

UK Type Examination Certificate CML 23UKEX1490X Issue 0

United Kingdom Conformity Assessment

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1
- 2 Equipment **Remote Display FHX50B**
- 3 Manufacturer **Endress+Hauser SE+Co. KG**
- 4 Address **Hauptstrasse 1
79689 Maulburg
Germany**

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.

8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-11:2012

EN 60079-31:2014

10 The equipment shall be marked with the following:



See marking in section 11





CML 23UKEX1490X
Issue 0

11 Description

The FHX50B is used to have the Display of a Level-or Pressure-Transmitter in a more visible place than under the window of the Transmitter enclosure cover, which can be on top of a large vessel or in a bad visible position.

It can be installed up to 60m far from the Field Transmitter enclosure.

Instead of the Display, the Display-Remote-Driver is assembled in the Field-Transmitter enclosure, and connected by an 8-wire cable to the Remote-Display.

The Remote-Display-Enclosure is assembled with the Display-Remote-Receiver and the Display for the level or pressure information.

The enclosure of the Remote Display FHX50B is only a one chamber enclosure.

It contains two electronic modules:

- a) The Remote Display Receiver, and
- b) The Display

Classification of installation and use:	Fixed
Ingress protection:	IP66/67 or IP66/68
Rated ambient temperature range (°C):	Refer to Temperature classification at general product information for details.
Rated ambient temperature range (°C) for Ex Components:	N/A

Rating:

Type of protection ia:

Input rating VA20 Remote Display Receiver (X100, X101, X102, X103, X106):

$U_i \leq 6 \text{ V}$, $I_i \leq 53 \text{ mA}$, $P_i \leq 0.2 \text{ W}$, $C_i \leq 15.5 \mu\text{F}$, $L_i = 0$

Type of protection db or tb:

VA20 Remote-Display-Receiver:

$U \leq 3.2 \text{ V DC}$, $P \leq 0.04 \text{ W}$

Temperature Rating:

Order Code	Ambient Temperature Range
FHX50B-UA	$-40^\circ\text{C}^{1)} \leq T_a \leq +60^\circ\text{C}$
FHX50B-UB	$-40^\circ\text{C}^{1)} \leq T_a \leq +60^\circ\text{C}$
FHX50B-UC	$-40^\circ\text{C}^{1)} \leq T_a \leq +70^\circ\text{C}$
FHX50B-UG	$-40^\circ\text{C}^{1)} \leq T_a \leq +80^\circ\text{C}$
FHX50B-UH	$-40^\circ\text{C}^{1)} \leq T_a \leq +60^\circ\text{C}$
FHX50B-UK	$-40^\circ\text{C}^{1)} \leq T_a \leq +60^\circ\text{C}$
FHX50B-UL	$-40^\circ\text{C}^{1)} \leq T_a \leq +80^\circ\text{C}$
FHX50B-UN	$-40^\circ\text{C}^{1)} \leq T_a \leq +80^\circ\text{C}$

¹⁾ Optional specification, ID Jx, Kx = JL, Lower limit of the ambient temperature for explosion protection changes to -50°C .

For further details refer to the Safety Instructions.



CML 23UKEX1490X
Issue 0

Marking:

The following marking strings are possible for all types and in combination with each other.

	II 2G	Ex db IIC T6...T1 Gb
	II 1G	Ex ia IIC T6...T1 Ga
	II 2G	Ex ia IIC T6...T1 Gb
	II 2D	Ex ia IIIC T80°C T _L 80°C Db
	II 2D	Ex tb IIIC T85°C T _L 85°C Db

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	14 Nov 2023	R17123A/00	Issue of the prime certificate

Note: Drawings that describe the equipment are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

14 Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. For EPL Ga enclosures made of aluminium must be installed protected from impact and friction.
- ii. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.

Certificate Annex

Certificate Number CML 23UKEX1490X
Equipment Remote Display FHX50B
Manufacturer Endress+Hauser SE+Co. KG



The following documents describe the equipment defined in this certificate:

Issue 0

For drawings describing the equipment, refer to attached certificate SEV 23 ATEX 0666 X and the associated reports. In addition to the drawings associated with SEV 23 ATEX 0666 X, the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
961007357	1 to 2	A	14 Nov 2023	Nameplate UKCA (Ux) Remote Display FHX50B