

**RD-H(St)H nx2x0,5 mm<sup>2</sup> Bd****UNIT TYPE CONTROL CABLES FOR POWER STATIONS**Operating voltage  
max 600 VTest voltage  
2 kVTemp. range  
fixed installation  
from -30°C to +80°CTemp. range  
during installation  
from -5°C to +70°CBending radius  
10xDFlame retardant  
PN-EN 60332-1-2Indoor  
application

Halogen-free

Low smoke  
density

Non-toxic



Non-corrosive

EMC  
Electromagnetic  
compatibility**APPLICATIONS**

**RD-H(St)H n x 2 x 0,5 mm<sup>2</sup> Bd** are unit type control cables intended for analogue or digital data transmission up to 10 kHz.

Pair lay lengths are designed to ensure minimum near-end cross-talks in units.

An electrostatic shield protects the cables against interference by external electric fields.

Halogen free cables, applied when higher safety in case of fire is required. The cables are flame retardant, their smoke emission in fire is low and released gases are not corrosive.

The cables are suitable for indoor installations connecting fixed and movable equipment.

The cable is also suitable for Maxi-Termi-Point jointing technique.

**CONSTRUCTION**

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), regular construction 7 wires,
- insulation made of halogen free compound (HFFR),
- insulated conductors twisted into pairs, star-quad assembly in the case of two-pair cable, colour of insulated conductors:

pair number	"a" wire	"b" wire
1	blue	red
2	grey	yellow
3	green	brown
4	white	black

- four pairs stranded into a unit and bound up with a polypropylene binder marked with unit number,
- units laid-up into a cable core,
- cable core wrapped in polyester tape,
- overall electrostatic shield incorporating aluminium-polyester tape and stranded annealed tinned copper drain wire, cross-section 0.5 mm<sup>2</sup> (7x0.3 mm),
- cable sheath made of halogen free compound (HFFR), grey (RAL 7001), other colours also available.

**AVAILABLE UPON REQUEST**

**RD-H(St)HH n x 2 x 0,5 mm<sup>2</sup> Bd** - cables with double HFFR sheath, suitable for outdoor installation and direct earth burial.

**RD-H(St)H nx2x0,5 mm<sup>2</sup> Bd****CHARACTERISTICS**

Operating voltage, peak value	600 V	Operating temperature range for fixed installation	from - 30 to + 80°C
Voltage test		for movable installation	from - 5 to + 70°C
conductor/conductor	2.0 kV rms	Minimum bending radius	10 x cable diameter
conductor/screen	2.0 kV rms	Corrosivity of emitted gases per	PN-EN 60754-1, PN-EN 60754-2, IEC 60754-2
DC loop resistance at 20°C, maximum	73.6 Ω/km	pH appr.	6.8
Insulation resistance, minimum	100 MΩ·km	conductivity appr.	0.4 μS/mm
Current-carrying capacity limit	6 A	Smoke density	PN-EN 61034-2, IEC 61034-2
Mutual capacitance at 800 Hz, maximum	100 nF/km*)	light transmittance, minimum	70 %
Near-end cross-talk at 10 kHz, minimum	60 dB/km	Cable combustibility	flame retardant
Characteristic impedance, nominal		Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2
at 1 kHz	370 Ω	Reference standards	DIN VDE 0815
at 10 kHz	130 Ω		
Attenuation loss, nominal			
at 1 kHz	1.2 dB/km		
at 10 kHz	3.0 dB/km		

\*) this value can be higher by 20 % in four or less pair cable

**CE = the cable meets requirements of the low voltage directive 2014/35/EU**

Product No.	Number of pairs (x 2) x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm <sup>2</sup>	mm	kg/km	kg/km
0217 003	2 x 2 x 0,5	5.8	26.0	60
0217 004	4 x 2 x 0,5	8.4	46.0	103
0217 001	8 x 2 x 0,5	12.6	86.0	195
0217 005	12 x 2 x 0,5	13.1	127.0	250

Product No.	Number of pairs (x 2) x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)
	mm <sup>2</sup>	mm	kg/km	kg/km
0217 006	16 x 2 x 0,5	15.0	167.0	310
0217 010	24 x 2 x 0,5	19.0	250.0	485
0217 007	32 x 2 x 0,5	20.9	331.0	615
0217 008	48 x 2 x 0,5	25.3	494.0	905

Other cross-sections and pair counts available on request.

TECHNOKABEL S.A. reserves the right to change specifications without prior notice.