

COVER PAGE FOR TEST REPORT

Product Category:	Power Supplies, Medical and Dental
Product Category CCN:	QQHM2, QQHM8
Complementary Product Categories:	Power Supplies for Information Technology Equipment Including Electrical Business Equipment(QQGQ2, QQGQ8)
Test Procedure:	Component Recognition
Product:	Switching Power Supply
Model/Type Reference:	CFM21SX-Y (X can be 033, 050, 090, 120, 150, 240; -Y can be blank, - E, -T or -S)
Rating(s):	I/P: 100-240Vac, 0.5-0.3A, 47-63 Hz Output: 3.3 Vdc, 4.0A or 2.0A (half load) for models CFM21S033, CFM21S033-E, CFM21S033-S and CFM21S033-T 5.0 Vdc, 4.0A or 2.0A (half load) for models CFM21S050, CFM21S050-E, CFM21S050-S and CFM21S050-T 9.0 Vdc, 2.3A or 1.15A (half load) for models CFM21S090, CFM21S090-E, CFM21S090-S and CFM21S090-T 12 Vdc, 1.7A or 0.85A (half load) for models CFM21S120, CFM21S120-E, CFM21S120-S and CFM21S120-T 15 Vdc, 1.4A or 0.7A (half load) for models CFM21S150, CFM21S150-E, CFM21S150-S and CFM21S150-T 24 Vdc, 0.9A or 0.45A (half load) for models CFM21S240, CFM21S240-E, CFM21S240-S and CFM21S240-T
Standards:	UL 60601-1, 1st Edition, 2006-04-26 (Medical Electrical Equipment, Part 1: General Requirements for Safety) CAN/CSA-C22.2 No. 601.1-M90, 2005 (Medical Electrical Equipment - Part 1: General Requirements for Safety)
Applicant Name and Address:	CINCON ELECTRONICS CO LTD 8-1 FU KUNG RD FU HSING PARK FU HSING HSIANG CHANGHUA HSIEN 506 TAIWAN

	Models CFM21SX-E series are similar to models CFM21SX except for optional enclosure with epoxy and model designation.	
CD1.0	Additional Information	
CD1.1	N/A	
CE1.0	Technical Considerations	
CE1.1	The product was investigated to the following additional standards:	UL 60601-1, 1st Edition, 2006-04-26 (includes National Differences for USA), CAN/CSA-C22.2 No. 601.1-M90 (R2006) (includes National Differences for Canada) UL 60950-1, 2nd Edition, 2007-03-27 CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03
CE1.2	The product was not investigated to the following standards or clauses:	Clause 36, Electromagnetic Compatibility (IEC 601-1-2), Clause 48, Biocompatibility (ISO 10993-1), Clause 52.1, Programmable Electronic Systems (IEC 601-1-4)
CE1.3	The product is Classified only to the following hazards:	Fire, Shock
CE1.4	The degree of protection against harmful ingress of water is:	Ordinary
CE1.6	The mode of operation is:	Continuous
CE1.7	Software is relied upon for meeting safety requirements related to mechanical, fire and shock:	No
CE1.8	The product is suitable for use in the presence of a flammable anesthetics mixture with air or oxygen or with nitrous oxide:	No
CF1.0	Engineering Conditions of Acceptability	
CF1.1	For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc. When installed in an end-product, consideration must be given to the following:	
CF2.0	This power supply has been judged on the basis of the required creepage and Clearances in the First Edition of the Standard for Medical Electrical Equipment, UL 60601-1, Sub clause 57.10, which covers the end-use product for which the component was designed.	--
CF2.1	These power supplies have not been evaluated for patient connected applications.	--
CF2.2	The power supply was evaluated as Double	--

UL TEST REPORT AND PROCEDURE

Standard:	ANSI/AAMI ES60601-1:2005, (Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance) CAN/CSA-C22.2 No. 60601-1 (2008) (Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance)
Certification Type:	Component Recognition
CCN:	QQHM2, QQHM8 (Power Supplies, Medical and Dental)
Product:	Switching Power Supply
Model:	CFM21SX-Y (X can be 033, 050, 090, 120, 150, 240; -Y can be blank, -E, -T or -S)
Rating:	Input: 100-240Vac, 0.5-0.3A, 47-63 Hz Output: - For models CFM21S033, CFM21S033-E, CFM21S033-S and CFM21S033-T 3.3 Vdc, 4.0A or 2.0A (half load) - For models CFM21S050, CFM21S050-E, CFM21S050-S and CFM21S050-T 5.0 Vdc, 4.0A or 2.0A (half load) - For models CFM21S090, CFM21S090-E, CFM21S090-S and CFM21S090-T 9.0 Vdc, 2.3A or 1.15A (half load) - For models CFM21S120, CFM21S120-E, CFM21S120-S and CFM21S120-T 12 Vdc, 1.7A or 0.85A (half load) - For models CFM21S150, CFM21S150-E, CFM21S150-S and CFM21S150-T 15 Vdc, 1.4A or 0.7A (half load) For models CFM21S240, CFM21S240-E, CFM21S240-S and CFM21S240-T 24 Vdc, 0.9A or 0.45A (half load)
Applicant Name and Address:	CINCON ELECTRONICS CO LTD 8-1 FU KUNG RD FU HSING PARK FU HSING HSIANG CHANGHUA HSIEN 506 TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.



Underwriters Laboratories (UL LLC) Safety Certification (Manufacturing Factory) Report

Model: CFM21Mx-Y (where x can be 050, 090, 120, 150, 240; -Y can be blank, -E, -T or -S)

Device Description: Component Medical Power Supply

Applicant: CINCON ELECTRONICS CO LTD
8-1 FU KUNG RD, FU HSING PARK, FU HSING HSIANG,
CHANGHUA HSIEN, 506, TAIWAN

Manufacturer: Same as Applicant

Manufacturing Facility(ies): DONGGUAN CINCON ELECTRONICS LTD
DONGGUAN CINCON ELECTRONICS LTD, 1 JING XIANG RD
DONGCHENG, FOREIGN TRADE INDUSTRIAL PARK, ZHUSHAN
DONGCHENG DISTRICT, DONGGUAN,
GUANGDONG 523128, CHINA

CINCON ELECTRONICS CO LTD
8-1 FU KUNG RD, FU HSING PARK, FU HSING HSIANG,
CHANGHUA HSIEN, 506, TAIWAN

Report No.: E252331-D1005-1/A0/C0-(M)

Report (Re)Issue Date: 2017-09-20

Base Standard(s): ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012) - Amendment 1 - Revision Date 2012/08/21
CAN/CSA-C22.2 No. 60601-1:14 - Edition 3 - Revision Date 2014/03

Additional Standards: N/A

Report Types: This report consists of the following report types:
[Yes] US Certification (UL Recognition)
[Yes] CAN Certification (cUL Recognition)

This report covers the Safety evaluation of the referenced model(s) according to the standard(s) specified above.

This is the Manufacturing Factory report only, which is used as part of the factory FUS inspections.