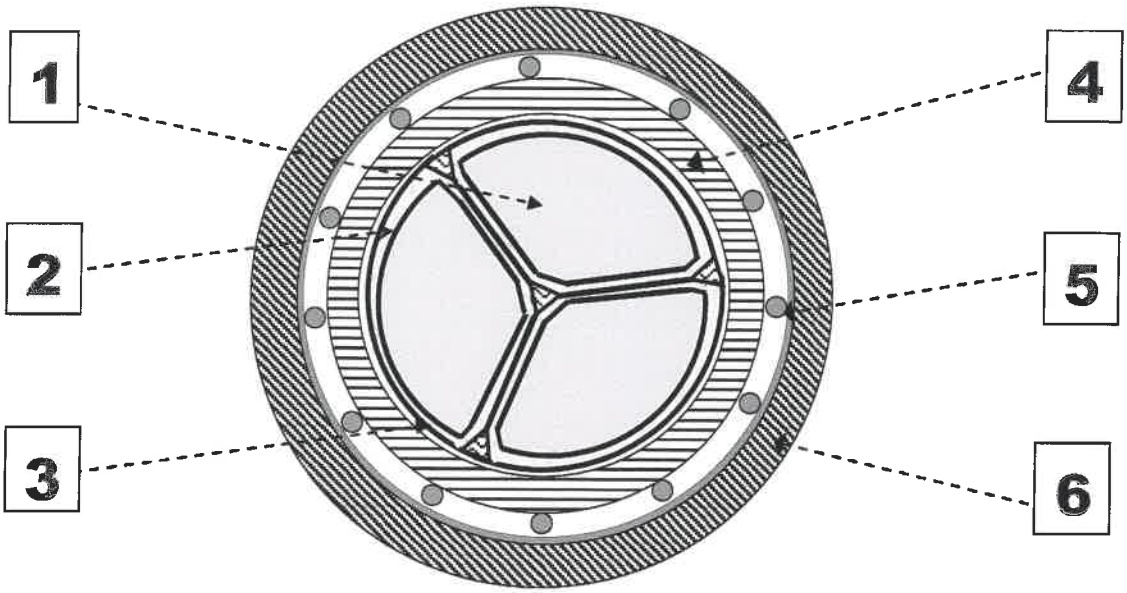
Three-Phase Shaped Aluminium Conductor with Helical Concentric Copper Neutral/Earth Conductor

Parameter			
Nominal cross-sectional area (mm^2)	$95mm^2$	$185mm^2$	$300mm^2$
Minimum average thickness of insulation (mm)	1.1	1.6	1.8
Minimum thickness of insulation at any point (mm)	0.89	1.34	1.52
Concentric neutral/earth conductor: • Approximate number of wires • Approximate diameter of wires (mm) • Approximate length of lay (mm)	 22 1.85 250	 41 1.85 300	 41 1.85 440
Minimum average thickness of oversheath (mm)	2.1	2.5	2.8
Minimum thickness of oversheath at any point (mm)	1.68	2.02	2.28
Approximate overall diameter (mm)	36	46	56
Approximate cable weight (kg)	1980	3520	4810
Maximum DC resistance of phase conductor @ 20°C (Ω/km)	0.320	0.164	0.100
Maximum DC resistance of neutral/earth conductor @ 20°C (Ω/km)	0.320	0.164	0.164
Maximum AC resistance of conductor @ 90°C (Ω/km)	0.411	0.211	0.130
Approximate Reactance @ 50Hz (Ω/km)	0.073	0.073	0.072
Approximate volt drop (mV/A/m)	0.72	0.39	0.26
Zero Phase Sequence Resistance (Ω/km)	0.241	0.124	0.084
Zero Phase Sequence Reactance (Ω/km)	0.086	0.077	0.074
Minimum bending radius (mm)	285 (*)	375 (*)	455 (*)
Nominal internal diameter of ducts (mm)	70	90	110
Current Ratings			
Direct in ground (Amps)	244	353	461
In Ducts (Amps)	227	328	429
In Air (Amps)	232	364	508
Current rating conditions			
Ground temperature	15°C		
Ambient Air temperature	25°C		
Depth of burial (to top of cable)	450mm		
Thermal resistance of soil	1.2°C m/W		

(*) during installation



1: SOLID ALUMINIUM CONDUCTOR
2: XLPE INSULATION
3: BINDING YARNS OR TAPE
4: RUBBER BEDDING
5: COPPER WIRES
6: PVC SHEATH