



DATA SHEET	2170240
UNITRONIC[®] BUS EIB	gültig ab : 13.10.2009

Application

Screened installation cable based on type J-Y(ST)Y in acc. to VDE 0815 for data transmission in the building management, in particular as bus cable for the European Installation Bus "EIB" (use for decentralised control of lighting, heating, air-conditioning, ventilation, energy management, blind, time management, locking systems etc.). The EIB bus cable can be laid in, on and under plaster, in pipes and cable ducts, in dry, damp and wet rooms. They may only be installed outdoors with UV-protection and in observation of the temperature range. UNITRONIC[®] BUS EIB cables have been tested with a test voltage of 4 kV. The cables may be laid respectively be touched without restrictions next to power cables.

Design

Conductor	Solid, bare copper wire, Ø 0.8 mm diameter
Insulation	special PVC-based compound
Core identification	pair 1: red and black, pair 2: white and yellow
Stranding	4 insulated conductors twisted (star-quad formation)
Wrapping	plastic foil
Screening	one layer plastics-coated aluminium foil, wrap metal side inside with Ø 0.4 mm bare copper drain wire
Sheath	special PVC-based compound, Ø max. 6.6 mm
Sheath colour	green, similar to RAL 6017

Electrical properties at 20 °C

Conductor resistance	max. Ω/km	73.2
Insulation resistance	min. MΩ x km	100
Mutual capacitance at 800 Hz	nom. nF/km	100
Inductance at 800 Hz	mH/km	0.65
Capacitive coupling k at 800 Hz	max. pF/100 m	300
Characteristic impedance at 100 kHz	nom. Ω	85
Characteristic impedance at 1MHz	nom. Ω	75
Attenuation at 10 kHz	nom. dB/km	3.5
Attenuation at 100 kHz	nom. dB/km	8
Operating voltage (not for power purposes)	peak value V	300
Test voltage (conductor/conductor)	V	1000
Test voltage (conductor/screen)	V	1000
Test voltage of the cable in water bath (5 min.)	V	4000

Mechanical and thermal properties

Minimum bending radius (fixed use)	cableØ	x 10
Permissible pulling strength	max. N	100
Permissible temperature range (fixed use)	°C	-30 to +70
Flame propagation	flame retardant acc. to IEC 60332-1-2	

Conformity

This cable confirms to RoHS directive (2002/95/EG)

elaborated by: Petra Samek, PDC	Dokument: DB2170240DE05	Blatt 1 von 1
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