

UK Type Examination Certificate CML 22UKEX1611X 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 **Level Switch Liquiphant HART types FTL51B, FTL62 and FTL64**
- 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 43 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 IEC 60079-7:2015+A1:2018
EN 60079-11:2012	EN 60079-26:2015	IEC 60079-26:2021
EN 60079-31:2014		
- 10 The equipment shall be marked with the following:

See marking in section 11





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11 Description

The device Level Switch Liquiphant HART, type FTL51B, FTL62 and FTL64 is a Level-Limit-Switch for process Liquids used in explosive atmospheres caused by the presence of combustible gases, fluids, vapours or dusts.

The device with the 4...20mA-Interface (FEL60H = MA10 + SA10) can be used for the Point Level Detection for Max-or Min-Applications by means of a symmetrical vibrating fork. The electronic inserts in the transmitter enclosure, convert the fork frequency into an electrical signal.

The enclosure is either a single electronics compartment version made aluminium or stainless steel, or a dual compartment version made of aluminium or stainless steel providing a separate electronics and a terminal compartment. The stainless steel sensor is directly fitted to the enclosure.

For the connection of the sensor to the L+P enclosures a thread adapter M48–M30 is used. In general, the Liquiphant Probe is designed with the complete metallic part (Fork, tube and process connection) to be used as Zone Separation Element according to IEC 60079-26.

The device can be a compact or a tube extended version with a length up to 6m.

Optionally the electronics compartment can be equipped with a Graphic display or with a Graphic display with Bluetooth in combination with a windowed cover.

The degree of protection of the equipment is IP64 in accordance with IEC 60079-0. The degree of protection of the equipment is IP66/IP68 (1,83 m during 24 h) in accordance with IEC 60529.

For the Nomenclature, Thermal data and Electrical data refer to Annex 1 to Report No. NL/DEK/ExTR22.0032/00.

Marking



II 1/2 G	Ex db IIC T6...T1 Ga/Gb
II 2 G	Ex db IIC T6...T1 Gb
II 1/2 D	Ex ta IIIC T _{200XXX} °C Da / Ex tb IIIC T _{LXXX} °C Db
II 2 D	Ex tb IIIC T _{LXXX} °C Db
II 1 G	Ex ia IIC T6...T1 Ga
II 1/2 G	Ex ia IIC T6...T1 Ga/Gb
II 1/2 G	Ex db ia IIC T6...T1 Ga/Gb
II 2 G	Ex ia IIC T6...T1 Gb
II 2 G	Ex db ia IIC T6...T1 Gb
II 1/2 D	Ex ia IIIC T _{200XXX} °C Da / Ex ia IIIC T _{LXXX} °C Db
II 2 D	Ex ia IIIC T _{LXXX} °C Db

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.



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12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	21 Dec 2022	R15858B/00	Issue of the prime certificate.

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

13 Conditions of Manufacture

None

14 Specific Conditions of Use

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

- i. For maximum surface temperature, ambient temperature range and maximum process temperatures see Annex 1 to NL/DEK/ExTR22.0032/00 and safety instructions.
- ii. The flameproof joints are not intended to be repaired.
- iii. The Level Switch Liquiphant HART shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.
- iv. For Level Switch Liquiphant HART with aluminium enclosure, when used as EPL Ga equipment, shall be installed in such a way that, even in the event of rare incidents, ignition sources due to impact and friction between the enclosure and iron or steel are excluded.

Certificate Annex

Certificate Number CML 22UKEX1611X

Equipment Level Switch Liquiphant HART types FTL51B, FTL62 and FTL64

Manufacturer Endress+Hauser SE+Co. KG



The following documents describe the equipment defined in this certificate:

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Drawing No	Sheets	Rev	Approved date	Title
961006752	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL51B...
961006753	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL51B...
961006754	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL51B...
961006755	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL51B...
961006757	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL51B...
961006758	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL62...
961006759	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL62...
961006760	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL62...
961006762	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL62...
961006763	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL64...
961006764	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL64...
961006765	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL64...
961006767	1 to 2	A	21 Dec 2022	Nameplate UKCA Liquiphant HART FTL64...