

HYDRONIC CH BOILERS ECODESIGN AND ENERGY LABEL REVIEW

WG1/2/3 INTERIM PROPOSALS ON 28 JANUARY 2021

EU.BAC COMMENTS

We are pleased to provide comments on the proposals presented at the meeting and have referenced our comments below in relation to the specific points in the Draft Interim Report December 2020.

3.5 TEMPERATURE CONTROLS

PROPOSAL: Increase the malus factor F(1) to 8%, in order to take into account and create room for system losses due to suboptimal flow rate control, system temperature control and other items specified in EPB-standards EN 15316-2:2017 and EN 15316-3:2017. Note that this proposal should be seen as a placeholder for a discussion on how to make it easier for national policymakers to incorporate Ecodesign test-and calculation methods in national building codes.

We would welcome a discussion on how national policymakers can introduce better incentives for heating controls but are not convinced that doing this by adding efficiency scores to heat appliances is the best way forward. The current limited approach with temperature controls has a logic to it, in that the controls specified can directly affect the operational efficiency of a boiler. However, under the proposed scenario, where the overall scale of bonus scores for the temperature control classes will remain the same, we have a concern that the room created for national level bonuses would lead to inconsistent approaches and the inclusion of unsuitable control types.

With respect to the latter point above, we would like to restate our position that control features such as heating scheduling, presence detection, remote control and geofencing mostly relate to time control of the heating appliance and should not be included in any label for the heating appliance. The labelling of space heaters is based on their efficiency, and the rationale for the temperature control classes is that the applicable devices will directly reduce the energy efficiency of the boiler while it is operating. Features such as those above reduce the hours of system operation depending on the behaviour of the occupants, but it would not be evidence-based to suggest that they directly reduce boiler efficiency.

PROPOSAL: Minor corrections to the scores for temperature control classes.

Class		Current value %	Proposed value %
I	On/off Room Thermostat	1	1
II	Weather compensator (modulating)	2	2
III	Weather compensator (on/off)	1.5	1.5
IV	TPI room thermostat (on/off)	2	2
V	Modulating room thermostat (modulating)	3	3
VI	Weather comp + room sensor (modulating)	4	3.5
VII	Weather comp + room sensor (on/off)	3.5	3
VIII	Multi-sensor room temp control (modulating)	5	5

The above changes are proposed to the scoring, highlighted in red.

The view of eu.bac remains that the current scores should be retained **so that this does not introduce costs to the industry to change existing literature**. Some updating of the definitions to reflect current practice and technologies would be sufficient.

If the European Commission is intent on amending the scores then we would suggest the changes below instead as these would be based on recent research carried out for the heating controls industry at the University of Salford. This has been shared with the Consultants and can be provided on request. These changes would also acknowledge the fact that half scores get rounded up in the process and therefore are irrelevant. However, **our strong position is that these scores should not be changed** at this time due to the administrative burden it would place on manufacturers for little benefit to consumers.

Class		Current value %	Proposed value %
I	On/off Room Thermostat	1	1
II	Weather compensator (modulating)	2	2
III	Weather compensator (on/off)	1.5	2
IV	TPI room thermostat (on/off)	2	3
V	Modulating room thermostat (modulating)	3	4
VI	Weather comp + room sensor (modulating)	4	4
VII	Weather comp + room sensor (on/off)	3.5	3
VIII	Multi-sensor room temp control (modulating)	5	5

PROPOSAL: Small changes are proposed to the wording of the definitions:

- **Class IV should be a generic load compensating control using proportional on/off control. This would include TPI controls that currently fall under class IV but not exclude other similar control devices that use different algorithms.**
- **Class VIII should be extended to include proportional on/off control as well as modulating the burner. This would include products currently in Class VIII but not exclude other similar devices.**
- **Any classes that reference the boiler (e.g. “for use with on/off output heaters”) should be changed to refer to the form of control (e.g. “weather compensating control, on/off”)**

As mentioned above, eu.bac fully supports these changes which would help to make the regulation much clearer for users.