#### **DATA SHEET** 2170241

valid from: 01.01.2019

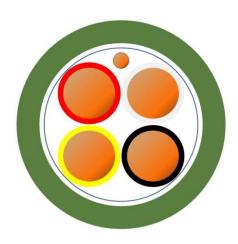
#### **UNITRONIC® BUS EIB-H**



#### **Application**

Halogen free, 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 halogen free polymer compound

Core identification code pair 1: red and black, pair 2: white and yellow

Stranding 4 insulated conductors twisted (star-quad formation)

plastic foil

Screen one layer plastics-coated aluminium foil, wrap metal side inside with Ø 0.4 mm bare copper drain

Outer sheath halogen free, flame retardant polymer compound,

green, similar to RAL 6017,

Ø max. 6.6 mm

#### Electrical properties at 20°C

Conductor resistance max. 73.2  $\Omega$ /km Insulation resistance min. 100  $M\Omega$  x km Mutual capacitance nom. nF/km

100

Inductance 0,65 mH/km

max. 300 pF/100 m Capacitive coupling at 100 kHz nom.  $\Omega$  85 Characteristic impedance at 1MHz nom.  $\Omega$  75

at 10 kHz nom. dB/km 3,5

Attenuation at 100 kHz nom. dB/km 8

Peak operating voltage 300 V (not for power applications) 1000 V Test voltage conductor/conductor

1000 V conductor/screen in waterbath (5 min.) 4000 V

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### Mechanical and thermal properties

Minimum bending radius fixed use:  $10 \times \text{cable } \emptyset$ Temperature range fixed use  $-30^{\circ} \text{ C to } +70^{\circ} \text{ C}$ 

Flammability flame retardant acc. to IEC 60332-1-2

General requirements

This cable is conform to the EU-Directive 2011/65/EU

(RoHS, Restriction of the use of certain hazardous substances).

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