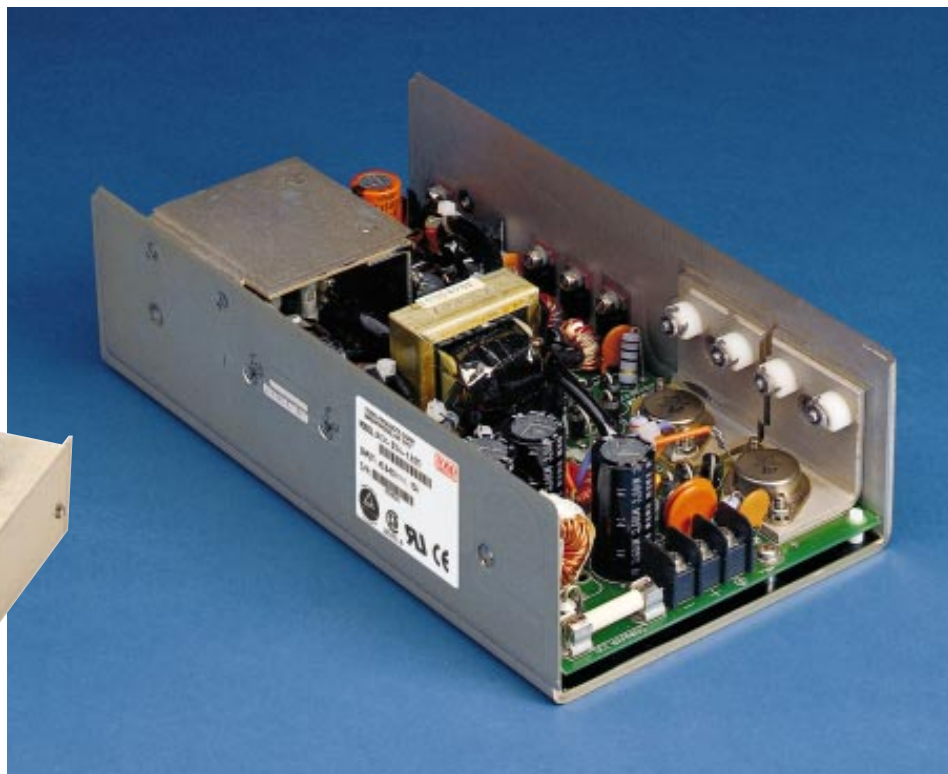


DCT-250  
DBX-275  
DCT-350  
DCX-350

Option F



## STANDARD DBX SERIES 24/28 VDC INPUT – MULTIPLE OUTPUT

MODEL	PWR	OUTPUT #1	OUTPUT #2	OUTPUT #3	OUTPUT #4
DBX-273-0512	275	+5V @ 50A	+12V @ 8/12A pk	-12V @ 4A	
DBX-274-1205	275	+5V @ 50A	+12V @ 8/12A pk	-12V @ 4A	5.2V @ 2 A
DBX-274-1224	275	+5V @ 50A	+12V @ 8/12A pk	-12V @ 4A	24V @ 1.5A

## STANDARD DCT, DCX SERIES 48 VDC INPUT – MULTIPLE OUTPUT

MODEL	PWR	OUTPUT #1	OUTPUT #2	OUTPUT #3	OUTPUT #4
DCT-253-0512	250	+5V @ 30A	+12V @ 5A	-12V @ 5A	
DCT-353-0512	350	+5V @ 45A	+12V @ 6A	-12V @ 6A	
DCX-353-0512	350	+5V @ 50A	+12V @ 8/12A pk	-12V @ 4A	
DCX-354-1205	350	+5V @ 50A	+12V @ 8/12A pk	-12V @ 4A	5.2V @ 2A

### Featuring:

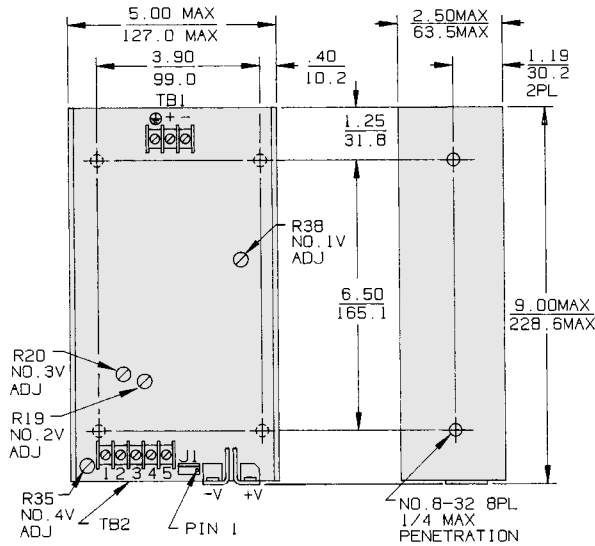
- Over 3 watts/in<sup>3</sup> power density
- Meets international safety requirements
- All outputs regulated  $\pm 1\%$
- High peak currents for motor starting
- System air and self-cooling options
- Available in dual AC input range

These series are particularly suitable for critical, "can't fail"; mobile; or transportable systems. All models share the same footprint and can include current sharing for redundancy (consult factory for details).

Optional DC power fail, covers, and fan/cover assemblies are available. These series are form-fit compatible with the 9" SC, MAX, MTC, and MPS Series

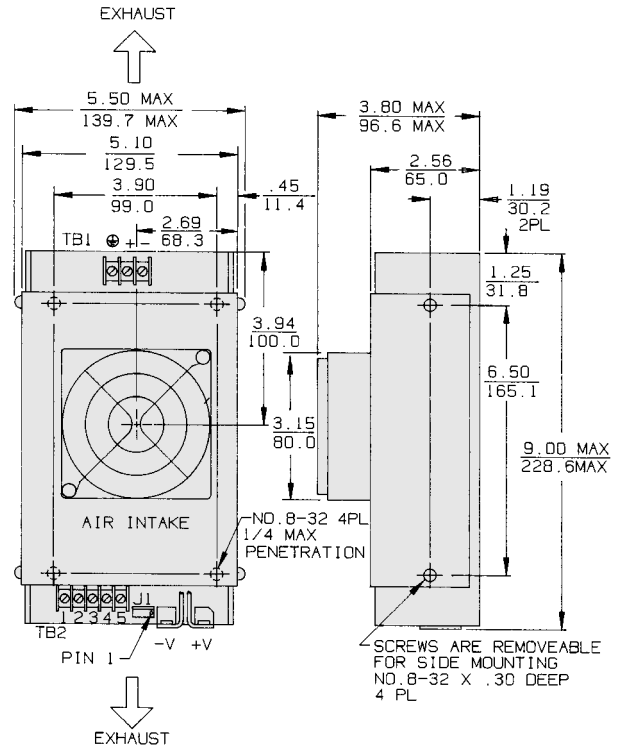
# 250, 275, 350 WATTS 9" x 5" x 2.5" DCT-250,350, DBX-275, DCX-350

## DBX, DCT, DCX 3.2 lbs - 1.5 kgs



Dimensions: Inches  
Millimeters

## DBX, DCT, DCX with Option F 3.8 lbs - 1.7 kgs



## SPECIFICATIONS: ALL MODELS

### INPUT

**DC Input:** DB, DBT, and DBX models 20-32 Vdc range, internally fused for 20 A. DCT, DCX, and DPS models 40-80 Vdc range, internally fused for 15 A.  
**Efficiency:** 70 to 75% typical.

### OUTPUT

**Adjustability:** All outputs user adjustable  $\pm 5\%$  minimum.  
**Line & Load Reg:**  $\pm 1\%$  over DC input range and 0 to 100% load change, except DPS models hold  $\pm 3\%$  on +5 V output (preprogrammed slope). Multiple output units require a minimum load of 10% on the +5 V output when drawing full load on the auxiliary outputs.  
**Ripple & Noise:** Less than 1% p-p or 100 mV, whichever is greater.  
**Remote Sense (Output #1):** Compensates for 250 mV total line drop. Open sense lead protection. (See Redundancy, below.)  
**Temperature Coefficient:** 0.02% per degree C.  
**Stability:** 0.1% over 8 hours after 30 minutes warm-up.  
**Transient Response:** Output voltage returns to within 1% in less than 500  $\mu$ s for a 50% load change. Peak transient does not exceed 5%.  
**Overload Protection:** All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault.  
**Overvoltage Protection (Output #1):** Protects load against power supply induced overvoltage. Trip point is factory set so that output voltage cannot exceed 136% of nominal.  
**Peak Output Current:** Dual current ratings define continuous and peak currents. The peak current shown can be delivered for a maximum period of 30 seconds.  
**Remote Inhibit:** Contact closure to the negative sense line drops output power to nominal zero.  
**Redundancy (DPS only):** External OR-ing diodes and slope program current sharing on output #1 provide "N+1" capability. Remote sense (+S) compensates for additional 0.6 V diode voltage drop. Current sharing remains within 10% of the unit's full output current rating.  
**Reverse Voltage:** Protected against reverse voltage up to supply current rating.

### ENVIRONMENTAL

**Thermal Protection:** Shuts down power supply if overheated. Automatic recovery.  
**Temperature Range:** 0° to 50°C at full ratings.  
**Safety Agencies:** Most models are approved to UL1950; CSA 22.2 #234; IEC 950 and TÜV EN60950, Class 1 SELV, CE 72/23/EEC/93/68EEC (low voltage directive).  
**Conducted RFI:** Meets FCC Part 15, Subpart J, Class A; EN55022 Class B; CISPR 22 Class B.  
**Cooling:** 30 CFM required to achieve full ratings.  
**Output Isolation:** Isolated from ground 50 Vdc, except 100 Vdc for models rated 48 Vdc output.

## OPTIONS:

**Option "C", Cover:** Limits contact with power supply interior.  
**Option "F", Fan/Cover Assembly:** Cover with integral ball-bearing fan provides proper cooling to achieve full ratings at 50°C ambient temperature.  
**Option "G", DC Power Good:** Provides a TTL "1" open collector when output #1 is above 4.6 V nominal.  
**Option "V", Fan/Cover Assembly:** Low profile, end venting cover with integral ball-bearing fan.

Consult factory for other available options.

## DC INPUT

FUNCTION	-48 Vdc	+24 Vdc	CONNECTOR
TB1- (-)	-48 Vdc Input	+24 Vdc Return	Barrier strip
TB1- (+)	-48 Vdc Return	+24 Vdc Input	#6-32 screws
TB1- (G)	Safety Ground	Safety Ground	3/8" centers

## DC OUTPUT

FUNCTION	LOCATION	NOTES	CONNECTOR
Output #1	Terminal marked +V	Main Output	Bus bars
	Terminal marked -V	Rtn (Common)	#10-32 screws
Output #2 (If provided)	TB2-3		Barrier strip #6-32 screws 3/8" centers
	TB2-4	Rtn (Common)	
Output #3 (If provided)	TB2-5		
	TB2-6	Rtn (Common)	
Output #4 (If provided)	TB2-1	(+) Floating Output	
	TB2-2	(-) Floating Output	

## STATUS AND CONTROL

FUNCTION	LOCATION	NOTES	CONNECTOR
Remote Sense	J1-1(+ S)	Output #1 Sense	AMP MTA type #640456-4 pin header (locking)
	J1-2 (- S)	Output #1 Sense Rtn	
DC Power Good*	J1-3 $\Delta$	Reference to J1-2	
Inhibit	J1-4 (IH)	Short to J1-2	

\*Optional function