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| 2170241 | DATA SHEET |  |
| 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



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| Conductor | Solid, bare copper wire, \varnothing 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 \varnothing 0.4 mm bare copper drain wire |
| Outer sheath | halogen free, flame retardant polymer compound, green, similar to RAL 6017, \varnothing max. 6.6 mm |

Electrical properties at 20°C

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| Conductor resistance | max. 73,2 Ω /km |
| Insulation resistance | min. 100 M Ω x km |
| Mutual capacitance | nom. nF/km 100 |
| Inductance | 0,65 mH/km |
| Capacitive coupling | max. 300 pF/100 m |
| Characteristic impedance | at 100 kHz nom. Ω 85 at 1MHz nom. Ω 75 |
| Attenuation | at 10 kHz nom. dB/km 3,5 at 100 kHz nom. dB/km 8 |
| Peak operating voltage | 300 V (not for power applications) |
| Test voltage | conductor/conductor 1000 V conductor/screen 1000 V in waterbath (5 min.) 4000 V |

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| Creator: TOST / PDC | Document: DB2170241EN | Page 1 of 2 |
| Released: ALTE / PDC | Version: 05 | |

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Mechanical and thermal properties

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| Minimum bending radius | fixed use: 10 x cable Ø |
| Temperature range | fixed use -30° C to +70° 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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| Creator: TOST / PDC | Document: DB2170241EN | Page 2 of 2 |
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