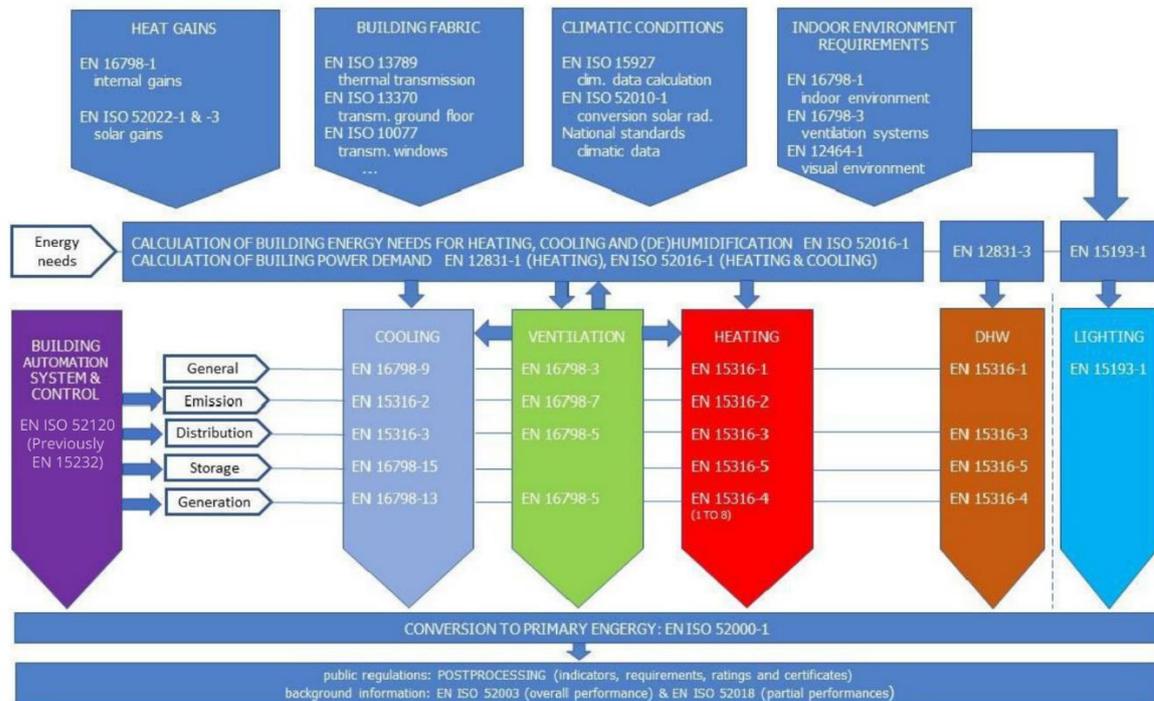European Building Automation Controls Association

THE NEW EN ISO 52120 IS REPLACING EN 15232
EU.BAC GUIDE

The new EN ISO 52120-1:2022 "Energy performance of buildings - Contribution of building automation, controls and building management - Part 1: General framework and procedures" standard is to substitute the EN 15232-1:2017 "Energy performance of buildings - Impact of Building Automation, Controls and Building Management – Part 1: Module M4,5, 6, 7, 8, 9, 10". The 30th of September 2022 is the latest date by which the EN ISO 52120 has to be implemented at national level by publication of an identical national standard or by endorsement, and the national standards corresponding to EN 15232 have to be withdrawn.

Therefore, all references to the EN 15232 standard in existing documents have to be updated, e.g. technical guidance documents, CEN / ISO standards, and data sheets of the manufacturers. All new communication and technical documents have to refer to the EN ISO 52120-1:2022.

EN 15232-1:2017 has been a fundamental standard in assessing the contribution of BACS to the energy performance of buildings, used in building regulations and guidelines at European and national levels. As such it was a part of the Energy Performance of Buildings (EPB) standards as shown in the graphic below.

Positioning of the standard (in purple) within the set of CEN and ISO Energy Performance of Buildings (EPB) standards

The following points summarize <u>the main differences between EN ISO 52120-1:2022 and EN 15232-1:2017</u>:

- The description of the control functions within Table 4 in EN 15232 are now in Table 5 in EN ISO 52120
- New hydronic balancing functions for heating and cooling distribution have been added as the functions 1.4a and 3.4a respectively
- New 4.1.3 Demand-based control function for supply air flow control at the room level "dependent on the air quality demand (measurement of CO_2, VOC, etc.)."
- The 5.1.2 and 5.1.3 lighting control functions have been simplified to no longer specify the maximum reaction time after occupancy or the level of dimming

- Enhanced 5.2.3 light level control function to dim down and finally fully switched off the luminaires are not only when daylight is available, but also "when scene based light level control is applied"
- Changes of classes for some functions under 1.10, 4.1, 4.4, 5.1 and 5.2
- Table 7 contains the up-to-date referenced EPB standards that shall take into account the control functions defined in Table 5
- The Annex B: "Minimum BAC function type requirements" now is normative and no more only informative
- Annex E: Applying BAC for EnMS specified in ISO 50001 has substantial changes due to the update of the ISO 50001 published in 2018.
- The title of the standard has changed

The European standard EN ISO 52120-1 informs and supports:

- **building owners and design engineers,** in defining the functions to be implemented for a given new building or the renovation of an existing building
- **public authorities**, in defining minimum requirements for BACS and TBM functions for new buildings as well as for renovation, as defined in the relevant standard
- **public authorities**, in defining inspection procedures of technical systems as well as inspectors applying these procedures to check if the level of BACS and TBM functions implemented is appropriate
- **public authorities,** in defining calculation methods which consider the impact of BACS and TBM functions on the energy performance of buildings as well as software developers implementing these calculation methods and designers using them
- **building managers and auditors**, in checking the impact of all BACS and TBM functions when assessing the energy performance of a building
- **manufacturers and system integrators**, in providing the optimal products and solutions for high-performing buildings

PLEASE NOTE THAT FROM SEPTEMBER 2022 THE REFERENCE TO EN 15232-1,2 WILL NOT BE VALID ANYMORE!

START USING THE NEW EN ISO 52120-1:2022 IN YOUR ACTIVITIES AND DOCUMENTS TO ENSURE ITS CONSISTENT APPLICATION IN THE SINGLE MARKET.

We have already started and updated the EPBD BACS Compliance Verification Package