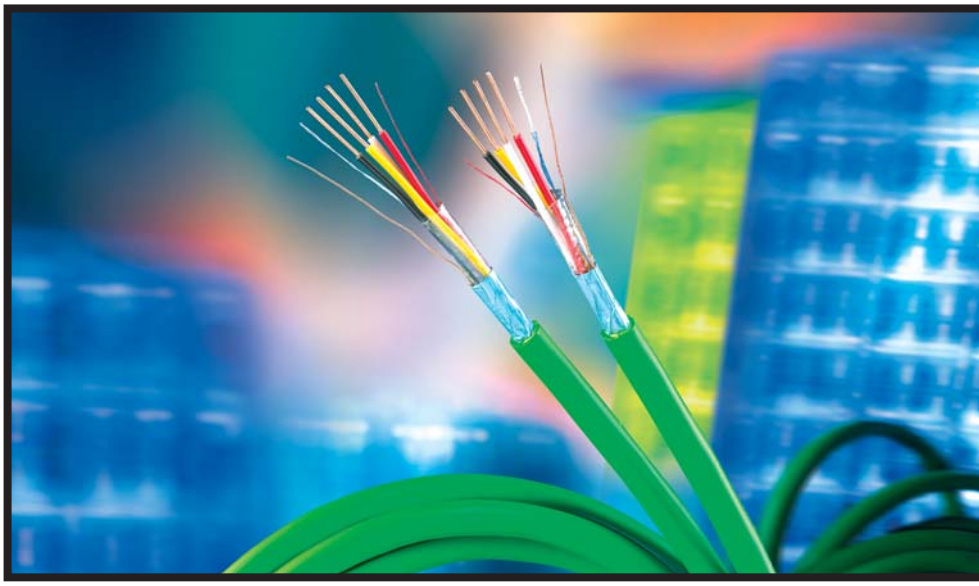
BELDEN
SENDING ALL THE RIGHT SIGNALS

New Product Bulletin

NP 106E

Building Management Systems and smart homes have become increasingly important over the past years.



Belden Offers KNX/EIB Approved Cables

To install and operate a building's management systems requires a wide range of technologies of different complexities. The control, monitoring and optimization of the various functions and services include heating and cooling, ventilation, lighting and often even the management of electric appliances.

The basic control technologies have been in existence for some time. Systems are available in various degrees of complexity, ranging from the timer-controlled water heater or thermostatic radiator valves (TRVs), to the so-called "intelligent houses" which manage, according to prearranged efficiency criteria, everything from safety and security systems to air conditioning, and from lighting and ventilation systems to telematic services and domestic appliances.

KNX

KNX standard is based upon more than 15 years of experience in the market including its predecessors EIB, EHS and BatiBUS.

In May 1999 the KNX Association cvba was formed from combining:

- EIBA (European Installation Bus Association)
- EHSA (European Home Systems Association)
- BCI (BatiBUS Club International)

Its main objective is to promote the global standard for fieldbus applications in home and building control.

KNX®

EIB

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Standard offering from a registered manufacturer

KNX is approved as:

- European Standard (CENELEC EN 50090 and CEN EN 13321-1)
- International Standard (ISO/IEC 14543-3)
- Chinese Standard (GB/Z 20965)
- US Standard (ANSI/ASHRAE 135)

KNX is user-friendly and simple, the physical layer is extremely easy to install with a remote power supply network and a totally open topology. One single KNX cable running throughout the building is all that is required to handle all the applications. This cable also powers the KNX sensors.

For ease of identification, every module of the installation is identified by a selected address by means of either drum wheels, dip switches or keyboards with displays.

Bus, star, ring, tree or any other combination can be installed as required, so this flexible architecture makes the system easy to extend. If the premises or the functions are modified, simply change the address list or connect an additional component to the bus.

The bus communication is based on a screened twisted pair cable design and is available in 1 and 2 pair configurations as well as an LSNH version for use in public areas.

Part No.	Applicable Standard(s)	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Outer Jacket Thickness		Nominal OD	
				ft.	m	lbs.	kg	inch	mm	inch	mm	inch	mm
0.8 mm (0.5 mm² or AWG 20)													
Solid BC • PVC Insulation • 100% Foil Screen • Green PVC Jacket													
KNX Reg. no. 109/7253/05													
YE00819	EN 50090 CEN/TC 247	1	Red/Black	328 500 3280	100 500 1000	8.4 46.3 89.3	3.8 21 40.5	0.012	0.3	0.043	1.1	0.217	5.5
YE00820	EN 50090 CEN/TC 247	2	Red/Black White/Yellow	328 500 3280	100 500 1000	11.5 61.7 122.3	5.2 28.0 55.5	0.012	0.3	0.043	1.1	0.241	6.1
Solid BC • PE Insulation • 100% Foil Screen • Green LSNH Jacket													
KNX Reg. no. 109/7254/05													
YE00905	IEC 60189-2 IEC 60332-1	1	Red/Black	328 1624 3280	100 500 1000	8.6 47.4 91.5	3.9 21.5 41.5	0.016	0.4	0.043	1.1	0.220	5.6
YE00906	IEC 60189-2 IEC 60332-1	2	Red/Black White/Yellow	328 1624 3280	100 500 1000	12.3 68.3 131.1	5.6 31.0 59.5	0.016	0.4	0.043	1.1	0.282	6.3