

Constructional and Electrical Performance Data

6181Y – Surface Wiring Cable



Construction	Solid or stranded plain annealed copper conductors, Polyvinyl Chloride (PVC) insulation, Polyvinyl Chloride (PVC) sheath		
Specification	BS6004 Table 7(1.00 – 35.00mm ²) BS6346 (50.00 – 1000.00mm ²)	Voltage Rating	0.3/0.5 kV (1.00 – 35.00mm ²) 0.6/1.0 kV (50.00 – 1000.00mm ²)
Operating Temperature	0°C (Min) to 70°C (Max)		
Standard Colours	Core : Red or Black Sheath : Grey or Black		
Harmonised Code	National Type		
Approvals	BASEC Schedule No. 024/001/173 (1.00 – 35.00mm ²)		

No. of cores & Nominal Cross Sectional Area of Conductor	Current Rating*		Voltage Drop*			Maximum DC Conductor Resistance @ 20°C	Nominal Overall Diameter	Nominal Weight	AEI Product Code
	2 Cables Single Phase (Touching) ac or dc	3 or 4 Cables Three Phase (Flat & Touching) ac	2 Cables dc	2 Cables Single Phase (Touching) ac or dc	3 Cables Three Phase (Flat & Touching) ac				
no x mm ²	Amps	Amps	mV/A/M	mV/A/M	mV/A/M	Ω/Km	mm	Kg/Km	
1 x 1.00+	15.50	14.00	44.00	44.00	38.00	18.10	4.10	28.00	221-060
1 x 1.50+	20.00	18.00	29.00	29.00	25.00	12.10	4.50	36.00	221-061
1 x 2.50+	27.00	25.00	18.00	18.00	15.00	7.41	5.20	51.00	221-062
1 x 4.00	37.00	33.00	11.00	11.00	9.50	4.61	6.00	73.00	221-063
1 x 6.00	47.00	43.00	7.30	7.30	6.40	3.08	6.60	96.00	221-064
1 x 10.00	65.00	59.00	4.40	4.40	3.80	1.83	7.70	147.00	221-065
1 x 16.00	87.00	79.00	2.80	2.80	2.40	1.15	8.90	215.00	221-066
1 x 25.00	114.00	104.00	1.75	1.75	1.55	0.727	10.90	329.00	222-199
1 x 35.00	141.00	129.00	1.25	1.25	1.10	0.524	12.55	444.00	222-200
1 x 50.00	182.00	167.00	0.93	0.95	0.84	0.387	14.80	608.00	222-201
1 x 70.00	234.00	214.00	0.63	0.66	0.60	0.268	16.60	829.00	222-202
1 x 95.00	284.00	261.00	0.46	0.50	0.47	0.193	19.10	1127.00	222-203
1 x 120.00	330.00	303.00	0.36	0.41	0.40	0.153	20.80	1383.00	222-204
1 x 150.00	381.00	349.00	0.29	0.34	0.34	0.124	23.00	1693.00	222-205
1 x 185.00	436.00	400.00	0.23	0.29	0.31	0.0991	25.50	2108.00	222-206
1 x 240.00	515.00	472.00	0.18	0.25	0.27	0.0754	28.80	2729.00	222-207
1 x 300.00	594.00	545.00	0.145	0.22	0.25	0.0601	31.90	3394.00	222-208
1 x 400.00	694.00	634.00	0.105	0.20	0.24	0.0470	35.50	4292.00	222-209
1 x 500.00	792.00	723.00	0.086	0.185	0.23	0.0366	39.30	5357.00	222-210
1 x 630.00	904.00	826.00	0.068	0.175	0.22	0.0283	43.50	6767.00	222-211

* The current rating and voltage drop factors are extracted from Appendix 4 of BS7671, Requirements for Electrical Installations: IEE Wiring Regulations Sixteenth Edition, table 4D1A, for cables installed "Clipped direct" Reference Method 1.
+ Solid conductors.

General Note
AEI Cables reserves the right to amend the product information without notice or liability.
The information is considered accurate at the time of going to print.

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