# PROTOCOL

## Tightness test of plastic KAN-therm systems Medium: water

Investor:

Investment/address:

Contractor of the installation:

Storey/room:

Name of the system:

**Installation of hot and cold water and its circulation**

☐

Test pressure $P_{op} = P_{proj.} \times 1{,}1$ [bar]

**Heating, cooling water and surface heating/cooling installation.**

☐

Test pressure $P_{op} = P_{work} + 2$ [bar] but not less than 4 bar

$P_{op}$ - pressure at which the tightness test is performed

$P_{proj.}$ - maximum allowable pressure for the installation system

$P_{work}$ - system design pressure

Prior to the tightness test, diaphragm expansion vessels, fittings which may interfere with the test (e.g. differential pressure regulators, safety valves and any other installation components with an allowable working pressure lower than the test pressure must be disconnected).
The installation must be thoroughly flushed, filled with clean medium and vented before the test. The temperature of the medium should be stabilised in relation to the ambient temperature. For the test, use a disc manometer with a measuring range 50% greater than the test pressure and a measuring range of 0.1 bar. Connect the manometer at the geometrically lowest point of the system.

The ambient temperature should not change during the test.

Perform The tigtness test in 3 steps:

### PRELIMINARY TEST WITH REDUCED PRESSURE

| Test pressure | Preliminary test conditions | Conditions of acceptance: |
|---|---|---|
| 1.0 to 4.0 bar | - time to visually check all connections<br>- keep the test pressure constant level | No moisture or leakage ☐ |

### PRELIMINARY TEST

| Preliminary test pressure: | Duration of the test | Conditions of acceptance: |
|---|---|---|
| $P_{op}$ =_____ | 30 min (Maintain the test pressure within this period, equalize if necessary).<br>After 30 minutes, reduce the pressure to the value 0.5 times the test pressure | No moisture or leakage ☐ |

### MAIN TEST

| Main test pressure | **Main test** duration: | Conditions of acceptance: |
|---|---|---|
| $P_{op}$ x 0,5 | 30 min | No moisture or leakage ☐<br>No pressure drop ☐ |

### SUMMARY:

| Ambient temperature: | **Main test** - duration | Pressure drop: |
|---|---|---|
| | | |

**Test result:** **POSITIVE** ☐ **NEGATIVE** ☐

Date of test ..... Ordering party signature ..... Contractor signature .....

The procedure for carrying out a leak test on the system has been developed on the basis of standard EN 806-4 and own experience.