32000 Series

Open Frame AC/DC Regulated Linear Power Supplies



GENERAL SPECIFICATIONS

A.C. Input D.C. Output

Line Regulation Load Regulation Output Ripple

Transient Response
Short Circuit and
Overload Protection
Overvoltage Protection

Remote Sensing

Stability
Temperature Rating

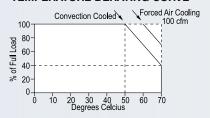
100/120/220/240 V AC +10%, -12%, 47 to 60 Hz See Voltage/Current Rating Chart. Adjustment range ±5% minimum.

 $\pm 0.05\%$ for a 10% line change. $\pm 0.05\%$ for a 50% load change. 2 V to 15 V units: 5.0 mV PK-PK maximum 20 V to 28 V units: 0.02% PK-PK maximum 50 μs for a 50% load change

Automatic current limit/foldback

Built-in on all 5 V outputs. Set at $6.2 \text{ V} \pm 0.4 \text{ V}$ Other models use optional overvoltage protection. See Option 3 overleaf Provided on most models, open sense load protection built in. $\pm 0.3\%$ for 24 hour period after 1 hour warm-up 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 Efficiency (typical) Isolation

RoHS Compliant

 $\pm 0.03\%/^{\circ}\text{C}$ maximum 5V unit: 45%; 12 V and 15 V units: 55%; 24 V units: 60% Input to ground: 3750 V AC min. Input to output(s): 3750 V AC min. Output to ground: 500 V AC min.

Leakage current (live to ground): $5~\mu\text{A}$ max.

Yes

These high quality linear regulated power supplies provide outstanding value and are designed for ease of application and long trouble-free life. They will accommodate AC inputs from 100 V to 240 V and provide a wide range of DC outputs with very low ripple.

All 32000 series power supplies are built around industry-standard case sizes to simplify installation and a 3.75 kV isolation safety transformer. For additional safety the transformer primary is protected from thermal overloads by a thermal fuse. This fuse will blow if a transformer temperature of 130°C is exceeded. Every unit incorporates a safety earth tag.

All models are fitted with automatic foldback current limiting. An overvoltage protection (OVP) circuit protects sensitive loads against excessive voltage such as in TTL logic. OVP is a standard feature of all 5 V output units and an option on all other units.

The remote sensing feature, included in almost all 32000 series power supplies, may be used to compensate the voltage drop across the load lines. All dual-output power supplies feature a unique anti-latch circuit to minimise common mode latch up.



SINGLE OUTPUT MODELS

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

DUAL OUTPUT MODELS

Model	Output 1		Output 2		Case
	Voltage Volts	Current Amps	Voltage Volt	Current Amps	
32212AR 32212BR 32212CR	12 to 15 12 to 15 12 to 15	1.0 1.7 3.4	-12 to -15 -12 to -15 -12 to -15	1.0 1.7 3.4	AA BB CC

TRIPLE OUTPUT MODELS

Model	Output 1		Output 2		Output 3		Case
	Voltage Volts	Current Amps	Voltage Volts	Current Amps	Voltage Volts	Current Amps	
32305AR 32305BR 32305DR 32305ER 32305FR	5* 5 5 5	2.0 3.0 6.0 8.0 12.0	9 to 15* 12 to 15	0.4 1.0 1.7 1.7	-9 to -15* -12 to -15 -12 to -15 -12 to -15 -12 to -15	0.4 1.0 1.7 1.7	AA AAA BBB BBB DBB

OVP SELECTION CHART

	Case	OVP Model Required	
Single	A/B/C/D	32901AR	
Output	Е	32901BR	
Dual Output	AA/BB/ CC	32901AR, protects both outputs	
	E	32901BR, protects both outputs	
Triple Output	AA/ AAA/D	32901AR, protects dual outputs	
	BBB/131	OVP built-in on 5 V outputs	

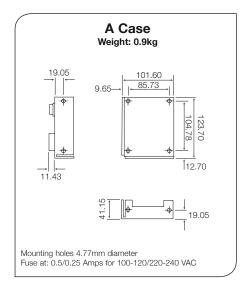
OPTIONS

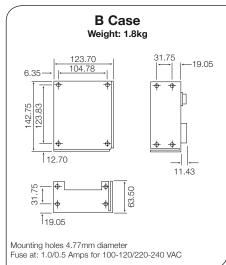
- 1 Tropicalisation suffix code 'T'
- 2 Low temperature operation -40°C to +50°C suffix code 'LT'
- 3 Overvoltage Protection Modules These optional Overvoltage Protection Modules are available for use with any power supply NOT supplied with built-in OVP. Each is adjustable from 6.4V to 34V and should be used when maximum load protection is of prime

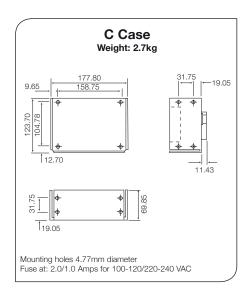
importance. Response time is 1 ms. Mounting holes are provided on the chassis for these modules, which mount within the specified outline dimensions of each power supply.

32000 SERIES - GENERAL DIMENSIONS

All dimensions are in mm







^{*} No remote sensing

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

