



ProCold Product Competition

15 January 2016

| | Received comments on preliminary competition rules | ProCold answer |
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| | General | |
| 1 | We read the competition rules draft and we do not have any comments about it. | - |
| 2 | <p>I reviewed the ProCold Product Competition, what I first of all noticed is that the product categories on the Topten list don't match the ProCold categories.</p> <p>ProCold Vertical chilled storage cabinets Beverage coolers Small ice-cream freezers Vertical chilled display cabinets Refrigerated glass fronted vending machines</p> <p>Topten Beverage coolers Ice-cream freezers Supermarket freezers Vertical chilled display cabinets with doors Storage refrigerators Storage freezers Storage refrigerators-freezers Minibars Wine coolers</p> <p>What is the reason that Procold has less categories or are the categories combined?</p> | <p>There are several reasons the categories in the ProCold product competition are fewer and more precise than the Topten product categories:</p> <ul style="list-style-type: none"> - To allow for a fair comparison between products we had to narrow the scope within each category - We chose those product categories, which we consider particularly relevant in the market (high volume, high savings potentials) - We furthermore considered categories on which more market transparency is helpful to provide meaningful information on the Topten platforms - We had to limit the number of product categories as our budget for laboratory tests is limited |
| | Eligible Products and test conditions - General | |
| 3 | <p>Ecodesign requirements for refrigerated commercial display cabinets in respect of vending machines is currently at draft stage and the exact timing for approval not fully known. As relevant articles should come into force in July 2017, this competition will likely have to rely on a draft text. If draft regulations are used for this competition, the draft versions from which date will be taken? I note that in point c) the draft regulation as of 1 July 2016 will be used, but in a following paragraph it says the draft of 31 August 2016.</p> | <p>If a final regulation has not been published by 31 August 2016, the latest draft regulation available on that day will apply.</p> <p>The following changes were made:</p> <ul style="list-style-type: none"> - Corrected date to 31 August 2016 - Made the sentence more clear with regard to applicable documents |
| 4 | <p>bullet c) -> please modify as follows "including Ecodesign and labelling requirements...." and put a special emphasis on the "OR, if not yet available, draft regulation as referenced...."</p> <p>Or we need to specify in detail in each product category the rules, to be clear.</p> | <p>We modified the text according to the first suggestion and made it more precise.</p> |
| | Eligible Products and test conditions - Vertical chilled storage cabinets | |
| 5 | <p>Why not include or differentiate also for freezers, the market share is high for this family</p> | <p>We had to limit the number of product categories (see comment above)</p> <p>We will consider freezers for possible future competitions.</p> |
| 6 | <p>After a consultation of a database of products, the size for the 1 door seems to be better 400-700</p> | <p>We changed the applicable volume to 400-700 as suggested.</p> |
| 7 | <p>heavy duty or normal climate classes will be mixed in the evaluation?</p> | <p>The normal climate class will be applied to all tested appliances to allow for a fair comparison (no matter if normal or heavy duty appliances are tested).</p> |
| 8 | <p>the GWP below 150 will be hard to reach for more efficient products; in other words more efficient products are > 150 (especially for freezers, if included)</p> | <p>The low GWP is a key ProCold requirement and will also be a future legal requirement.</p> <p>Therefore, we decided to keep the requirement on low GWP to prepare manufacturers and buyers for the upcoming regulation.</p> |
| 9 | <p>1 –door, 250 – 550 litres net volume (add) according to EN 16825</p> | <p>Added reference to standard for calculating net volume for all categories except vending machines</p> |

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| | Eligible Products and test conditions - Refrigerated glass fronted vending machines | |
| 10 | Definition of refrigerated vending machine should be "a refrigerated commercial display cabinet designed to accept consumer payments or tokens to dispense chilled items without onsite labour intervention." This definition in the Energy Labelling Regulation will be amended as such so that it only references chilled items and not frozen items. | No need to change text in competition rules as the definition in the (draft) Ecodesign Regulation available on 31 August 2016 will apply. |
| 11 | Regarding the standard EN50597:2015, you may wish to note that it will be updated to change the testing requirements from 23C/60% to 25C/60%. However, as this amendment is not expected to be finalised and approved until after this competition, your requirements specified are correct. | No changes have been implemented now. We note to carefully check draft standard available on 1 July 2016. |
| 12 | Regarding the requirement for a refrigerant with a GWP below 150. The 2013 EU F Gas regulation bans the most commonly used refrigerant gases for vending (R404a, R134a) by 2020 and 2022 respectively, and due to the nature of European glass fronted spiral machines, the expected alternative refrigerant will be CO2. However, currently CO2 refrigeration units are complex, prohibitively expensive, and consume more energy than HFC-based refrigeration units. In Europe there are only two manufacturers producing CO2 cooling units, and both in extremely low quantities. This will of course change by 2020, but it is the situation today. Therefore the requirement for a vending machine to use GWP under 150 refrigerant could well lead to a lack of entries in the vending machine category next year. | Climate-friendly refrigerants are a core criterium of Topten and will be a future legal requirement. Hence, the market will have to develop in this direction soon and this should be reflected in the ProCold competition requirements. Therefore, we decided to keep the requirement on low GWP to prepare manufacturers and buyers for the upcoming regulation. |
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| | Eligible Products and test conditions - Beverage coolers | |
| 13 | Why was there chosen for only temperature class K1? | We chose one temperature class to ensure a fair comparison between different appliances. K1 is the relevant temperature class for soft drinks. |
| 14 | What if the prEN 160902 isn't final on 15-1-2016 which norm will than apply? | If applicable standards are not final on 1 July 2016 the available draft standard on that date will apply |
| 15 | What is the threshold for the EEI or labelling? | As we have to identify an absolute winner in each category, the definition of a threshold is not enough. The product with the lowest EEI in each category wins. Hence, no threshold is established. |
| 16 | Why is the net volume fixed at 250-550L? We have a product with net volume up to approximately 700L | The volume is fixed to increase comparability, not to capture all products available on the market. |
| 17 | In according of which norm is the net volume calculated? | The designation of norms has now been added for all categories except vending machines |
| 18 | Has the product testing been done by an independent test laboratory and does the test report has to be written by them. I case the test report can be written by the manufacturer is there a format or template for this report? | The test report has to be issued by an independent test laboratory as described in the rules, the applicable standard defines the format. The competition rules define further information requirements and an application form is made available for this purpose. |
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| | Eligible Products and test conditions - Vertical supermarket refrigerator cabinets | |
| 19 | there is no reference to the EN 16825 | No reference to EN 16825 added as reference standard is EN ISO 23953:2015 |
| 20 | Total display area (TDA) (not DTA) between 0,5 and 3 m2 (because of smaller applications) | Changed required TDA to be in the range of 0,5 to 3 m ² |
| 21 | Temperature class M2 (-1°C to +7°C) and TDA according to EN ISO 23953 | Temperature class M1 is more versatile as it can contain all food that is suitable for M2 but not the other way around; hence, in the competition the climate class M1 will be required. |
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| | Eligible Products and test conditions - Small ice cream freezers | |
| 22 | The applicable test norm currently requires a defined door opening and closing cycle. This creates additional costs but adds little to the accuracy of the energy consumption/efficiency results. We therefore recommend to not require such a cycle. | In all requirements we build upon the available (draft) norms as these will be the basis for future regulation. We have hence decided to not change this requirement in the competition rules. However, we are interested to understand this concern better to be able to contribute to future revisions of the applicable norms. |
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| Submission Requirements | | |
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| 23 | Point d) IV) The volume definition from Annex IV of the latest draft Ecodesign Regulation should be used. Therefore point IV) should add also "For Vending machines, only those compartments are to be considered that are directly available for vending." | Modified text to require provision of net volume as defined in the applicable (draft) regulation |
| 24 | For vertical chilled storage cabinets: The sum of the net volumes of all compartments functioning at chilled operating temperature. (the end) (erase the whole following the sum of the net volumes of all compartments functioning at frozen operating temperature. because chilled cabinets do not have frozen compartments) | Erased sentence on information on net volume for frozen compartments as suggested |
| Winner Identification | | |
| 25 | Point f) Perhaps you should clarify which invitation you are referring to? It is not clear whether the invitation relates to the manufacturer being present at the independent test, or whether it is to sponsor an additional definitive test by 31 January 2017. | Changed text to make it more precise |
| 26 | The cost of ownership is missing as a criterion, since really sustainable products are those offering the best compromise between TEWI / LCCP (life cycle performance) and LCC (life cycle cost). For the product groups mentioned, ultra-low GWP is stipulated by the F-Gas rules in any case, hence CO2-eq emissions are only related to indirect emissions from energy consumption and therefore relatively easy to evaluate and to compare. However, the cost of ownership is not taken into account, although it has a major impact on the "real-life dissemination" and impact of a product. | We agree that cost of ownership is a very interesting criterion and we would like to find ways to better recognize this in the future. However, we have to make the comparison of products as objective as possible based on clear norms and across many European countries (with different prices, CO2e emission factors for electricity etc.) We have therefore decided to not include this criterion in the competition rules. Please note that the total cost of ownership is provided as extra information on some of the Topten portals (e.g. ecotopten.de) |
| Further changes to the competition rules implemented: | | |
| 27 | Changed dates to accommodate for updated timeline | |
| 28 | Corrected small typos and rearranged text to other places | |
| 29 | Changed name of product category "Vertical chilled display cabinets" to "Vertical supermarket refrigerator cabinets" | |
| 30 | Deleted sentence indicating the date on which the application form is available on the ProCold-website. | |
| 31 | Added information requirement on foaming agent used | |
| 32 | Further specified information requirements on refrigerant | |
| 33 | Added "temperature class" as information requirement | |
| 34 | Added further information requirements as published on Topten-platforms | |
| 35 | Deleted paragraph in "winner identification" that ProCold would test and nominate appliances if no product are submitted in a category | |
| 36 | Made the text on applicable definitions more explicit for display cabinet categories: "As defined in the (draft) European Ecodesign Regulation for refrigerated commercial display cabinets available on 31 August 2016 (and provided on topten.eu/pro-cold)" | |
| 37 | Signed statement will be required applying to both the top-performing and second best performing product in each category: "In case our submitted product is the top-performing or second best performing product in its category..." | |
| 38 | For storage cabinet category, added: EEI calculation according to Ecodesign Regulation (EU) 2015/1095 | |
| 39 | For all other categories, added: EEI calculation according to applicable (draft) European Ecodesign Regulation | |
| 40 | The rules in general now reference Ecodesign instead of Energy Labelling Regulations | |



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