



SSE BS7870 11KV SAC LLDPE SCREENED POWER CABLE



APPLICATION

SSE approved medium voltage aluminium power cable for connections from electrical grid to sub-main developments. Suitable for power networks, underground, outdoors and installation in cable ducting.

Please note: the red outer sheath can be prone to fading when exposed to UV rays.

CONSTRUCTION

Conductor:	Class 2 Stranded Circular Compacted Aluminium Conductor
Screen:	Fully Bonded Semi-conductive Compound
Insulation:	Cross Link Polyethylene (XLPE)
Insulation Screen:	Semi-conductive Compound
Screen:	Copper Wires & Helical Equalising Copper Tape
Separator:	Binding Tape Helically Applied
Sheath:	Linear Low-Density Polyethylene (LLDPE)
Sheath Colour:	Red

CABLE STANDARDS

BS 7870 4.20
BS EN 60228
Flame propagation to BS EN60332
DNO approved for SSE

CHARACTERISTICS

Voltage Rating:	6350/11000 Volts (11kV)
Temperature Limits:	-15°C to 90°C
Minimum Bending Radius:	As per cable manufacturer datasheet

CORE IDENTIFICATION

3 Core	Brown Black Grey Tapes
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Should not be installed at temperatures below 0°C or above +60°C



SSE BS7870 11KV SAC LLDPE SCREENED CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	NO. OF CORES	NOMINAL AREA OF METALLIC SCREEN	MAXIMUM VOLTAGE RATING	WEIGHT (KG/KM)	NOMINAL INSULATION THICKNESS (MM)	APPROX OVERALL DIAMETER	MIN BENDING RADIUS
SSE11KVLLDPE3X95AL	95	3	60	11KV	2540	3.4	51.8	1040
SSE11KVLLDPE3X150AL	150	3	60	11KV	3700	3.4	62.5	1250
SSE11KVLLDPE3X240AL	240	3	60	11KV	4870	3.4	71.1	1420
SSE11KVLLDPE3X300AL	300	3	60	11KV	5680	3.4	75.8	1510

SSE BS7870 11KV SAC LLDPE SCREENED CABLE - ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA (MM ²)	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	CONDUCTOR AC RESISTANCE (90°C Ω/KM)	INDUCTANCE Mh/KM	REACTANCE AT 50HZ OHMS/KM	CAPACITANCE (µF/KM)	1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR KA	1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN KA
70	0.443	0.569	0.400	0.101	0.250	6.600	8,900
150	0.206	0.265	0.350	0.091	0.330	14.200	8,900
240	0.125	0.161	0.330	0.085	0.410	22.700	8,900
300	0.1	0.13	0.310	0.084	0.440	28.300	8,900

THE ABOVE IS IN ACCORDANCE WITH SPEN CAB-03-020.

SSE BS7870 11KV SAC LLDPE SCREENED CABLE - CURRENT CARRYING CAPACITY

MAX VOLTAGE RATING	MUTUAL CAPACITANCE pF/m			
	NOMINAL CROSS SECTIONAL AREA (mm ²)	IN GROUND AMPS	IN DUCTS AMPS	IN AIR AMPS
11kV	70	199	168	217
11kV	150	303	259	344
11kV	240	399	344	468
11kV	300	450	390	535

ELECTRICAL DATA:

Maximum conductor operating temperature: 90°C
 Maximum screen operating temperature: 80°C
 Maximum conductor temperature during S.C: 250°C

LAYING CONDITIONS AT TREFOIL FORMATION ARE AS BELOW:

Soil thermal resistivity: 1.2°K.m/W
 Burial depth: 0.6m
 Ground temperature: 15°C
 Air temperature: 25°C

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.