HALOGEN FREE INSULATED ARMOURED CABLES TO BS 7835 STRANDED COPPER CONDUCTORS

10 9 8 7 6 5 4 3 2 1

1. Round stranded compacted conductor
2. Extruded semi-conductive conductor screen
3. XLPE insulation
4. Extruded semi-conductive insulation screen
5. Copper tape overlapped over each core
6. Fillers
7. Plastic tape
8. LSF inner sheath
9. Galvanised steel wires
10. LSF outersheath

CABLE TYPE: XLPE/CTS/LSF/SWA/LSF
NOMINAL VOLTAGE: 6,35/11 kV
SPECIFICATION: BS 7835

The cable can be also produced with CWS or CTS according to IEC 60502-2.

CABLES WITH COPPER CONDUCTOR											
NOMINAL AREA OF CONDUCTOR	DIAMETER (APPROX.) UNDER ARMOUR	DIAMETER (APPROX.) OVER ARMOUR	DIAMETER (APPROX.) OVERALL	NET WEIGHT (APPROX.)	CONTINUOUS CURRENT RATING IN GROUND		CONTINUOUS CURRENT RATING IN DUCTS		CONTINUOUS CURRENT RATING IN AIR	
					TREFOIL	FLAT	TREFOIL	FLAT	TREFOIL	FLAT
mm²	mm	mm	mm	kg/km	A	A	A	A	A	A
1X50	23,9	27,1	30,9	1400	220	230	220	220	250	300
1X70	25,6	28,8	32,6	1600	270	280	260	270	310	370
1X95	27,0	31,0	35,0	2000	320	335	305	325	375	460
1X120	28,3	32,3	36,5	2400	360	380	340	370	430	530
1X150	29,8	33,8	38,0	2700	410	430	375	410	490	600
1X185	31,6	35,6	40,0	3100	455	485	410	460	550	690
1X240	33,9	37,9	42,5	3800	520	560	470	540	650	820
1X300	36,2	40,2	44,8	4400	580	640	500	610	740	940
1X400	39,4	44,4	49,4	5600	650	730	530	690	840	1100
1X500	42,8	47,8	53,0	6700	710	830	570	780	930	1280
1X630	46,7	51,7	57,1	8300	760	940	620	890	1040	1480
1X800	51,2	56,2	61,8	10200	810	1060	660	990	1140	1690
1X1000	55,8	60,8	66,8	12400	860	1170	690	1090	1230	1900
3X25	44,3	49,3	54,5	4810	140		125		145	
3X35	46,3	51,3	56,7	5280	170		150		175	
3X50	48,6	53,6	59,2	5960	210		180		220	
3X70	52,2	57,2	63,0	7090	250		215		270	
3X95	56,2	61,2	67,2	8210	300		255		330	
3X120	59,6	64,6	70,8	9440	340		290		380	
3X150	62,6	67,6	74,0	10770	380		330		430	
3X185	66,9	73,2	80,0	12320	430		370		490	
3X240	72,3	78,6	85,8	15570	500		430		570	
3X300	77,3	83,6	91,0	18510	540		470		650	

Single core cables are aluminium wire armoured

Note:
The above ratings are given for 25°C ambient temperature, depth of laying 0,8 m, ground temperature 15°C, thermal resistivity of soil 1,2 Km/W and maximum conductor temperature 90°C. Single core cables are laid either in trefoil formation touching or in flat formation spaced by one cable diameter. For other conditions the correction factors are given below:

Ambient Temperature °C:	25	30	35	40	45	50	55
Correction factor	1,0	0,96	0,92	0,88	0,83	0,78	0,73

Ground Temperature °C:	25	30	35	40	45	50	55
Correction factor	1,0	0,96	0,92	0,88	0,83	0,78	0,73

Ground thermal resistivity:	0,9	1,0	1,2	1,5	2,0	2,5	3,0
Correction factor	1,06	1,04	1,0	0,92	0,82	0,74	0,68

Depth of laying m:	0,8	1,0	1,25	1,5	1,75	2,0	2,5
Correction factor	1,0	0,97	0,95	0,94	0,93	0,91	0,90

MIN. bending radius during installation	Single core cables 20 D	Multicore cables 15 D

D: overall diameter of cable

CORE IDENTIFICATION:
In three core cables each phase is identified by a coloured strip laid longitudinally under the metallic screen.