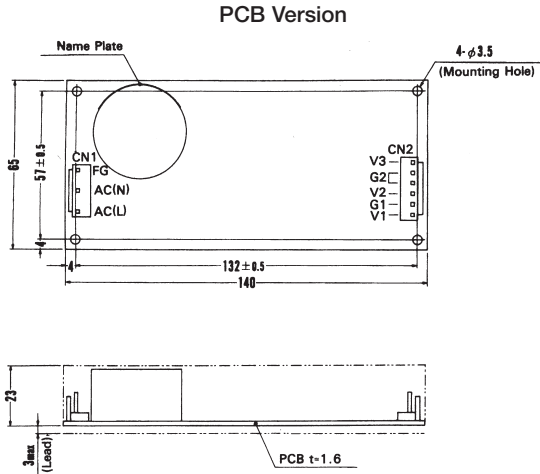
PIN ASSIGNMENT

CN1	
Pin No.	Input
1	AC(L)
2	
3	AC(N)
4	
5	FG

CN2	
Pin No.	Input
1	V 1
2	V 1
3	G 1
4	G 1
5	V 2
6	G 2
7	G 2
8	V 3

NOTES:
 2 A per pin maximum for CN2
 Weight: 150g or less
 Tolerance: ±1
 Dimensions in mm
 PWB Material: Glass composite (CEM3)

Mechanical Details - 30 Watt Models



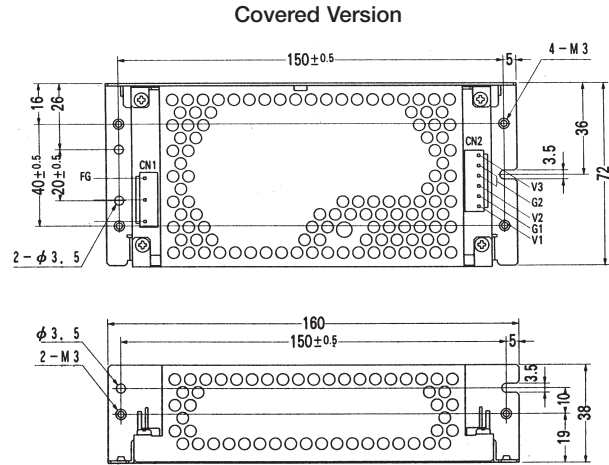
Fuse Rating 250 V T3 A

I/O Connector	Mating Connector (Terminal)
CN1	B3P5-VH
CN2	B6P-VH

Mfr: JST

PIN ASSIGNMENT

Pin No.	Input
1	AC(L)
2	
3	AC(N)
4	
5	FG

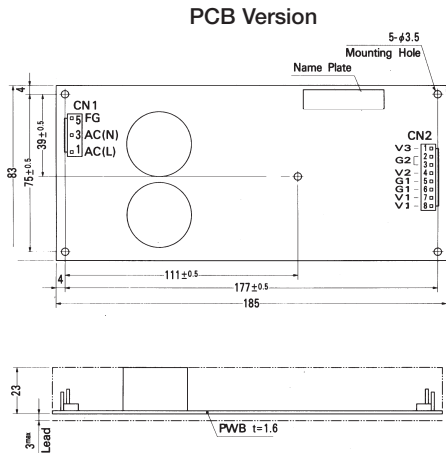


Supplied as cover kit (not fitted). Order as **CPC30/COVER KIT**
Supplied fitted use suffix C e.g. CPC30UT1-C

NOTES:

2 A per pin maximum for CN2
Weight: 220g or less
Tolerance: ±1
Dimensions in mm
PWB Material: Glass composite (CEM3)

Mechanical Details - 60 Watt Models



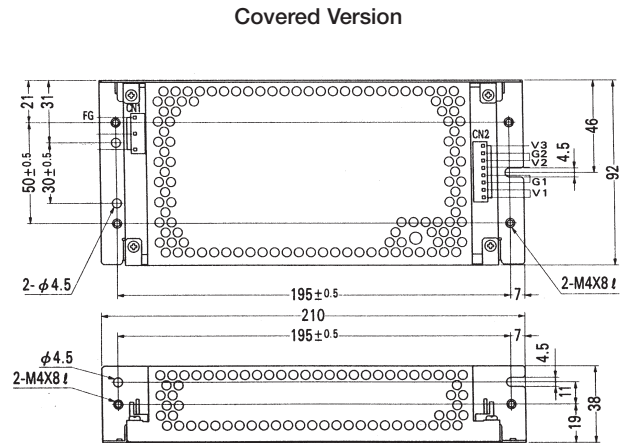
Fuse Rating 250 V T3 A

I/O Connector	Mating Connector (Terminal)
CN1	B3P5-VH
CN2	B8P-VH

Mfr: JST

PIN ASSIGNMENT

Pin No.	Input
1	AC(L)
2	
3	AC(N)
4	
5	FG



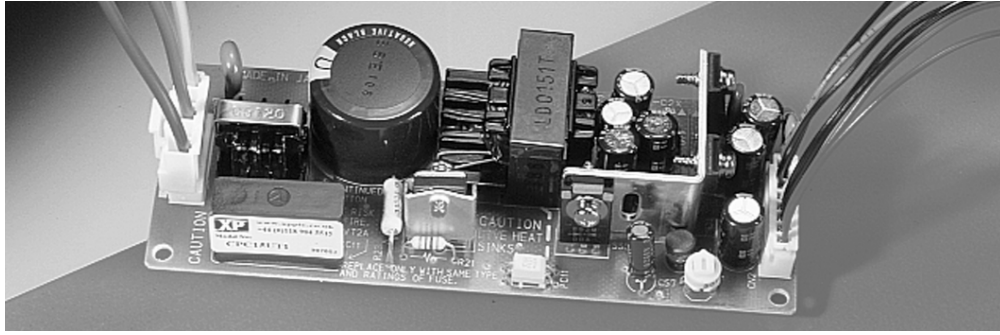
Supplied as cover kit (not fitted). Order as **CPC60/COVER KIT**
Supplied fitted use suffix C e.g. CPC60UT1-C

NOTES:

5 A per pin maximum for CN2
Weight: 300g or less
Tolerance: ±1
Dimensions in mm
PWB Material: Glass composite (CEM3)

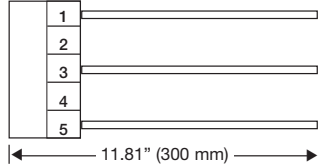
LOOM KITS

CPC



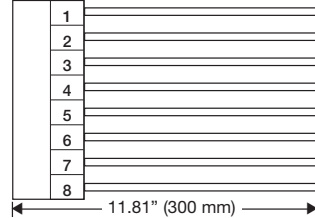
Loom Kit - 15 Watt Models

Input Connector



Pin No.	Wire Gauge	Colour	Input
1	0.5 mm	Brown	L
2	-	-	-
3	0.5 mm	Blue	N
4	-	-	-
5	0.5 mm	Grn/Yel	E

Output Connector

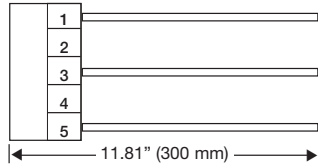


Pin No.	Wire Gauge	Colour	Output
1 & 2	22 AWG	Red	V 1
3 & 4	22 AWG	Black	G 1
5	22 AWG	Yellow	V 2
6 & 7	22 AWG	Black	G 2
8	22 AWG	Grey	V 3

Order as CPC 15 Loom KT

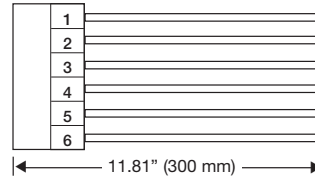
Loom Kit - 30 Watt Models

Input Connector



Pin No.	Wire Gauge	Colour	Input
1	0.5 mm	Brown	L
2	-	-	-
3	0.5 mm	Blue	N
4	-	-	-
5	0.5 mm	Grn/Yel	E

Output Connector

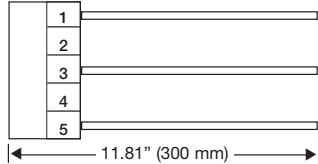


Pin No.	Wire Gauge	Colour	Output
1	0.5 mm	Grey	V 3
2 & 3	0.5 mm	Black	G 2
4	0.5 mm	Yellow	V 2
5	0.5 mm	Black	G 1
6	0.5 mm	Red	V 1

Order as CPC 30 Loom KT

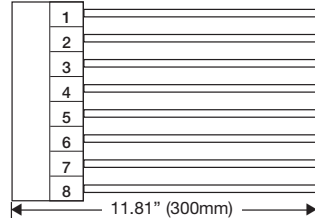
Loom Kit - 60 Watt Models

Input Connector



Pin No.	Wire Gauge	Colour	Input
1	0.5 mm	Brown	L
2	-	-	-
3	0.5 mm	Blue	N
4	-	-	-
5	0.5 mm	Grn/Yel	E

Output Connector



Pin No.	Wire Gauge	Colour	Output
1 & 2	0.5 mm	Grey	V 3
2 & 3	0.5 mm	Black	G 2
4	0.5 mm	Yellow	V 2
5 & 6	0.5 mm	Black	G 1
7 & 8	0.5 mm	Red	V 1

Order as CPC 60 Loom KT

