



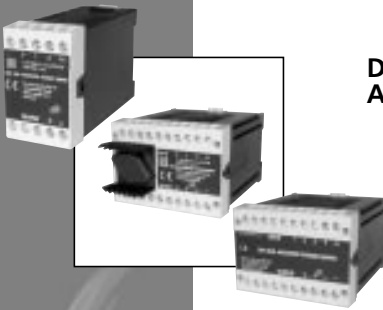
POWER CONVERSION SOLUTIONS FOR INDUSTRY

**Convel Industrial and Bench Top
AC/DC Power Supplies**

CALEX
ELECTRONICS LTD

POWER to supply you !

In this catalogue you will find the Convel ranges of industrial and bench top AC/DC power supplies designed, manufactured and marketed by Calex Electronics Ltd.



DIN Rail Mounting AC/DC Regulated Power Supplies

Linear, for instrumentation	41000 Series	A	1
Linear, general purpose	42000 Series	B	2
Switch Mode	42000H/J Series	C	3



Open Frame AC/DC Linear Power Supplies

Regulated	32000 Series	D	4
Unregulated	33000 Series	E	10



Chassis Mounting AC/DC Linear Power Supplies

Regulated	92401	F	11
Unregulated	92405/10/15	G	13



Bench Top AC/DC Power Supplies

Battery Charger	BPS1000	H	15
0 to 15V dc, 1A	BPS1510	I	16
0 to 30V dc, 0.5A	BPS3005	J	17
Triple output; 4/6V dc, 12/15V dc, -12 /-15V dc	BPS4000	K	18
Triple interconnectable; fixed floating outputs	BPS5000	L	19

SELECTION GUIDE - SINGLE OUTPUTS

Output dc			Format	Model	Section	Page
0 to 15V	1A	15W	Bench Top	BPS1510	I	16
0 to 30V	0.5A	15W	Bench Top	BPS3005	J	17
5V	200mA	1W	DIN Rail Mount	41052	A	1
5V	500mA	2.5W	DIN Rail Mount	41055	A	1
5V	3.0A	15W	Open Frame	32005A	D	4
5V	6.0A	30W	Open Frame	32005B	D	4
5V	9.0A	45W	Open Frame	32005C	D	4
5V	12.0A	60W	Open Frame	32005D	D	4
5V	18.0A	90W	Open Frame	32005E	D	4
12V	100mA	1.2W	DIN Rail Mount	41121	A	1
12V	200mA	2.4W	DIN Rail Mount	41122	A	1
12V	400mA	4.8W	DIN Rail Mount	41124	A	1
12V	1.0A	12W	DIN Rail Mount	42012A	B	2
12V	2.0A	24W	DIN Rail Mount	42012A/2	B	2
12V	5A	60W	DIN Rail Mount	42012H	C	3
12V	10A	120W	DIN Rail Mount	42012J	C	3
12V	10A	120W	Open Frame	33012A	E	10
12V	20A	240W	Open Frame	33012B	E	10
12 to 15V	1.7A	25.5W	Open Frame	32012A	D	4
12 to 15V	3.4A	51W	Open Frame	32012B	D	4
12 to 15V	5.1A	76.5W	Open Frame	32012C	D	4
12 to 15V	6.8A	102W	Open Frame	32012D	D	4
12 to 15V	10.2A	153W	Open Frame	32012E	D	4
15V	100mA	1.5W	DIN Rail Mount	41151	A	1
15V	300mA	4.5W	DIN Rail Mount	41153	A	1
15V	1.0A	15W	DIN Rail Mount	42015A	B	2
15V	2.0A	30W	DIN Rail Mount	42015A/2	B	2
24V	100mA	2.4W	DIN Rail Mount	41241	A	1
24V	200mA	4.8W	DIN Rail Mount	41242	A	1
24V	500mA	12W	DIN Rail Mount	41245	A	1
24V	1.0A	24W	DIN Rail Mount	42024A	B	2
24V	1.25A	30W	Chassis Mount	92401	F	11
24V	2.0A	48W	DIN Rail Mount	42024A/2	B	2
24V	2.5A	60W	DIN Rail Mount	42024H	C	3
24V	4.0A	96W	DIN Rail Mount	42024B	B	2
24V	5A	120W	DIN Rail Mount	42024J	C	3
24V	5A	120W	Chassis Mount	92405	G	13
24V	5A	120W	Open Frame	33024A	E	10
24V	10A	240W	Chassis Mount	92410	G	13
24V	10A	240W	Open Frame	33024B	E	10
24V	15A	360W	Chassis Mount	92415	G	13
24V	20A	480W	Open Frame	33024C	E	10
24 to 28V	1.2A	33.6W	Open Frame	32024A	D	4
24 to 28V	2.4A	67.2W	Open Frame	32024B	D	4
24 to 28V	3.6A	100.8W	Open Frame	32024C	D	4
24 to 28V	4.8A	134.4W	Open Frame	32024D	D	4
24 to 28V	7.2A	201.6W	Open Frame	32024E	D	4
24 to 28V	10.0A	280W	Open Frame	32024E/10	D	4
48V	0.5A	24W	Open Frame	32048A	D	4
48V	1.0A	48W	Open Frame	32048B	D	4
48V	3.0A	144W	Open Frame	32048D	D	4
48V	5A	240W	Open Frame	33048B	E	10
120 to 200V	0.15A-0.125A	27W	Open Frame	32150A	D	4
-	10mA	-	Bench Top	BPS1000	H	15
-	60mA	-				
-	120mA	-				
-	240mA	-				
-	480mA	-				

SELECTION GUIDE - DUAL OUTPUTS

Output 1 dc		Output 2 dc		Format	Model	Section	Page
5V	1.5A	-5V	1.5A	Open Frame	32205A	D	4
12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	Open Frame	32212A	D	4
12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.4A	Open Frame	32212B	D	4
12 to 15V	3.4A	-12 to -15V	3.4A	Open Frame	32212C	D	4
12 to 15V	5.0A	-12 to -15V	5.0A	Open Frame	32212D	D	4

SELECTION GUIDE - TRIPLE OUTPUTS

Output 1 dc		Output 2 dc		Output 3 dc		Format	Model	Section	Page
4 to 6V	0.5A	12 to 15V	0.5A	-12 to -15V	0.5A	Bench Top	BPS4000	K	18
5V	2.0A	9 to 15V	0.4A	-9 to -15V or -5V	0.4A	Open Frame	32305A	D	4
5V	3.0A	12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	Open Frame	32305B	D	4
5V	6.0A	12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	Open Frame	32305C	D	4
5V	6.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	Open Frame	32305D	D	4
5V	8.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	Open Frame	32305E	D	4
5V	12.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	Open Frame	32305F	D	4
5V	12.0A	12 to 15V	3.4A	-12 to -15V	3.4A	Open Frame	32305G	D	4
12V $\pm 0.2V$	0.75A	12V $\pm 0.2V$	0.75A	5V $\pm 0.2V$	0.75A	Bench Top	BPS5000	L	19

Convel 41000 Series

DIN Rail Mounting Power Supplies for Instrumentation Applications



The 41000 Series range of power supplies are designed for quick and trouble-free installation onto 35mm profile DIN rails. With outputs ranging from 5V to 24V and maximum current capabilities from 100mA to 500mA, these units are ideal for most instrumentation and control systems.

Every model in the range is provided with output current foldback limiting and is fully short-circuit protected. Great attention has been taken to usability and safety. A green "supply on" LED is provided to clearly indicate the presence of power, and link selection allows the use of 110 or 230V supplies without derating.

SPECIFICATION

Input

115VAC or 230VAC ($\pm 10\%$) link selectable

DC Output

See model chart

Ripple & Noise

less than 5mV rms.

Output Voltage Tolerance

$\pm 0.5\%$ max.

Load Regulation

$\pm 0.2\%$ for 50% load change

Line Regulation

$\pm 0.05\%$ for 10% line change

Isolation: Input to output

3750VAC min.

Temperature Rating

Standard Range: 0°C to +50°C full-rated,
derated linearly to 40% at 70°C

Safety

In accordance with EN60950;
IEC950; UL1950; and CSA 22.2

Transformer

VDE 0551

Case Size

(l x w x h) 119.2 x 45 x 73.2mm
The case is rated to IP20

Case Material

Polycarbonate (self extinguishing to UL 94V-0)

Weight

0.37kg
41245: 0.53kg

Model	Output Voltage Volts	Output Current mA
41052	5	200
41055	5	500
41121	12	100
41122	12	200
41124	12	400
41151	15	100
41153	15	300
41241	24	100
41242	24	200
41245	24	500

Convel 42000 Series

DIN Rail Mounting Linear Power Supplies



The 42000 Series DIN rail mounting power supplies are supplied ready for connection. The unit has only to be snapped on to the 35mm profile rail (DIN 46277-3) and connected to the clearly marked terminal screws. A status LED indicates power OK.

For increased power two or more units may be connected in parallel. The output of these units is fully protected against short circuits and overload

SPECIFICATION

Input

115/230VAC 50/60Hz

DC Output

See model chart

Ripple & Noise

<5mV rms

Output Voltage Tolerance

±0.5% max.

Load Regulation

±0.2% for 50% load change

Line Regulation

±0.05% for 10% line change

Isolation: Input to output

3750Vac min.

Temperature Rating

Standard Range: 0°C to +50°C full-rated, derated linearly to 40% at 70°C

Safety

In accordance with EN60950, IEC 950, UL 1950 and CSA22.2

Transformer

VDE 0551

Case Size

'A' l x w x h 100 x 70 x 112mm

'B' l x w x h 150 x 72 x 112mm

The case is rated to IP20

Case Material

Polycarbonate (self extinguishing to UL 94V-0)

Weight

420xxA: 1.3kg

42024B: 2.32kg

Model	Output Voltage Volts	Output Current Amps	Case
42012A	12	1.0	A
42012A/2	12	2.0	A
42015A	15	1.0	A
42015A/2	15	2.0	A
42024A	24	1.0	A
42024A/2	24	2.0	A
42024B	24	4.0	B

Convel 42000 H & J Series

DIN Rail Mounting Switch Mode Power Supplies – 60 and 120 Watt



A range of high grade, low noise, regulated switch mode power supplies designed to fit standard 35mm DIN rail to BS5584:1978 (EN50 022, DIN 46277-3).

Front facing, clearly identified screw terminals provide easy access for connection. Input of either 110 or 230VAC can be used and the range has a choice of output voltage and current combinations. The DC output is fully protected for short circuit and overload conditions using pulse by pulse current limiting.

- ◆ Inbuilt EMI filter, meets VDE curve B
- ◆ Status LED indicates power OK
- ◆ Compliant with relevant EU directives

SPECIFICATION

Input Voltage

93 - 132 & 187 - 264VAC

Frequency

47 - 63Hz

DC Output

See model chart

Output Hold-up

20mS typ. at nominal line, full load

Output Voltage Tolerance

±0.5% max.

Efficiency

>80% typ.

Load Regulation

1%

Line Regulation

±0.05% for 10% line change

Output Ripple

<50mV p-p

Short Circuit Protection

Electronic

Isolation

SELV to EN60 950

RFI

Class B

Safety

In accordance with EN60950; IEC950; UL1950; and CSA 22.2

Operating Temp

0 - 50°C (Derate linearly to 40% of rated output at 70°C)

Dimensions (h x w x l)

73 x 100 x 118mm

Case Material

Polycarbonate (self extinguishing to UL 94V-0)

Weight

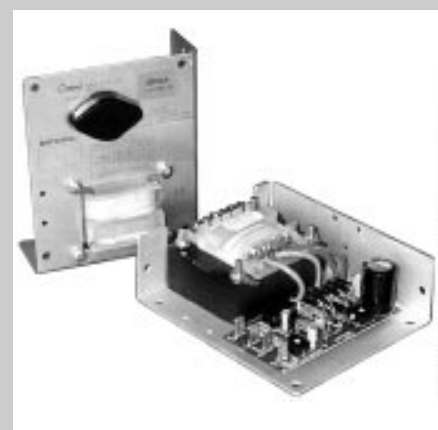
420xxH: 0.45kg

420xxJ: 0.5kg

Model	Output Voltage Volts	Output Current Amps
42012H	12	5
42024H	24	2.5
42012J	12	10
42024J	24	5

Convel 32000 Series

Open Frame AC/DC Regulated Linear Power Supplies



These high quality linear regulated power supplies provide outstanding value and are designed for ease of application and long trouble free life.

- ◆ Universal AC input 100 - 240VAC
- ◆ 3.75kV Isolation safety transformer
- ◆ TÜV approved
- ◆ Quality UK design and manufacture
- ◆ International industry standard sizes
- ◆ Overload protection on all units
- ◆ Exceeds the requirements of UL, CSA, VDE, IEC, BT, ECMA & CEE
- ◆ Safety earth tag
- ◆ 2 year warranty

SPECIFICATION

A.C. Input

100/120/220/240VAC +10%, -12%,
47 to 440Hz

D.C. Output

See Voltage/Current Rating Chart.
Adjustment range $\pm 5\%$ minimum.

Line Regulation

$\pm 0.05\%$ for a 10% line change.

Load Regulation

$\pm 0.05\%$ for a 50% load change.

Output Ripple

2V to 15V units: 5.0mV PK-PK maximum
20V to 28V units: 0.02% PK-PK maximum

Transient Response

50µseconds for a 50% load change

Short Circuit and Overload Protection

Automatic current limit/foldback

Overvoltage Protection

Built-in on all 5V outputs. Set at 6.2V ± 0.4 V
Other models use optional overvoltage protection. See Option 4 overleaf

Remote Sensing

Provided on most models, open sense load protection built in.

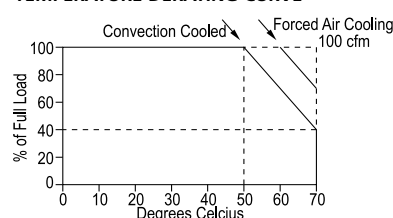
Stability

$\pm 0.3\%$ for 24 hour period after 1 hour warm-up

Temperature Rating

Standard Range: 0°C to +50°C full-rated,
derated linearly to 40% at 70°C
Extended Range: -40°C to +50°C full-rated,
derated linearly to 40% at 70°C

TEMPERATURE DERATING CURVE



Temperature Coefficient

$\pm 0.03\%/^{\circ}\text{C}$ maximum

Efficiency (typical)

5V unit: 45%; 12V and 15V units: 55%;
24V units: 60%

Vibration

Per MIL-STD-810C, Method 514, Procedure X

Shock

Per MIL-STD-810C, Method 516, Procedure V

Isolation

Input to ground: 3750VAC min.
Input to output(s): 3750VAC min.
Output to ground: 500VAC min.
Leakage current (live to ground): 5µA max.

Safety

In accordance with EN60950

3200 SERIES

SINGLE OUTPUT MODELS

Model	Output Voltage Volts	Output Current Amps	Case
32005A	5	3.0	A
32005B	5	6.0	B
32005C	5	9.0	C
32005D	5	12.0	D
32005E	5	18.0	E
32012A	12 to 15	1.7	A
32012B	12 to 15	3.4	B
32012C	12 to 15	5.1	C
32012D	12 to 15	6.8	D
32012E	12 to 15	10.2	E
32024A	24 to 28	1.2	A
32024B	24 to 28	2.4	B
32024C	24 to 28	3.6	C
32024D	24 to 28	4.8	D
32024E	24 to 28	7.2	E
32024E/10	24 to 28	10.0	E
32048A*	48	0.5	A
32048B*	48	1.0	B
32048D*	48	3.0	D
32150A	120 to 200	0.150**	A

* No remote sensing

** Output current from 180 to 200V falls linearly from 150mA to 125mA

DUAL OUTPUT MODELS

Model	Output 1		Output 2		Case
	Voltage Volts	Current Amps	Voltage Volt	Current Amps	
32205A*	5	1.5	-5	1.5	AA
32212A	12 to 15	1.0	-12 to -15 or -5	1.0 0.4	AA
32212B	12 to 15	1.7	-12 to -15 or -5	1.7 0.4	BB
32212C	12 to 15	3.4	-12 to -15	3.4	CC
32212D	12 to 15	5.0	-12 to -15	5.0	E

TRIPLE OUTPUT MODELS

Model	Output 1		Output 2		Output 3		Case
	Voltage Volts	Current Amps	Voltage Volts	Current Amps	Voltage Volts	Current Amps	
32305A	5*	2.0	9 to 15*	0.4	-9 to -15* or -5	0.4	AA
32305B	5	3.0	12 to 15	1.0	-12 to -15 or -5	1.0 0.4	AAA
32305C	5	6.0	12 to 15*	1.0	-12 to -15* or -5	1.0 0.4	D
32305D	5	6.0	12 to 15	1.7	-12 to -15 or -5	1.7 0.7	BBB
32305E	5	8.0	12 to 15	1.7	-12 to -15 or -5	1.7 0.7	BBB
32305F	5	12.0	12 to 15	1.7	-12 to -15 or -5	1.7 0.7	DBB
32305G	5	12.0	12 to 15	3.4	-12 to -15	3.4	DCC

OPTIONS

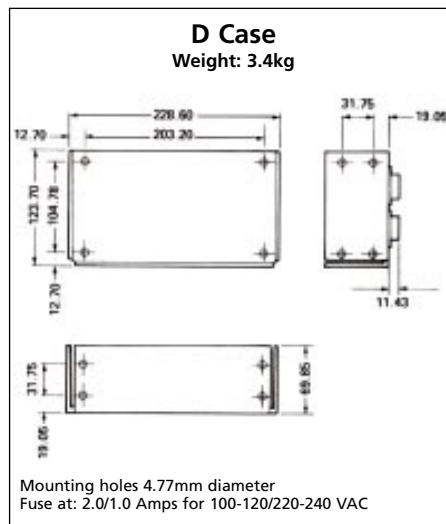
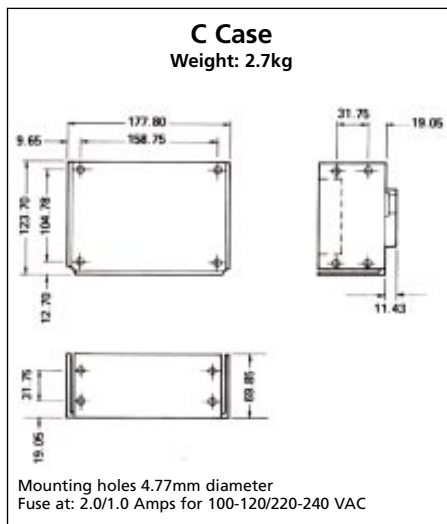
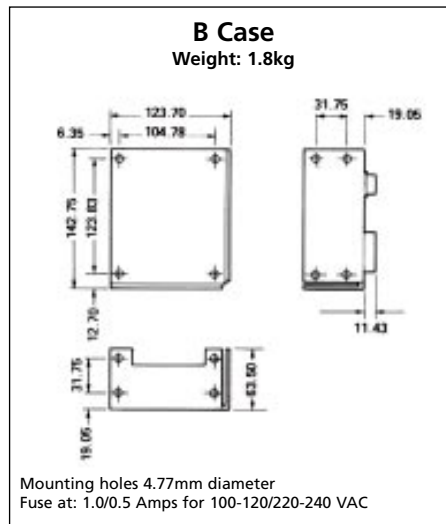
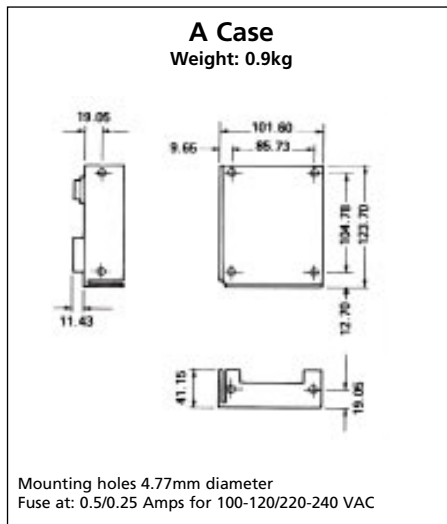
- 1 Tropicalisation – suffix code 'T'
- 2 Wide range output voltage adjustment – suffix code 'R' available on 12V and higher output voltages enabling adjustment down to 2V (derate linearly from full load to zero at 2V)
- 3 Low temperature operation -40°C to +50°C – suffix code 'LT'
- 4 Overvoltage Protection Modules – These optional Overvoltage Protection Modules are available for use with any power supply NOT supplied with built-in OVP. Each is adjustable from 6.4V to 34V and should be used when maximum load protection is of prime importance. Response time is 1mS. Mounting holes are provided on the chassis for these modules, which mount within the specified outline dimensions of each power supply.

OVP Selection Chart

	Case	OVP Model Required
Single Output	A/B/C/D	32901A
	E	32901B
Dual Output	AA/BB/CC	32901A, protects both outputs
	E	32901B, protects both outputs
Triple Output	AA/AAA/D	32901A, protects dual outputs
	BBB/131	OVP built-in on 5V outputs
Disk Drive	C/131/AAA BB	32901A, protects any output not supplied with built-in OVP

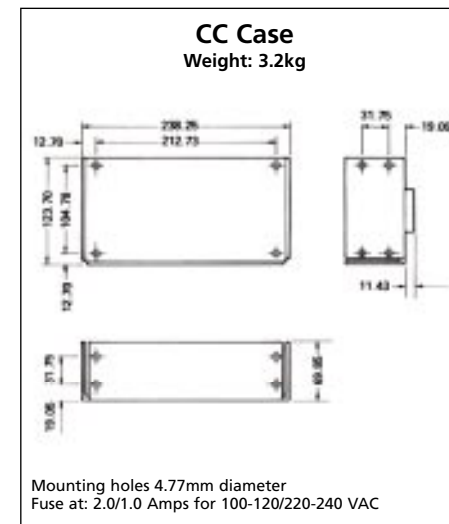
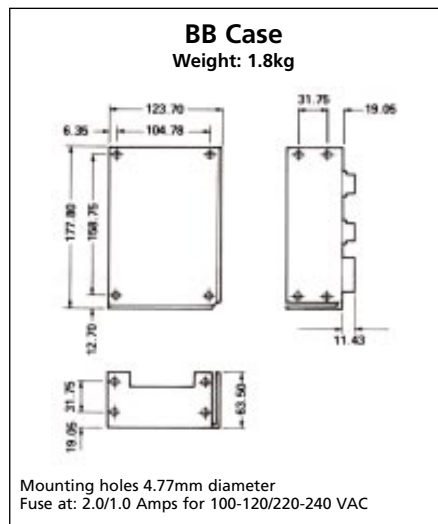
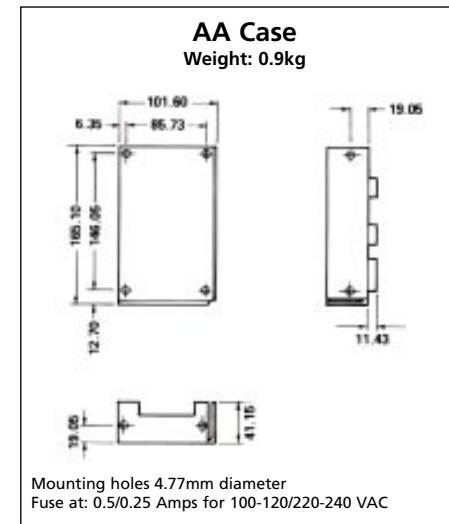
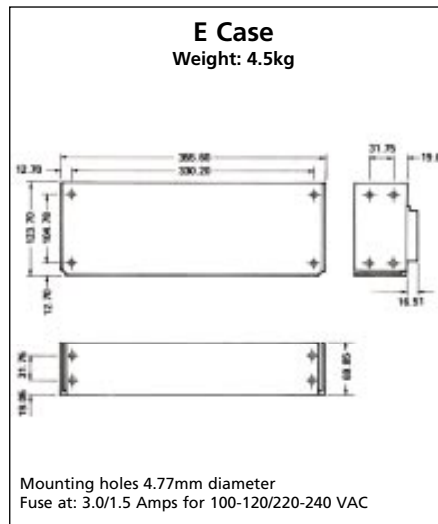
3200 SERIES - GENERAL DIMENSIONS

All dimensions are in mm



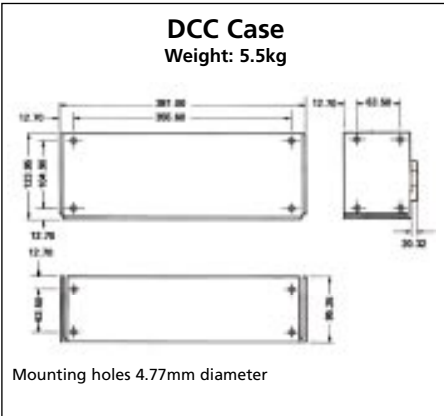
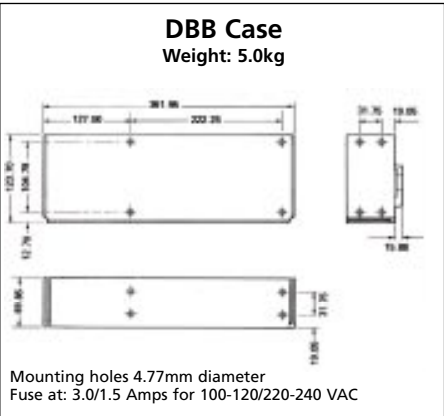
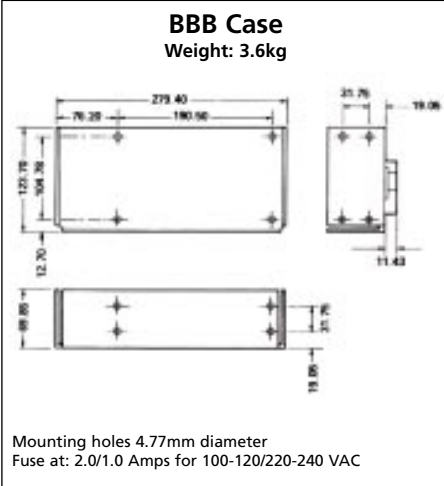
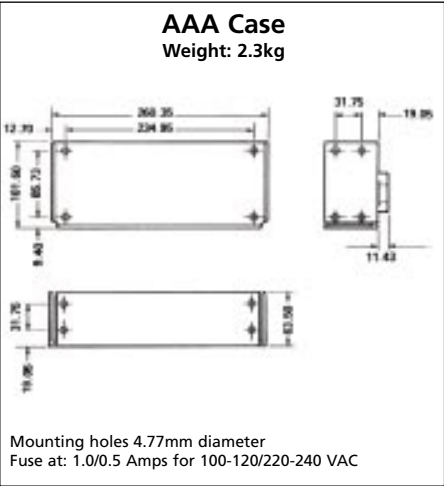
3200 SERIES - GENERAL DIMENSIONS

All dimensions are in mm

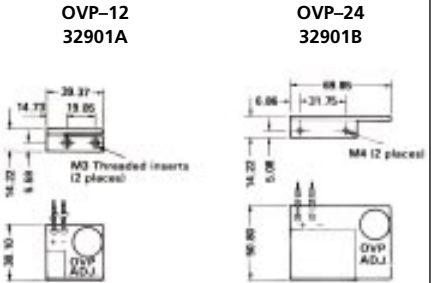


3200 SERIES - GENERAL DIMENSIONS

All dimensions are in mm

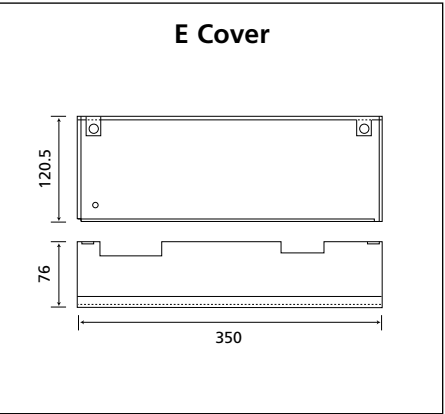
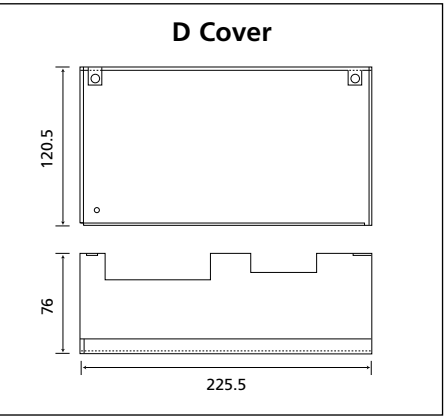
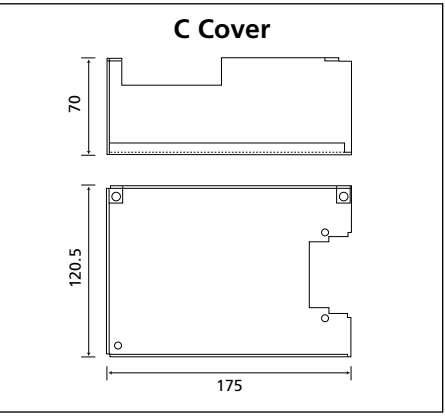
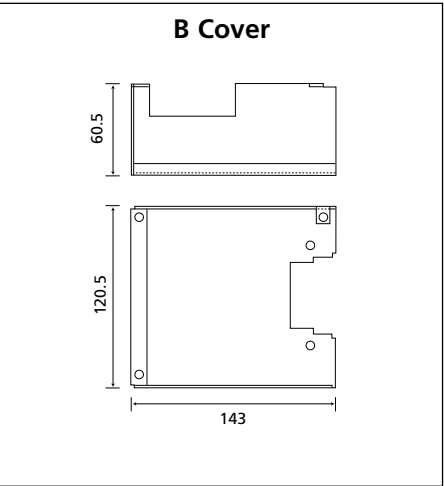
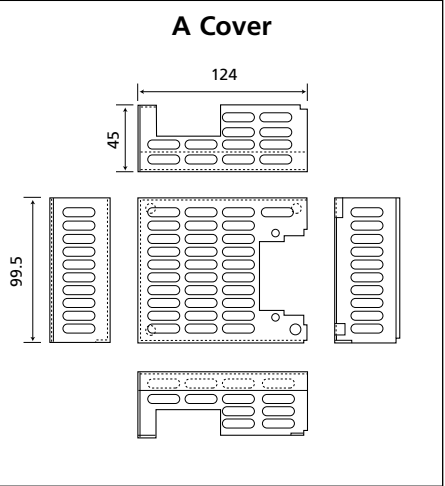


Overvoltage Protection Modules



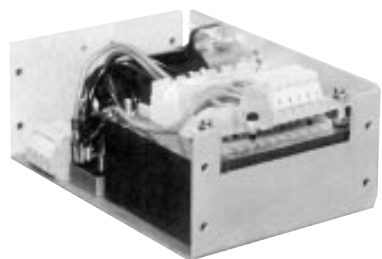
3200 SERIES - GENERAL DIMENSIONS

All dimensions are in mm



Convel 33000 Series

Open Frame AC/DC Unregulated Linear Power Supplies



These high quality unregulated linear power supplies are suitable for a wide range of applications where a fully regulated DC source is not required.

- ◆ Low cost
- ◆ Suitable for many industrial applications e.g. relays, solenoids, DC motors etc.
- ◆ Universal input
- ◆ 3.75kV isolation safety transformer
- ◆ Quality UK design and manufacture

SPECIFICATION

Input

115/230VAC 50/60Hz

D.C. Output

See Model Chart

Load Regulation

20% or 3V whichever is the greater for 20 to 100% load change

Output Ripple & Noise

1.5Vrms maximum

Operating Temperature

0°C to +50°C

Isolation

Input to ground: 3750VAC min.

Input to output: 3750VAC min.

Output to ground: 500VAC min.

Safety

In accordance with EN60950 (Construction uses safety bobbin approved to VDE 0551)

Overall Dimensions

l x w x h: 177.8 x 123.7 x <86.0mm

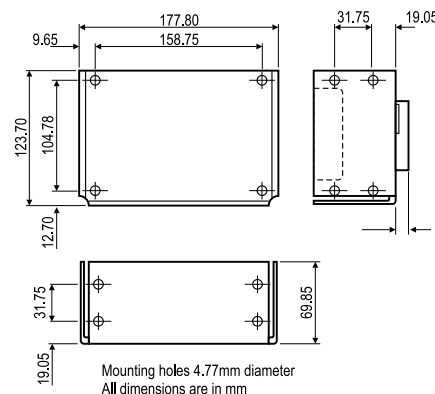
Weight

330xxA: 3.5kg

330xxB: 3.6kg

33024C: 4.3kg

Model	Output Voltage Volts	Output Current Amps
33012A	12	10
33012B	12	20
33024A	24	5
33024B	24	10
33024C	24	20
33048B	48	5



Convel 92401

Chassis Mounting AC/DC Regulated Linear Power Supply



This high quality linear regulated power supply provides outstanding value and is designed for ease of application and long trouble free life.

- ◆ Universal AC input 100 - 240VAC
- ◆ 24VDC 1.25A output
- ◆ 3.75kV Isolation safety transformer
- ◆ Short circuit and overload protection
- ◆ Quality UK design and manufacture

SPECIFICATION

A.C. Input

100/120/220/240VAC +10%, -12%, 47 to 440Hz

D.C. Output

24V at 1.25A

Line Regulation

±2.0% for a 10% line change.

Load Regulation

±2.0% for a 100% load change.

Output Ripple

0.2% PK-PK maximum

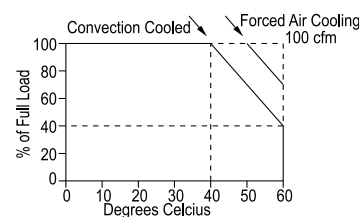
Short Circuit and Overload Protection

Automatic current limit/foldback

Temperature Rating

0°C to +40°C full-rated, derated linearly to 40% at 60°C

TEMPERATURE DERATING CURVE



Efficiency (typical)

60%

Isolation

Input to ground: 3750VAC min.

Input to output(s): 3750VAC min.

Output to ground: 500VAC min.

Leakage current (live to ground): 5µA max.

Safety

In accordance with EN60950

MECHANICAL

Overall dimensions (l x w x h)

179 x 118.6 x 88mm

Weight

2.3kg

Mechanical Format

All units are supplied fully enclosed as standard

Mounting Orientation

Units may be mounted horizontally as shown on the outline drawing overleaf, or vertically with the cables entering from below.

Ventilation and Cooling

Units are convection cooled and therefore require free air flow around the chassis.

Fixings

Units have 4 x M3 ISO standard threaded inserts provided

Connectors

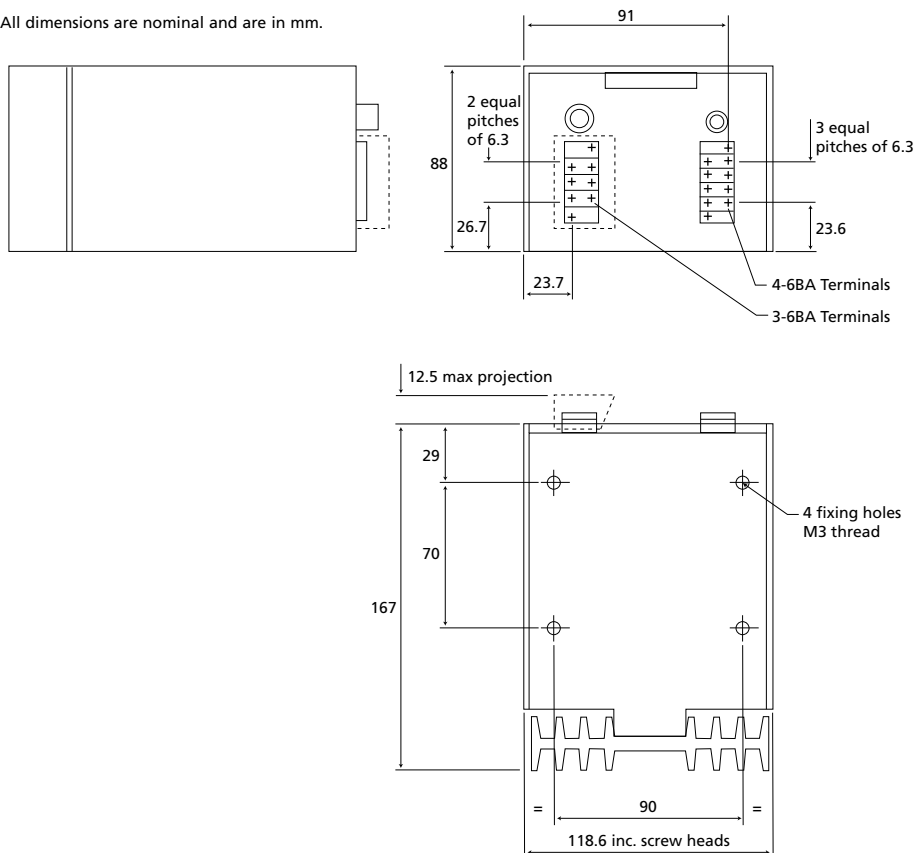
The following connectors are provided on the power supply:

Screw terminals are provided for input and output connections

Input voltage selection is achieved using links on the transformer

OUTLINE DRAWING

All dimensions are nominal and are in mm.



Convel 92405, 92410 and 92415

Chassis Mounting AC/DC Unregulated Linear Power Supplies



A range of 24V DC power supplies manufactured to a high standard suitable for a wide range of industrial control applications. All models feature detachable terminal covers to provide easy access for connection to the input and output terminals. This cover is recommended to be secured back in position prior to use.

- ◆ 24V DC output
- ◆ 120 to 360 Watt
- ◆ Suitable for many industrial applications e.g. relays, solenoids, DC motors etc.
- ◆ Universal input
- ◆ 3.75kV isolation safety transformer
- ◆ Quality UK design and manufacture

SPECIFICATION

Input

115/230VAC 50/60Hz

D.C. Output

See Model Chart

Load Regulation

20% or 3V whichever is the greater for 20 to 100% load change

Output Ripple & Noise

1.5Vrms maximum

Operating Temperature

0°C to +40°C

Isolation

Input to ground: 3750VAC min.

Input to output: 3750VAC min.

Output to ground: 500VAC min.

Safety

In accordance with EN60950 (Construction uses safety bobbin approved to VDE 0551)

Output overcurrent

Circuit breakers

MECHANICAL

Overall Dimensions

l x w x h: 210 x 152.1 x 140.1mm

Weight

92405: 3.9kg

92410: 5.8kg

92415: 7.7kg

Mechanical Format

All units are supplied fully enclosed as standard

Mounting Orientation

Units may be mounted horizontally as shown on the outline drawing overleaf, or vertically with the cables entering from below.

Ventilation and Cooling

Units are convection cooled and therefore require free air flow around the chassis.

Model	Output Voltage Volts	Output Current Amps
92405	24	5
92410	24	10
92415	24	15

92405, 92410 AND 92415

Fixings

Units have 4 x 5.6mm (0.2in) mounting holes provided

Connectors

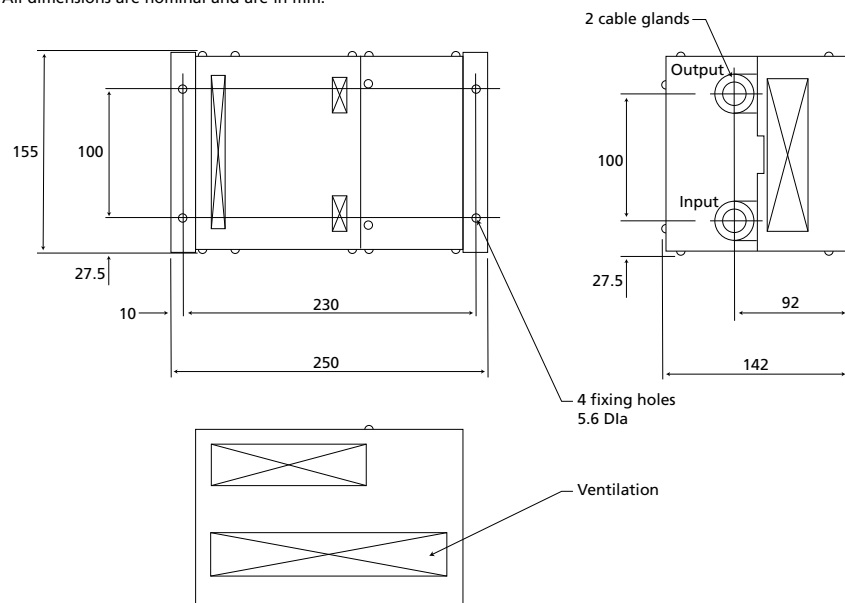
The following connectors are provided on the power supply:

Screw terminals are provided for input and output connections

Input voltage selection is achieved using terminal block links

OUTLINE DRAWING

All dimensions are nominal and are in mm.



Convel BPS1000

Multi-range/Multi-cell Ni-Cd Battery Charger



The BPS1000 constant current nickel cadmium battery charger is designed for quick charging, overnight charging or float (trickle) charging of a single cell or up to a maximum of 7 cells in series – as in a battery pack.

Selection of current is based around the standard range of commonly available cell sizes. The charger output is protected against short circuits and reverse connections and will not discharge cells if left connected with the power off.

SPECIFICATION

Input Voltage Range

Nominal 230VAC @ 50 to 60Hz

Output Current Ranges

Off
10mA
60mA
120mA
240mA
480mA

Output Current Tolerance

±10%

Ambient Temp Range

0°C to 35°C

Storage Temp Range

-10°C to 80°C

Weight

1.0kg

CHARGING NICKEL CADMIUM CELLS

Cell Type	Nominal Capacity
PP3	110 mAh
N	150mAh
AAA	180mAh
1/2 AA	240mAh
AA	500mA
1/2 A	450mAh
PP9	1.2Ah
RR	1.4Ah
C (HP11)	2.0Ah
D (HP2)	4.0Ah
F	7.0Ah

Note: Capacities may vary slightly from manufacturer to manufacturer.

Convel BPS1510

Bench Top Power Supply 0 to 15VDC, 1A



The BPS1510 provides a fully stabilised and smoothed variable DC power source. The voltage can be adjusted by rotating a graduated control on the front panel.

The output is short circuit and reverse connection protected. Additional protection is provided by current limiting and an internal thermal shut-down mechanism.

A 20mm x 5mm mains fuse accessible from the rear panel provides further protection

SPECIFICATION

Mains Input

230VAC ($\pm 7.5\%$) 50Hz via 1 metre 3-core cable, on/off switch and 20mm x 5mm mains fuse rated 0.5A

Power-On Indication

LED on front panel

DC Output

0 to 15V adjustable by front panel control.
Maximum current 1A
Internal current limiting at approximately 1.5A

Load Regulation

Typically 0.5%

Ripple and Noise

Typically 5mV rms

Ambient Temp Range

0°C to 35°C

Storage Temp Range

-10°C to 80°C

Termination

For use with 4mm wander plugs or as a binding post for wire connection.

Dimensions (h x w x d)

76 x 160 x 138mm

Weight

1.5kg

Convel BPS3005

Bench Top Power Supply 0 to 30VDC, 0.5A



The BPS3005 provides a fully stabilised and smoothed variable DC power source. The voltage can be adjusted by rotating a graduated control on the front panel.

The output is short circuit and reverse connection protected. Additional protection is provided by current limiting and an internal thermal shut-down mechanism.

A 20mm x 5mm mains fuse accessible from the rear panel provides further protection

SPECIFICATION

Mains Input

230VAC ($\pm 7.5\%$) 50Hz via 1 metre 3-core cable, on/off switch and 20mm x 5mm mains fuse rated 0.5A

Power-On Indication

LED on front panel

Output

0 to 30V adjustable by front panel control.
Maximum current 0.5A
Internal current limiting at approximately 1.5A

Load Regulation

Typically 0.5%

Ripple and Noise

Typically 5mV rms

Ambient Temp Range

0°C to 35°C

Storage Temp Range

-10°C to 80°C

Termination

For use with 4mm wander plugs or as a binding post for wire connection.

Dimensions (h x w x d)

76 x 160 x 138mm

Weight

1.5kg

Convel BPS4000 Triple Output Bench Top Power Supply

4 to 6VDC, 12 to 15VDC and -12 to -15 VDC



The BPS4000 provides three fully stabilised and smoothed variable DC power sources.

The voltages can be adjusted by rotating graduated controls on the front panel. All three outputs are short circuit and reverse connection protected. Additional protection is provided by current limiting and an internal thermal shut-down mechanism.

A 20mm x 5mm mains fuse accessible from the rear panel provides further protection

SPECIFICATION

Mains Input

230VAC ($\pm 7.5\%$) 50Hz via 1 metre 3-core cable, on/off switch and 20mm x 5mm mains fuse rated 0.5A

Power-on Indication

LED on front panel

DC Output 1

4 to 6V, adjustable by front panel control. Maximum current 0.5A. On this output the indicated area on the front panel is for T.T.L. applications and provides a reminder of the voltage range (4.75 to 5.25)

DC Outputs 2 & 3

+12 to 15V and -12 to 15V. The two outputs share a common 0V, are adjusted simultaneously by a single front panel control and are isolated from output. 1. Maximum current 0.5A.

Protection

All 3 outputs have an internal current limit of approximately 1A for overload protection.

Load Regulation

Typically 0.5% (all outputs)

Ripple and Noise

Typically 5mV rms (all outputs)

Ambient Temp Range

0°C to 35°C

Storage Temp Range

-10°C to 80°C

Termination

For use with 4mm wander plugs or as a binding post for wire connection.

Dimensions (h x w x d)

76 x 160 x 138mm

Weight

1.5kg

Convel BPS5000 Triple Output Bench Top Power Supply

Interconnectable Fixed Floating Outputs



The BPS5000 provides three fully stabilised and smoothed variable DC power sources. Maximum versatility is achieved by making each output isolated from the other so that they may be interconnected to provide plus and minus rails or added together for higher voltages.

Outputs are current limited. An internal diode protects against reverse connection. Further protection is provided by an internal thermal overload mechanism which decreases the output voltage on continued overload.

Indicator lights give an indication of excessive output current being drawn. An indicator light also gives identification of the mains power being on.

Outputs are terminated on 4mm terminals which double either as binding posts for wires or sockets for 4mm plugs.

A double-section bobbin transformer and careful layout internally ensures that the maximum mains/output isolation is achieved for greater safety.

SPECIFICATION

Mains Input

230VAC ($\pm 7.5\%$) 50/60Hz

Mains Fuse

1A, 20 x 5mm (located on back panel).

Power On Indication

LED on front panel

Output Voltage

Output 1: 12V ± 0.2 V

Output 2: 12V ± 0.2 V

Output 3: 5V ± 0.2 V

(All outputs are isolated from one another).

Output Current

All outputs 1A max (for up to 4 hours) 0.75A continuous

Load Regulation

(0 to 1A) 1%

Line Regulation

(222V to 258V) 1%

Noise and Ripple

10mV rms

Overload Indication

Occurs at approximately 25% overload

Ambient Temperature Range

0°C to 35°C

Storage Temperature Range

-10°C to 80°C

Termination

For use with 4mm wander plugs or as a binding post for wire connection.

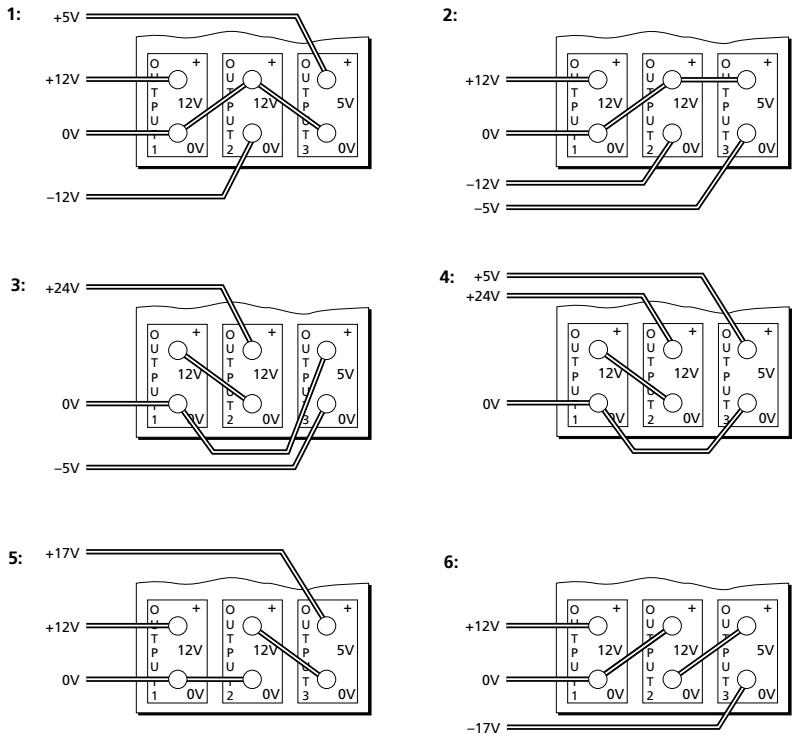
Dimensions (h x w x d)

110 x 165 x 175mm

Weight

2.39kg

BPS5000 - EXAMPLES OF INTERCONNECTIONS FOR VARIOUS SUPPLY RAILS



INDEX

Model	Format	Output 1 dc		Output 2 dc		Output 3 dc		Section	Page
32005A	Open Frame	5V	3.0A	-	-	-	-	D	4
32005B	Open Frame	5V	6.0A	-	-	-	-	D	4
32005C	Open Frame	5V	9.0A	-	-	-	-	D	4
32005D	Open Frame	5V	12.0A	-	-	-	-	D	4
32005E	Open Frame	5V	18.0A	-	-	-	-	D	4
32012A	Open Frame	12 to 15V	1.7A	-	-	-	-	D	4
32012B	Open Frame	12 to 15V	3.4A	-	-	-	-	D	4
32012C	Open Frame	12 to 15V	5.1A	-	-	-	-	D	4
32012D	Open Frame	12 to 15V	6.8A	-	-	-	-	D	4
32012E	Open Frame	12 to 15V	10.2A	-	-	-	-	D	4
32024A	Open Frame	24 to 28V	1.2A	-	-	-	-	D	4
32024B	Open Frame	24 to 28V	2.4A	-	-	-	-	D	4
32024C	Open Frame	24 to 28V	3.6A	-	-	-	-	D	4
32024D	Open Frame	24 to 28V	4.8A	-	-	-	-	D	4
32024E	Open Frame	24 to 28V	7.2A	-	-	-	-	D	4
32024E/10	Open Frame	24 to 28V	10.0A	-	-	-	-	D	4
32048A	Open Frame	48V	0.5A	-	-	-	-	D	4
32048B	Open Frame	48V	1.0A	-	-	-	-	D	4
32048D	Open Frame	48V	3.0A	-	-	-	-	D	4
32150A	Open Frame	120 to 200V	0.15A	-	-	-	-	D	4
32205A	Open Frame	5V	1.5A	-5V	1.5A	-	-	D	4
32212A	Open Frame	12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	-	-	D	4
32212B	Open Frame	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.4A	-	-	D	4
32212C	Open Frame	12 to 15V	3.4A	-12 to -15V	3.4A	-	-	D	4
32212D	Open Frame	12 to 15V	5.0A	-12 to -15V	5.0A	-	-	D	4
32305A	Open Frame	5V	2.0A	9 to 15V	0.4A	-9 to -15V or -5V	0.4A	D	4
32305B	Open Frame	5V	3.0A	12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	D	4
32305C	Open Frame	5V	6.0A	12 to 15V	1.0A	-12 to -15V or -5V	1.0A 0.4A	D	4
32305D	Open Frame	5V	6.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	D	4
32305E	Open Frame	5V	8.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	D	4
32305F	Open Frame	5V	12.0A	12 to 15V	1.7A	-12 to -15V or -5V	1.7A 0.7A	D	4
32305G	Open Frame	5V	12.0A	12 to 15V	3.4A	-12 to -15V	3.4A	D	4
33012A	Open Frame	12V	10A	-	-	-	-	E	10
33012B	Open Frame	12V	20A	-	-	-	-	E	10
33024A	Open Frame	24V	5A	-	-	-	-	E	10
33024B	Open Frame	24V	10A	-	-	-	-	E	10
33024C	Open Frame	24V	20A	-	-	-	-	E	10
33048B	Open Frame	48V	5A	-	-	-	-	E	10
41052	DIN Rail Mount	5V	200mA	-	-	-	-	A	1
41055	DIN Rail Mount	5V	500mA	-	-	-	-	A	1
41121	DIN Rail Mount	12V	100mA	-	-	-	-	A	1
41122	DIN Rail Mount	12V	200mA	-	-	-	-	A	1
41124	DIN Rail Mount	12V	400mA	-	-	-	-	A	1
41151	DIN Rail Mount	15V	100mA	-	-	-	-	A	1
41153	DIN Rail Mount	15V	300mA	-	-	-	-	A	1
41241	DIN Rail Mount	24V	100mA	-	-	-	-	A	1
41242	DIN Rail Mount	24V	200mA	-	-	-	-	A	1
41245	DIN Rail Mount	24V	500mA	-	-	-	-	A	1

Model	Format	Output 1 dc		Output 2 dc		Output 3 dc		Section	Page
42012A	DIN Rail Mount	12V	1.0A	-	-	-	-	B	2
42012A/2	DIN Rail Mount	12V	2.0A	-	-	-	-	B	2
42012H	DIN Rail Mount	12V	5A	-	-	-	-	C	3
42012J	DIN Rail Mount	12V	10A	-	-	-	-	C	3
42015A	DIN Rail Mount	15V	1.0A	-	-	-	-	B	2
42015A/2	DIN Rail Mount	15V	2.0A	-	-	-	-	B	2
42024A	DIN Rail Mount	24V	1.0A	-	-	-	-	B	2
42024A/2	DIN Rail Mount	24V	2.0A	-	-	-	-	B	2
42024B	DIN Rail Mount	24V	4.0A	-	-	-	-	B	2
42024H	DIN Rail Mount	24V	2.5A	-	-	-	-	C	3
42024J	DIN Rail Mount	24V	5A	-	-	-	-	C	3
92401	Chassis Mount	24V	1.25A	-	-	-	-	F	11
92405	Chassis Mount	24V	5A	-	-	-	-	G	13
92410	Chassis Mount	24V	10A	-	-	-	-	G	13
92415	Chassis Mount	24V	15A	-	-	-	-	G	13
BP51000	Bench Top	-	10mA	-	-	-	-	H	15
		-	60mA						
		-	120mA						
		-	240mA						
		-	480mA						
BP51510	Bench Top	0 to 15V	1A	-	-	-	-	I	16
BP53005	Bench Top	0 to 30V	0.5A	-	-	-	-	J	17
BP54000	Bench Top	4 to 6V	0.5A	12 to 15V	0.5A	-12 to -15V	0.5A	K	18
BP55000	Bench Top	12V \pm 0.2V	0.75A	12V \pm 0.2V	0.75A	5V \pm 0.2V	0.75A	L	19

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.



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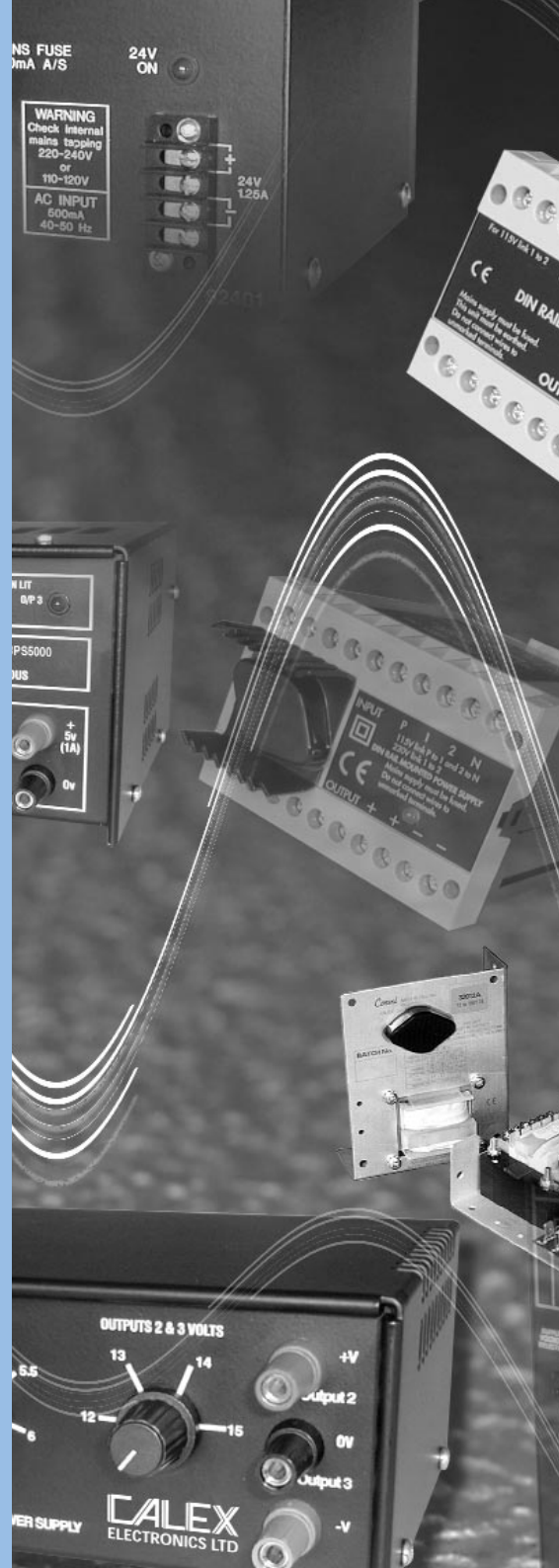
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