



Ref. Certif. No.

JP-22383-UL

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

COSEL CO LTD
1-6-43 KAMIAKAE-MACHI TOYAMA-SHI TOYAMA 930-0816
JAPAN*Note: When more than one factory, please report on page 2*☒ Additional Information on page 2

Ratings and principal characteristics

See Page 2

Trademark / Brand (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)
"y" = 05, 12, 24 or 48 (when "w" = FS or FW, "y" is 24 or 48 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 and "w" = XW, "z" is 12 or 15)
Maybe provided with suffix "-\$#".
(\$ represents "Y", # represents one or more digits of any alphanumeric characters 0 to 9 or A to Z.)

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

Additionally evaluated to EN 62368-1:2014/ A11:2017.
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 62368-1:2014

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

E132067-A6056-CB-1 issued on 2020-12-10

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, CANADAFor full legal entity names see www.ul.com/ncbnames

Date: 2020-12-11

Signature:

Masamichi Takagi



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Factories:

EIKOKU CO LTD

TOYAMA SATELITE FACTORY

223 NAKAJINZU YATSUO-MACHI TOYAMA-SHI TOYAMA 939-2311

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 (if necessary)



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Date: 2020-12-11

Signature:

Masamichi Takagi