

|  |  |  |
| --- | --- | --- |
| **Change Note** | | **CN-033** |
| **Change to:** Assumption **58** | | |
| **Description:** Flow restrictor pressure loss | | |
| **References: All tests, test regime paragraph 2.21** | | |
| **Change originator:** VK | | **Date of request:** 18/1/22 |
| **Rev: 2** | **Date authored:** 18/1/22 | **Proposed change to assumption: Yes** |

1. Proposed Approach

* To reduce the pressure loss for the restrictor to 10 kPa (100 mbar) to simulate a typical heat meter.
* HIU units are proposed to be tested with the restrictor installed to replace the meter.
* The manufacturer can select an option to test with their preferred heat meter. The pressure loss of the meter “X” kPa at 1.0 m3/h should be stated in the components list.

If a HIU is tested with a specific heat meter (option 3 above), the test results will only be applicable for any HIU using a heat meter with the same pressure loss as the installed heat meter or an equivalent heat meter with the same or lower pressure loss when measured at 1.0 m3/h. An HIU that was supplied with a heat meter with a greater pressure loss across the heat meter would need to be retested in order to be BESA certified.

1. Rationale (underlying basis for the change)

For a typical domestic heat meter with Qp 1.5 the pressure loss at 1.0 m3/h is significantly lower than the restrictor pressure loss 25 kPa currently used in the test.

1. Impact of change (e.g. implications for test rig)

New flow restrictor required to simulate 10 kPa dP.

|  |  |  |  |
| --- | --- | --- | --- |
| **Evaluation of change** | | | |
| **Date evaluated: 15/02/22** | **Those present:** BESA HIU Technical Committee | **Additional info required?: No** | **Modification to proposed approach?: No** |
| **Details: Rationale detailed in TN-025** | | | |
| **Signed off:** Yes | | | |