

1 EU declaration of conformity

This declaration attests the compliance of the instrument with the standard specifications for electrical instruments and accessories and with the standard specifications for safety and system validation of the manufacturing company.

The responsibility for issuing this EU declaration of conformity lies solely with the manufacturer.

1.1 Product validity

This declaration is valid for the following products or product versions:

- **831 KF Coulometer**

Microprocessor-controlled Karl Fischer titrator with coulometric reagent generation for KF moisture determinations down to the lower microgram range in liquids, solids and gases. No titer determination required.

1.2 Directives

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:



- **2014/35/EU –Low Voltage Directive, LVD**

Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits; Official Journal of the EU L96, 29 March 2014, p. 357-374

- **2014/30/EU – EMC Directive, EMC**

Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility; Official Journal of the EU L96, 29 March 2014, p. 79-106



- **2011/65/EU – Directive for certain hazardous substances, RoHS**

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment; Official Journal of the EU L174, 1 July 2011, p. 88-110

- **2012/19/EU – Disposal and recycling of electrical and electronic equipment, WEEE**

Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE); Official Journal of the EU L197, 24 July 2012, p. 38-71

1.3 Safety specifications

This instrument fulfills the following safety requirements:

Design and type testing

- **EN 61010-1: 2010**
Safety requirements for electrical equipment for measurement, control, and laboratory use
- **EN 60529: 2013 – degree of protection IP40**
Degrees of protection provided by enclosures (IP Code)
- **ISO 12100: 2010**
General principles for design - Risk assessment and risk reduction
- **EN 61140: 2016 – protection class I**
Protection against electric shock - Common aspects for installation and equipment

Testing in Production

Every instrument is routine-tested according to EN/IEC 61010-1 Appendix F in the production division:
Check of the protective conductor connection and the insulation from power circuits.

1.4 Electromagnetic compatibility (EMC)

Design and type testing

- **EN 61326-1: 2013**
Electrical equipment for measurement, control and laboratory use - General EMC requirements

1.4.1 Emission

Standards fulfilled

- EN 61000-6-3: 2011
- EN 55011 / CISPR 11: 2016

1.4.2 Immunity

Standards fulfilled

- EN 61000-6-2: 2005
- EN 61000-4-2: 2009
- EN 61000-4-3: 2010
- EN 61000-4-4: 2012
- EN 61000-4-5: 2014
- EN 61000-4-6: 2014
- EN 61000-4-11: 2004

1.5 Manufacturer

Metrohm AG, Ionenstrasse, CH-9100 Herisau/Switzerland

Metrohm AG holds the SQS certificate ISO 9001 – Quality management system for the development, production and sale of instruments and accessories for analyses.

Herisau, November 30th, 2018



P. Hunziker
Vice President,
Head of Development



Dr. M. Saba
Head of Quality Management
& Regulatory Affairs

2 Authorizations and certificates

2.1 Authorization Federal Inspectorate for Heavy Current Installations ESTI



This instrument complies with the Swiss Ordinance on Electrical Low-voltage Equipment (NEV; SR 734.26) and the Swiss Federal Law on Product Safety (PrSG; SR 930.11). The label attests the inspection by the independent national certification institute ESTI, accredited according to ISO/IEC 17065.

The product is listed in the register of authorizations at ESTI.



2.2 IEC certificate



This instrument has been tested in accordance with the IEC standards and certified to the IECEE CB Scheme. The tests also comprise the national differences for Europe, the USA and Canada. Therefore, the instrument is in compliance with the respective standards EN 61010-1, UL 61010-1 and CSA-C22.2 No. 61010-1.

The CB certificate is available in the directory of certified products at electrosuisse.