



Ref. Certif. No.

CA/33262/CSA

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

CB TEST CERTIFICATE

Product

Photovoltaic (PV) Rapid Shutdown Equipment

Name and address of the applicant

GoodWe Technologies Co., Ltd.
No.90, Zijin Road, New District, Suzhou, Jiangsu, 215011,
CHINA

Name and address of the manufacturer

GoodWe Technologies Co., Ltd.
No.90, Zijin Road, New District, Suzhou, Jiangsu, 215011,
CHINA

Name and address of the factory

Goodwe (Guangde) Power Supply Technology Co., Ltd.
No.208, Tong Rui East Road, Guangde, Anhui, 242299,
CHINA*Note: When more than one factory, please report on page 2*☐ Additional Information on page 2

Ratings and principal characteristics

GR-A1F-20: 8 to 80 Vdc, 22 Adc*1
GR-A2F-20: 8 to 80 Vdc, 22 Adc*2
GR-B1F-20: 8 to 80 Vdc, 22 Adc*1
GR-B2F-20: 8 to 80 Vdc, 22 Adc*2

Trademark / Brand (if any)

GOODWE

Customer's Testing Facility (CTF) Stage used

CTF Stage 2

Model / Type Ref.

GR-A1F-20, GR-B1F-20, GR-A2F-20 and GR-B2F-20

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

Refer to Page 2 of Certificate

☐ Additional Information on page 2

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

IEC 62109 1:2010 (First Edition)

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

CB 300612-80173166

This CB Test Certificate is issued by the National Certification Body

CSA Group
178 Rexdale Boulevard
Toronto, ON M9W 1R3 Canada

Date: 2023-09-13

Signature: William Meng

Additional Information:

Photovoltaic Rapid Shutdown Equipment (PVRSE), Receiver device model No.: GR-A1F-20, GR-B1F-20, GR-A2F-20 and GR-B2F-20, Used for disconnecting the controlled conductor of a PV System

Rating type	GR-A1F-20	GR-B1F-20	GR-A2F-20	GR-B2F-20
a) Maximum System Voltage	1100 Vdc	1500 Vdc	1100 Vdc	1500 Vdc
b) Range of input operating voltage (dc)	8 to 80 Vdc	8 to 80 Vdc	8 to 80 Vdc	8 to 80 Vdc
c) Max. input channel (dc)	1	1	2	2
d) Max input current (dc)	22 A	22 A	22 A	22 A
e) Max Input short circuit current	23 A	23 A	23 A	23 A
f) Rapid shutdown time limit	15 s			
g) Normal operation temperature and humidity range	-40 to 85 °C, 0% to 100% RH			
h) Enclosure Type Rating	IP68			
i) Size (L,W,H)	140x37x23 mm	140x37x23 mm	132x52x23 mm	132x52x23 mm
j) altitude (m)	≤ 3000			
k) Hardware version	00		00	

Receiver models were tested with the following Transmitter:

Photovoltaic Rapid Shutdown Equipment, Transmitter device Model No.: GT-BF-20 and GT-KF-20. Used for initiating the rapid shutdown function (to turn off the PV system)

Rating type	GT-BF-20	GT-KF-20
a) Rated Input voltage	12 Vdc	12 Vdc
b) Max. Input current	0.5 A	0.5 A
c) Enclosure	Only PCBA, without enclosure, shall be installed in at least IP34 enclosure.	PCBA with IP20 enclosure, DIN installation, shall be installed in at least IP34 enclosure.
d) Normal operation temperature range	-40 to 85 °C	
e) altitude (m)	≤ 3000	
f) Hardware version	00	

Additional information (if necessary)

Date: 2023-09-13

Signature: William Meng