

Component Certificate


Bachmann electronic GmbH
Kreuzäckerweg 33
6800 Feldkirch
Austria

Type of component	Protection device	
Description of component	GMP232/1, GMP232/2, GMP232/3, GMP232/4, GMP232/1 cc, GMP232/2 cc, GMP232/3 cc, GMP232/4 cc	
Technical data	Nominal Measuring Voltage $U_{AC} = 120 / 690 V_{AC}$ Measuring current $I_{AC} = 1 / 5 A_{AC}$ Measuring frequency $f = 35 - 65 \text{ Hz for } 50 \text{ Hz}$ $f = 45 - 75 \text{ Hz for } 60 \text{ Hz}$ Nominal Voltage $U = 18 - 34 V_{DC} \text{ typ. } 24 V_{DC}$	
Certification scheme	P30VA01 Rev 04/07.19	Verfahrensanweisung zur Netzanschlusszertifizierung (Certification procedure for grid code compliance)
Standard	Engineering Recommendation G99 Issue 1, Amendment 6, March 2020; Chapter 10	Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019

The component complies with the requirements of the above listed certification scheme and standards with obligations. The obligations to fulfill the requirements and further technical data are listed in annex 1 (3 Pages).

Registered-No. 44 799 13137970
Evaluation report no. 35258521
ZA: 35297592

Validity
from 2021-05-27
until 2024-12-16


Dipl.-Ing. Malte Berghaus
Certification body of
TÜV NORD CERT GmbH

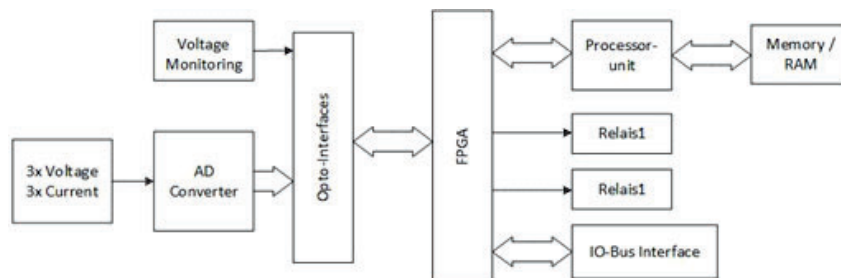
Essen, 2021-05-27
Rev. 2.0


ANNEX

Annex 1, Page 1 of 3

to Certificate Registration No. 44 799 13137970

Schematic structure




Dipl.-Ing. Malte Berghaus
Certification body of
TÜV NORD CERT GmbH

Essen, 2021-05-27
Rev. 2.0

ANNEX

Annex 1, Page 2 of 3


to Certificate Registration No. 44 799 13137970

General description

Refer Component Certificate

Technical data

General				
Type	GMP232/1	GMP232/2 cc	GMP232/3	GMP232/4
Construction Revision	103.000, 106.000			
Software version	1.03R, 1.04R			
MD5 checksum (Software)	5e6e1741bda656238f0b70e2cdfeda25			
Nominal Voltage	18 - 34 V _{DC} typ. 24 V _{DC}			
Measuring channels				
Measuring Voltage	120 V _{AC}	690 V _{AC}	120 V _{AC}	690 V _{AC}
Measuring Current	1 A _{AC}		5 A _{AC}	
Measuring Frequency	35 – 65 Hz for 50 Hz 45 – 75 Hz for 60 Hz			
Adjustment range of protection parameters				
Voltage	Value	0 - 400 % Un		
	Time	0 - 600000 ms		
Frequency	Value	35 - 75 Hz		
	Time	0 - 600000 ms		


 Dipl.-Ing. Malte Berghaus
 Certification body of
 TÜV NORD CERT GmbH

Essen, 2021-05-27
 Rev. 2.0

ANNEX

Annex 1, Page 3 of 3

to Certificate Registration No. 44 799 13137970

Notes about the certificate

Additional technical data, according Engineering Recommendation G99 Issue 1 in annex A, are given in the evaluation report (appendix A1).

The use of other firmware (construction Revision) and software version numbers is allowed if the differences are proved and confirmed by TÜV NORD CERT GmbH beforehand. The validity of a new software version is attested by written confirmation and becomes part of the certificate.

The following protection functions were part of the conformity assessment:

- Over and under voltage
- Over and under frequency
- Loss of Mains (LoM) / Rate of Change of Frequency (RoCoF)
- Automatic Reconnection

Due to a typing error, the Registration No. 44 797 13137970 was used in revision 1 of this certificate. The Registration No. has been corrected in the 5th digit and it is now 44 799 13137970.

Obligations to fulfill the requirements

The final parameterization of the protection setting must be carried out by the manufacturer of the Generating Unit or by the installer of the Power Generating Facility. The protection settings are not pre-configured.

A wiring functional test must be carried out during commissioning for type tested protection device.

Restriction of the certificate

none

Appendix to the certificate

A1 Evaluation report no. 35258521 Version 2.0



Dipl.-Ing. Malte Berghaus
Certification body of
TÜV NORD CERT GmbH

Essen, 2021-05-27
Rev. 2.0