

United Kingdom Conformity Assessment

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Certification Manager



CML 21UKEX2551X
Issue 0

11 Description

The HBS4400 and HBS4600 are intrinsically safe field mounted temperature transmitters. The device transmits temperature data remotely over a 4 – 20 mA current loop. The equipment is completely encapsulated except for the intrinsically safe I/O terminals and the connector to an external USB configuration device. The only difference between the two models is that the HBS4600 features additional components to enable HART communications.

When operating in the field, the equipment is to be powered only by an intrinsically safe supply.

When being configured in the safe area there is a connection via the USB Configurator accessory (the subject of a separate UKEX certification – CML 21UKEX2552X).

Table of entity parameters	
Parameter	Barrier Input (4-20 mA)
Ui	30V
Ii	100 mA
Pi	0.75W
Um	-
Uo	-
Io	-
Li	0 mH
Ci	0 nF

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	11/05/2021	R14218A/00	Issue of the prime certificate.

Note: Drawings that describe the equipment are listed or referred to in the Appendix of EMT 17ATEX0036X V0.

13 Conditions of Manufacture

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

- Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- Any previously certified parts incorporated in the equipment shall be UKCA compliant by the 1st January 2022.



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14 Specific Conditions of Use

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

- i. For gas applications, the HBS4400 and HBS4600 temperature transmitters must be mounted in an appropriately approved enclosure rated for IP54 and located in an area where the enclosure will not be subjected to impact or friction.
- ii. For dust applications, the HBS4400 and HBS4600 temperature transmitters must be mounted in an appropriately approved enclosure rated for the Zone of end use.
- iii. The ambient temperature range of the enclosure will limit the permitted ambient range of the overall equipment. Refer to enclosure certificate.
- iv. Only suitable for connection to thermocouples, RTD temperature sensors or slide wire resistance devices. They shall meet the requirements for simple apparatus as per EN 60079-11, clause 5.7 and shall meet the dielectric withstand requirements of EN 60079-11, clause 6.3.13.
- iv. A copy of the instructions can be downloaded at www.hbsensors.com.

Certificate Annex

Certificate Number CML 21UKEX2551X
Equipment Temperature Transmitter – HBS4400, HBS4600
Manufacturer H&B Sensors Ltd



The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
HBS-13-10951	1 of 1	A	11/05/2021	HBS4400 / HBS4600 LABEL CERTIFICATION DRAWING

The above list includes marking drawings only. Refer to EMT 17ATEX0036X V0 for the full list of drawings.