

185 WATTS

DC2-185 SERIES DC-DC

FEATURES:

- RoHS Compliant
- 18-36 VDC Input
- Advanced SMT Design
- Compact 4.2" x 7.0" x 1.5" Size
- 2 Year Warranty
- One to Four Outputs
- 4242 VDC Reinforced Insulation
- Fits 1U Applications
- EN 60950-1 ITE Certification
- EN 60601-1 Medical Certification
- Size & Pin compatible with REL-185 Series
- Optional Chassis and Cover



OPEN CHASSIS



CHASSIS/COVER

SAFETY SPECIFICATIONS



Underwriters Laboratories
File E137708/E140259

UL 60950-1 2nd Edition
UL 60601-1 1st Edition



CB Certificate per IEC 60950-1:2005
2nd Edition +A1:2009 including all National Deviations
CB Certificate per IEC 60601-1 (1988)
2nd Edition A1, A2



UL Recognition Mark for Canada
File E137708/E140259

CAN/CSA-C22.2 No. 60950-1-07, 2nd Edition
CAN/CSA-C22.2 No. 601-1-M90 with updates 1 and 2



TUV

EN 60950-1/A1:2010
EN 60601-1/A2:1995

MODEL LISTING

MODEL	OUTPUT 1 ⁽⁸⁾	OUTPUT 2 ⁽⁸⁾	OUTPUT 3 ⁽⁷⁾	OUTPUT 4 ⁽⁷⁾
DC2-185-4001	+3.3V/20A ⁽¹⁾	+5V/10A	+12V/2A	-12V/2A
DC2-185-4002	+5V/20A ⁽¹⁾	+3.3V/10A	+12V/2A	-12V/2A
DC2-185-4003	+5V/20A ⁽¹⁾	+3.3V/10A	+15V/2A	-15V/2A
DC2-185-4004	+5V/20A ⁽¹⁾	-5V/10A	+12V/2A	-12V/2A
DC2-185-4005	+5V/20A ⁽¹⁾	-5V/10A	+15V/2A	-15V/2A
DC2-185-4006	+5V/20A ⁽¹⁾	+24V/3A	+12V/2A	-12V/2A
DC2-185-4007	+5V/20A ⁽¹⁾	+24V/3A	+15V/2A	-15V/2A
DC2-185-3001	+5V/20A ⁽¹⁾	+12V/5A		-12V/3A
DC2-185-3002	+5V/20A ⁽¹⁾	+15V/4A		-15V/3A
DC2-185-2001	+3.3V/20A ⁽¹⁾	+5V/10A		
DC2-185-2002	+5V/20A ⁽¹⁾	+12V/8A		
DC2-185-2003	+5V/20A ⁽¹⁾	+24V/4A		
DC2-185-2004	+12V/10A	-12V/6A		
DC2-185-2005	+15V/8A	-15V/5A		
DC2-185-1001	2.5V/37A ⁽²⁾			
DC2-185-1002	3.3V/37A ⁽²⁾			
DC2-185-1003	5V/37A ⁽²⁾			
DC2-185-1004	12V/15.4A			
DC2-185-1005	15V/12.3A			
DC2-185-1006	24V/7.7A			
DC2-185-1007	28V/6.6A			
DC2-185-1008	48V/3.8A			

NOTES

Consult factory for alternate output configurations.
Consult factory for positive, negative or floating outputs.
Refer to Applications Information for complete output power ratings.
All specifications are maximum at 25° C, 185W unless otherwise stated, may vary by model and are subject to change without notice.
Specify optional chassis and cover, power good or reverse input protection when ordering.

OUTPUT SPECIFICATIONS

Total Output Power at 50° C	135W	Convection Cooled
	185W	300 LFM Forced Air
Output Voltage Centering	Output 1: ± 0.5%	(All outputs)
	Output 2: ± 5.0%	at 50% load)
	Output 3: ± 5.0%	
	Output 4: ± 5.0%	
Output Voltage Adjust Range	Output 1: 95 - 105%	
Load Regulation	Output 1: 0.5%	(10-100% load change)
	Output 2: 5.0%	(20-100% load change)
	(4001,4,5,2001) 10.0%	(20-100% load change)
	(4002,3) 15.0%	
	Output 3: 5.0%	
	Output 4: 5.0%	
Source Regulation	Outputs 1 - 4: 0.5%	
Cross Regulation	Outputs 2 - 4: 6.0%	
Output Noise	Outputs 1 - 4: 1.0%	
Turn on Overshoot	None	
Transient Response	Outputs 1 - 4	
Voltage Deviation	5.0%	
Recovery Time	500µS	
Load Change	50% to 100%	
Output Overvoltage Protection	Output 1: 110% to 150%	
Output Overpower Protection	110-160% rated Pout, cycle on/off, auto recovery	
Start Up Time	5 Seconds	

INPUT SPECIFICATIONS

Input Voltage Range	18-36 VDC
Input Under-Voltage Lockout	
Turn-On Voltage	14.5-17.5 VDC
Turn-Off Voltage	14.0-17.0 VDC
Input Overvoltage Shutdown	37.0-43.0 VDC
Maximum Input Current	14.0 A
Reflected Ripple Current	5 %
Efficiency	77% Typ., Full Power, 24VDC, varies by model

ENVIRONMENTAL SPECIFICATIONS

Ambient Operating	0° C to + 70° C
Temperature Range	Derating: See Power Rating Chart
Ambient Storage Temp. Range	- 40° C to + 85° C
Temperature Coefficient	Outputs 1 - 4: 0.02%/°C

GENERAL SPECIFICATIONS

Dielectric Strength ⁽¹⁸⁾	
Reinforced Insulation	4242 VDC, Primary to Secondary, 1 Sec.
Basic Insulation	2121 VDC, Primary to Ground, 1 Sec.
Operational Insulation	707 VDC, Secondary to Ground, 1 Sec.
Power Good Signal	Logic high with input voltage above Vin min.
Remote Sense (singles only)	250mV compensation of output cable losses
Mean-Time Between Failures	100,000 Hours min., MIL-HDBK-217F, 25° C, GB
Weight	1.28 Lbs. Open Frame 2.16 Lbs. Chassis and Cover

MAXIMUM OUTPUT POWER VS. AMBIENT TEMPERATURE



