

<b>SPECIFICA TECNICA</b> <b>TECHNICAL SPECIFICATION</b>	
Mod. TEC-tds-0 N°0003.18 Rev.0	

**Technical specification for EIB BUS cable, Halogen Free  
HCHM, 0,8 mm copper conductors, HFFR insulation, static Aluminium screen and HFFR jacket  
EN 50575:2014+A1:2016 (CPR305/11) Class Cca-s1b-d1-a1**

## **EIB BUS CABLE**

### **EIB BUS HCHM 2x2x0,8 Cca, 250/250 V**

#### **Costruction**

##### Conductor

Material: Soft annealed copper wire  
Diameter : 0,8 mm

##### Insulation

HFFR Material HI2  
Thickness (Nominal) 0,3 mm

Stranding Quad

##### Quad Colour Code

a-wire Pair 1 Red  
b-wire Pair 1 Black  
a-wire Pair 2 White  
b-wire Pair 2 Yellow

Core wrapping Plastic tape

Screen Laminated Aluminium/plastic tape

Drain wire Tinned copper wire, 0,4 mm  $\phi$

##### Sheath

HFFR Material type HM2  
according to DIN VDE 0207 part 24  
Thickness (Nominal) 1,1 mm  
Cable diameter (Nom.) 5,7 mm  
Cable weight (Nom.) 51 kg/km  
Sheath colour Green (RAL 6018)  
Marking  
EIB BUS HCHM 2X2X0.8 - EN50575:2014+A1:2016 - Class Cca-s1-d1-a1 - week/year of production - CE mark + metric marking

#### **Electrical Characteristics**

Nominal Voltage  $U_0/U$  250/250 V (Eff.)

Working Voltage max. 350 V

Voltage test  
wire/wire 1 kV, 5 min  
wire/screen

Insulation resistance min. 1 G $\Omega$  x 1km

#### **Transmission Characteristics**

Conductor resistance at 20°C max. 73,2  $\Omega$ /km

Mutual capacitance  
at 800 Hz max. 100 nF/km

Capacitance unbalance  
at 800 Hz max. 300 pF/100m

Characteristic Impedance | Z | see Table 1

Attenuation  $\alpha$  see Table 1

Near end crosstalk (NEXT) see Table 1

#### **General characteristics**

Mechanical/thermal characteristics according to DIN VDE 0472  
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**Table 1 - Typical Value for EIB BUS HCHM 2x2x0.8**

Frequency MHz	Characteristic Impedance $\Omega$	Attenuation dB/km	Near end crosstalk NEXT dB
0,001	330 $\pm$ 50	max. 1,4	min. 80
0,01	120 $\pm$ 20	max. 3,1	min. 70
0,1	100 $\pm$ 15	max. 8,2	min. 60

0	08-02-2018	Emissione /First issue	G. Maiorani	G. Di Censo
Rev.	Data /Date:	Descrizione modifiche / Changes description	Emesso / Issued	Approvato / Approved