ENAMELLED COPPER WIRES

KIN COPPER ELECTRIC

GAUGE 220 (EI/AIW)

GAUGE Polyester Imide/Polyamide Imide (EI/AIW) Coated Enamelled Copper Wire, Class C 220°C IEC 60317, KS C3106, NEMA 37-C

No.	Stock Code	SWG	MM	Packing	Price/Kg (RM)
1	SGJAIEI3200	10	3.20	PT25	
2	SGJAIEI3000	10 ½	3.00	PT25	
3	SGJAIEI2900	11	2.90	PT25	
4	SGJAIEI2800	11 ½	2.80	PT25	
5	SGJAIEI2600	12	2.60	PT25	
6	SGJAIEI2500	12 ½	2.50	PT25	
7	SGJAIEI2300	13	2.30	PT25	
8	SGJAIEI2100	13 ½	2.10	PT25	
9	SGJAIEI2000	14	2.00	PT25	
10	SGJAIEI1900	14 ½	1.90	PT25	
11	SGJAIEI1800	15	1.80	PT25	
12	SGJAIEI1700	15 ½	1.70	PT25	
13	SGJAIEI1600	16	1.60	PT25	
14	SGJAIEI1500	16 ½	1.50	PT25	
15	SGJAIEI1450	16 ½	1.45	PT25	
16	SGJAIEI1400	17	1.40	PT25	
17	SGJAIEI1300	17 ½	1.30	PT25	
18	SGJAIEI1250	18	1.25	PT25	
19	SGJAIEI1200	18	1.20	PT25	
20	SGJAIEI1150	18 ½	1.15	PT25	
21	SGJAIEI1100	18 ½	1.10	PT25	
22	SGJAIEI1050	19	1.05	PT25	
23	SGJAIEI1000	19	1.00	PT25	
24	SGJAIEI0950	19 ½	0.95	PT25	
25	SGJAIEI0900	20	0.90	PT25	
26	SGJAIEI0850	20 ½	0.85	PT25	
27	SGJAIEI0800	21	0.80	PT25	
28	SGJAIEI0750	21 ½	0.75	PT25	
29	SGJAIEI0700	22	0.70	PT25	
30	SGJAIEI0670	22 ½	0.67	PT25	
31	SGJAIEI0650	22 ½	0.65	PT25	
32	SGJAIEI0600	23	0.60	PT25	
33	SGJAIEI0550	24	0.55	PT25	
34	SGJAIEI0500	25	0.50	PT25	
35	SGJAIEI0450	26	0.45	PT25	
36	SGJAIEI0400	27	0.40	PT25	
37	SGJAIEI0370	28	0.37	PT25	
38	SGJAIEI0350	29	0.35	PT25	
39	SGJAIEI0320	30	0.32	PT25	

* This type of enamelled wire exhibits good solvent & abrasion resistance as well as high tolerance of overload.
* Applications: HVT coil for transformer, motor for automobile, electric devices, transformers, motors used in Freon gas.
* Disclaimer: GAUGE JIS is a brand owned by Kin Copper Electric, manufactured on OEM basis by readily established magnet wire manufacturer according to requirements as stipulated in the JIS Standard.



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Polyester Imide/Polyamide Imide (EI/AIW) Coated Enamelled Copper Wire, Class C 220°C IEC 60317, KS C3106 NEMA MW 37-C

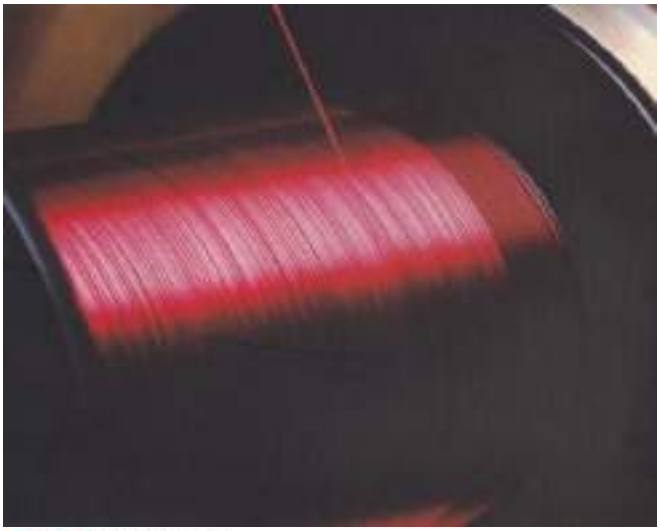
No.	Stock Code	SWG	MM	Packing	Price/Kg (RM)
40	SGJAIEI0300	30 ½	0.30	PT25	
41	SGJAIEI0290	31	0.29	PT25	
42	SGJAIEI0270	32	0.27	PT25	
43	SGJAIEI0250	33	0.25	PT25	
44	SGJAIEI0230	34	0.23	PT25	
45	SGJAIEI0210	35	0.21	PT25	
46	SGJAIEI0200	35 ½	0.20	PT25	
47	SGJAIEI0190	36	0.19	PT25	
48	SGJAIEI0170	37	0.17	PT25	
49	SGJAIEI0150	38	0.15	PT25	

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KIN COPPER ELECTRIC







GAUGE

PRODUCT CHARACTERISTICS

The GAUGE 220 wire is coated with a dual film of insulation. The underlying film is composed primarily of a synthetic resin based on Polyester-Imide which is heat resistance and the superimposed film is composed primarily of Polyamide-Imide which is abrasion resistant.

The insulating film of the wire is made by baking insulating varnish on the conductor uniformly. The film is harmless to the conductor and also have sufficient durability.

Other characteristic of the GAUGE 220 wire are as shown below:

STANDARDS	IEC 60317-01 NEMA MW 37-C KS C3106
Symbol	EI/AIW
Insulation Coating	Polyester-Imide with Polyamide-Imide
Mechanical Properties*	Properties stated are for sample size at 1.00mm*
Elongation	>30%
Adherence - Flexibility	>300mm
Resistance to Scrape	Min 9.81N, Avg 11.61N
Electrical Properties Breakdown Voltage	5KV
Thermal Properties	
Temperature Index	220°C
Cut Through	Min 300°C
Heat Shock	Film free from cracks such as to expose the conductor
Chemical Properties	
Solvent Test	Film free from blister and peeling off by 2H pencil lead or finger nail
Resistance to Refrigerants	HFC134 - 404 - 407 FREON R12 R22 R134-a

ENAMELLED COPPER WIRES

KIN COPPER ELECTRIC

MAGNET WIRE PROCESS FLOWCHART



Spool Incoming Inspection

Varnish Incoming Inspection

Copper Incoming Inspection













Drawing Annealing

Enamelling

Take-Up

Roving Inspection

Final Inspection (lab test)

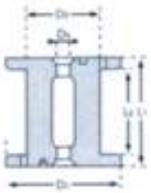
Final Inspection (reel test)

Weighing, Labelling, Packaging

STORAGE

PACKAGING AND DELIVERY

The standard packing of GAUGE 200 wire is in Cylindrical Spools according to the DIN 46399 and IEC 264-2 Standards.



TYPE OF REEL	WIRE RANGE mm	ABERAGE CONTENT kg	DIMENSIONS mm				
			Flange (D1)	Barrel (D2)	Bore (D3)	Width (L1)	Traverse (L2)
200	0.16-0.56	11	200	125	22	200	160
250	0.63-1.90	20	250	160	22	200	160
355	2.00-5.00	40	355	224	36	200	160
500	2.00-5.00	100	500	315	36	250	160

ENAMELLED COPPER WIRES

KIN COPPER ELECTRIC

GAUGE (IEC)

Polyester-Polyamide Imide (EI/AIW) Coated Enamelled Copper Wire Class C 220˚C IEC 60317-13, NEMA MW 37-C

No.	Stock Code	SWG	MM	Packing	Price/Kg (RM)
1	SGAIEI4000	8	4.00	D355	
2	SGAIEI3750	8 ½	3.75	D355	
3	SGAIEI3650	8 ½	3.65	D355	
4	SGAIEI3550	9	3.55	D355	
5	SGAIEI3350	9 ½	3.35	D355	
6	SGAIEI3250	9 ½	3.25	D355	
7	SGAIEI3150	10	3.15	D355	
8	SGAIEI3000	10 ½	3.00	D355	
9	SGAIEI2900	11	2.90	D355	
10	SGAIEI2800	11 ½	2.80	D355	
11	SGAIEI2650	12	2.65	D355	
12	SGAIEI2500	12 ½	2.50	D355	
13	SGAIEI2360	13	2.36	D355	
14	SGAIEI2120	13 ½	2.12	D355	
15	SGAIEI2000	14	2.00	D250	
16	SGAIEI1900	14 ½	1.90	D250	
17	SGAIEI1800	15	1.80	D250	
18	SGAIEI1700	15 ½	1.70	D250	
19	SGAIEI1600	16	1.60	D250	
20	SGAIEI1500	16 ½	1.50	D250	
21	SGAIEI1450	16 ½	1.45	D250	
22	SGAIEI1400	17	1.40	D250	
23	SGAIEI1320	17 ½	1.32	D250	
24	SGAIEI1300	17 ½	1.30	D250	
25	SGAIEI1250	18	1.25	D250	
26	SGAIEI1200	18	1.20	D250	
27	SGAIEI1180	18 ½	1.18	D250	
28	SGAIEI1120	18 ½	1.12	D250	
29	SGAIEI1100	18 ½	1.10	D250	
30	SGAIEI1060	19	1.06	D250	
31	SGAIEI1050	19	1.05	D250	
32	SGAIEI1000	19	1.00	D250	
33	SGAIEI0950	19 ½	0.95	D250	
34	SGAIEI0900	20	0.90	D250	
35	SGAIEI0850	20 ½	0.85	D250	
36	SGAIEI0800	21	0.80	D250	
37	SGAIEI0750	21 ½	0.75	D250	
38	SGAIEI0710	22	0.71	D250	
39	SGAIEI0700	22	0.70	D250	
40	SGAIEI0670	22 ½	0.67	D250	
41	SGAIEI0650	22 ½	0.65	D250	
42	SGAIEI0630	22 ½	0.63	D250	
43	SGAIEI0600	23	0.60	D250	
44	SGAIEI0560	24	0.56	D200	
45	SGAIEI0550	24	0.55	D200	
46	SGAIEI0500	25	0.50	D200	

* This type of enamelled wire exhibits good solvent & abrasion resistance as well as high tolerance of overload.
* Applications: HVT coil for transformer, motor for automobile, electric devices, transformers, motors used in Freon gas.
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