

접수번호 : 17-046496-06-1
(Receipt No.)



안전인증서

Safety Certificate

안전인증번호 : SU03053-12002A
(Certificate No.)

제조사/수입업자명 : WEIHAI DONG IL Technology Electronics Co., Ltd.
(Manufacturer/importer)

주소 : No.97 East-Guzhai Road, Hi-Tech Development Zone, Weihai
(Address) City, Shandong, China

제품명 : 전파장해억제용전원필터
(Product) (Power filter for inhibiting radio interference)

기본모델명 : TB1-30D
(Basic Model)

파생모델명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC250V, 50/60Hz, 30A
(Rating)

시험기준 : KC60939-1(2015-09), KC60939-2(2015-09)
(Standard)

본 인증서는 제조국명 : 중국
제조사명 : WEIHAI DONG IL Technology Electronics Co., Ltd.
제조공장의 주소 : No.97 East-Guzhai Road, Hi-Tech Development Zone, Weihai
City, Shandong, China
의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제9조제2항·제4항 또는 제10조제2항에 따라 안전인증서를 발급합니다.

We Issue This Safety Certificate for the above appliances in accordance with the Article 9(2),9(4) or 10(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2017년 09월 07일
Year month day

한국산업기술시험원장
KOREA TESTING LABORATORY



※ 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증·허가 등을 받아야 합니다.

첨부서류	1. 전기용품의 안전관리부품 및 재질목록(List of Critical Components) 2. 기본모델·파생모델의 내용 (Descriptions of the basic and series model) 3. 안전인증의 변경 현황 (Revisions Status)
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□ 첨부 1 : 전기용품의 안전관리부품 및 재질목록
List of Critical Components

부품명 (회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Approved by
X-Capacitor	코웰패션주식회사	PCX2 335	275VAC, 1.0uF	KC
		PCX2 335M	275VAC, 2.2uF	
		PCX2 337	275VAC, 3.3uF	
		PCX2 339	305VAC, 0.1uF	
	305VAC, 0.33uF			
	선일전자산업(주)	435D	275VAC, 2.2uF	KC
		436D	275VAC, 3.3uF	
	Sunil Electronics Ind, Co., Ltd	435D	275VAC, 0.1uF	KC
			275VAC, 0.33uF	
			275VAC, 1uF	
436D		275VAC, 0.1uF	KC	
		275VAC, 0.33uF		
		275VAC, 1uF		
		275VAC, 3uF		
Y-Capacitor		Taiwan Murata Electronics Co., Ltd.	KX	250VAC, 4700pF
	KH		250VAC, 10000pF	
	Murata Electronics (Thailand), Ltd.	KX	250VAC, 4700pF	KC
		KH	250VAC, 10000pF	
	동일전자(주)	DA	250VAC, 4700pF	KC
		DS	250VAC, 10nF	
Alt. Y-Capacitor	Murata Electronics (Thailand) Ltd.	KY Y2 250V	250VAC, 10 000pF	KC
Coil	위해동일기연전자유한공사	-	Inductance Value : 0.3mH~ 18mH	Tested with appliance
Terminal	(주) 동일기연	-	Copper 64~68% alloy (Ni or Tin plating)	Tested with appliance

부품명 (회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Approved by
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유의사항 (Attention) :

1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등록을 원하시는 경우는 안전인증기관에 인증변경신청을 하여야 합니다.

As the "Critical components" are parts in directly related with safety, these components shall be checked during a factory inspection by the certification body. In case of applying multiple listing or changing the items above, the certification revision shall be applied.

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 20 조제 1 항 또는 제 36 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

The Safety Certification will be cancelled under the Article 20(1), 36(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.

FP511-04

첨부 2 : 기본모델 · 파생모델의 내용
General description of Certified Products

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
TB1-30A	Capacitance
TB1-20A	Capacitance, Rated current (20A), Inductance
TB1-16A	Capacitance, Rated current (16A), Inductance
TB1-10A	Capacitance, Rated current (10A), Inductance
TB1-06A	Capacitance, Rated current (06A), Inductance
TB1-16L	Capacitance, Rated current (16A), Inductance
TB1-06N	Capacitance, Rated current (06A), Inductance
제품특기사항 및 시험조건 Remarks & Test conditions	
<p>1. 시험성적서 발행번호 : 12-1920-0884(2012.10.29.)</p> <p>2. 제품특기사항</p> <ul style="list-style-type: none"> - 본 제품은 전자파 장애 억제용 전원필터임. - 정격 : AC250 V, 50/60 Hz, 10 A 	
<p><input type="checkbox"/> 본 제품의 시험내용에 관하여 문의하실 사항이 있으시면 아래 연락처로 문의하시기 바랍니다. 시험 담당자 : 인증산업본부 전기부품평가센터 이 웅 / 055-7913-422</p> <p><input type="checkbox"/> If you have any question on product testing, please contact the person below : Job holder: Certification Business Division, Electrical Components Testing Center, W. LEE /+82 55-7913-422</p>	

FP511-05

첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions
<p>1 차 변경) 안전관리부품 제조사 변경, 부품 추가(17-046496-06-2 : 2017.09.06.)</p> <ul style="list-style-type: none"> - X-capacitor 필코전자주에서 코웰패션 주식회사로 제조사 변경 - Y-capacitor KY Y2 250V model 추가

FP511-06



Certificate of Compliance

Certificate: 80106540

Master Contract: 176007

Project: 80129017

Date Issued: 2022-07-12

Issued To: DONG IL TECHNOLOGY LTD.
28 Namyang-ro, 930 beon-gil
Hwaseong-si, Gyeonggi-do, 445-040
South Korea

Attention: Hyo-kwang Heo

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C', 'US' and ▲



Issued by: Xong Do
Xong Do, Certifier

PRODUCTS

- CLASS 2221 02 - AUDIO AND VIDEO EQUIPMENT - Electromagnetic Interference (EMI) Filters
- CLASS 2221 82 - AUDIO AND VIDEO EQUIPMENT - Electromagnetic Interference (EMI) Filters - Certified to US Standards

Appliance EMI Filters, Model TB1- series, rated 250Vac, 50/60Hz. Ambient: -40 to 40°C. Climatic category:

Ferrite core & Plastic case: 40/85/21 or 25/85/21

Nano crystalline core & Plastic case: 40/100/21 or 25/100/21

Ferrite core & Metal case: 40/100/21 or 25/100/21

Nano crystalline core & Metal case: 40/100/21 or 25/100/21

Models: TB1 Series with Plastic case

TB1-06*****, rated current 6A

TB1-10*****, rated current 10A

TB1-16*****, rated current 16A

TB1-20*****, rated current 20A

TB1-30*****, rated current 30A

TB1-40*****, rated current 40A



Certificate: 80106540
Project: 80129017

Master Contract: 176007
Date Issued: 2022-07-12

TB1-*** **

*Model suffix explanation:

TB1-(06, 10, 16, 20, 30, 40) (A-H) (A-Z or 0-9) (Null, H)

Models: TB1 Series with Metal case

TB1-40*****, rate current 40A

TB1-50*****, rate current 50A

TB1-60*****, rate current 60A

TB1-80*****, rate current 80A

TB1-*** **

*Model suffix explanation:

TB1-(40, 50, 60, 80) (P, none) (080) (M) (G, H)

Conditions of Acceptability:

- Filters are certified as components only for use in equipment where the acceptability of the combination is to be determined by the CSA, or other Regulatory Authorities having Jurisdiction.
- Overcurrent protection device, Capacitor discharge voltages and Leakage current test shall be considered to comply with the requirement of the end-use application.
- Filters shall be installed by trained person in compliance with the mounting, terminal, spacing and segregation requirements of the end use application, installation instructions and local electrical code.
- For Metal cased models, Filter enclosure shall not be touched during operation due to hot surface

APPLICABLE REQUIREMENTS

- CSA Std C22.2 No.8-13 (5th Ed.) - Electromagnetic Interference (EMI Filters)
- UL 60939-3 (1st Ed.) - Passive Filter Units for Electromagnetic Interference Suppression – Part 3: Passive Filter Units for Which Safety Tests are Appropriate

MARKINGS

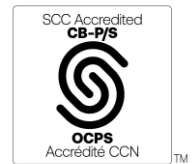
- Submitter's name or Master Contract No. **176007** adjacent to the CSA Monogram;
- Model designation;
- Electrical rating in volts, hertz, amperes;
- The rated cold Operating ambient temperature;
- The rated maximum operating ambient temperature.
- Climatic category; 40/100/21 or 25/85/21
- Line and load terminal identification, or Wiring diagram for the end-product use;
- Date code or serial number (denoting, at least, month and year of manufacture), factory identification;
- CSA Monogram;



Certificate: 80106540
Project: 80129017

Master Contract: 176007
Date Issued: 2022-07-12

Products certified under Class C222102 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 80106540

Master Contract: 176007

*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
80129017	2022-07-12	Added TB1 metal case series (1P, 250V, 40A to 80A) using certified terminal block with adequate ratings.
80106540	2022-04-14	Original Certification on model TB1 plastic case series (1P, 250V, 6A to 40A)

LICENCE FOR



ENEC LICENCE REF NO. SE-ENEC-2200330

Filter unit for radio interference suppression

Type Designation: TB1-***** , TB1-*****

Licence Holder: DONG IL TECHNOLOGY Ltd.
28 Namyang-ro
930 beon-gil, Hwaseong-si, Gyeonggi-do
REPUBLIC OF KOREA

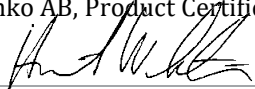
The product complies with the standard(s): EN 60939-3:2015

Licence holder is authorized to use the mark with the following limitations:

Date of expiry: 15 March, 2027

Additional information in Appendix

Certification Body: Intertek Semko AB, Product Certification **Place:** Kista - Stockholm

Signed: 
Henrik Wikström **Date:** 15 March, 2022

**APPENDIX:
ENEC LICENCE REF NO.SE-ENEC-2200330**

Test Report No. 2100702STO-001, 2100702STO-002

Technical Data:

Type designation TB1-*****
Rated voltage (V) 250VAC
Rated current (A) 6, 10, 16, 20, 30, 40
Frequency (Hz) 50/60
Input 0 or 0.1,0.15,0.22,0.33,0.47,0.68,1.0uFX2+0 or 0.33,0.47uFX2+0 or
0.1,0.15,0.22,0.33,0.47,0.68,1.0uFX2+0 or
6x100,220,330,470,680,820,1000,1500,2200,3300pFY1/Y2+2x9.0,
5.2,2.0,1.0,0.3,0.18, 56, 22, 9.2, 5.2, 1.7, 1.1mH+0 or 3x1Mohm
Trademark DIT
Product information 40°C, 25/85/21, 25/100/21. Plastic case

Technical Data:

Type designation TB1-*****
Rated voltage (V) 250VAC
Rated current (A) 40, 50, 60, 80A
Frequency (Hz) 50/60
Input 2x3.3uFX2+2x3300pFY2+2x1.11,0.67,0.34,0.22,7.1,4.0,2.7,1.7mH+0 or
1Mohm.
Trademark DIT
Product information 40°C. 25/100/21. Metallic case

Capacitors included shall be approved according to EN 60384-14

2. Model Nomenclature

$\frac{\text{TB}}{\text{I}} \frac{1}{\text{II}} - \frac{\text{**}}{\text{III}} \frac{*}{\text{IV}} \frac{\text{***}}{\text{V}} \frac{*}{\text{VI}}$

I, II – Model Series Designation

III – Rated Current and Inductance

06=6A 10=10A 16=16A 20=20A 30=30A 40=40A

III	Inductance	
	Inductor L1	Inductor L2
TB1-06****	9.0mH(+50%,-30%)	9.0mH(+50%,-30%)
TB1-10****	5.2mH(+50%,-30%)	5.2mH(+50%,-30%)
TB1-16****	2.0mH(+50%,-30%)	2.0mH(+50%,-30%)
TB1-20****	1.0mH(+50%,-30%)	1.0mH(+50%,-30%)
TB1-30****	0.3mH(+50%,-30%)	0.3mH(+50%,-30%)
TB1-40****	0.18mH(+50%,-30%)	0.18mH(+50%,-30%)
TB1-06****H	Min.56.0	Min.56.0
TB1-10****H	Min. 22.0	Min. 22.0
TB1-16****H	Min. 9.2	Min. 9.2
TB1-20****H	Min. 5.2	Min. 5.2
TB1-30****H	Min. 1.7	Min. 1.7
TB1-40****H	Min. 1.1	Min. 1.1

IV – X-Capacitor (CX1, CX2, CX3) : order of development

@ : Capacitor values for CX1, CX2, CX3.

The suffix letter from “A” – “Z”, or “0” – “9” is need in order to stand for the one the following capacitor ranges for each capacitor CX1, CX2, CX3.

CX1 : None, 0.1uF, 0.15uF, 0.22uF, 0.33uF, 0.47uF, 0.68uF, 1.0uF
 CX2 : None, 0.33uF, 0.47uF
 CX3 : None, 0.1uF, 0.15uF, 0.22uF, 0.33uF, 0.47uF, 0.68uF, 1.0uF

V – Y-Capacitor (CY1, CY2, CY3, CY4, CY5, and CY6)

Y1 class

0=none A=100pF B=220pF C=330pF D=470pF G=680pF
 F=820pF E=1000pF 1=1500pF 2=2200pF 3=3300pF

Y2 class

5=none P=100pF Q=220pF R=330pF S=470pF T=680pF
 U=820pF V=1000pF 6=1500pF 7=2200pF 8=3300pF

VI - Core type

Null: Ferrite core H: Nano core

TB1- ** * * * ***

① ② ③ ④ ⑤ ⑥

1	2	3	4	5	6
Series Name	Rated Current 40: 40A 50: 50A 60: 60A 80: 80A	Line to Line Capacitor code. Input/Output: P: 3.3uF (middle line: none)	Line to Ground capacitor code. (only middle line) 080: 3300pF(Y2 class)	Case Type M: Metal	Characteristic Option G: General H: High

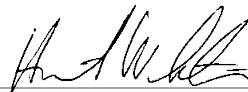
Manufacturing Sites:

WEIHAI DONG IL TECHNOLOGY ELECTRONICS Co.LTD.
No. 97 East-Guzhai Road, Hi-tech Development Zone
Weihai City, Shan Dong
CHINA

Certification Body: Intertek Semko AB, Product Certification

Place: Kista - Stockholm

Signed:



Date: 15 March, 2022

Henrik Wikström

EC Declaration of Conformity

Issuer's name and address:

Document No. DIT-DOCCE20

Dong il Technology Ltd.
28, Namyang-ro 930beon-gil,
Hwaseong-si, Gyeonggi-do
445-040 Korea

Product: Passive filter units for electromagnetic interference suppression

Type designation: TB1 Series

EN 60939-3:2015

Intertek Semko AB, Product Certification, Torshamnsgatan 43, Box 1103, SE-164 22 Kista, Sweden
has tested and certified the product granting the ENEC & SEMKO Approval for the mark(s) as displayed.



Certificate No. SE-ENEC-2200330

Test Report No. 2100702STO-001, 2100702STO-002

Gyeonggi-do, S.Korea

July 27th, 2022

(Place, Date)

A handwritten signature in blue ink, consisting of several loops and a long tail, positioned above a horizontal line.

(Legally binding signature of the issuer)

CERTIFICATE OF COMPLIANCE

Certificate Number 20151209-E105227
Report Reference E105227-20120910
Issue Date 2015-DECEMBER-09

Issued to: DONG IL TECHNOLOGY LTD
28 NAMYANG-RO930(GUBAEKSAMSIP)BEON-GIL
HWASEONG-SI GYEONGGI-DO 445-040 KOREA

**This is to certify that
representative samples of**

**COMPONENT - ELECTROMAGNETIC INTERFERENCE
FILTERS**

USR, CNR – Component, Appliance Filters, TB1 Series
followed by -06, -10, -16, -20 and -30; followed by A-Z or 0-
9; followed by 0-3, 5-8, A-G or P-V; followed by 0-3, 5-8, A-
G or P-V; followed by 0-3,5-8, A-G or P-V;

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 1283 and C22.2 No. 8 - Electromagnetic
Interference Filters.

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance
capabilities and are intended for use as components of complete equipment submitted for investigation rather
than for direct separate installation in the field. The final acceptance of the component is dependent upon its
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





产品认证证书

证书编号: CQC12001072476

申请人名称及地址

威海东日技研电子有限公司
威海市高技术产业开发区古寨东路97号

制造商名称及地址

株式会社 东日技研
28, Namyang-ro930 (gubaeksamsip) beon-gil, Hwaseong-si, Gyeonggi-do, 韩国

生产企业名称及地址

威海东日技研电子有限公司 (V008275)
威海市高技术产业开发区古寨东路97号

产品名称和系列、规格、型号

抑制射频干扰整件滤波器

见附件

产品标准和技术要求

GB/T15288-1994; GB/T15287-1994

认证模式

产品型式试验+初次工厂检查+获证后监督

上述产品符合CQC11-471141-2016认证规则的要求, 特发此证。

发证日期: 2016年08月03日

证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

本证书为变更证书, 证书首次颁发日期: 2012年06月05日

经中国合格评定国家认可委员会认可 CNAS C001-P

主任: _____



中国质量认证中心

中国·北京·南四环西路188号9区100070

<http://www.cqc.com.cn>

C 0086274



PRODUCT CERTIFICATE

No.: CQC12001072476

NAME AND ADDRESS OF THE APPLICANT

WEIHAI DONG IL TECHNOLOGY ELECTRONICS Co.,LTD.
No.97 East-Guzhai Road, Hi-tech Development Zone, Weihai City

NAME AND ADDRESS OF THE MANUFACTURER

DONG IL TECHNOLOGY LTD.
28,Namyang-ro930(gubaeksamsip)beon-gil,Hwaseong-si,Gyeonggi-do,Korea

NAME AND ADDRESS OF THE FACTORY

WEIHAI DONG IL TECHNOLOGY ELECTRONICS Co.,LTD.(V008275)
No.97 East-Guzhai Road, Hi-tech Development Zone, Weihai City

NAME, MODEL AND SPECIFICATION

EMI Filter
See appendix

THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS

GB/T15288-1994;GB/T15287-1994

CERTIFICATION MODEL

Type Testing of Product + Initial Factory Inspection + Follow up Factory Inspection

This is to certify that the above mentioned products have met the requirements of certification rules CQC11-471141-2016.

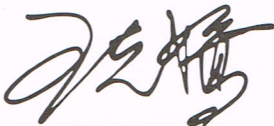
Date of issue: Aug.03,2016

Validity of this certificate is subject to positive result of the regular follow up inspection by issuing certification body until the expiry date.

Date of original certification: Jun.05,2012

Accredited by China National Accreditation Service for Conformity Assessment CNAS C001-P

President:


Wang Kejiao



CHINA QUALITY CERTIFICATION CENTRE

Section 9, No.188, Nansihuan Xilu, Beijing 100070 P.R.China
<http://www.cqc.com.cn>

C 0086274



产品认证证书

附录:

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证书编号: CQC12001072476

纸号: 86274

型号规格: 250VAC 50/60Hz

TB 1 - ** * ***

1 2 3 4 5

1, 2—表示产品设计系列号;

3—表示不同额定电流值及电感值, 06=6A, 10=10A, 16=16A, 20=20A, 30=30A;

3	电感	
	电感 L1	电感 L2
TB1-06****	9.0mH	9.0mH
TB1-10****	5.2mH	5.2mH
TB1-16****	2.0mH	2.0mH
TB1-20****	1.0mH	1.0mH
TB1-30****	0.3mH	0.3mH

4—表示不同 X 电容值, 取值为 A-Z 或 0-9 之一, 分别有如下电容值:

CX1: None, 0.1 μ F, 0.15 μ F, 0.22 μ F, 0.33 μ F, 0.47 μ F, 0.68 μ F, 1.0 μ F

CX2: None, 0.33 μ F, 0.47 μ F

CX3: None, 0.1 μ F, 0.15 μ F, 0.22 μ F, 0.33 μ F, 0.47 μ F, 0.68 μ F, 1.0 μ F

5—表示不同 Y 电容值, 分别有如下电容值:

注: 此附录与证书同时使用时有效。

主任: _____



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Y1 类: 0=none, A=100pF, B=220pF, C=330pF, D=470pF, G=680pF, F=820pF, E=1000pF, 1=1500pF,
2=2200pF, 3=3300pF
Y2 类: 5=none, P=100pF, Q=220pF, R=330pF, S=470pF, T=680pF, U=820pF, V=1000pF, 6=1500pF,
7=2200pF, 8=3300pF

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