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SPECIFICATION
FOR
FIRE RESISTANT CABLE
MAX-FOH(i)

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SPECIFICATION
FOR
FIRE RESISTANT CABLE
MAX-FOH(i)

1. Scope

This specification covers the cable rate voltage 0.6/1kV* concentric stranded plain annealed copper conductor, fire barrier layer, halogen-free crosslinked ethylene vinyl acetate (XLEVA) compound insulated and low emission of smoke and corrosive gases when exposed to fire cable comply to BS EN 50525-3-41, IEC60331, IEC60332-3-22, IEC 60754-2, BS EN 61034.

* Rate voltage 0.6/kV when the cable is used in fixed installations with mechanical protection, with in switchgear.
For other installation the cable used at rate voltage 450/750V.

2. Conductor

The conductor shall be concentric stranded plain annealed copper wires in accordance with IEC 60228 class 2.

3. Fire barrier

The fire barrier shall be the mica tape applied over the conductor.

The thickness of mica tape shall be approximately 0.14 mm.

4. Insulation

The insulation shall be extruded with cross linked ethylene vinyl acetate (XLEVA, EI 5) compound.

The average thickness of insulation shall be not less than the nominal value give in the attached table.

The minimum thickness at any point shall be not fall below the nominal value by more than 10% + 0.1 mm.

5. Identification of cores

Each cores shall be identified by :

Single Core : Orange

6. Inspection and Test

The following test on the cable shall be performed BS EN 50525-3-41 e.g.

1. Routine test

- Conductor resistance measurement and conductor examination.
- A.C. High voltage test at 2.5kV.
- Dimension check

2. Special test

- IEC60331-21 : Fire resistant characteristics of electric cable
- IEC60332-3 : Tests on electric cable under fire conditions Part 3 test on bunched wires or cables
- BS6387 / SS299 Part 1 : Performance requirements for cables required to maintain
circuit integrity under fire conditions
Category C,W,Z

7. Marking

The marking information shall be marked on the sheath surface of the cable the as follow :-

1. Manufacturer's name and/or trade mark.
2. Type of cable
3. Rated voltage.
4. Type of material
5. Standard
6. Number of core and size of conductor
7. Cable length marking interval 1 meter.

8. Packing

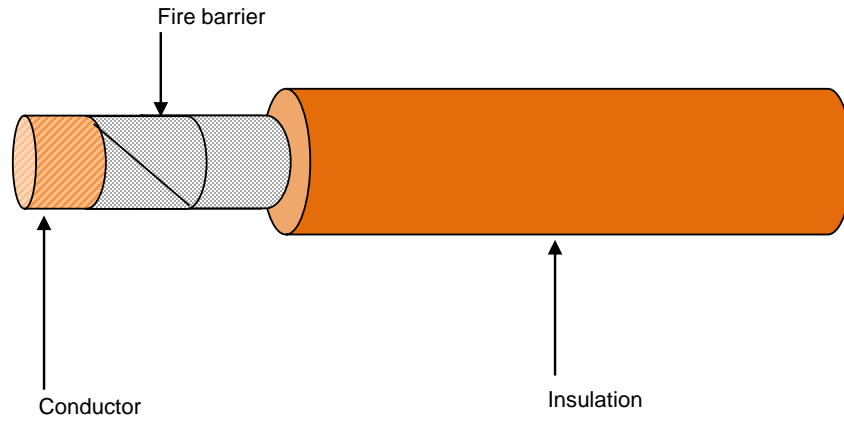
The length of cable shall be wound on a non-returnable wooden drum. Each drum shall have clearly at least information as follow :-

1. Manufacturer's name and/or trade mark.
2. Type of cable.
3. Number core and size of conductor
4. Length of the cable.
5. Net weight and gross weight
6. Drum number.

ATTACHED TABLE

No. of core	Conductor		Insulation thickness of (mm) (Nominal)	Overall diameter of cable ±10% (Approx.) (mm)	Conductor resistance at 20°C (Max) Ohm/km	Current Rating in free air 40°C (A)	Voltage Drop		Cable weight kg./km. (Approx.)	Standard length m/Drum (Approx.)
	Size (mm ²)	Diameter (Approx.) (mm)					1 Phase AC/DC mV/A/m	3 Phase AC mV/A/m		
1	1.5	1.5	0.7	3.8	12.1	24	30.90	26.70	29	1000
1	2.5	2.0	0.8	4.5	7.41	33	18.90	16.40	42	1000
1	4	2.5	0.8	5	4.61	44	11.80	12.20	58	1000
1	6	3.1	0.8	5.6	3.08	57	7.86	6.80	81	1000
1	10	4.0	1.0	6.9	1.83	79	4.67	4.05	131	1000
1	16	5.1	1.0	7.9	1.15	105	2.94	2.55	190	1000
1	25	6.4	1.2	9.6	0.727	145	1.86	1.61	297	1000
1	35	7.7	1.2	11	0.524	180	1.35	1.17	400	1000
1	50	8.9	1.4	12.6	0.387	220	1.00	0.87	537	1000
1	70	10.7	1.4	14.4	0.268	280	0.703	0.609	749	1000
1	95	12.6	1.6	16.7	0.193	350	0.519	0.449	1026	1000
1	120	14.2	1.6	18.3	0.153	405	0.422	0.365	1279	1000
1	150	15.8	1.8	20.3	0.124	465	0.354	0.307	1569	1000
1	185	17.6	2.0	22.5	0.0991	540	0.299	0.259	1959	500
1	240	20.3	2.2	25.6	0.0754	645	0.278	0.215	2523	500
1	300	22.7	2.4	28.4	0.0601	740	0.219	0.190	3149	500
1	400	25.7	2.6	31.8	0.0470	860	0.196	0.170	4003	500
1	500	28.8	2.8	35.3	0.0366	1000	0.180	0.156	5009	300
1	630	32.8	2.8	39.3	0.0283	1155	0.167	0.144	6468	300

Illustration of Cable



Description	Material
Conductor	Plain annealed copper stranded wires
Fire barrier	Mica tape
Insulation	Cross linked ethylene vinyl acetate (XLEVA) compound