6241B, 6242B, 6243B

300/500V

BS 7211:2012 table 5

Thermosetting insulated and LSOH sheathed flat cable with circuit protective conductor (CPC), low smoke halogen free

APPLICATIONS

for fixed installation in dry or damp premises. Suitable for installation in walls, on a wall or ceiling, or embedded in plaster. Particularly for situations in which low emission of smoke and corrosive gases is required in the case of burning. These cable are not intended to provide circuit integrity in case of fire.

Standard length cable packing	100 m coils or 500 m on drums. Other forms of packing and delivery are available on request.

CONSTRUCTION

Conductors:	Annealed copper, solid class 1 (RE) or stranded conductor class 2 (RM) acc. to BS EN 60228
Insulation:	Thermosetting compound XLPE type GP8 acc. to BS 7655-1.3
Sheath:	LSOH compound type LTS2 acc. to BS 7655-6.1

CHARACTERISTICS

Colour of sheath:	white or other agreed
Core identification:	single core: brown or blue twin core: brown and blue, or for 2 x 1,0 and 2 x 1,5 cables , brown and brown 3-core: brown, black (centre core) and grey
Maximum conductor operating temperature:	+90°C
Lowest ambient temperature for fixed installation:	-30°C
Lowest installation temperature:	-5°C
Maximum short-circuit conductor temperature:	+250°C
Minimum bending radius:	6 × D, D – overall diameter
Test voltage:	2000V

Fire performance

Flame retardant:	EN 60332-1-2, EN 60332-3-24
CPR – class reaction to fire (acc EN 50575):	Dca-s2,d1,a1
Corrosive and acid gas emission:	BS EN 60754-2, pH ≥ 4,3 & conductivity ≤ 10 μSmm^{-1} BS EN 60754-1, HCL ≤ 0,5%
Smoke emission:	BS EN 61034-2

Approvals

BASEC

Technical and Electrical Characteristics

Number and cross-sectional area of conductor	Number of wires in conductor	Nominal thickness of insulation	Nominal thickness of sheath	Cross-sectional area of protective conductor	Approximate overall dimensions	Approximate net weight of cables	Maximum conductor resistance at temperature 20°C
n × mm²	**n**	**mm**	**mm**	**mm²**	**mm x mm**	**kg/km**	**Ω/km**
1x1RE	1	0,7	0,9	1RE	4,3x5,7	42	18,1/18,1
1x1,5RE	1	0,7	0,9	1RE	4,6x5,7	48	12,1/18,1
2x1RE	1	0,7	0,9	1RE	4,3x7,9	64	18,1/18,1
2x1,5RE	1	0,7	0,9	1RE	4,6x8,4	76	12,1/18,1
2x2,5RE	1	0,7	1,0	1,5RE	5,1x9,6	107	7,41/12,1
2x4RM	7	0,7	1,0	1,5RE	5,9x11,2	148	4,61/12,1
2x6RM	7	0,7	1,1	2,5RE	6,5x12,5	202	3,08/7,41
2x10RM	7	0,7	1,2	4RM	7,6x15,3	313	1,83/4,61
2x16RM	7	0,7	1,3	6RM	8,8x17,9	464	1,15/3,08
3x1RE	1	0,7	0,9	1RE	4,3x10,4	85	18,1/18,1
3x1,5RE	1	0,7	0,9	1RE	4,6x11,2	103	12,1/18,1
3x2,5RE	1	0,7	1,0	1,5RE	5,1x12,8	141	7,41/12,1

Electrical Characteristics

Number and cross-sectional area of conductor	Current rating single-phase A.C. or D.C. *				Voltage Drop DC	Voltage Drop single-phase AC
	Enclosed in conduit in thermally insulating wall	Enclosed in conduit on a wall or in trunking	Clipped direct	Free air or on a perforated cable tray etc, horizontal or vertical		
n × mm²	**Amp**	**Amp**	**Amp**	**Amp**	**mV/A/m**	**mV/A/m**
1x1RE	14,5	17	19	21	46	46
1x1,5RE	18,5	22	24	26	31	31
2x1RE	14,5	17	19	21	46	46
2x1,5RE	18,5	22	24	26	31	31
2x2,5RE	25	30	33	36	19	19
2x4RM	33	40	45	49	12	12
2x6RM	42	51	58	63	7,9	7,9
2x10RM	57	69	80	86	4,7	4,7
2x16RM	76	91	107	115	2,9	2,9
3x1RE	13	15	17	18	-	40
3x1,5RE	16,5	19,5	22	23	-	27
3x2,5RE	22	26	30	32	-	16

*acc to BS 7671 table 4E2A & 4E2B