Statement of Compliance

Bachmann electronic GmbH
Kreuzäckerweg 33
6800 Feldkirch
Austria

Type of component	Protection Relay			
Description of component	GMP232/12, GMP232/22, GMP232/32, GMP232/42, GMP232/52 GMP232/12 cc, GMP232/22 cc, GMP232/32 cc, GMP232/42 cc; GMP232/52 cc			
Technical data	Nominal Measuring Voltage	U_{AC}	=	120 / 690 / 1000 V_{AC}
	Nominal Measuring current	I_{AC}	=	1 / 5 A_{AC}
	Nominal Measuring frequency	f	=	35 - 65 Hz at 50 Hz 45 - 75 Hz at 60 Hz
	Nominal Voltage	U	=	18 - 34 V_{DC} typ. 24 V_{DC}
Certification scheme	P30VA01 (Rev. 08/10.22)	TÜV NORD-Zertifizierungsverfahren zur Netzanschlusszertifizierung (TÜV NORD certification procedure for Grid Code Compliance Certification)		
Standards	IEEE Std C37.90-2005	IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus		
Applicable guidelines	IEEE Std C37.90.1-2012	IEEE Standard for Surge Withstand Capability (SWC) Tests for Relays and Relay Systems Associated with Electric Power Apparatus		
	IEEE Std C37.90.2-2004	IEEE Standard for Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers		
	IEEE Std C37.90.3-2001	IEEE Standard Electrostatic Discharge Tests for Protective Relays		

The protection relay complies with the requirements of the above-mentioned standards. Further technical data and notes are placed in annex 1 (2 Pages).

Registered No. 44 799 13137974
Evaluation Report no. 3532 3654

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ANNEX

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Technical data

Device type	GMP232/12 GMP232/12cc	GMP232/22 GMP232/22cc	GMP232/32 GMP232/32cc	GMP232/42 GMP232/42cc	GMP232/52 GMP232/52cc
Auxiliary s upply voltage	18 - 34 V_{DC}, typ. 24 V_{DC}				
Power consumption	max. 1,3 W				
Measuring voltage	120 V_{RMS}	690 V_{RMS}	120 V_{RMS}	690 V_{RMS}	1000 V_{RMS}
Measuring current	1 A_{RMS}	1 A_{RMS}	5 A_{RMS}	5 A_{RMS}	1 A_{RMS}
Measuring frequency	35 - 65 Hz at 50 Hz 45 - 75 Hz at 60 Hz				
Load (current measurement)	10 mVA	10 mVA	250 mVA	250 mVA	10 mVA
Load (voltage measurement)	----	>3,2 MΩ	>3,2 MΩ	>3,2 MΩ	>5,0 MΩ
Relay outputs	2				
Norminal voltage relay outputs	24V_{DC}, 48V_{DC}, 250V_{AC}				
Norminal current relay outputs	5 A				
Relay inputs	0				
Construction revision	120.000				
Software version (SW)	1.20 R				
MD5 checksum (Software)	e1883c28266646fd1f1b0af6f071bb16				
Relay					
Manufacturer	Xiamen Hongfa Electroacoustic LTD or FUJITSU Mikroelektronik GmbH				
Type	HF41F or FTR-LYCA024V				
Norminal voltage	24V_{DC}, 48V_{DC}, 250V_{AC}				
Norminal current	6 A				

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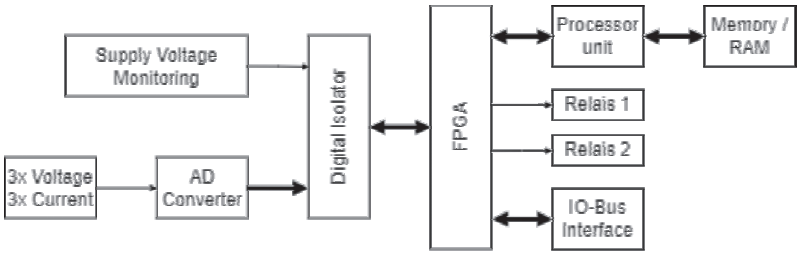
Schematic structure:



Notes

The following tests were a part of the conformity assessment:

- Operational and non-operational temperature ranges
- Relative humidity withstand capability
- Allowable variations from the stated electrical ratings
- Heating limits of temperature rise for coils
- Mechanical requirements
- Insulation tests
- Electromagnetic compatibility test

Additional technical data and details, according to IEEE Std C37.90, are given in the technical report number 35323654 (version 1.0 or higher).

Obligations to fulfill the requirements

none

Restrictions

none

Appendix

A1 Technical report no. 35323654 Version 1.0

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