

Introduction

AEI Cables Limited is a subsidiary of TT Group PLC and was formed in the mid 1960's as a result of the amalgamation of a number of long established cable manufacturers previously trading as separate subsidiaries of Associated Electrical Industries Limited. These included such well known names as W. T. Henley, Siemens, Edison Swan and Hackbridge Cables with a history dating back over 150 years to the very origins of electrical distribution.

AEI Cables has three manufacturing sites in the UK at Birtley in County Durham, Gravesend in Kent and Bootle on Merseyside. These three factories manufacture a vast range of cables for almost every application from 132kV supertension cables to fire performance cables and which have been used throughout the world on numerous and diverse projects.

This brochure covers the range of standard general wiring cables manufactured by AEI Cables but where a project requires cables with different properties or characteristics then we will always be pleased to discuss your specific requirements.

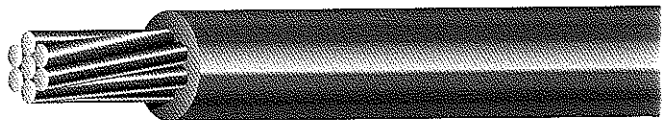
Should you require information on any of the other cables in the AEI Cables range please use the Fax Back facility in the back page of this brochure, or contact us using our e-mail or website addresses shown on the same page.

Technical Note

All the cables detailed within this brochure represent AEI Cables standard range. However, cables can be manufactured, upon request, in different colours, core configurations and conductor sizes, subject to technical and commercial considerations.

NB: For a number of reasons, for instance as a result of improvements in design, in methods of manufacture or experience in use or as permitted by the relevant British Standard specification, the products as supplied at any one time may differ from the descriptions given in this publication.

Conduit Wiring



6491X - Single Core non-sheathed cables to BS6004.

Construction: Plain annealed copper conductor, PVC insulated

Standard colours: Green/Yellow, Red, Black, Blue and Yellow.

Harmonized codes: Solid Conductor - H07V-U
Stranded Conductor - H07V-R.

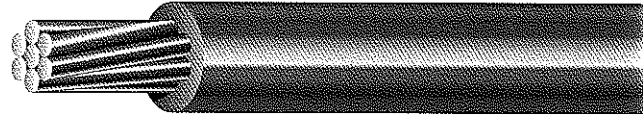
Voltage Rating: 450/750 Volts

H07V

Nominal Cross Sectional Area of Conductor	Current Rating ^a		Voltage Drop ^b			Maximum DC Conductor Resistance at 20°C	Nominal Overall Diameter	Nominal Weight
	2 Cables Single Phase ac or dc	3 or 4 Cables Three Phase ac	2 Cables Single Phase ac or dc		3 or 4 Cables Three Phase ac			
mm ²	Amps	Amps	mV/A/m		mV/A/m	ohms/km	mm	kg/km
1.5+	17.5	15.5	29		25	12.1	3.3	21
2.5+	24	21	18		15	7.41	3.9	33
4	32	28	11		9.5	4.61	4.8	51
6	41	36	7.3		6.4	3.08	5.4	71
10	57	50	4.4		3.8	1.83	6.8	120
16	76	68	2.8		2.4	1.15	8.0	180
			ac	dc				
25	101	89	1.8	1.75	1.55	0.727	9.8	285
35	125	110	1.3	1.25	1.10	0.524	11.0	380
50	151	134	1.0	0.93	0.85	0.387	13.0	510
70	192	171	0.72	0.63	0.61	0.268	15.0	720
95	232	207	0.56	0.46	0.48	0.193	17.0	990
120	269	239	0.47	0.36	0.41	0.153	19.0	1230
150	300	262	0.41	0.29	0.36	0.124	21.0	1510
185	341	296	0.37	0.23	0.32	0.099	23.5	1900
240	400	346	0.33	0.180	0.29	0.075	26.5	2490
300	458	394	0.31	0.145	0.27	0.0601	29.5	3100
400	546	467	0.29	0.105	0.25	0.0470	33.5	3950
500*	626	533	0.28	0.086	0.25	0.0366	37.0	4950
630*	720	611	0.27	0.068	0.24	0.0283	41.0	6300

- * National Types
- + Available with Solid or Stranded Conductor
- ∅ The Current Ratings and Voltage Drop factors are extracted from Appendix 4 of BS7671, Requirements for Electrical Installations: IEE Wiring Regulations Sixteenth Edition, table 4D1A, for single core cables installed in the following condition: Reference method 3 "Enclosed in conduit on a wall or in a trunking".

Conduit Wiring



6491LSZH - Thermosetting insulated non-sheathed single core Low Smoke Zero Halogen (LSZH) cable to BS7211.

Construction: Plain or tinned annealed copper conductor, Thermosetting type EI 5 insulated

Standard colours: Red, Black, and Green/Yellow.

Harmonized codes: Solid Conductor - H07Z-U
Stranded Conductor - H07Z-R.

Voltage Rating: 450/750 Volts

6491LSZH

Nominal Cross Sectional Area of Conductor	Current Rating ¹		Voltage Drop ²		Maximum DC Conductor Resistance at 20°C	Nominal Overall Diameter	Nominal Weight	
	2 Cables Single Phase ac or dc	3 or 4 Cables Three Phase ac	2 Cables Single Phase ac or dc	3 or 4 Cables Three Phase ac				
mm ²	Amps	Amps	mV/A/m	mV/A/m	ohms/km	mm	kg/km	
1.5	22	19	31	27	12.1	3.4	22	
2.5	30	26	19	16	7.41	4.2	34	
4	40	35	12	10	4.61	4.8	50	
6	51	45	7.9	6.8	3.08	5.4	72	
10	71	63	4.7	4.0	1.83	6.8	114	
16	95	85	2.9	2.5	1.15	8.0	171	
			ac	dc				
25	126	111	1.90	1.85	1.65	0.727	9.8	292
35	156	138	1.35	1.35	1.15	0.524	11.0	369
50	189	168	1.05	0.99	0.90	0.387	13.0	494
70	240	214	0.75	0.68	0.65	0.268	15.0	695
95	290	259	0.58	0.49	0.50	0.193	17.0	965
120	336	299	0.48	0.39	0.42	0.153	19.0	1199
150	328	328	0.43	0.32	0.37	0.124	21.0	1475
185	370	370	0.37	0.25	0.32	0.0991	23.5	1857
240	500	433	0.33	0.190	0.29	0.0754	26.5	2956
300	573	493	0.31	0.155	0.27	0.0601	29.5	3047
400	683	584	0.29	0.120	0.25	0.0470	33.5	3878
500*	783	666	0.28	0.093	0.24	0.0366	37.0	5010
630*	900	764	0.27	0.072	0.23	0.0283	41.0	6274

* National Types

- ∅ The current Ratings and Voltage Drop factors are extracted from Appendix 4 of BS7671, Requirements for Electrical Installations: IEE Wiring Regulations Sixteenth Edition, table 4E1A, for single core cables installed in the following condition: Reference method 3 "Enclosed in conduit on a wall or in a trunking".