

6941AX 3.3KV - BS5467 SINGLE CORE MAINS CABLE PVC AWA



APPLICATION

6941AX 3.3KV Mains cable, single core aluminium wire armoured cable is most commonly used in power networks, due to the armour providing mechanical protection. Designed for use in AC circuits, the aluminium armour prevents magnetic build up and the PVC outer sheath protects the cable.

CABLE STANDARDS

BS5467
Flame propagation to BS EN 60332-1-2

CONSTRUCTION

Conductor: Stranded Plain Annealed Circular Copper Conductor
Insulation: Cross Linked Polyethylene (XLPE)
Bedding: PVC
Armour: Aluminium Wire Armour (AWA)
Sheath: PVC

CHARACTERISTICS

Voltage Rating: 1900 to 3300 Volts
Temperature Limits: -15°C to +90°C
Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION

■ Brown Inner

Should not be installed at temperatures below 0°C or above +60°C

6941AX 3.3KV/BS5467 CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO OF CORES	WEIGHT Kg/Km	OVERALL DIAMETER (MM)	GLAND SIZE	NYLON CLEAT	TREFOIL CLEAT
6941AX120/3	120	37/2.03	1	1490	23.20	25	1.2	-
6941AX150/3	150	37/2.25	1	1870	26.30	32	1.2	-
6941AX185/3	185	37/2.52	1	2290	28.70	32	1.4	TASB04
6941AX240/3	240	61/2.25	1	2880	31.40	40	1.4	TASB05
6941AX300/3	300	61/2.52	1	3520	34.10	40	1.8	TASB07
6941AX400/3	400	61/2.85	1	4520	38.90	50S	1.8	TASB10
6941AX500/3	500	61/3.2	1	5680	42.80	50S	1.8	TASB12
6941AX630/3	630	127/2.52	1	7120	47.30	50	2.0	TASB15

6941AX 3.3KV/BS5467 CABLE - CURRENT CARRYING CAPACITY

CONDUCTOR CROSS-SECTIONAL AREA	REFERENCE METHOD C (CLIPPED DIRECT)		REFERENCE METHOD F (IN FREE AIR ON A PERFORATED CABLE TRAY HORIZONTAL / VERTICAL)								
	TOUCHING		TOUCHING			SPACED BY ONE DIAMETER					
	2 CABLES, SINGLE - PHASE AC OR DC	3 OR 4 CABLES, 3 PHASE AC	2 CABLES, SINGLE - PHASE AC OR DC FLAT	3 CABLES, 3 PHASE AC FLAT	3 CABLES, THREE - PHASE AC TREFOIL	2 CABLES DC		2 CABLES, SINGLE PHASE AC		3 OR 4 CABLES, THREE-PHASE AC FLAT	
						HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
1	2	3	4	5	6	7	8	9	10	11	12
(MM ²)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
120	425	383	449	405	402	519	497	504	477	485	449
150	488	437	516	462	463	600	575	566	539	549	510
185	557	496	587	524	529	688	660	643	614	618	574
240	656	579	689	612	625	815	782	749	714	715	666
300	755	662	792	700	720	943	906	842	805	810	755
400	853	717	899	767	815	1137	1094	929	889	848	797
500	962	791	1016	851	918	1314	1266	1032	989	923	871
630	1082	861	1146	935	1027	1528	1474	1139	1092	992	940

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

6941AX 3.3KV/BS5467 CABLE - VOLTAGE DROP

CROSS SECTIONAL AREA MM ²	2 CABLES DC	REFERENCE METHODS C AND F (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)														
		2 CABLES SINGLE PASS AC						3 OR 4 CABLES THREE PHASE AC								
		TOUCHING			SPACED			TREFOIL / TOUCHING			FLAT / TOUCHING			FLAT / SPACED		
		r	X	Z	r	X	Z	r	X	Z	r	X	Z	r	X	Z
120	0.39	0.410	0.19	0.45	0.43	0.27	0.51	0.35	0.165	0.39	0.38	0.24	0.44	0.410	0.3	0.51
150	0.310	0.33	0.185	0.38	0.36	0.27	0.45	0.29	0.16	0.33	0.310	0.23	0.39	0.34	0.29	0.45
185	0.25	0.270	0.185	0.33	0.3	0.26	0.4	0.23	0.16	0.28	0.26	0.23	0.34	0.29	0.29	0.41
240	0.195	0.210	0.18	0.28	0.24	0.26	0.35	0.18	0.155	0.24	0.210	0.22	0.3	0.24	0.28	0.37
300	0.155	0.17	0.175	0.25	0.195	0.25	0.32	0.145	0.15	0.210	0.17	0.22	0.28	0.2	0.270	0.34
400	0.115	0.145	0.17	0.22	0.18	0.24	0.3	0.125	0.15	0.195	0.16	0.210	0.27	0.2	0.270	0.33
500	0.093	0.125	0.170	0.210	0.165	0.24	0.29	0.105	0.145	0.18	0.145	0.2	0.25	0.19	0.24	0.31
630	0.073	0.105	0.165	0.195	0.15	0.23	0.27	0.092	0.145	0.17	0.135	0.195	0.24	0.175	0.23	0.29

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CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT
 X = REACTIVE COMPONENT
 Z = IMPEDANCE VALUE

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