

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

CB TEST CERTIFICATE

Product

DC-DC Converter

Name and address of the applicant

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
JAPAN

Name and address of the manufacturer

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
JAPAN

Name and address of the factory

Note: When more than one factory, please report on page 2

EIKOKU CO LTD
TOYAMA SATELITE FACTORY
223 NAKAJINZU YATSUO-MACHI TOYAMA-SHI TOYAMA-KEN
939-2311
JAPAN

☒ Additional Information on page 2

Ratings and principal characteristics

See Page 2

Trademark (if any)



Type of Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

MGwxyz - #####
"w" = S, FS, XS, W, FW or XW
"x" = 1R5, 3, 6 or 10 (when "w" = XS or XW, "x" is 1R5 or 6 only)
"y" = 05, 12, 24 or 48 (when "w" = FS or FW, "y" is 24 or 48 only
and "w" = XS or XW, "y" is 24 only)
"Z" = 3R3, 05, 12, 15 (when "w" = W or FW, "z" is 05, 12 or 15 only
and "w" = XW, "z" is 12 or 15 only)
Maybe provided with suffix "#####". (# is any number 0 to 9 or
any letter A to Z or blank.)

Additional information (if necessary may also be reported on page 2)

Additionally evaluated to EN 60950-1:2006/ A11:2009/ A1:2010/
A12:2011/ A2:2013.

National Differences specified in the CB Test Report.

☒ Additional Information on page 2

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

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

As shown in the Test Report Ref. No. which forms part of this Certificate

E132067-A132-CB-1 issued on 2017-12-26

This CB Test Certificate is issued by the National Certification Body



UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
UL (Denko), Borupvang 5A DK-2750 Ballerup, DENMARK
☒ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2017-12-27

Original Issue Date: 2016-02-12

Signature:

M. Takagi

Masamichi Takagi

Factories:

COSEL CO LTD

1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816

JAPAN

SUNRISE INDUSTRIES CO LTD

2-24-6 TERAJIMA ITOIGAWA-SHI NIIGATA 941-0066

JAPAN

Ratings:

4.5-9 Vdc/ 0.39 A (MGS1R5053R3), 0.41 A (MGS1R50515, MGW1R50515), 0.42 A (MGS1R50505, MGS1R50512, MGW1R50505, MGW1R50512), 0.76 A (MGS3053R3), 0.80 A (MGS30512, MGS30515), 0.81 A (MGW30512, MGW30515), 0.83 A (MGS30505, MGW30505), 1.54 A (MGS6053R3), 1.61 A (MGS60612, MGS60515, MGW60512, MGW60515), 1.67 A (MGS60505, MGW60505), 2.36 A (MGS10053R3), 2.69 A (MGS100505), 2.75 A (MGW100505), 2.79 A (MGS100515), 2.82 A (MGW100515), 2.87 A (MGS100512), 2.90 A (MGW100512)

9-18 Vdc/ 0.19 A (MGS1R5123R3), 0.20 A (MGS1R51215, MGW1R51215), 0.21 A (MGS1R51205, MGS1R51212, MGW1R51205, MGW1R51212), 0.38 A (MGS3123R3), 0.40 A (MGS31212, MGS31215, MGW31212, MGW31215), 0.41 A (MGS31205, MGW31205), 0.77 A (MGS6123R3), 0.80 A (MGS61212, MGS61215, MGW61212, MGW61215), 0.83 A (MGS61205, MGW61205), 1.17 A (MGS10123R3), 1.33 A (MGS101205), 1.36 A (MGW101205), 1.38 A (MGS101215), 1.40 A (MGW101215), 1.42 A (MGS101212), 1.44 A (MGW101212)

18-36 Vdc/ 0.10 A (MGS1R5243R3, MGS1R52415, MGW1R52415), 0.11 A (MGS1R52405, MGS1R52412, MGW1R52405, MGW1R52412), 0.19 A (MGS3243R3), 0.20 A (MGS32412, MGS32415, MGW32412, MGW32415), 0.21 A (MGS32405, MGW32405), 0.39 A (MGS6243R3), 0.40 A (MGS62412, MGS62415, MGW62412, MGW62415), 0.42 A (MGS62405, MGW62405), 0.59 A (MGS10243R3), 0.67 A (MGS102405), 0.68 A (MGW102405), 0.69 A (MGS102415), 0.70 A (MGW102415), 0.71 A (MGS102412), 0.72 A (MGW102412)

36-76 Vdc/ 0.05 A (MGS1R5483R3), 0.06 A (MGS1R54805, MGS1R54812, MGS1R54815, MGW1R54805, MGW1R54812, MGW1R54815), 0.10 A (MGS3483R3, MGS34812, MGS34815, MGW34812, MGW34815), 0.11 A (MGS34805, MGW34805), 0.20 A (MGS6483R3, MGS64812, MGS64815, MGW64812, MGW64815), 0.21 A (MGS64805, MGW64805), 0.30 A (MGS10483R3), 0.34 A (MGS104805, MGW104805, MGW104812, MGW104815), 0.35 A (MGS104815), 0.36 A (MGS104812)

9-36 Vdc/ 0.19 A (MGFS1R5243R3), 0.20 A (MGFS1R52415, MGFW1R52415), 0.21 A (MGFS1R52405, MGFS1R52412, MGFW1R52405, MGFW1R52412), 0.38 A (MGFS3243R3), 0.40 A (MGFS32412, MGFS32415, MGFW32415), 0.41 A (MGFS32405, MGFW32405), 0.45 A (MGFW32412), 0.77 A (MGFS6243R3), 0.80 A (MGFS62412, MGFS62415, MGFW62412, MGFW62415), 0.83 A (MGFS62405, MGFW62405), 1.17 A (MGFS10243R3), 1.33 A (MGFS102405), 1.36 A (MGFW102405), 1.38 A (MGFS102415), 1.42 A (MGFS102412), 1.40 A (MGFW102415), 1.44 A (MGFW102412)

18-76 Vdc/ 0.10 A (MGFS1R5483R3), 0.11 A (MGFS1R54805, MGFS1R54812, MGFS1R54815, MGFW1R54805, MGFW1R54812, MGFW1R54815), 0.19 A (MGFS3483R3), 0.20 A (MGFS34812, MGFS34815), 0.21 A (MGFS34805, MGFW34805), 0.23 A (MGFW34812, MGFW34815), 0.39 A (MGFS6483R3), 0.40 A (MGFS64812, MGFS64815, MGFW64812, MGFW64815), 0.42 A (MGFS64805, MGFW64805), 0.59 A (MGFS10483R3), 0.67 A (MGFS104805), 0.68 A (MGFW104805), 0.69 A (MGFS104815), 0.70 A (MGFW104815), 0.71 A (MGFS104812), 0.72 A (MGFW104812)

6-60 Vdc/ 0.30 A (MGXS1R5243R3), 0.32 A (MGXS1R52415, MGXW1R52415), 0.33 A (MGXS1R52405, MGXS1R52412, MGXW1R52412), 0.90 A (MGXS6243R3), 0.97 A (MGXS62412, MGXS62415, MGXW62412, MGXW62415), 0.99A (MGXS62405)

Additional Information:

The original report was modified to include the following changes/additions:

- Addition of models, MGXS1R5, MGXW1R5, MGXS6 and MGXW6 series.

Additional information (if necessary)


UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

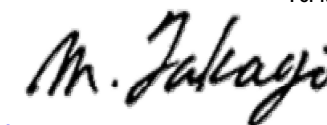
UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames
Date: 2017-12-27

Original Issue Date: 2016-02-12

Signature:


Masamichi Takagi

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

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

Note: When more than one factory, please report on page 2
Note: Lorsque il y a plus d'une usine, veuillez utiliser la 2^{ème} page

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

Trademark (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 may also be
reported on page 2)
Les informations complémentaires (si nécessaire,,
peuvent être indiqués sur la 2^{ème} page

A sample of the product was tested and found
to be in conformity with
Un 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 partie de ce Certificat

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

CERTIFICAT D'ESSAI OC

DC-DC Converter

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI
TOYAMA-SHI
TOYAMA 930-0816 JAPAN

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI
TOYAMA-SHI
TOYAMA 930-0816 JAPAN

EIKOKU CO LTD
TOYAMA SATELITE FACTORY
223 NAKAJINZU YATSUO-MACHI TOYAMA-SHI TOYAMA-KEN
939-2311
JAPAN

☒ Additional Information on page 2
See Page 2

COSEL

MGwxyz - #####
See Page 2

Additionally evaluated to EN 60950-1:2006 /A11:2009 /A1:2010
/A12:2011 /A2:2013. National Differences specified in the CB Test
Report.

☒ Additional Information on page 2

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

E132067-A132-CB-1 issued on 2016-07-15



- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☐ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☒ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2016-07-15
Original Issue Date: 2016-02-12

Signature:

Akira Kato

Model Details:

MGWxyz - #####

"w" = S, FS, W or FW "x" = 1R5, 3, 6 or 10

"y" = 05, 12, 24 or 48 (when "w" = FS or FW, "y" is 24 or 48 only)

"Z" = 3R3, 05, 12, 15 (when "w" = W or FW, "z" is 05, 12 or 15 only)

Maybe provided with suffix "#####". (# is any number 0 to 9 or any letter A to Z or blank.)

Factories:

COSEL CO LTD

1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816

JAPAN

SUNRISE INDUSTRIES CO LTD

2-24-6 TERAJIMA ITOIGAWA-SHI NIIGATA 941-0066

JAPAN

Ratings:

4.5-9 Vdc/ 0.39 A (MGS1R5053R3), 0.41 A (MGS1R50515, MGW1R50515), 0.42 A (MGS1R50505, MGS1R50512, MGW1R50505, MGW1R50512), 0.76 A (MGS3053R3), 0.80 A (MGS30512, MGS30515), 0.81 A (MGW30512, MGW30515), 0.83 A (MGS30505, MGW30505), 1.54 A (MGS6053R3), 1.61 A (MGS60612, MGS60515, MGW60512, MGW60515), 1.67 A (MGS60505, MGW60505), 2.36 A (MGS10053R3), 2.69 A (MGS100505), 2.75 A (MGW100505), 2.79 A (MGS100515), 2.82 A (MGW100515), 2.87 A (MGS100512), 2.90 A (MGW100512)

9-18 Vdc/ 0.19 A (MGS1R5123R3), 0.20 A (MGS1R51215, MGW1R51215), 0.21 A (MGS1R51205, MGS1R51212, MGW1R51205, MGW1R51212), 0.38 A (MGS3123R3), 0.40 A (MGS31212, MGS31215, MGW31212, MGW31215), 0.41 A (MGS31205, MGW31205), 0.77 A (MGS6123R3), 0.80 A (MGS61212, MGS61215, MGW61212, MGW61215), 0.83 A (MGS61205, MGW61205), 1.17 A (MGS10123R3), 1.33 A (MGS101205), 1.36 A (MGW101205), 1.38 A (MGS101215), 1.40 A (MGW101215), 1.42 A (MGS101212), 1.44 A (MGW101212)

18-36 Vdc/ 0.10 A (MGS1R5243R3, MGS1R52415, MGW1R52415), 0.11 A (MGS1R52405, MGS1R52412, MGW1R52405, MGW1R52412), 0.19 A (MGS3243R3), 0.20 A (MGS32412, MGS32415, MGW32412, MGW32415), 0.21 A (MGS32405, MGW32405), 0.39 A (MGS6243R3), 0.40 A (MGS62412, MGS62415, MGW62412, MGW62415), 0.42 A (MGS62405, MGW62405), 0.59 A (MGS10243R3), 0.67 A (MGS102405), 0.68 A (MGW102405), 0.69 A (MGS102415), 0.70 A (MGW102415), 0.71 A (MGS102412), 0.72 A (MGW102412)

36-76 Vdc/ 0.05 A (MGS1R5483R3), 0.06 A (MGS1R54805, MGS1R54812, MGS1R54815, MGW1R54805, MGW1R54812, MGW1R54815), 0.10 A (MGS3483R3, MGS34812, MGS34815, MGW34812, MGW34815), 0.11 A (MGS34805, MGW34805), 0.20 A (MGS6483R3, MGS64812, MGS64815, MGW64812, MGW64815), 0.21 A (MGS64805, MGW64805), 0.30 A (MGS10483R3), 0.34 A (MGS104805, MGW104805, MGW104812, MGW104815), 0.35 A (MGS104815), 0.36 A (MGS104812)

9-36 Vdc/ 0.19 A (MGFS1R5243R3), 0.20 A (MGFS1R52415, MGFW1R52415), 0.21 A (MGFS1R52405, MGFS1R52412, MGFW1R52405, MGFW1R52412), 0.38 A (MGFS3243R3), 0.40 A (MGFS32412, MGFS32415, MGFW32415), 0.41 A (MGFS32405, MGFW32405), 0.45 A (MGFW32412), 0.77 A (MGFS6243R3), 0.80 A (MGFS62412, MGFS62415, MGFW62412, MGFW62415), 0.83 A (MGFS62405, MGFW62405), 1.17 A (MGFS10243R3), 1.33 A (MGFS102405), 1.36 A (MGFW102405), 1.38 A (MGFS102415), 1.42 A (MGFS102412), 1.40 A (MGFW102415), 1.44 A (MGFW102412)

18-76 Vdc/ 0.10 A (MGFS1R5483R3), 0.11 A (MGFS1R54805, MGFS1R54812, MGFS1R54815, MGFW1R54805, MGFW1R54812, MGFW1R54815), 0.19 A (MGFS3483R3), 0.20 A (MGFS34812, MGFS34815), 0.21 A (MGFS34805, MGFW34805), 0.23 A (MGFW34812, MGFW34815), 0.39 A (MGFS6483R3), 0.40 A (MGFS64812, MGFS64815, MGFW64812, MGFW64815), 0.42 A (MGFS64805, MGFW64805), 0.59 A (MGFS10483R3), 0.67 A (MGFS104805), 0.68 A (MGFW104805), 0.69 A (MGFS104815), 0.70 A (MGFW104815), 0.71 A (MGFS104812), 0.72 A (MGFW104812)

Additional Information:

The original report was modified to include the following changes/additions:

Add new models.

Additional information (if necessary)
Information complémentaire (si nécessaire)


UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2016-07-15

Original Issue Date: 2016-02-12

Signature:



Akira Kato

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

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

Note: When more than one factory, please report on page 2
Note: Lorsque il y plus d'une usine, veuillez utiliser la 2^{ème} page

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

Trademark (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 may also be
reported on page 2)
Les informations complémentaires (si nécessaire,,
peuvent être indiqués sur la 2^{ème} page

A sample of the product was tested and found
to be in conformity with
Un 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 partie de ce Certificat

CERTIFICAT D'ESSAI OC

DC-DC Converter

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
JAPAN

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
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EIKOKU CO LTD
TOYAMA SATELITE FACTORY
223 NAKAJINZU YATSUO-MACHI TOYAMA-SHI TOYAMA-KEN
939-2311
JAPAN

☒ Additional Information on page 2
See Page 2



See Page 2

Additionally evaluated to EN 60950-1:2006/ A11:2009/ A1:2010/
A12:2011/ A2:2013.
National Differences specified in the CB Test Report.

☒ Additional Information on page 2
IEC 60950-1(ed.2), IEC 60950-1(ed.2);am1,
IEC 60950-1(ed.2);am2

E132067-A132-CB-1 issued on 2016-04-26

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



- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☐ UL (Denko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☒ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2016-04-26
Original Issue Date: 2016-02-12

Signature:

Akira Kato

Model Details:

MGWxyz - #####

"w" = S, FS, W or FW

"x" = 1R5 or 3

"y" = 05, 12, 24 or 48 (when "w" = FS or FW, "y" is 24 or 48 only)

"z" = 3R3, 05, 12, 15 (when "w" = W or FW, "z" is 05, 12 or 15 only)

Maybe provided with suffix "#####".

(# is any number 0 to 9 or any letter A to Z or blank.)

MGFW104805

Maybe provided with suffix "-Y"

Factories:

COSEL CO LTD

1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816

JAPAN

SUNRISE INDUSTRIES CO LTD

2-24-6 TERAJIMA ITOIGAWA-SHI NIIGATA 941-0066

JAPAN

Ratings:

4.5-9 Vdc/ 0.39 A (MGS1R5053R3), 0.41 A (MGS1R50515, MGW1R50515), 0.42 A (MGS1R50505, MGS1R50512, MGW1R50505, MGW1R50512), 0.76 A (MGS3053R3), 0.80 A (MGS30512, MGS30515), 0.81 A (MGW30512, MGW30515), 0.83 A (MGS30505, MGW30505)

9-18 Vdc/ 0.19 A (MGS1R5123R3), 0.20 A (MGS1R51215, MGW1R51215), 0.21 A (MGS1R51205, MGS1R51212, MGW1R51205, MGW1R51212), 0.38 A (MGS3123R3), 0.40 A (MGS31212, MGS31215, MGW31212, MGW31215), 0.41 A (MGS31205, MGW31205)

18-36 Vdc/ 0.10 A (MGS1R5243R3, MGS1R52415, MGW1R52415), 0.11 A (MGS1R52405, MGS1R52412, MGW1R52405, MGW1R52412), 0.19 A (MGS3243R3), 0.20 A (MGS32412, MGS32415, MGW32412, MGW32415), 0.21 A (MGS32405, MGW32405)

36-76 Vdc/ 0.05 A (MGS1R5483R3), 0.06 A (MGS1R54805, MGS1R54812, MGS1R54815, MGW1R54805, MGW1R54812, MGW1R54815), 0.10 A (MGS3483R3, MGS34812, MGS34815, MGW34812, MGW34815), 0.11 A (MGS34805, MGW34805)

9-36 Vdc/ 0.19 A (MGFS1R5243R3), 0.20 A (MGFS1R52415, MGFW1R52415), 0.21 A (MGFS1R52405, MGFS1R52412, MGFW1R52405, MGFW1R52412), 0.38 A (MGFS3243R3), 0.40 A (MGFS32412, MGFS32415, MGFW32415), 0.41 A (MGFS32405, MGFW32405), 0.45 A (MGFW32412)

18-76 Vdc/ 0.10 A (MGFS1R5483R3), 0.11 A (MGFS1R54805, MGFS1R54812, MGFS1R54815, MGFW1R54805, MGFW1R54812, MGFW1R54815), 0.19 A (MGFS3483R3), 0.20 A (MGFS34812, MGFS34815), 0.21 A (MGFS34805, MGFW34805), 0.23 A (MGFW34812, MGFW34815), 0.65 A (MGFW104805)

Additional Information:

The original report was modified to include the following changes/additions:

- Addition of models, Model MGS1R5, MGW1R5, MGFS1R5 and MGFW1R5 series.
- Addition of models, Model MGS3, MGW3, MGFS3 and MGFW3 series except for Model MGFW34805.

Additional information (if necessary)
Information complémentaire (si nécessaire)


UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2016-04-26

Original Issue Date: 2016-02-12

Signature:

Akira Kato



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
Produit

DC-DC Converter

Name and address of the applicant
Nom et adresse du demandeur

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI
TOYAMA-SHI
TOYAMA 930-0816 JAPAN

Name and address of the manufacturer
Nom et adresse du fabricant

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI
TOYAMA-SHI
TOYAMA 930-0816 JAPAN

Name and address of the factory
Nom et adresse de l'usine

EIKOKU CO LTD
TOYAMA SATELITE FACTORY
223 NAKAJINZU YATSUO-MACHI TOYAMA-SHI TOYAMA-KEN
939-2311
JAPAN

Note: When more than one factory, please report on page 2
Note: Lorsque il y plus d'une usine, veuillez utiliser la 2^{ème} page

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

☒ Additional Information on page 2
18-76 Vdc, 0.21 A (MGFW34805)
18-76 Vdc, 0.65 A (MGFW104805)

Trademark (if any)
Marque de fabrique (si elle existe)

COSEL

Type of Manufacturer's Testing Laboratories used
Type de programme du laboratoire d'essais
constructeur

Model / Type Ref.
Ref. De type

MGFW104805, MGFW34805
Maybe provided with suffix "-Y".

Additional information (if necessary may also be
reported on page 2)
Les informations complémentaires (si nécessaire,,
peuvent être indiqués sur la 2^{ème} page

Additionally evaluated to EN 60950-1:2006/ A11:2009/ A1:2010/
A12:2011/ A2:2013.
National Differences specified in the CB Test Report.

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

☐ Additional Information on page 2
IEC 60950-1(ed.2), IEC 60950-1(ed.2);am1, IEC
60950-1(ed.2);am2

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 partie de ce Certificat

E132067-A132-CB-1 issued on 2016-02-12

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



- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☐ UL (Denko), Borupvang 5A DK-2750 Ballerup, DENMARK
☒ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2016-02-12

Signature:

Akira Kato



Ref. Certif. No.

JP-13179-UL

Factories:
COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
JAPAN
SUNRISE INDUSTRIES CO LTD
2-24-6 TERAJIMA ITOIGAWA-SHI NIIGATA 941-0066
JAPAN

Additional information (if necessary)
Information complémentaire (si nécessaire)



UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

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