STANDARDS ACTIVITIES

ASERCOM Annual General Assembly 2020

Heinz Jürgensen, Convenor WG Standards
Brussels, 24th January 2020
CONTENT

CEN    TC 113 WG 6
CEN    TC 182
ISO    TC 86 SC 4
IEC    SC 61 C
AHRI

ASERCOM Annual Meeting, Brussels, January 2020
Amendment under preparation for final vote in TC113

Minor technical changes after inquiry necessary

Changes demanded by HAS consultant

Final standard expected in early 2020

Interpolation of mid point evaporation

**Linear as default**

\[
\begin{align*}
t_{om} &= \frac{t_{o1} + t_{oD}}{2} \\
t_{o1} &= t_{oB} + (t_{oD} - t_{oB}) \times \frac{h_{EX} - h_{oB}}{h_{oD} - h_{oB}}
\end{align*}
\]

**Thermodynamic if large glide**

\[
t_{o,th} = \frac{h_{oD} + h_{o1}}{s_{oD} + s_{o1}}
\]
Questionnaire on update 

*after ca 5 years*

Possible changes necessary 

- simpler text/tables for economized compressors 
- annex on conversion for refrigerants with temp glide 
- minor text clarifications 

Other?
CEN TC 182
EN 378:2018: REFRIGERANT SYSTEM SAFETY

Alignment with ISO 5149 still in progress

mainly parts -3 and -4 on maintenance and operation

TC 182 WG 12 Risk assessments

Establishes basis for simplification of risk assessments especially for higher flammability refrigerants A3

e.g. R290 propane

work base is EC Mandate M/555
ISO TC 86 SC 4 WG 1

ISO 916

Testing of vapour compression refrigeration systems (revision)


Small scope clarifying necessary after comments

final voting in TC 86 SC 4 passed - accepted

Small editorial corrections up to December

Final standard expected published early 2020
IEC SC 61 C
LARGER CHARGE FLAMMABLE REFR.

**IEC 60335-2-89 Commercial refrigerators and freezers**

- **Today:** flammable up to 150 g covered
- **Draft:** up to ca 500 g R290, 1.2 kg A2L

*More strict rules for larger charge*

*Final vote: 2019-04 ACCEPTED (after some formal corrections)*

**EN 60335-2-89 will come in 2020 with EN 60335-1 Version 6**

*Major alignments necessary*
New leak test setup

<LFL at all sensor points

Also with door opening
AHRI
AHRI 540: POSITIVE DISPLACEMENT REFRIGERANT COMPRESSORS RATING

AHRI 540-2019

concluded same topics of
510 – Ammonia
570 – carbon dioxide
540 – other refrigerants compressors

now more similar to EN 12900