

Faced with rising energy costs, the need for automation to achieve energy efficiency and ultimately consume less energy is vital. Though individual products can help reduce energy consumption, building automation control systems (BACS) can prove beneficial in residential, commercial and industrial applications. In order to assist in certifying these systems, UL Solutions has created a Building Automation Controls and Systems category (CLSB) utilizing the applicable requirements of ANSI/UL 60730-1.

What are the benefits of an evaluation under UL Solutions new product category CLSB?

- CLSB helps smart building automation control system companies to centralize and efficiently manage related product certifications
- CLSB can be directly linked to the IEC/EN standards to help companies quickly switch between different regional certifications, speed up certification and reduce certification costs. (Agreement between TC 23 and TC 72 of the International Electrotechnical Organization (IEC) allows the use of both standards in the market place since the technical requirements are considered equivalent)
- The CLSB category created based on UL 60730 applicable requirements can more comprehensively evaluate product safety regulations, software, EMC, etc., and truly realize one stop service

Related products:

The products covered under this new product category include controls/systems intended to control lighting, heating, ventilation, air conditioning, and the like, for building comfort and energy efficiency, including but not limited to the products listed as below:



Gateway

Control box unit







Sensor

Actuator

Remote control unit







Dimmer function control unit

Temperature control

Smart plug/ wireless switch



This category (CLSB) does not cover building fire systems, security systems, alarm system, elevator control systems, or drapes and window operators.



How Can UL Solutions Assist?

Historically, BACS have been certified under Energy Management Equipment (UL 916), Appliance Controls (UL 244A) and Information Technology Equipment (UL 60950). Evaluation of BACS in accordance with ANSI/UL 60730-1 under UL Solutions new CLSB product category offers the added benefit of being able to bundle product evaluations for international certifications since UL 60730 is an IEC based standard, which builds upon IEC 60730-1 requirements:

Standard	Certification type
CSA E60730-1	UL Certification for Canada
IEC 60730-1	IEC CB Test Certificate or Informative Test Report,which can be used towards a manufacturer declared CE marking*
EN 60730-1	European Group Difference, which can be used towards ENEC licensing or Informative Test Report, which can be used towards a manufacturer declared CE marking*

Note: CE marking is not a UL Certification Marking

Applicable Part 2's of UL 60730 series of standards may be used in conjunction with the Part 1 standard (General Requirements) depending on the equipment's specific features (e.g., temperature sensing, humidity sensing, pressure sensing etc.).

How does UL Solutions evaluate building automation controls systems?

All BACS are evaluated and tested to address potential fire and shock hazards that may be inherent to the product design. Where the design employs a function that is relied upon for functional safety to mitigate against conditions of operation under normal and abnormal operation, a reliable hardware and software investigation is considered in accordance with UL 60730-1. This includes EMC immunity testing, Failure Modes & Effect Analysis (FMEA) of the design and a software reliability investigation, which are all inherent requirements of UL 60730.

Learn more at <u>UL.com/services/solution-control</u>

