



(1) **EC-TYPE-EXAMINATION CERTIFICATE**  
(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

**PTB 02 ATEX 2079 U**

(4) Component: Monorack and RACKSYST module rack, types FXG and FG

(5) Manufacturer: Endress + Hauser GmbH+Co.KG

(6) Address: Hauptstraße 1, D-79689 Maulburg, Germany

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 02-21485.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50014:1997+A1+A2 EN 50020:1994**

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

(12) The marking of the component shall include the following:

II (1) G D EEx

Zertifizierungsstelle Explosionschutz

Braunschweig, June 26, 2002

By order:

Dipl.-Ing. M. Krämer



## SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2079 U**

(15) Description of component

The RACKSYST module rack is a universal mounting rack system which accommodates plug-in modules designed for 19" systems.

The Monorack is used for individual assemblies. It is suited for single and butt mounting.

### **Monorack:**

The permissible ambient temperature range for the MONORACK is  $-25...+70$  °C.

The connectors are coded to ensure the assignment of plug-in module and slot.

Provided conditions 1 and 2 listed under the "Special Conditions" are met, the clearance and creepage distances required in EN 50020 will be complied with up to a peak value of the nominal voltage of 375 V.

MONORACK wiring is carried out by means of terminal blocks. The type of wiring described in the documents listed under point 3 of the test report meets the requirements of section 6.3.1, EN 50020.

### **RACKSYST module rack, types FXG and FG**

Provided the conditions listed under the "Special Conditions" are met, assemblies with intrinsically safe circuits and assemblies without explosion protection may be used side by side, the clearance and creepage distances specified in EN 50020 being complied with up to a peak value of the nominal voltage of 375 V.

The RACKSYST module racks are used to accommodate plug-in modules or cassettes. The components fitted may be plug-in assemblies of type of protection Intrinsic Safety, categories "ib" and "ia", for which an examination certificate has been issued, as well as plug-in assemblies without certified intrinsically safe circuits.

The connectors are coded to ensure the assignment of plug-in module and slot.

The mounting racks are wired either directly at the multiple-contact strips of the plug-in connectors or the wiring is taken out by the manufacturer to the terminal blocks, where connection can be made by the user.

The type of wiring described in the documents listed under point 3 of the test report meets the requirements of section 6.3.1, EN 50020.

(16) Test report PTB Ex 02-21485

(17) Special conditions for safe use

1. When using plug-in modules or cassettes of Endress + Hauser GmbH + Co. KG, Maulburg/Germany, which are compatible with the RACKSYST or Monorack system, the clearance distances required in EN 50020 are complied with.
2. The module rack and the Monorack have to be installed outside the potentially explosive atmosphere.
3. RACKSYST mounting rack
  - 3.1 When combining plug-in modules of the RACKSYST system with assemblies of a different make, the clearance between the assemblies has to comply with EN 50020. This may, for instance, be achieved by leaving 2 modular spacings open.
  - 3.2 The non-explosion protected plug-in modules with a front panel width of 4 modular spacings (20.3 mm) must not exceed an element height on the PCB of 10.6 mm.
  - 3.3 The mounting rack with its connection point shall be installed as such that at least a degree of protection of IP 20 in accordance with IEC 60529 is met.

(18) Essential health and safety requirements

Covered by the standards specified above

Zertifizierungsstelle Explosionsschutz  
By order:

Braunschweig, June 26, 2002

Dipl.-Ing. M. Krämer

