



Ref. Certif. No.

DE 3 - 40940

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product

Medical power supplies
Switch Mode Power Supply Series

Name and address of the applicant

Integrated Power Designs, Inc. Hanover Industrial Estates
300 Stewart Road
Wilkes-Barre PA 18706, USA

Name and address of the manufacturer

Integrated Power Designs, Inc. Hanover Industrial Estates
300 Stewart Road, Wilkes-Barre PA 18706, USA

Name and address of the factory

Integrated Power Designs, Inc. Hanover Industrial Estates
300 Stewart Road, Wilkes-Barre PA 18706, USA

Ratings and principal characteristics

Rated Input Voltage:	REL Series: 100-240VAC DC2 Series: 18-36VDC DC4 Series: 36-72VDC DC1-80 Series: 9-18VDC
Rated Input Frequency:	REL Series: 50-60Hz DC2/DC4/DC1 Series: DC
Rated Input Current:	See Attachment

Model/type Ref.

REL-XXX-YYYY Series, DC2-XXX-YYYY Series
DC4-XXX-YYYY Series, DC1-80-YYYY Series
(The "XXX" suffix following the REL, DC2, DC4 or DC1 describes the typical output power designation of the supply, in watts and may be 70, 110, 150 or 185. The "YYYY" delineates the voltages found in the Model Numbers and Output Ratings, listed in the certificate attachment)

Additional information (if necessary)

Certificate DE 3 – 40487 issued 2016-03-14 is replaced by this version due to technical changes

A sample of the product was tested and found to be in conformity with

IEC 60601-1:2005
IEC 60601-1:2005/AMD1:2012

as shown in the Test Report Ref. No. which forms part of this certificate

090-72103910-200

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date, 2018-04-13
CB 18 04 30824 347

Antony Young-Taylor



TÜV SÜD Product Service GmbH · Certification Body · Ridlerstrasse 65 · D-80339 München

Product Service

Attachment to Certificate CB 18 04 30824 347

Integrated Power Designs, Inc.
Hanover Industrial Estates
300 Steward Road
Wilkes-Barre, PA 18706 USA

Applicable Standards:

-EN 60601-1:2006/A1:2013

Also Assessed To:

-CAN/CSA-C22.2 No. 60601-1:2014-03

-ANSI/AAMI ES60601-1:2005/(R)2012

Rated Input:

- REL-70: 100-240VAC, 50-60Hz, 1.6A
- REL-110: 100-240VAC, 50-60Hz, 2.0A
- REL-150: 100-240VAC, 50-60Hz, 4.0A
- REL-150-4009: 100-240VAC, 50-60Hz, 6.0A
- REL-185: 100-240VAC, 50-60Hz, 4.0A
- DC2-70: 18-36VDC, 7.0A
- DC2-110: 18-36VDC, 12.0A
- DC2-150: 18-36VDC, 20.0A
- DC2-185: 18-36VDC, 20.0A
- DC4-70: 36-72VDC, 4.0A
- DC4-110: 36-72VDC, 7.0A
- DC4-150: 36-72VDC, 10.0A
- DC4-185: 36-72VDC, 10.0A
- DC1-80: 9-18VDC, 15.0A

Model Numbers and Ratings:

Model Number	Transformer (6000XX X)	Output 1	Output 2	Output 3	Output 4
REL-70-4001	544				
DC2-70-4001	787	3.3V/6A	5V/5A	12V/2A(6)	12V/2A(6)
DC4-70-4001	743				

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-70-4002 DC2-70-4002 DC4-70-4002	545 788 744	5V/6A	3.3V/5A	12V/2A(6)	12V/2A(6)
REL-70-4003 DC2-70-4003 DC4-70-4003	546 789 745	5V/6A	3.3V/5A	15V/2A(6)	15V/2A(6)
REL-70-4004 DC2-70-4004 DC4-70-4004	547 790 746	5V/6A	5V/5A	12V/2A(6)	12V/2A(6)
REL-70-4005 DC2-70-4005 DC4-70-4005	548 791 747	5V/6A	5V/5A	15V/2A(6)	15V/2A(6)
REL-70-4006 DC2-70-4006 DC4-70-4006	549 792 748	5V/6A	24V/2A	12V/2A(6)	12V/2A(6)
REL-70-4007 DC2-70-4007 DC4-70-4007	550 793 749	5V/6A	24V/2A	15V/2A(6)	15V/2A(6)
REL-70-4008	706	24V/1.25A	6V/2.5A	10V/1.7A	6V/1.5A
REL-70-4009	021	6.7V/5A	5V/4A	15V/2A(6)	15V/2A(6)
REL-70-4010	869	7.5V/3A	7.5V/2A	12V/2A(6)	12V/2A(6)
REL-70-3001 DC2-70-3001 DC4-70-3001	551 794 750	5V/6A	12V/2A	-	12V/2A(6)
REL-70-3002 DC2-70-3002 DC4-70-3002	552 795 751	5V/6A	15V/2A	-	15V/2A(6)
REL-70-3003	702	5.1V/6A	7.5V/2A		7.5V/2A(6)

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REL-70-3004	741	3.3 V/6 A	7 V/5 A	12 V/2 A(6)	
REL-70-3005	358	5 V/5 A	18 V/2 A		18 V/ 2A(6)
REL-70-2001	553				
DC2-70-2001	796	3.3V/6A	5V/5A	-	-
DC4-70-2001	752				

Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-70-2002	554				
DC2-70-2002	797	5V/6A	12V/4A	-	-
DC4-70-2002	753				
REL-70-2003	555				
DC2-70-2003	798	5V/6A	24V/2A	-	-
DC4-70-2003	754				
REL-70-2004	556				
DC2-70-2004	799	12V/3A	12V/3A	-	-
DC4-70-2004	755				
REL-70-2005	557				
DC2-70-2005	800	15V/3A	15V/2A	-	-
DC4-70-2005	756				
REL-70-2006	707	5.5V/6A	5.5V/5A	-	-
REL-70-2007	876				
DC2-70-2007	874	5V/6A	29V/2A	-	-
DC4-70-2007	875				
REL-70-2008	1359	9V/2A	48V/1.5A		
REL-70-1001	558				
DC2-70-1001	801	2.5V/14A(7)		-	-
DC4-70-1001	757				
REL-70-1002	559				
DC2-70-1002	802	3.3V/14A(7)	-	-	-
DC4-70-1002	758				
REL-70-1003	560				
DC2-70-1003	803	5V/14A(7)	-	-	-
DC4-70-1003	759				

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REL-70-1004	561				
DC2-70-1004	804	12V/5.8A	-	-	-
DC4-70-1004	760				
REL-70-1005	562				
DC2-70-1005	805	15V/4.7A	-	-	-
DC4-70-1005	761				
REL-70-1006	563				
DC2-70-1006	806	24V/2.9A	-	-	-
DC4-70-1006	762				
REL-70-1007	564				
DC2-70-1007	807	28V/2.5A	-	-	-
DC4-70-1007	763				
Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-70-1008	565				
DC2-70-1008	808	48V/1.5A	-	-	-
DC4-70-1008	764				
REL-110-4001	484				
DC2-110-4001	626	3.3V/10A(8)	5V/6A	12V/2A	12V/2A
DC4-110-4001	648				
REL-110-4002	485				
DC2-110-4002	627	5V/10A(8)	3.3V/6A	12V/2A	12V/2A
DC4-110-4002	649				
REL-110-4003	486				
DC2-110-4003	628	5V/10A(8)	3.3V/6A	15V/2A	15V/2A
DC4-110-4003	650				
REL-110-4004	487				
DC2-110-4004	629	5V/10A(8)	5V/6A	12V/2A	12V/2A
DC4-110-4004	651				
REL-110-4005	488				
DC2-110-4005	630	5V/10A(8)	5V/6A	15V/2A	15V/2A
DC4-110-4005	652				
REL-110-4006	489				
DC2-110-4006	631	5V/10A(8)	24V/2A	12V/2A	12V/2A
DC4-110-4006	653				
REL-110-4007	490				
DC2-110-4007	632	5V/10A(8)	24V/2A	15V/2A	15V/2A
DC4-110-4007	654				

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DC2-110-4008	827	+3.3V/10A (8)	+5V/6A	+12V/3.7A	-12V/.3A
REL-110-4009	736	5V/10A (8)	24V/2A	7V/2.5A	7V/2.5A
REL-110-4010	871	9V/6A	24V/2A	15V/2A	15V/2A
REL-110-4011	872	32V/2A	32V/2A	12V/1A	12V/1A
REL-110-3001	491				
DC2-110-3001	624	5V/10A(8)	12V/3A	-	12V/3A
DC4-110-3001	646				
REL-110-3002	492				
DC2-110-3002	625	5V/10A(8)	15V/2A	-	15V/2A
DC4-110-3002	647				
REL-110-3003	737				
DC2-110-3003	883	8V/5A(8)	8V/1A	-	30V/1A
REL-110-3004	088	9V/3A	24V/3A	13V/2A	-
Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-110-3005(14)	852	5/12A(8)	9.5V/1A	-	9.5V/1A
REL-110-3007	892	20V/2.5A	12V/2.5A	-	12V/2.5A
REL-110-2001	493				
DC2-110-2001	619	3.3V/10A(8)	5V/6A	-	-
DC4-110-2001	641				
REL-110-2002	494				
DC2-110-2002	620	5V/10A(8)	12V/5A	-	-
DC4-110-2002	642				
REL-110-2003	495				
DC2-110-2003	621	5V/10A(8)	24V/3A	-	-
DC4-110-2003	643				
REL-110-2004	496				
DC2-110-2004	622	12V/5A	12V/4A	-	-
DC4-110-2004	644				
REL-110-2005	497				
DC2-110-2005	623	15V/4A	15V/3A	-	-
DC4-110-2005	645				

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REL-110-2006	704	18V/4A	18V/3A	-	-
REL-110-2007	1423	6V/10A (8)	7.5V/6A	-	-
REL-110-1001	512	2.5V/22A(9)	-	-	-
DC2-110-1001	611				
DC4-110-1001	633				
REL-110-1002	498	3.3V/22A(9)	-	-	-
DC2-110-1002	612				
DC4-110-1002	634				
REL-110-1003	499	5V/22A(9)	-	-	-
DC2-110-1003	613				
DC4-110-1003	635				
REL-110-1004	500	12V/9.2A	-	-	-
DC2-110-1004	614				
DC4-110-1004	636				
REL-110-1005	501	15V/7.3A	-	-	-
DC2-110-1005	615				
DC4-110-1005	637				

Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-110-1006	502	24V/4.6A	-	-	-
DC2-110-1006	616				
DC4-110-1006	638				
REL-110-1007	503	28V/3.9A	-	-	-
DC2-110-1007	617				
DC4-110-1007	639				
REL-110-1008	504	48V/2.3A	-	-	-
DC2-110-1008	618				
DC4-110-1008	640				
REL-150-4001	517	3.3V/15A(10)	5V/8A	12V/2A	12V/2A
DC2-150-4001	670				
DC4-150-4001	692				
REL-150-4002	518	5V/15A(10)	3.3V/8A	12V/2A	12V/2A
DC2-150-4002	671				
DC4-150-4002	693				

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-150-4003	519				
DC2-150-4003	672	5V/15A(10)	3.3V/8A	15V/2A	15V/2A
DC4-150-4003	694				
REL-150-4004	520				
DC2-150-4004	673	5V/15A(10)	5V/8A	12V/2A	12V/2A
DC4-150-4004	695				
REL-150-4005	521				
DC2-150-4005	674	5V/15A(10)	5V/8A	15V/2A	15V/2A
DC4-150-4005	696				
REL-150-4006	522				
DC2-150-4006	675	5V/15A(10)	24V/3A	12V/2A	12V/2A
DC4-150-4006	697				
REL-150-4007					
DC2-150-4007	523	5V/15A(10)	24V/3A	15V/2A	15V/2A
DC4-150-4007					
DC4-150-4008	826	3.5V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4009(15)	610	24V/2.3A	10V/1A	6V/1.6A	6V/0.3A
REL-150-4010	809	5V/15A	12V/5A	24V/1A	24V/1A
REL-150-4011	824	3.3V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4012	825	3.3V/15A(10)	5V/8A	14V/2A	14V/2A
REL-150-4013	1022	7.25V/8.7A	30V/0.5A	24V/1.5A	24V/1.5A
Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-150-3001	524				
DC2-150-3001	668	5V/15A(10)	12V/4A	-	12V/3A
DC4-150-3001	690				

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-150-3002 DC2-150-3002 DC4-150-3002	525 669 691	+5V/15A(10)	+15V/3A	-	15V/2A
REL-150-3003	609	22V/3.5A	22V/3.5A	-	24V/1A
REL-150-3004	608	5V/6A	12V/7A	-	12V/3A
REL-150-3005	129	5.5V/15A(10)	15.5V/3A	-	15.5V/2A
REL-150-2001 DC2-150-2001 DC4-150-2001	526 663 685	3.3V/15A(10)	5V/8A	-	-
REL-150-2002 DC2-150-2002 DC4-150-2002	527 664 686	5V/15A(10)	12V/5A	-	-
REL-150-2003 DC2-150-2003 DC4-150-2003	528 665 687	5V/15A(10)	24V/3A	-	-
REL-150-2004 DC2-150-2004 DC4-150-2004	529 666 688	12V/7.55A	12V/5A	-	-
REL-150-2005 DC2-150-2005 DC4-150-2005	530 667 689	15V/5A	15V/5A	-	-
REL-150-1001 DC2-150-1001 DC4-150-1001	531 655 677	2.5V/30A(11)	-	-	-
REL-150-1002 DC2-150-1002 DC4-150-1002	532 656 678	3.3V/30A(11)	-	-	-
REL-150-1003 DC2-150-1003 DC4-150-1003	533 657 679	5V/30A(11)	-	-	-
REL-150-1004 DC2-150-1004 DC4-150-1004	534 658 680	12V/12.5A	-	-	-

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-150-1005	535				
DC2-150-1005	659	15V/10.0A	-	-	-
DC4-150-1005	681				
REL-150-1006	536				
DC2-150-1006	660	24V/6.3A	-	-	-
DC4-150-1006	682				
REL-150-1007	537				
DC2-150-1007	661	28V/5.4A	-	-	-
DC4-150-1007	683				
REL-150-1008	538				
DC2-150-1008	662	48V/3.1A	-	-	-
DC4-150-1008	684				
REL-150-1009	738	31V/5.4A	-	-	-
DC2-150-1009	---	20V/7.5A	-	-	-
DC4-150-1009	822				
REL-150-1010	742	36V/4.16A	-	-	-
REL-150-1011(16)	738	31V/5.4A	-	-	-
REL-185-4001	573				
DC2-185-4001	714	3.3V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4001	765				
REL-185-4002	574				
DC2-185-4002	715	5V/20A(12)	3.3V/10A	12V/2A	12V/2A
DC4-185-4002	766				
REL-185-4003	575				
DC2-185-4003	716	5V/20A(12)	3.3V/10A	15V/2A	15V/2A
DC4-185-4003	767				
REL-185-4004	576				
DC2-185-4004	717	5V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4004	768				

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-185-4005	577				
DC2-185-4005	718	5V/20A(12)	5V/10A	15V/2A	15V/2A
DC4-185-4005	769				
REL-185-4006	578				
DC2-185-4006	719	5V/20A(12)	24V/3A	12V/2A	12V/2A
DC4-185-4006	770				
Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-185-4007	579				
DC2-185-4007	720	5V/20A(12)	24V/3A	15V/2A	15V/2A
DC4-185-4007	771				
REL-185-4008	873	3.3V/20A(12)	6V/5A	12V/2A	6V/5A
REL-185-4009	1075	5V/15A	12V/4A	28V/0.80A	12V/2A
REL-185-3001	580				
DC2-185-3001	721	5V/20A(12)	12V/5A	-	12V/2A
DC4-185-3001	772				
REL-185-3002	581				
DC2-185-3002	722	5V/20A(12)	15V/4A	-	15V/2A
DC4-185-3002	773				
REL-185-2001	582				
DC2-185-2001	723	3.3V/20A(12)	5V/10A	-	-
DC4-185-2001	774				
REL-185-2002	583				
DC2-185-2002	724	5V/20A(12)	12V/8A	-	-
DC4-185-2002	775				
REL-185-2003	584				
DC2-185-2003	725	5V/20A(12)	24V/4A	-	-
DC4-185-2003	776				
REL-185-2004	585				
DC2-185-2004	726	12V/10A	12V/6A	-	-
DC4-185-2004	777				
REL-185-2005	586				
DC2-185-2005	727	15V/8A	15V/5A	-	-
DC4-185-2005	778				

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Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-185-2006	712	15V/6A	24V/4A	-	-
REL-185-2007	816	35V/3.5A	12V/5.2A	-	-
REL-185-1001	587	2.5V/37A(13)	-	-	-
DC2-185-1001	728				
DC4-185-1001	779				
REL-185-1002	588	3.3V/37A(13)	-	-	-
DC2-185-1002	729				
DC4-185-1002	780				
REL-185-1003	589	5V/37A(13)	-	-	-
DC2-185-1003	730				
DC4-185-1003	781				
Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-185-1004	590	12V/15.4A	-	-	-
DC2-185-1004	731				
DC4-185-1004	782				
REL-185-1005	591	15V/12.3A	-	-	-
DC2-185-1005	732				
DC4-185-1005	783				
REL-185-1006	592	24V/7.7A	-	-	-
DC2-185-1006	733				
DC4-185-1006	784				
REL-185-1007	593	28V/6.6A	-	-	-
DC2-185-1007	734				
DC4-185-1007	785				
REL-185-1008	594	48V/3.8A	-	-	-
DC2-185-1008	735				
DC4-185-1008	786				
REL-185-1009	022	6.3V/29A	-	-	-
REL-185-1010	593	31V/6A	-	-	-
DC1-80-4001	1114	3.3V/6A	5V/5A	12V/2A	12V/2A
DC1-80-4002	1115	5V/6A	3.3V/5A	12V/2A	12V/2A
DC1-80-4003	1116	5V/6A	5V/5A	12V/2A	12V/2A

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Integrated Power Designs, Inc.
Hanover Industrial Estates
300 Steward Road
Wilkes-Barre, PA 18706 USA

Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
DC1-80-4004	1117	5V/6A	5V/5A	15V/2A	15V/2A
DC1-80-4005	1118	5V/6A	24V/2A	12V/2A	12V/2A
DC1-80-4006	1119	5V/6A	24V/2A	15V/2A	15V/2A
DC1-80-3001	1112	5V/6A	12V/2A	-	12V/2A
DC1-80-3002	1113	5V/6A	15V/2A	-	15V/2A
DC1-80-2001	1108	5V/6A	12V/4A	-	-
DC1-80-2002	1109	5V/6A	24V/2A	-	-
DC1-80-2003	1110	12V/3.5A	12V/3.5A	-	-
DC1-80-2004	1111	15V/3A	15V/3A	-	-
DC1-80-1001	1101	5V/16A	-	-	-
DC1-80-1002	1102	12V/6.7A	-	-	-
DC1-80-1003	1103	15V/5.3A	-	-	-
DC1-80-1004	1104	24V/3.3A	-	-	-
DC1-80-1005	1105	28V/2.9A	-	-	-
DC1-80-1006	1106	36V/2.2A	-	-	-

Notes Below -Apply to all models, unless specifically noted otherwise:

- Outputs can be positive, negative, or floating with respect to Output 1.
- Total output power, with free air convection, must not exceed:
REL, DC2, DC4-70: 50 watts (open frame), 40 watts (chassis/cover option)
REL, DC2, DC4-110: 80 watts (open frame), 65 watts (chassis/cover option)
REL, DC2, DC4-150: 100 watts (open frame), 85 watts (chassis/cover option)
REL, DC2, DC4-185: 135 watts (open frame), 110 watts (chassis/cover option)
DC1-80 (Singles): 60 watts (open frame or chassis), 50 watts (chassis/cover option)
DC1-80 (Multis): 50 watts (open frame or chassis), 40 watts (chassis/cover option)

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3. Total output power, with 300LFM forced air cooling, must not exceed:
REL, DC2, DC4-70: 70 watts (open frame or chassis/cover option)
REL, DC2, DC4-110: 110 watts (open frame or chassis/cover option)
REL, DC2, DC4-150: 150 watts (open frame or chassis/cover option)
REL, DC2, DC4-185: 185 watts (open frame or chassis/cover option)
DC1-80: 80 watts (open frame or chassis/cover option)
4. Total current from Outputs 1 and 2, convection cooled, must not exceed:
REL, DC2, DC4-110: 12A
REL, DC2, DC4-150: 15A
REL, DC2, DC4-185: 20A
5. Total current from Outputs 3 and 4, convection cooled, must not exceed:
REL, DC2, DC4-110: 3A
REL, DC2, DC4-150: 3A
REL, DC2, DC4-185: 3A
6. Rated 1.5A maximum with convection cooling.
7. Rated 10A maximum with convection cooling.
8. Rated 8A maximum with convection cooling.
9. Rated 16A maximum with convection cooling.
10. Rated 12A maximum with convection cooling.
11. Rated 20A maximum with convection cooling.
12. Rated 15A maximum with convection cooling.
13. Rated 27A maximum with convection cooling.
14. Open Frame or chassis mount only, no cover.
15. Rated Input for this supply is 40-95Vac, 6A. Maximum output power is 77 Watts.
16. Total output power must not exceed 167.4 Watts with 300 LFM Forced Air Cooling.

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17. A suffix, or any combination of, may be added to the model number to indicate the following optional configuration(s): CH-chassis, CO-cover, IO-isolated outputs, PF-power fail, OVP-over voltage protection, PG-power good, WT- wide temperature, RE- Remote On/Off, TS-terminal strips, TB- terminal blocks, GOLD-gold pins input / output headers, Y or NY-decreased, or removed, line to ground capacitors, O – Y2 caps secondary to ground, P – Y1 caps secondary to ground or removed, BD- Blocking Diode (DC Series only), D- Acceptable for use up to 4000m altitude (REL-150 Series only).

Conditions of Acceptability:

1. These components have been judged on the basis of the required spacings in the Standard for Safety of Medical Electrical Equipment, IEC60601-1:2005 + CORR. 1:2006 + CORR. 2:2007 + AM1:2012.
2. These components have been evaluated for the output power ratings specified, at a 50°C ambient. The temperature tests are to be repeated in the end product. Isolation Transformer T1 employs a R/C OBJY2 Class B (130°C) electrical insulation system designated IPD-130-1 (see File E137708SP, Vol. 1, Sec. 4.). Isolation Transformer T1 utilizes a R/C OBJS2 Class B (130°C) Electrical Insulation System issued by Underwriters Laboratories except for DC1-80 Series which utilizes a R/C OBJS2 Class F (155°C) Electrical Insulation System issued by Underwriters Laboratories.
3. The input circuit includes only one fuse in the line input. A second fuse must be included in the neutral input in the end product, in consideration of paragraph 8.11.5 of IEC60601-1:2005 + CORR. 1:2006 + CORR. 2:2007 + AM1:2012.
4. Evaluated for class I applications, pollution degree II.
5. The supply terminal grounding connector is connected to the chassis through a land on the printed wiring board. An earthing test between the chassis and input ground terminal was successfully performed. All mounting holes on the printed circuit board must be reliably connected to the end product's grounding connection.
6. These components require Electrical and Fire enclosures as part of the end product.
7. All models provide 2MOPP from Primary Mains to Secondary Output.
8. All models are SELV, non-hazardous energy, except where noted otherwise.
9. Standard model numbers, no suffix, provide 1MOPP Primary Mains to Protective Earth and Operational Insulation-Secondary-Output-to-Ground.

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Conditions of Acceptability (Cont.):

10. Model Number Suffix "O" indicates 1MOOP Secondary Output to Protective Earth (secondary to ground capacitors are Y2 or removed).

11. Model Number Suffix "P" indicates 1MOPP Secondary Output to Protective Earth (secondary to ground capacitors are Y1 or removed).

12. This unit utilizes both input/output connectors and alternate output terminal blocks, see critical components list. The input/output connectors are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of these mating connectors relative to secureness, insulating materials and temperatures should be considered.

However, the units that utilize terminal blocks are acceptable for field wiring. These terminal blocks accept 16-30 AWG wire.

13. Touch Currents and/or Leakage Currents must be repeated in the end product.

14. In consideration of IEC60601-1:2005 + CORR. 1:2006 + CORR. 2:2007 + AM1:2012, Clause 8.8, care must be taken to insure the voltage applied to a reinforced insulation does not overstress basic insulation. Breakdown of basic insulation and catastrophic failure of the power supply may result if a test voltage of greater than 1800 VAC is applied between primary and secondary circuits. Each isolating component is factory tested at 4000 VAC minimum prior to installation.

15. Model Number Suffix "D" indicates power supply is acceptable for use up to an altitude of 4000m, applicable to the REL-150 Series only.

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IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Audio/Video, Information and Communication technology equipment Power Supply
Name and address of the applicant	Integrated Power Designs, Inc. Hanover Industrial Estates 300 Stewart Road Wilkes-Barre PA 18706 USA
Name and address of the manufacturer	Integrated Power Designs, Inc. Hanover Industrial Estates 300 Stewart Road, Wilkes-Barre PA 18706, USA
Name and address of the factory	Integrated Power Designs, Inc. Hanover Industrial Estates 300 Stewart Road, Wilkes-Barre PA 18706, USA
Ratings and principal characteristics	Rated Input Voltage: 100-240 V AC Rated Frequency: 50-60 Hz Rated Input Current: 1.6 A Protection Class: I Degree of Protection: IPX0 Ambient Temperature: 50°C
Trade mark (if any)	IPD
Customer's Testing Facility (CTF) Stage used	CTF STAGE 3
Model/type Ref.	REL-70, REL-110, REL-150, REL-185, DC2-70, DC2-110, DC2-150, DC2-185, DC4-70, DC4-110, DC4-150, DC4-185, DC1-80 Series
Additional information (if necessary)	Certificate DE 3 - ITAV485 issued 2020-08-04 is replaced by this version due to technical changes
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014
as shown in the Test Report Ref. No. which forms part of this certificate	72137232-200

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IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Rating Information:

Model Series	Input Voltage	Frequency	Input Current (max)
REL-70	100-240V AC	50-60 Hz	1.6 A
DC2-70	18-36 V DC	--	7.0 A
DC4-70	36-72 V DC	--	4.0 A
REL-110	100-240 V AC	50-60 Hz	2.0 A
DC2-110	18-36 V DC	--	12.0 A
DC4-110	36-72 V DC	--	7.0 A
REL-150	100-240 V AC	50-60 Hz	4.0 A
REL-150-4009	100-240 V AC	50-60 Hz	6.0 A
DC2-150	18-36 VDC	--	20 A
DC4-150	36-72 V DC	--	10 A
REL-185	100-240 V AC	50-60 Hz	4.0 A
DC2-185	18-36 V DC	--	20 A
DC4-185	36-72 VDC	--	10 A
DC1-80	9-18 V DC	--	15 A

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IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Model Numbers:

Model Number	Transformer (6000XXX)	Output 1	Output 2	Output 3	Output 4
REL-70-4001 DC2-70-4001 DC4-70-4001	544 787 743	3.3V/6A	5V/5A	12V/2A(6)	12V/2A(6)
REL-70-4002 DC2-70-4002 DC4-70-4002	545 788 744	5V/6A	3.3V/5A	12V/2A(6)	12V/2A(6)
REL-70-4003 DC2-70-4003 DC4-70-4003	546 789 745	5V/6A	3.3V/5A	15V/2A(6)	15V/2A(6)
REL-70-4004 DC2-70-4004 DC4-70-4004	547 790 746	5V/6A	5V/5A	12V/2A(6)	12V/2A(6)
REL-70-4005 DC2-70-4005 DC4-70-4005	548 791 747	5V/6A	5V/5A	15V/2A(6)	15V/2A(6)
REL-70-4006 DC2-70-4006 DC4-70-4006	549 792 748	5V/6A	24V/2A	12V/2A(6)	12V/2A(6)
REL-70-4007 DC2-70-4007 DC4-70-4007	550 793 749	5V/6A	24V/2A	15V/2A(6)	15V/2A(6)
REL-70-4008	706	24V/1.25A	6V/2.5A	10V/1.7A	6V/1.5A
REL-70-4009	021	6.7V/5A	5V/4A	15V/2A(6)	15V/2A(6)
REL-70-4010	869	7.5V/3A	7.5V/2A	12V/2A(6)	12V/2A(6)
REL-70-3001 DC2-70-3001 DC4-70-3001	551 794 750	5V/6A	12V/2A	-	12V/2A(6)
REL-70-3002 DC2-70-3002 DC4-70-3002	552 795 751	5V/6A	15V/2A	-	15V/2A(6)
REL-70-3003	702	5.1V/6A	7.5V/2A		7.5V/2A(6)
REL-70-3004	741	3.3 V/6 A	7 V/5 A	12 V/2 A(6)	
REL-70-3005	358	5 V/5 A	18 V/2 A		18 V/ 2A(6)
REL-70-2001 DC2-70-2001 DC4-70-2001	553 796 752	3.3V/6A	5V/5A	-	-

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REL-70-2002	554				
DC2-70-2002	797	5V/6A	12V/4A	-	-
DC4-70-2002	753				
REL-70-2003	555				
DC2-70-2003	798	5V/6A	24V/2A	-	-
DC4-70-2003	754				
REL-70-2004	556				
DC2-70-2004	799	12V/3A	12V/3A	-	-
DC4-70-2004	755				
REL-70-2005	557				
DC2-70-2005	800	15V/3A	15V/2A	-	-
DC4-70-2005	756				
REL-70-2006	707	5.5V/6A	5.5V/5A	-	-
REL-70-2007	876				
DC2-70-2007	874	5V/6A	29V/2A	-	-
DC4-70-2007	875				
REL-70-2008	1054	9V/2A	48V/1.5A		
REL-70-1001	558				
DC2-70-1001	801	2.5V/14A(7)	-	-	-
DC4-70-1001	757				
REL-70-1002	559				
DC2-70-1002	802	3.3V/14A(7)	-	-	-
DC4-70-1002	758				
REL-70-1003	560				
DC2-70-1003	803	5V/14A(7)	-	-	-
DC4-70-1003	759				
REL-70-1004	561				
DC2-70-1004	804	12V/5.8A	-	-	-
DC4-70-1004	760				
REL-70-1005	562				
DC2-70-1005	805	15V/4.7A	-	-	-
DC4-70-1005	761				
REL-70-1006	563				
DC2-70-1006	806	24V/2.9A	-	-	-
DC4-70-1006	762				
REL-70-1007	564				
DC2-70-1007	807	28V/2.5A	-	-	-
DC4-70-1007	763				
REL-70-1008	565				
DC2-70-1008	808	48V/1.5A	-	-	-
DC4-70-1008	764				
REL-110-4001	484	3.3V/10A(8)	5V/6A	12V/2A	12V/2A

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DC2-110-4001	626				
DC4-110-4001	648				
REL-110-4002	485				
DC2-110-4002	627	5V/10A(8)	3.3V/6A	12V/2A	12V/2A
DC4-110-4002	649				
REL-110-4003	486				
DC2-110-4003	628	5V/10A(8)	3.3V/6A	15V/2A	15V/2A
DC4-110-4003	650				
REL-110-4004	487				
DC2-110-4004	629	5V/10A(8)	5V/6A	12V/2A	12V/2A
DC4-110-4004	651				
REL-110-4005	488				
DC2-110-4005	630	5V/10A(8)	5V/6A	15V/2A	15V/2A
DC4-110-4005	652				
REL-110-4006	489				
DC2-110-4006	631	5V/10A(8)	24V/2A	12V/2A	12V/2A
DC4-110-4006	653				
REL-110-4007	490				
DC2-110-4007	632	5V/10A(8)	24V/2A	15V/2A	15V/2A
DC4-110-4007	654				
DC2-110-4008	827	+3.3V/10A (8)	+5V/6A	+12V/3.7A	-12V/1.3A
REL-110-4009	736	5V/10A (8)	24V/2A	7V/2.5A	7V/2.5A
REL-110-4010	871	9V/6A	24V/2A	15V/2A	15V/2A
REL-110-4011	872	32V/2A	32V/2A	12V/1A	12V/1A
REL-110-4012	1043	5V/10A(8)	9V/3A	15V/2A	15V/2A
REL-110-4014	1143	5V/8A	12V/4A	17V/1.5A	17V/1.5A
REL-110-3001	491				
DC2-110-3001	624	5V/10A(8)	12V/3A	-	12V/3A
DC4-110-3001	646				
REL-110-3002	492				
DC2-110-3002	625	5V/10A(8)	15V/2A	-	15V/2A
DC4-110-3002	647				
REL-110-3003	737				
DC2-110-3003	883	8V/5A(8)	8V/1A	-	30V/1A
REL-110-3004	088	9V/3A	24V/3A	13V/2A	-
REL-110-3005(14)	852	5/12A(8)	9.5V/1A	-	9.5V/1A
REL-110-3007	892	20V/2.5A	12V/2.5A	-	12V/2.5A
REL-110-2001	493				
DC2-110-2001	619	3.3V/10A(8)	5V/6A	-	-
DC4-110-2001	641				
REL-110-2002	494	5V/10A(8)	12V/5A	-	-

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DC2-110-2002	620				
DC4-110-2002	642				
REL-110-2003	495				
DC2-110-2003	621	5V/10A(8)	24V/3A	-	-
DC4-110-2003	643				
REL-110-2004	496				
DC2-110-2004	622	12V/5A	12V/4A	-	-
DC4-110-2004	644				
REL-110-2005	497				
DC2-110-2005	623	15V/4A	15V/3A	-	-
DC4-110-2005	645				
REL-110-2006	704	18V/4A	18V/3A	-	-
REL-110-2007	1423	6V/10A (8)	7.5V/6A	-	-
REL-110-1001	512				
DC2-110-1001	611	2.5V/22A(9)	-	-	-
DC4-110-1001	633				
REL-110-1002	498				
DC2-110-1002	612	3.3V/22A(9)	-	-	-
DC4-110-1002	634				
REL-110-1003	499				
DC2-110-1003	613	5V/22A(9)	-	-	-
DC4-110-1003	635				
REL-110-1004	500				
DC2-110-1004	614	12V/9.2A	-	-	-
DC4-110-1004	636				
REL-110-1005	501				
DC2-110-1005	615	15V/7.3A	-	-	-
DC4-110-1005	637				
REL-110-1006	502				
DC2-110-1006	616	24V/4.6A	-	-	-
DC4-110-1006	638				
REL-110-1007	503				
DC2-110-1007	617	28V/3.9A	-	-	-
DC4-110-1007	639				
REL-110-1008	504				
DC2-110-1008	618	48V/2.3A	-	-	-
DC4-110-1008	640				
REL-150-4001	517				
DC2-150-4001	670	3.3V/15A(10)	5V/8A	12V/2A	12V/2A
DC4-150-4001	692				
REL-150-4002	518				
DC2-150-4002	671	5V/15A(10)	3.3V/8A	12V/2A	12V/2A

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DC4-150-4002	693				
REL-150-4003	519				
DC2-150-4003	672	5V/15A(10)	3.3V/8A	15V/2A	15V/2A
DC4-150-4003	694				
REL-150-4004	520				
DC2-150-4004	673	5V/15A(10)	5V/8A	12V/2A	12V/2A
DC4-150-4004	695				
REL-150-4005	521				
DC2-150-4005	674	5V/15A(10)	5V/8A	15V/2A	15V/2A
DC4-150-4005	696				
REL-150-4006	522				
DC2-150-4006	675	5V/15A(10)	24V/3A	12V/2A	12V/2A
DC4-150-4006	697				
REL-150-4007	523				
DC2-150-4007	676	5V/15A(10)	24V/3A	15V/2A	15V/2A
DC4-150-4007	698				
DC4-150-4008	826	3.5V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4009(15)	610	24V/2.3A	10V/1A	6V/1.6A	6V/0.3A
REL-150-4010	809	5V/15A	12V/5A	24V/1A	24V/1A
REL-150-4011	824	3.3V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4012	825	3.3V/15A(10)	5V/8A	14V/2A	14V/2A
REL-150-4013	1022	7.25V/8.7A	30V/0.5A	24V/1.5A	24V/1.5A
REL-150-3001	524				
DC2-150-3001	668	5V/15A(10)	12V/4A	-	12V/3A
DC4-150-3001	690				
REL-150-3002	525				
DC2-150-3002	669	5V/15A(10)	15V/3A	-	15V/2A
DC4-150-3002	691				
REL-150-3003	609	22V/3.5A	22V/3.5A	-	24V/1A
REL-150-3004	608	5V/6A	12V/7A	-	12V/3A
REL-150-3005	129	5.5V/15A(10)	15.5V/3A	-	15.5V/2A
REL-150-2001	526				
DC2-150-2001	663	3.3V/15A(10)	5V/8A	-	-
DC4-150-2001	685				
REL-150-2002	527				
DC2-150-2002	664	5V/15A(10)	12V/5A	-	-
DC4-150-2002	686				
REL-150-2003	528				
DC2-150-2003	665	5V/15A(10)	24V/3A	-	-
DC4-150-2003	687				
REL-150-2004	529	12V/7.5A	12V/5A	-	-

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IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

DC2-150-2004	666				
DC4-150-2004	688				
REL-150-2005	530				
DC2-150-2005	667	15V/5A	15V/5A	-	-
DC4-150-2005	689				
REL-150-1001	531				
DC2-150-1001	655	2.5V/30A(11)	-	-	-
DC4-150-1001	677				
REL-150-1002	532				
DC2-150-1002	656	3.3V/30A(11)	-	-	-
DC4-150-1002	678				
REL-150-1003	533				
DC2-150-1003	657	5V/30A(11)	-	-	-
DC4-150-1003	679				
REL-150-1004	534				
DC2-150-1004	658	12V/12.5A	-	-	-
DC4-150-1004	680				
REL-150-1005	535				
DC2-150-1005	659	15V/10.0A	-	-	-
DC4-150-1005	681				
REL-150-1006	536				
DC2-150-1006	660	24V/6.3A	-	-	-
DC4-150-1006	682				
REL-150-1007	537				
DC2-150-1007	661	28V/5.4A	-	-	-
DC4-150-1007	683				
REL-150-1008	538				
DC2-150-1008	662	48V/3.1A	-	-	-
DC4-150-1008	684				
REL-150-1009	738	31V/5.4A	-	-	-
DC4-150-1009	822	20V/7.5A	-	-	-
REL-150-1010	742	36V/4.16A	-	-	-
REL-150-1011(16)	738	31V/5.4A	-	-	-
REL-185-4001	573				
DC2-185-4001	714	3.3V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4001	765				
REL-185-4002	574				
DC2-185-4002	715	5V/20A(12)	3.3V/10A	12V/2A	12V/2A
DC4-185-4002	766				
REL-185-4003	575				
DC2-185-4003	716	5V/20A(12)	3.3V/10A	15V/2A	15V/2A
DC4-185-4003	767				

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REL-185-4004	576				
DC2-185-4004	717	5V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4004	768				
REL-185-4005	577				
DC2-185-4005	718	5V/20A(12)	5V/10A	15V/2A	15V/2A
DC4-185-4005	769				
REL-185-4006	578				
DC2-185-4006	719	5V/20A(12)	24V/3A	12V/2A	12V/2A
DC4-185-4006	770				
REL-185-4007	579				
DC2-185-4007	720	5V/20A(12)	24V/3A	15V/2A	15V/2A
DC4-185-4007	771				
REL-185-4008	873	3.3V/20A(12)	6V/5A	12V/2A	6V/5A
REL-185-4009	1075	5V/15A	12V/4A	28V/0.80A	12V/2A
REL-185-3001	580				
DC2-185-3001	721	5V/20A(12)	12V/5A	-	12V/2A
DC4-185-3001	772				
REL-185-3002	581				
DC2-185-3002	722	5V/20A(12)	15V/4A	-	15V/2A
DC4-185-3002	773				
REL-185-2001	582				
DC2-185-2001	723	3.3V/20A(12)	5V/10A	-	-
DC4-185-2001	774				
REL-185-2002	583				
DC2-185-2002	724	5V/20A(12)	12V/8A	-	-
DC4-185-2002	775				
REL-185-2003	584				
DC2-185-2003	725	5V/20A(12)	24V/4A	-	-
DC4-185-2003	776				
REL-185-2004	585				
DC2-185-2004	726	12V/10A	12V/6A	-	-
DC4-185-2004	777				
REL-185-2005	586				
DC2-185-2005	727	15V/8A	15V/5A	-	-
DC4-185-2005	778				
REL-185-2006	712	15V/6A	24V/4A	-	-
REL-185-2007	816	35V/3.5A	12V/5.2A	-	-
REL-185-1001	587				
DC2-185-1001	728	2.5V/37A(13)	-	-	-
DC4-185-1001	779				
REL-185-1002	588	3.3V/37A(13)	-	-	-
DC2-185-1002	729				

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DC4-185-1002	780				
REL-185-1003	589				
DC2-185-1003	730	5V/37A(13)	-	-	-
DC4-185-1003	781				
REL-185-1004	590				
DC2-185-1004	731	12V/15.4A	-	-	-
DC4-185-1004	782				
REL-185-1005	591				
DC2-185-1005	732	15V/12.3A	-	-	-
DC4-185-1005	783				
REL-185-1006	592				
DC2-185-1006	733	24V/7.7A	-	-	-
DC4-185-1006	784				
REL-185-1007	593				
DC2-185-1007	734	28V/6.6A	-	-	-
DC4-185-1007	785				
REL-185-1008	594				
DC2-185-1008	735	48V/3.8A	-	-	-
DC4-185-1008	786				
REL-185-1009	022	6.3V/29A	-	-	-
REL-185-1010	593	31V/6A	-	-	-
DC1-80-4001	1114	3.3V/6A	5V/5A	12V/2A	12V/2A
DC1-80-4002	1115	5V/6A	3.3V/5A	12V/2A	12V/2A
DC1-80-4003	1116	5V/6A	5V/5A	12V/2A	12V/2A
DC1-80-4004	1117	5V/6A	5V/5A	15V/2A	15V/2A
DC1-80-4005	1118	5V/6A	24V/2A	12V/2A	12V/2A
DC1-80-4006	1119	5V/6A	24V/2A	15V/2A	15V/2A
DC1-80-3001	1112	5V/6A	12V/2A	-	12V/2A
DC1-80-3002	1113	5V/6A	15V/2A	-	15V/2A
DC1-80-2001	1108	5V/6A	12V/4A	-	-
DC1-80-2002	1109	5V/6A	24V/2A	-	-
DC1-80-2003	1110	12V/3.5A	12V/3.5A	-	-
DC1-80-2004	1111	15V/3A	15V/3A	-	-
DC1-80-1001	1101	5V/16A	-	-	-
DC1-80-1002	1102	12V/6.7A	-	-	-
DC1-80-1003	1103	15V/5.3A	-	-	-
DC1-80-1004	1104	24V/3.3A	-	-	-
DC1-80-1005	1105	28V/2.9A	-	-	-
DC1-80-1006	1106	36V/2.2A	-	-	-
DC1-80-1007	1107	48V/1.5A	-	-	-

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IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Notes:

1. Outputs can be positive, negative, or floating with respect to Output 1.
2. Total output power, with free air convection, must not exceed:
 - REL, DC2, DC4-70: 50 watts (open frame), 40 watts (chassis/cover option)
 - REL, DC2, DC4-110: 80 watts (open frame), 65 watts (chassis/cover option)
 - REL, DC2, DC4-150: 100 watts (open frame), 85 watts (chassis/cover option)
 - REL, DC2, DC4-185: 135 watts (open frame), 110 watts (chassis/cover option)
 - DC1-80 (Singles): 60 watts (open frame or chassis), 50 watts (chassis/cover option)
 - DC1-80 (Multis): 50 watts (open frame or chassis), 40 watts (chassis/cover option)
3. Total output power, with 300LFM forced air cooling, must not exceed:
 - REL, DC2, DC4-70: 70 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-110: 110 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-150: 150 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-185: 185 watts (open frame or chassis/cover option)
 - DC1-80: 80 watts (open frame or chassis/cover option)
4. Total current from Outputs 1 and 2, convection cooled, must not exceed:
 - REL, DC2, DC4-110: 12A
 - REL, DC2, DC4-150: 15A
 - REL, DC2, DC4-185: 20A
5. Total current from Outputs 3 and 4, convection cooled, must not exceed:
 - REL, DC2, DC4-110: 3A
 - REL, DC2, DC4-150: 3A
 - REL, DC2, DC4-185: 3A
6. Rated 1.5A maximum with convection cooling.
7. Rated 10A maximum with convection cooling.
8. Rated 8A maximum with convection cooling.
9. Rated 16A maximum with convection cooling.
10. Rated 12A maximum with convection cooling.
11. Rated 20A maximum with convection cooling.
12. Rated 15A maximum with convection cooling.
13. Rated 27A maximum with convection cooling.
14. Open Frame or chassis mount only, no cover.
15. Rated Input for this supply is 40-95Vac, 6A. Maximum output power is 77 Watts.
16. Total output power must not exceed 167.4 Watts with 300 LFM Forced Air Cooling.
17. A suffix, or any combination of, may be added to the model number to indicate the following optional configuration(s): CH-chassis, CO-cover, IO-isolated outputs, PF-power fail, OVP-over voltage protection, PG-power good, WT- wide temperature, RE- Remote On/Off, TS-terminal strips, TB- terminal blocks, GOLD-gold pins input / output headers, Y or NY-decreased, or removed, line to ground capacitors, O – Y2 caps secondary to ground, P – Y1 caps secondary to ground or removed, BD- Blocking Diode (DC Series only)

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Product Service

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Application Considerations:

- These components have been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment (IEC/EN 62368-1, 2nd Edition)
- These components have been evaluated for the output power ratings specified, convection cooled open-frame and in optional chassis and cover, at a 50°C ambient. The temperature tests are to be repeated in the end product. Isolation Transformer T1 utilizes a Class B (130°C) Electrical Insulation System designated IPD-130-1 issued by Underwriters Laboratories except for DC1-80 series which utilizes Class F (155°C) Electrical Insulation System designated IPD-155-1 issued by Underwriters Laboratories.
- The input circuit includes a fuse in the line input only.
- These components have been evaluated as Class I equipment for use in a pollution degree 2 environments.
- The supply terminal grounding connector is connected to the chassis through a land on the printed wiring board. An Earthing Test between the chassis and input ground terminal was successfully performed at 40A and must be performed in the end product.
- These components require Electrical and Fire enclosures as part of the end product.
- These components provide reinforced insulation between the primary and secondary circuits and basic insulation between primary and earth. All outputs are classified ES1 except the DC2-70-1008, DC4-70-1008, DC2-150-1007, DC2-150-1008, DC4-150-1007, DC4-150-1008 and DC1-80-1007 which are classified ES2.
- This unit utilizes both input/output connectors and optional output terminal blocks, see critical components list. The input/output connectors are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of these mating connectors relative to secureness, insulating, materials and temperatures should be considered. However, the units that utilize terminal blocks are acceptable for field wiring. These terminal blocks accept 16-30 AWG wire.
- Touch Currents and/or Leakage Currents must be performed in the end product, applicable to REL Series only.
- Care must be taken to insure the voltage applied to a reinforced insulation does not overstress basic insulation. Breakdown of basic insulation and catastrophic failure of the power supply may result if a test voltage of greater than 1800 VAC is applied between primary and secondary circuits. Each isolating component is factory tested at 4000 V AC minimum prior to installation.
- Option SB, REL-185 Series only, indicates a 8.5V / 5mA standby voltage accessible on P3 pins 5 and 6.

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Product Service



Ref. Certif. No.

DE 3 - 501568

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEMESYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC**CB TEST CERTIFICATE**
CERTIFICAT D'ESSAI OC

Product

Produit

Name and address of the applicant

Nom et adresse du demandeur

Name and address of the manufacturer

Nom et adresse du fabricant

Name and address of the factory

Nom et adresse de l'usine

Ratings and principal characteristics

Valeurs nominales et caractéristiques principales

Trade mark (if any)

Marque de fabrique (si elle existe)

Type of Manufacturer's Testing Laboratories used

Type de programme du laboratoire d'essais constructeur

Model/type Ref.

Ref. de type

Additional information (if necessary)

Information complémentaire (si nécessaire)

A sample of the product was tested and found
to be in conformity withUn échantillon de ce produit a été essayé et a été
considéré conforme à la

as shown in the Test Report Ref. No.

which forms part of this certificate

comme indiqué dans le Rapport d'essais numéro

de référence qui constitue une partie de ce

certificat

Power supply

Integrated Power Designs, Inc. Hanover Industrial Estates

300 Stewart Road

Wilkes-Barre PA 18706, USA

Integrated Power Designs, Inc. Hanover Industrial Estates

300 Stewart Road, Wilkes-Barre PA 18706, USA

Integrated Power Designs, Inc. Hanover Industrial Estates

300 Stewart Road, Wilkes-Barre PA 18706, USA

REL-70-1001

Rated Input Voltage: 100-240 V AC

Rated Frequency: 50-60 Hz

Rated Input Current: 1.6 A max

Protection Class: I

See certificate attachment for ratings,

configurations and license conditions

IPD

CTF Stage 3

1) REL-70, DC2-70, DC4-70 Series

2) REL-110, DC2-110, DC4-110 Series

3) REL-150, DC2-150, DC4-150 Series

4) REL-185, DC2-185, DC4-185 Series

Each model of each series can have from one (1) to four (4)

outputs of any voltage/current configurations with a max

total output power of 70W(1), 110W(2), 150W(3) or 185W(4).

Certificate DE 3 – 59690 issued 2012-05-18 is replaced by this version

due to technical changes

IEC 60950-1(ed.2);am1;am2

72108766-000

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Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date,

2015-12-02

CB 15 11 30824 291

William Stinson



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Product Service

Attachment to Certificate CB 15 11 30824 291

Model Number	Transformer (6000XXX)	Input voltage	Input current	Output 1	Output 2	Output 3	Output 4
REL-70-4001	544	100-240V~	1.6A				
DC2-70-4001	787	18-36Vdc	7A	3.3V/6A	5V/5A	12V/2A(6)	12V/2A(6)
DC4-70-4001	743	36-72Vdc	4A				
REL-70-4002	545	100-240V~	1.6A				
DC2-70-4002	788	18-36Vdc	7A	5V/6A	3.3V/5A	12V/2A(6)	12V/2A(6)
DC4-70-4002	744	36-72Vdc	4A				
REL-70-4003	546	100-240V~	1.6A				
DC2-70-4003	789	18-36Vdc	7A	5V/6A	3.3V/5A	15V/2A(6)	15V/2A(6)
DC4-70-4003	745	36-72Vdc	4A				
REL-70-4004	547	100-240V~	1.6A				
DC2-70-4004	790	18-36Vdc	7A	5V/6A	5V/5A	12V/2A(6)	12V/2A(6)
DC4-70-4004	746	36-72Vdc	4A				
REL-70-4005	548	100-240V~	1.6A				
DC2-70-4005	791	18-36Vdc	7A	5V/6A	5V/5A	15V/2A(6)	15V/2A(6)
DC4-70-4005	747	36-72Vdc	4A				
REL-70-4006	549	100-240V~	1.6A				
DC2-70-4006	792	18-36Vdc	7A	5V/6A	24V/2A	12V/2A(6)	12V/2A(6)
DC4-70-4006	748	36-72Vdc	4A				
REL-70-4007	550	100-240V~	1.6A				
DC2-70-4007	793	18-36Vdc	7A	5V/6A	24V/2A	15V/2A(6)	15V/2A(6)
DC4-70-4007	749	36-72Vdc	4A				
REL-70-4008	706	100-240V~	1.6A	24V/1.25A	6V/2.5A	10V/1.7A	6V/1.5A
REL-70-4009	021	100-240V~	1.6A	6.7V/5A	5V/4A	15V/2A(6)	15V/2A(6)
REL-70-4010	869	100-240V~	1.6A	7.5V/3A	7.5V/2A	12V/2A(6)	12V/2A(6)
REL-70-3001	551	100-240V~	1.6A				
DC2-70-3001	794	18-36Vdc	7A	5V/6A	12V/2A	-	12V/2A(6)
DC4-70-3001	750	36-72Vdc	4A				
REL-70-3002	552	100-240V~	1.6A				
DC2-70-3002	795	18-36Vdc	7A	5V/6A	15V/2A	-	15V/2A(6)
DC4-70-3002	751	36-72Vdc	4A				
REL-70-3003	702	100-240V~	1.6A	5.1V/6A	7.5V/2A		7.5V/2A(6)
REL-70-3004	741	100-240V~	1.6A	3.3 V/6 A	7 V/5 A	12 V/2 A(6)	
REL-70-3005	358	100-240V~	1.6A	5 V/5 A	18 V/2 A		18 V/ 2A(6)
REL-70-2001	553	100-240V~	1.6A				
DC2-70-2001	796	18-36Vdc	7A	3.3V/6A	5V/5A	-	-
DC4-70-2001	752	36-72Vdc	4A				
REL-70-2002	554	100-240V~	1.6A				
DC2-70-2002	797	18-36Vdc	7A	5V/6A	12V/4A	-	-
DC4-70-2002	753	36-72Vdc	4A				
REL-70-2003	555	100-240V~	1.6A				
DC2-70-2003	798	18-36Vdc	7A	5V/6A	24V/2A	-	-
DC4-70-2003	754	36-72Vdc	4A				

Test Report No: 72108766-000

Date, 2015-12-02

CB 15 11 30824 291



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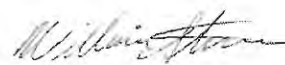
Attachment to Certificate CB 15 11 30824 291

Model Number	Transformer (6000XXX)	Input voltage	Input current	Output 1	Output 2	Output 3	Output 4
REL-70-2004	556	100-240V~	1.6A				
DC2-70-2004	799	18-36Vdc	7A	12V/3A	12V/3A	-	-
DC4-70-2004	755	36-72Vdc	4A				
REL-70-2005	557	100-240V~	1.6A				
DC2-70-2005	800	18-36Vdc	7A	15V/3A	15V/2A	-	-
DC4-70-2005	756	36-72Vdc	4A				
REL-70-2006	707	100-240V~	1.6A	5.5V/6A	5.5V/5A	-	-
REL-70-2007	876	100-240V~	1.6A				
DC2-70-2007	874	18-36Vdc	7A	5V/6A	29V/2A	-	-
DC4-70-2007	875	36-72Vdc	4A				
REL-70-2008	1359	100-240V~	1.6A	9V/2A	48V/1.5A		
REL-70-1001	558	100-240V~	1.6A				
DC2-70-1001	801	18-36Vdc	7A	2.5V/14A(7)		-	-
DC4-70-1001	757	36-72Vdc	4A				
REL-70-1002	559	100-240V~	1.6A				
DC2-70-1002	802	18-36Vdc	7A	3.3V/14A(7)	-	-	-
DC4-70-1002	758	36-72Vdc	4A				
REL-70-1003	560	100-240V~	1.6A				
DC2-70-1003	803	18-36Vdc	7A	5V/14A(7)	-	-	-
DC4-70-1003	759	36-72Vdc	4A				
REL-70-1004	561	100-240V~	1.6A				
DC2-70-1004	804	18-36Vdc	7A	12V/5.8A	-	-	-
DC4-70-1004	760	36-72Vdc	4A				
REL-70-1005	562	100-240V~	1.6A				
DC2-70-1005	805	18-36Vdc	7A	15V/4.7A	-	-	-
DC4-70-1005	761	36-72Vdc	4A				
REL-70-1006	563	100-240V~	1.6A				
DC2-70-1006	806	18-36Vdc	7A	24V/2.9A	-	-	-
DC4-70-1006	762	36-72Vdc	4A				
REL-70-1007	564	100-240V~	1.6A				
DC2-70-1007	807	18-36Vdc	7A	28V/2.5A	-	-	-
DC4-70-1007	763	36-72Vdc	4A				
REL-70-1008	565	100-240V~	1.6A				
DC2-70-1008	808	18-36Vdc	7A	48V/1.5A	-	-	-
DC4-70-1008	764	36-72Vdc	4A				
REL-110-4001	484	100-240V~	2A				
DC2-110-4001	626	18-36Vdc	12A	3.3V/10A(8)	5V/6A	12V/2A	12V/2A
DC4-110-4001	648	36-72Vdc	7A				
REL-110-4002	485	100-240V~	2A				
DC2-110-4002	627	18-36Vdc	12A	5V/10A(8)	3.3V/6A	12V/2A	12V/2A
DC4-110-4002	649	36-72Vdc	7A				
REL-110-4003	486	100-240V~	2A				
DC2-110-4003	628	18-36Vdc	12A	5V/10A(8)	3.3V/6A	15V/2A	15V/2A
DC4-110-4003	650	36-72Vdc	7A				

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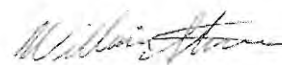
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Model Number	Transformer (6000XXX)	Input voltage	Input current	Output 1	Output 2	Output 3	Output 4
REL-110-4004	487	100-240V~	2A				
DC2-110-4004	629	18-36Vdc	12A	5V/10A(8)	5V/6A	12V/2A	12V/2A
DC4-110-4004	651	36-72Vdc	7A				
REL-110-4005	488	100-240V~	2A				
DC2-110-4005	630	18-36Vdc	12A	5V/10A(8)	5V/6A	15V/2A	15V/2A
DC4-110-4005	652	36-72Vdc	7A				
REL-110-4006	489	100-240V~	2A				
DC2-110-4006	631	18-36Vdc	12A	5V/10A(8)	24V/2A	12V/2A	12V/2A
DC4-110-4006	653	36-72Vdc	7A				
REL-110-4007	490	100-240V~	2A				
DC2-110-4007	632	18-36Vdc	12A	5V/10A(8)	24V/2A	15V/2A	15V/2A
DC4-110-4007	654	36-72Vdc	7A				
DC2-110-4008	827	18-36Vdc	12A	+3.3V/10A (8)	+5V/6A	+12V/3.7A	-12V/3A
REL-110-4009	736	100-240V~	2A	5V/10A (8)	24V/2A	7V/2.5A	7V/2.5A
REL-110-4010	871	100-240V~	2A	9V/6A	24V/2A	15V/2A	15V/2A
REL-110-4011	872	100-240V~	2A	32V/2A	32V/2A	12V/1A	12V/1A
REL-110-3001	491	100-240V~	2A				
DC2-110-3001	624	18-36Vdc	12A	5V/10A(8)	12V/3A	-	12V/3A
DC4-110-3001	646	36-72Vdc	7A				
REL-110-3002	492	100-240V~	2A				
DC2-110-3002	625	18-36Vdc	12A	5V/10A(8)	15V/2A	-	15V/2A
DC4-110-3002	647	36-72Vdc	7A				
REL-110-3003	737	100-240V~	2A				
DC2-110-3003	883	18-36Vdc	12A	8V/5A(8)	8V/1A	-	30V/1A
DC4-110-3003		36-72Vdc	7A				
REL-110-3004	088	100-240V~	2A	9V/3A	24V/3A	13V/2A	-
REL-110-3005(14)	852	100-240V~	2A	5/12A(8)	9.5V/1A	-	9.5V/1A
REL-110-3007	892	100-240V~	2A	20V/2.5A	12V/2.5A	-	12V/2.5A
REL-110-2001	493	100-240V~	2A				
DC2-110-2001	619	18-36Vdc	12A	3.3V/10A(8)	5V/6A	-	-
DC4-110-2001	641	36-72Vdc	7A				
REL-110-2002	494	100-240V~	2A				
DC2-110-2002	620	18-36Vdc	12A	5V/10A(8)	12V/5A	-	-
DC4-110-2002	642	36-72Vdc	7A				
REL-110-2003	495	100-240V~	2A				
DC2-110-2003	621	18-36Vdc	12A	5V/10A(8)	24V/3A	-	-
DC4-110-2003	643	36-72Vdc	7A				
REL-110-2004	496	100-240V~	2A				
DC2-110-2004	622	18-36Vdc	12A	12V/5A	12V/4A	-	-
DC4-110-2004	644	36-72Vdc	7A				
REL-110-2005	497	100-240V~	2A				
DC2-110-2005	623	18-36Vdc	12A	15V/4A	15V/3A	-	-
DC4-110-2005	645	36-72Vdc	7A				

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REL-110-2006	704	100-240V~	2A	18V/4A	18V/3A	-	-
REL-110-2007	1423	100-240V~	2A	6V/10A (8)	7.5V/6A	-	-
REL-110-1001	512	100-240V~	2A				
DC2-110-1001	611	18-36Vdc	12A	2.5V/22A(9)	-	-	-
DC4-110-1001	633	36-72Vdc	7A				
REL-110-1002	498	100-240V~	2A				
DC2-110-1002	612	18-36Vdc	12A	3.3V/22A(9)	-	-	-
DC4-110-1002	634	36-72Vdc	7A				
REL-110-1003	499	100-240V~	2A				
DC2-110-1003	613	18-36Vdc	12A	5V/22A(9)	-	-	-
DC4-110-1003	635	36-72Vdc	7A				
REL-110-1004	500	100-240V~	2A				
DC2-110-1004	614	18-36Vdc	12A	12V/9.2A	-	-	-
DC4-110-1004	636	36-72Vdc	7A				
REL-110-1005	501	100-240V~	2A				
DC2-110-1005	615	18-36Vdc	12A	15V/7.3A	-	-	-
DC4-110-1005	637	36-72Vdc	7A				
REL-110-1006	502	100-240V~	2A				
DC2-110-1006	616	18-36Vdc	12A	24V/4.6A	-	-	-
DC4-110-1006	638	36-72Vdc	7A				
REL-110-1007	503	100-240V~	2A				
DC2-110-1007	617	18-36Vdc	12A	28V/3.9A	-	-	-
DC4-110-1007	639	36-72Vdc	7A				
REL-110-1008	504	100-240V~	2A				
DC2-110-1008	618	18-36Vdc	12A	48V/2.3A	-	-	-
DC4-110-1008	640	36-72Vdc	7A				
REL-150-4001	517	100-240V~	4A				
DC2-150-4001	670	18-36Vdc	20A	3.3V/15A(10)	5V/8A	12V/2A	12V/2A
DC4-150-4001	692	36-72Vdc	10A				
REL-150-4002	518	100-240V~	4A				
DC2-150-4002	671	18-36Vdc	20A	5V/15A(10)	3.3V/8A	12V/2A	12V/2A
DC4-150-4002	693	36-72Vdc	10A				
REL-150-4003	519	100-240V~	4A				
DC2-150-4003	672	18-36Vdc	20A	5V/15A(10)	3.3V/8A	15V/2A	15V/2A
DC4-150-4003	694	36-72Vdc	10A				
REL-150-4004	520	100-240V~	4A				
DC2-150-4004	673	18-36Vdc	20A	5V/15A(10)	5V/8A	12V/2A	12V/2A
DC4-150-4004	695	36-72Vdc	10A				
REL-150-4005	521	100-240V~	4A				
DC2-150-4005	674	18-36Vdc	20A	5V/15A(10)	5V/8A	15V/2A	15V/2A
DC4-150-4005	696	36-72Vdc	10A				
REL-150-4006	522	100-240V~	4A				
DC2-150-4006	675	18-36Vdc	20A	5V/15A(10)	24V/3A	12V/2A	12V/2A
DC4-150-4006	697	36-72Vdc	10A				

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REL-150-4007 DC2-150-4007 DC4-150-4007	523	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	5V/15A(10)	24V/3A	15V/2A	15V/2A
DC4-150-4008	826	100-240V~	4A	3.5V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4009(15)	610	100-240V~	6A	24V/2.3A	10V/1A	6V/1.6A	6V/0.3A
REL-150-4010	809	100-240V~	4A	5V/15A	12V/5A	24V/1A	24V/1A
REL-150-4011	824	100-240V~	4A	3.3V/10A	5.2V/9A	12.5V/1A	13.3V/3A
REL-150-4012	825	100-240V~	4A	3.3V/15A(10)	5V/8A	14V/2A	14V/2A
REL-150-4013	1022	100-240V~	4A	7.25V/8.7A	30V/0.5A	24V/1.5A	24V/1.5A
REL-150-3001 DC2-150-3001 DC4-150-3001	524 668 690	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	5V/15A(10)	12V/4A	-	12V/3A
REL-150-3002 DC2-150-3002 DC4-150-3002	525 669 691	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	+5V/15A(10)	+15V/3A	-	15V/2A
REL-150-3003	609	100-240V~	4A	22V/3.5A	22V/3.5A	-	24V/1A
REL-150-3004	608	100-240V~	4A	5V/6A	12V/7A	-	12V/3A
REL-150-3005	129	100-240V~	4A	5.5V/15A(10)	15.5V/3A	-	15.5V/2A
REL-150-2001 DC2-150-2001 DC4-150-2001	526 663 685	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	3.3V/15A(10)	5V/8A	-	-
REL-150-2002 DC2-150-2002 DC4-150-2002	527 664 686	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	5V/15A(10)	12V/5A	-	-
REL-150-2003 DC2-150-2003 DC4-150-2003	528 665 687	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	5V/15A(10)	24V/3A	-	-
REL-150-2004 DC2-150-2004 DC4-150-2004	529 666 688	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	12V/7.55A	12V/5A	-	-
REL-150-2005 DC2-150-2005 DC4-150-2005	530 667 689	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	15V/5A	15V/5A	-	-
REL-150-1001 DC2-150-1001 DC4-150-1001	531 655 677	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	2.5V/30A(11)	-	-	-
REL-150-1002 DC2-150-1002 DC4-150-1002	532 656 678	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	3.3V/30A(11)	-	-	-
REL-150-1003 DC2-150-1003 DC4-150-1003	533 657 679	100-240V~ 18-36Vdc 36-72Vdc	4A 20A 10A	5V/30A(11)	-	-	-

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REL-150-1004	534	100-240V~	4A				
DC2-150-1004	658	18-36Vdc	20A	12V/12.5A	-	-	-
DC4-150-1004	680	36-72Vdc	10A				
REL-150-1005	535	100-240V~	4A				
DC2-150-1005	659	18-36Vdc	20A	15V/10.0A	-	-	-
DC4-150-1005	681	36-72Vdc	10A				
REL-150-1006	536	100-240V~	4A				
DC2-150-1006	660	18-36Vdc	20A	24V/6.3A	-	-	-
DC4-150-1006	682	36-72Vdc	10A				
REL-150-1007	537	100-240V~	4A				
DC2-150-1007	661	18-36Vdc	20A	28V/5.4A	-	-	-
DC4-150-1007	683	36-72Vdc	10A				
REL-150-1008	538	100-240V~	4A				
DC2-150-1008	662	18-36Vdc	20A	48V/3.1A	-	-	-
DC4-150-1008	684	36-72Vdc	10A				
REL-150-1009	738	100-240V~	4A	31V/5.4A	-	-	-
DC2-150-1009	---	18-36Vdc	20A	20V/7.5A	-	-	-
DC4-150-1009	822	36-72Vdc	10A				
REL-150-1010	742	100-240V~	4A	36V/4.16A	-	-	-
REL-150-1011(16)	738	100-240V~	4A	31V/5.4A	-	-	-
REL-185-4001	573	100-240V~	4A				
DC2-185-4001	714	18-36Vdc	20A	3.3V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4001	765	36-72Vdc	10A				
REL-185-4002	574	100-240V~	4A				
DC2-185-4002	715	18-36Vdc	20A	5V/20A(12)	3.3V/10A	12V/2A	12V/2A
DC4-185-4002	766	36-72Vdc	10A				
REL-185-4003	575	100-240V~	4A				
DC2-185-4003	716	18-36Vdc	20A	5V/20A(12)	3.3V/10A	15V/2A	15V/2A
DC4-185-4003	767	36-72Vdc	10A				
REL-185-4004	576	100-240V~	4A				
DC2-185-4004	717	18-36Vdc	20A	5V/20A(12)	5V/10A	12V/2A	12V/2A
DC4-185-4004	768	36-72Vdc	10A				
REL-185-4005	577	100-240V~	4A				
DC2-185-4005	718	18-36Vdc	20A	5V/20A(12)	5V/10A	15V/2A	15V/2A
DC4-185-4005	769	36-72Vdc	10A				
REL-185-4006	578	100-240V~	4A				
DC2-185-4006	719	18-36Vdc	20A	5V/20A(12)	24V/3A	12V/2A	12V/2A
DC4-185-4006	770	36-72Vdc	10A				
REL-185-4007	579	100-240V~	4A				
DC2-185-4007	720	18-36Vdc	20A	5V/20A(12)	24V/3A	15V/2A	15V/2A
DC4-185-4007	771	36-72Vdc	10A				
REL-185-4008	873	100-240V~	4A	3.3V/20A(12)	6V/5A	12V/2A	6V/5A
REL-185-4009	1075	100-240V~	4A	5V/15A	12V/4A	28V/0.80A	12V/2A

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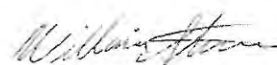
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REL-185-3001	580	100-240V~	4A				
DC2-185-3001	721	18-36Vdc	20A	5V/20A(12)	12V/5A	-	12V/2A
DC4-185-3001	772	36-72Vdc	10A				
REL-185-3002	581	100-240V~	4A				
DC2-185-3002	722	18-36Vdc	20A	5V/20A(12)	15V/4A	-	15V/2A
DC4-185-3002	773	36-72Vdc	10A				
REL-185-2001	582	100-240V~	4A				
DC2-185-2001	723	18-36Vdc	20A	3.3V/20A(12)	5V/10A	-	-
DC4-185-2001	774	36-72Vdc	10A				
REL-185-2002	583	100-240V~	4A				
DC2-185-2002	724	18-36Vdc	20A	5V/20A(12)	12V/8A	-	-
DC4-185-2002	775	36-72Vdc	10A				
REL-185-2003	584	100-240V~	4A				
DC2-185-2003	725	18-36Vdc	20A	5V/20A(12)	24V/4A	-	-
DC4-185-2003	776	36-72Vdc	10A				
REL-185-2004	585	100-240V~	4A				
DC2-185-2004	726	18-36Vdc	20A	12V/10A	12V/6A	-	-
DC4-185-2004	777	36-72Vdc	10A				
REL-185-2005	586	100-240V~	4A				
DC2-185-2005	727	18-36Vdc	20A	15V/8A	15V/5A	-	-
DC4-185-2005	778	36-72Vdc	10A				
REL-185-2006	712	100-240V~	4A	15V/6A	24V/4A	-	-
REL-185-2007	816	100-240V~	4A	35V/3.5A	12V/5.2A	-	-
REL-185-1001	587	100-240V~	4A				
DC2-185-1001	728	18-36Vdc	20A	2.5V/37A(13)	-	-	-
DC4-185-1001	779	36-72Vdc	10A				
REL-185-1002	588	100-240V~	4A				
DC2-185-1002	729	18-36Vdc	20A	3.3V/37A(13)	-	-	-
DC4-185-1002	780	36-72Vdc	10A				
REL-185-1003	589	100-240V~	4A				
DC2-185-1003	730	18-36Vdc	20A	5V/37A(13)	-	-	-
DC4-185-1003	781	36-72Vdc	10A				
REL-185-1004	590	100-240V~	4A				
DC2-185-1004	731	18-36Vdc	20A	12V/15.4A	-	-	-
DC4-185-1004	782	36-72Vdc	10A				
REL-185-1005	591	100-240V~	4A				
DC2-185-1005	732	18-36Vdc	20A	15V/12.3A	-	-	-
DC4-185-1005	783	36-72Vdc	10A				
REL-185-1006	592	100-240V~	4A				
DC2-185-1006	733	18-36Vdc	20A	24V/7.7A	-	-	-
DC4-185-1006	784	36-72Vdc	10A				
REL-185-1007	593	100-240V~	4A				
DC2-185-1007	734	18-36Vdc	20A	28V/6.6A	-	-	-
DC4-185-1007	785	36-72Vdc	10A				

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REL-185-1008	594	100-240V~	4A				
DC2-185-1008	735	18-36Vdc	20A	48V/3.8A	-	-	-
DC4-185-1008	786	36-72Vdc	10A				
REL-185-1009	022	100-240V~	4A	6.3V/29A	-	-	-
REL-185-1010	593	100-240V~	4A	31V/6A	-	-	-

Notes:

- Outputs can be positive, negative, or floating with respect to Output 1.
- Total output power, with free air convection, must not exceed:
 - REL, DC2, DC4-70: 50 watts (open frame), 40 watts (chassis/cover option)
 - REL, DC2, DC4-110: 80 watts (open frame), 65 watts (chassis/cover option)
 - REL, DC2, DC4-150: 100 watts (open frame), 85 watts (chassis/cover option)
 - REL, DC2, DC4-185: 135 watts (open frame), 110 watts (chassis/cover option)
- Total output power, with 300LFM forced air cooling, must not exceed:
 - REL, DC2, DC4-70: 70 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-110: 110 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-150: 150 watts (open frame or chassis/cover option)
 - REL, DC2, DC4-185: 185 watts (open frame or chassis/cover option)
- Total current from Outputs 1 and 2, convection cooled, must not exceed:
 - REL, DC2, DC4-110: 12A
 - REL, DC2, DC4-150: 15A
 - REL, DC2, DC4-185: 20A
- Total current from Outputs 3 and 4, convection cooled, must not exceed:
 - REL, DC2, DC4-110: 3A
 - REL, DC2, DC4-150: 3A
 - REL, DC2, DC4-185: 3A
- Rated 1.5A maximum with convection cooling.
- Rated 10A maximum with convection cooling

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8. Rated 8A maximum with convection cooling.
9. Rated 16A maximum with convection cooling.
10. Rated 12A maximum with convection cooling.
11. Rated 20A maximum with convection cooling.
12. Rated 15A maximum with convection cooling.
13. Rated 27A maximum with convection cooling.
14. Open Frame or chassis mount only, no cover.
15. Rated Input for this supply is 40-95Vac, 6A. Maximum output power is 77 Watts.
16. Total output power must not exceed 167.4 Watts with 300 LFM Forced Air Cooling.
17. A suffix, or any combination of, may be added to the model number to indicate the following optional configuration(s): CH- chassis, CO-cover, IO-isolated outputs, PF-power fail, OVP-over voltage protection, PG-power good, WT- wide temperature, RE- Remote On/Off, TS-terminal strips, TB- terminal blocks, GOLD-gold pins input / output headers, Y or NY-decreased, or removed, line to ground capacitors, O – Y2 caps secondary to ground, P – Y1 caps secondary to ground or removed, BD- Blocking Diode (DC Series only)

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Conditions of Acceptability:

1. These components has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, IEC/EN 60950-1 2nd Ed.
2. These components have been evaluated for the output power ratings specified, at a 50°C ambient. The temperature tests are to be repeated in the end product. Isolation Transformer T1 employs a R/C OBJY2 Class B (130°C) electrical insulation system designated IPD-130-1.
3. The input circuit includes only one fuse in the line input.
4. These components have been evaluated as Class I equipment for use in pollution degree 2 environments.
5. The supply terminal grounding connector is connected to the chassis through a land on the printed wiring board. An Earthing Test between the chassis and input ground terminal was successfully performed. All mounting holes on the printed circuit board must be reliably connected to the end product's grounding connection.
6. These components require Electrical and Fire enclosures as part of the end product.
7. These components provide reinforced insulation between the primary and secondary circuits and basic insulation between primary and secondary. All outputs are SELV type, non hazardous energy. The DC2-70-1008, DC4-70-1008, DC2-150-1007, DC2-150-1008, DC4-150-1007 and DC4-150-1008 which are ELV type, non-hazardous energy.
8. This unit utilizes both input/output connectors and alternate output terminal blocks, see critical components list. The input/output connectors are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of these mating connectors relative to secureness, insulating materials and temperatures should be considered.

However, the units that utilize terminal blocks are acceptable for field wiring. These terminal blocks accept 16-30 AWG wire.

9. Touch Currents and/or Leakage Currents must be performed in the end product. Note applicable to REL-70 Series only.
10. Care must be taken to insure the voltage applied to a reinforced insulation does not overstress basic insulation. Breakdown of basic insulation and catastrophic failure of the power supply may result if a test voltage of greater than 1800 VAC is applied between primary and secondary circuits. Each isolating component is factory tested at 4000 VAC minimum prior to installation.
11. Option SB, REL-185 Series Only, indicates a 8.5V/5mA standby voltage accessible on P3 pins 5 and 6.

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TÜV SÜD Product Service GmbH • Certification Body • Ridlerstrasse 65 • D-80339 München

Product Service