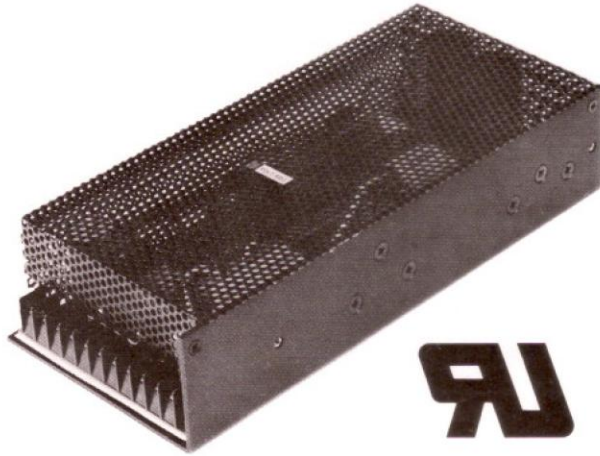


Abbott 

AC-DC Switchers

180-WATT SINGLE OUTPUT AC-DC SWITCHING POWER SUPPLY



Abbott's "ND" model line of single output switching power supplies provide 180 watts of DC power with tight regulation and low ripple. These competitively priced units have an industry standard case size of 2.5" x 5.0" x 11.0", which allow for easy replacement of existing models from Kepco, ACDC, Boschert, Deltron, and Sierracin. The "ND" model offers the system designer many features which are normally available from our competitors as costly options. These features include: overvoltage protection, input undervoltage protection, foldback overcurrent protection, remote sense, remote inhibit, aluminum chassis and steel cover, dual AC input (user selectable), and an MTBF of 189,000 hours, (per MIL-HDBK-217D). These convection cooled power supplies comply with the radiated and conducted specifications of FCC 20780, level A, and VDE 0871, level A. The models are also designed to UL 478, UL 1012, CSA 22.2 safety standards. Typical efficiencies are greater than 75%. The "ND" line is the reliable choice for your medium power requirements when failures cannot be tolerated.

- **INDUSTRY STANDARD CASE SIZE**
(2.5" x 5.0" x 11.0") Allows for easy replacement of existing models from Sierracin, Kepco, ACDC, Boschert, and Deltron.
- **UL 478, UL 1012, CSA 22.2**
- **COMPETITIVELY PRICED**
- **LOW EMI** — meets FCC 20780 Class A, VDE 0871 Class A.
- **STANDARD OUTPUT VOLTAGES AVAILABLE** from 5VDC to 28VDC.
- **TIGHT REGULATION ON OUTPUT** (better than .15%).
- **LOW RIPPLE** (typically 50 mV Peak-to-Peak).
- **CONVECTION COOLED** — full power up to 50 degrees C.
- **HIGH RELIABILITY** — MTBF of 189,000 hrs per MIL HDBK 217D.
- **STANDARD FEATURES INCLUDE:**
 - input undervoltage protection
 - overvoltage protection
 - foldback overcurrent protection
 - remote sense
 - remote inhibit
 - 115/230 VAC, user selected, 50/60/400 Hz
- **OPTIONAL** Power fail warning
- **SIXTEEN HOUR** burn-in
- **TWO-YEAR WARRANTY**

FIVE STANDARD SINGLE OUTPUT MODELS*

VOLTAGE	MAXIMUM CURRENT	TOTAL POWER	MODEL NUMBER
5	36A	180W	ND180S5
12	15A	180W	ND180S12
15	12A	180W	ND180S15
24	7.5A	180W	ND180S24
28	6.4A	180W	ND180S28

OUTPUT VOLTAGES ARE CONTINUOUSLY ADJUSTABLE $\pm 5\%$.

*Other voltages available. Please contact your nearest sales office.

Abbott 

Main Sales Office: 639 S. Glenwood Place, Burbank, CA 91506, (818) 841-3630, FAX (818) 954-9305
 Eastern Sales Office: 321 Commercial Avenue, Suite 104, Palisades Park, NJ 07650, (201) 461-4005, FAX (201) 461-6323



AC-DC Switchers

SPECIFICATIONS

AC INPUT: 90–132/180–264 VAC, 47 to 400 Hz, user selectable.

EFFICIENCY: Typically 75% or greater.

LINE REGULATION: Within 0.15% over full input range, holding line constant.

LOAD REGULATION: Within 0.15% from 20% to 100% rated load, holding line constant.

RIPPLE: 50mV peak to peak typical, 1% maximum using a 25 MHz bandwidth.

STABILITY: Output voltage changes less than $\pm 0.05\%$ for 24 hours following initial warm-up period.

LOAD TRANSIENT RESPONSE: Recovery to within 0.5% of nominal voltage set-point within 0.5 msec after 50% load change.

HOLD-UP TIME: 20 msec minimum after nominal input voltage is lost at full load.

TEMPERATURE RANGE: Operating: -0°C to 70°C (Full power up to 50°C , derate linearly to 50% power at 70°C). Storage -20°C to 85°C .

TEMPERATURE COEFFICIENT: 0.02%/degree centigrade

ISOLATION VOLTAGE (STANDARD): 1500VDC input to case, input to output, 500VDC output to case.

SHORT CIRCUIT PROTECTION: Foldback overcurrent protection is standard. Output automatically resets after short circuit is removed. Foldback will occur when output power of unit exceeds 110% of rated load.

OVERVOLTAGE PROTECTION: Crowbar and non-crowbar overvoltage protection are standard features.

REMOTE ERROR SENSING: Standard.

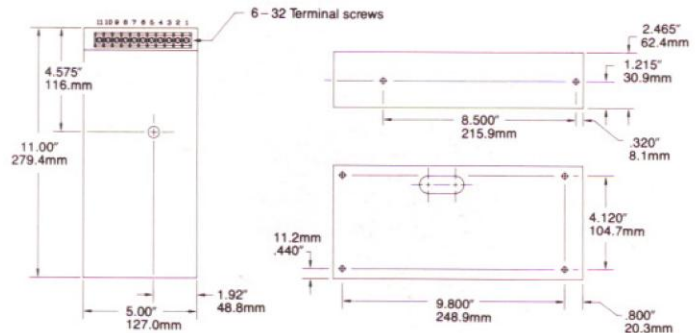
INPUT PROTECTION: Internal fuse.

LOGIC INHIBIT: Standard. Output shuts off upon application of a TTL compatible low signal to "inhibit" terminal.

POWER FAIL WARNING (OPTIONAL): A TTL compatible "low" signal will occur at least 2 ms before the loss of main output after the loss of AC input power. (To specify this option, please place a "-2" after the last digit in the model number.)

WEIGHT: 4 lbs., 1.8 kgs.

MECHANICAL DIMENSIONS



Terminal Identification

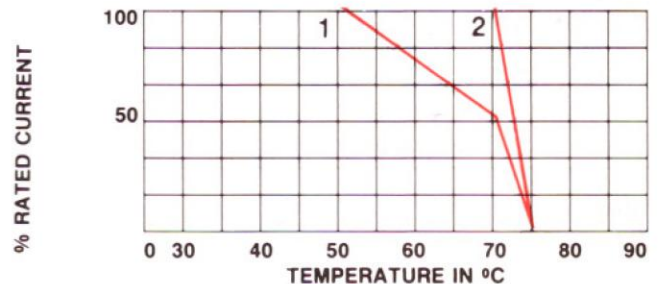
1 Chassis Gnd	5 Inhibit	9 -V Sense
2 AC Input	6 +V Sense	10 -V Output
3 AC Input	7 +V Output	11 -V Output
4 Power Fail	8 +V Output	

Mounting holes 8-32
Max screw penetration — 5/32" 4mm

Dimensions in inches and mm
Tolerance $\pm .02"$ $\pm .05\text{mm}$

COOLING REQUIREMENTS

OUTPUT THERMAL DERATING CURVE



CONVECTION COOLING — CURVE 1. Temperature is ambient and measures one inch from side mounting surface. 100% of rated power at 50°C .

FORCED AIR COOLING — CURVE 2. Temperature is ambient. Forced air of 20 cubic feet per minute flowing parallel to side mounting surface. 100% rated power at 70°C .



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