

# CERTIFICATE OF CONFORMITY

## Low Voltage Directive 2014/35/EU

Certificate No. LVD-2020122201-TW  
Product DC-DC Converter  
Model /Type ref. See page 2  
Holder of Certificate MORN SUN GUANGZHOU SCIENCE & TECHNOLOGY CO., LTD.  
NO.8, NANYUN ROAD 4, HUANGPU DISTRICT, GUANGZHOU  
GUANGDONG 510670, CHINA  
Manufacturer MORN SUN GUANGZHOU SCIENCE & TECHNOLOGY CO., LTD.  
NO.8, NANYUN ROAD 4, HUANGPU DISTRICT, GUANGZHOU  
GUANGDONG 510670, CHINA  
Trade Mark **MORN SUN**<sup>®</sup>  
Electrical Rating Input: 12Vdc, 0.12A or 24 Vdc, 0.06A,  
See page 2 for details.  
Output: See page 2  
Insulation Class Class III  
Degree of Protection IPX0  
Additional Information -

This is to certify that the sample(s) of the Product described above has been investigated and is presumed to be in conformity with the applicable safety objectives set out in Annex I of the Directive 2014/35/EU on the basis of compliance with the following harmonized standards:

Standard(s): EN 62368-1:2014/ A11:2017

Detailed specifications of the tested and certified product are shown in the following Test Report:

Test Report Ref. No.: S2020110566280102  
Issued Date: 2020-12-10  
By: Fangguang Inspection & Testing Co., Ltd. (Huangpu Branch)

The standard(s) above is listed in harmonized standards of Official Journal of the European Union and apply to the sample of product submitted by the manufacturer for conformity assessment for safety objectives, excluding the analysis and assessment of risk(s) and the manufacturing process and its monitoring. This certificate and the relevant test results apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. . This certificate is to serve as a supplement to technical documents which established by the manufacturer according to Annex III of the directive. The manufacturer shall draw up a written EU declaration of conformity for a product model and keep it together with the technical documentation at the disposal of the national market surveillance authorities for 10 years after the electrical equipment has been placed on the market. The EU declaration of conformity shall identify the electrical equipment for which it has been drawn up.

This document contains 2 pages.

Date: 2020-12-22

Signature: 

**Doris Lee**  
CO Manager

**Underwriters Laboratories Taiwan Co., Ltd.**  
1/F, 260, Da-Yeh Road, Peitou, Taipei City, Taiwan 112  
Tel:+886.2.2896.7790 Fax:+886.2.2890.7460



Model /Type ref.

F1203N-1WR3\*, B1203D-1WR3\*, F1205N-1WR3\*,  
 B1205D-1WR3\*, F1212N-1WR3\*, B1212D-1WR3\*, F1215N-1WR3\*,  
 B1215D-1WR3\*, F1224N-1WR3\*, B1224D-1WR3\*,  
 F2403N-1WR3\*, B2403D-1WR3\*, F2405N-1WR3\*, B2405D-1WR3\*,  
 F2412N-1WR3\*, B2412D-1WR3\*, F2415N-1WR3\*,  
 B2415D-1WR3\*, F2424N-1WR3\*, B2424D-1WR3\*

\*\*\* means blank or "-TR" or "-xy", among them: the "-TR" model represents that the product is packaged as a tap package; the "-xy" model represents a customer model, "x" means any letter from A to Z, and "y" means any number from 0 to 9. These suffixes represent variations or selections that are not related to security.

Electrical Rating

Input voltage: 12Vdc 0.12A				
Part number	Output voltage	Output current	Output power	Transformer type
F1203N-1WR3*	3.3V	333mA	1W	51104391
B1203D-1WR3*				(A/0,....,A/9)
F1205N-1WR3*	5V	200mA	1W	51104392
B1205D-1WR3*				(A/0,....,A/9)
F1212N-1WR3*	12V	83mA	1W	51104393
B1212D-1WR3*				(A/0,....,A/9)
F1215N-1WR3*	15V	67mA	1W	51104394
B1215D-1WR3*				(A/0,....,A/9)
F1224N-1WR3*	24V	42mA	1W	51104395
B1224D-1WR3*				(A/0,....,A/9)
Input voltage: 24Vdc 0.06A				
F2403N-1WR3*	3.3V	333mA	1W	51104461
B2403D-1WR3*				(A/0,....,A/9)
F2405N-1WR3*	5V	200mA	1W	51104462
B2405D-1WR3*				(A/0,....,A/9)
F2412N-1WR3*	12V	83mA	1W	51104464
B2412D-1WR3*				(A/0,....,A/9)
F2415N-1WR3*	15V	67mA	1W	51104465
B2415D-1WR3*				(A/0,....,A/9)
F2424N-1WR3*	24V	42mA	1W	51104466
B2424D-1WR3*				(A/0,....,A/9)