BS 5467 Copper Conductor Single Core AWA PVC 1.9/3.3kV Cable

Eland Product Group: B9S

APPLICATION

Single core PVC cable with aluminium wire armour (AWA). Power and auxiliary control cables for use in power networks, underground in free-draining soil, outdoor and indoor applications and for use in cable ducting.

CHARACTERISTICS

Voltage Rating Uo/U
1.9/3.3kV

Temperature Rating
Maximum Operating: +90°C
Maximum Short-Circuit: +250°C

Minimum Bending Radius
8 x overall diameter

CONSTRUCTION

Conductor
Class 2 circular stranded copper

Insulation
XLPE (Cross-Linked Polyethylene)

Separator
Polyester Tape

Filler
PVC (Polyvinyl Chloride)

Armour
AWA (Aluminium Wire Armour)

Outer Sheath
PVC (Polyvinyl Chloride)

Core Identification
● Brown

Sheath Colour
● Black

STANDARDS

BS 5467, IEC/EN 60502-1, EN 60228

Flame retardant to IEC/EN 60332-1
UV Resistant

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.

SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	MINMUM THICKNESS OF OUTER SHEATH mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
B9S01050BK	1	50	8.1	2.0	1.08	19	956
B9S01070BK	1	70	9.7	2.0	1.08	20	1201
B9S01095BK	1	95	11.4	2.0	1.08	22	1499
B9S01120BK	1	120	12.65	2.0	1.16	25	1936
B9S01150BK	1	150	14.15	2.0	1.16	26	2254
B9S01185BK	1	185	15.75	2.0	1.24	28	2650
B9S01240BK	1	240	18.2	2.0	1.24	30	3280
B9S01300BK	1	300	20.5	2.0	1.32	33	3938
B9S01400BK	1	400	23	2.0	1.4	37	5090
B9S01500BK	1	500	26	2.2	1.48	40	6255
B9S01630BK	1	630	29.7	2.4	1.56	45	7809

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm²	REFERENCE METHOD C (CLIPPED DIRECT) Amps		REFERENCE METHOD F (IN FREE AIR OR ON A PERFORATED CABLE TRAY ETC HORIZONTAL OR VERTICAL ETC) Amps									MAXIMUM CONDUCTER DC RESISTANCE AT 20°C Ω/km
	Touching		Touching			Spaced by one diameter						
	2 Cables Single-Phase AC or DC flat	3 or 4 Cables Three-Phase AC	2 Cables Single-Phase AC or DC flat	3 Cables Three-Phase AC flat	3 Cables Three-Phase AC trefoil	2 Cables DC	2 Cables, single-phase AC		3 or 4 Cables Three-phase AC			
						Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	
50	237	220	253	232	222	284	270	282	266	288	266	0.387
70	303	277	322	293	285	356	349	357	337	358	331	0.268
95	367	333	389	352	346	446	426	436	412	425	393	0.193
120	425	383	449	405	402	519	497	504	477	485	449	0.153
150	488	437	516	462	463	600	575	566	539	549	510	0.124
185	557	496	587	524	529	688	660	643	614	618	574	0.0991
240	656	579	689	612	625	815	782	749	714	715	666	0.0754
300	755	662	792	700	720	943	906	842	805	810	755	0.0601
400	853	717	899	767	815	1137	1094	929	889	848	797	0.0471
500	962	791	1016	851	918	1314	1266	1032	989	923	871	0.0366
630	1082	861	1146	935	1027	1528	1474	1139	1092	992	940	0.0283

Air ambient temperature: 30°C
Conductor operating temperature: 90°C

Notes
1. Where a conductor operates at a temperature exceeding 70°C it must be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see Regulation 512.1.2 of the 18th Edition of IEE Wiring Regulations).

2. Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70°C , the current ratings given in the equivalent table for 70°C thermoplastic insulated cables (Table 4D3A) must be used (see also Regulation 523.1 of the 18th Edition of IEE Wiring Regulations).

The above table is in accordance with Table 4E3A of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52

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