

SPECIFICATION OF COLD ROLLED NON-ORIENTED ELECTRICAL STEEL

Guaranteed Core Loss and induction

Grade	Thickness	Density	Max. Core Loss	Min. Induction	Min. Lamination Factor
	(mm)	(kg/dm ³)	w/kg (1.5T, 50HZ)	T (B50)	(%)
35A230	0.35	7.60	2.30	1.62	95.0
35A250		7.60	2.50	1.62	95.0
35A270		7.65	2.70	1.62	95.0
35A300		7.65	3.00	1.62	95.0
35A360		7.65	3.60	1.63	95.0
35A440		7.70	4.40	1.63	95.0
35A550		7.75	5.50	1.64	95.0
50A250	0.50	7.60	2.50	1.62	96.0
50A270		7.60	2.70	1.62	96.0
50A290		7.60	2.90	1.62	96.0
50A310		7.65	3.10	1.62	96.0
50A350		7.65	3.50	1.62	96.0
50A400		7.65	4.00	1.63	96.0
50A470		7.70	4.70	1.64	96.0
50A600		7.75	6.00	1.66	96.0
50A700		7.80	7.00	1.70	96.0
50A800		7.80	8.00	1.70	96.0
50A1000		7.85	10.00	1.70	96.0
50A1300		7.85	13.00	1.70	96.0
65A470		0.65	7.65	4.70	1.70
65A600	7.75		6.00	1.70	97.0
65A700	7.75		7.00	1.71	97.0
65A800	7.80		8.00	1.70	97.0
65A1000	7.80		10.00	1.70	97.0
65A1300	7.85		13.00	1.70	97.0

Typical Core Loss and Induction

Grade	Thickness	Density	Typical Core Loss (w/kg)				Induction (T)			
	(mm)	(kg/dm ³)	P10/50	P15/50	P10/60	P15/60	B10	B25	B50	B100
35A230	0.35	7.60	0.92	2.15	1.15	2.67	1.47	1.57	1.66	1.78
35A250		7.60	0.98	2.25	1.22	2.78	1.48	1.57	1.66	1.78
35A270		7.65	1.00	2.40	1.24	2.82	1.48	1.58	1.67	1.79
35A300		7.65	1.14	2.55	1.42	3.13	1.51	1.59	1.68	1.80
35A360		7.65	1.25	2.80	1.55	3.41	1.51	1.60	1.68	1.80
35A440		7.70	1.35	3.00	1.66	3.69	1.53	1.62	1.70	1.82
35A550		7.75	1.55	3.50	1.92	4.34	1.53	1.61	1.69	1.82
50A250	0.50	7.60	1.05	2.39	1.34	3.03	1.48	1.57	1.67	1.79
50A270		7.60	1.08	2.50	1.40	3.18	1.48	1.57	1.67	1.80
50A290		7.60	1.10	2.60	1.41	3.25	1.49	1.58	1.67	1.79
50A310		7.65	1.18	2.70	1.57	3.38	1.50	1.59	1.68	1.80
50A350		7.65	1.30	2.85	1.65	3.60	1.50	1.60	1.68	1.80
50A400		7.65	1.45	3.15	1.84	4.01	1.52	1.61	1.69	1.81
50A470		7.70	1.76	4.00	2.22	5.01	1.52	1.60	1.69	1.80
50A600		7.75	1.93	4.30	2.43	5.37	1.53	1.62	1.71	1.82
50A700		7.80	2.42	5.20	3.01	6.47	1.56	1.65	1.73	1.84
50A800		7.80	2.67	5.70	3.34	7.11	1.57	1.66	1.74	1.84
50A1000		7.85	2.82	6.20	3.57	7.80	1.59	1.68	1.76	1.87
50A1300		7.85	3.32	7.20	4.20	9.12	1.59	1.68	1.76	1.88
65A470	0.65	7.65	1.69	3.70	2.19	4.75	1.52	1.62	1.71	1.82
65A600		7.75	2.11	4.70	2.71	5.97	1.52	1.62	1.71	1.82
65A700		7.75	2.19	4.90	2.84	6.25	1.53	1.63	1.72	1.83
65A800		7.80	2.69	5.90	3.42	7.52	1.56	1.66	1.74	1.85
65A100		7.80	2.85	6.40	3.67	8.17	1.57	1.67	1.75	1.86
65A1300		7.85	3.25	7.40	4.22	8.52	1.59	1.68	1.77	1.88

Typical Mechanical Properties

Grade	Thickness	Density	Tensile Strength	Yield Strength	Elongation	Hardness	Bending Number
	mm	(kg/dm ³)	(N/mm ²)	(N/mm ²)	(%)	(HV1)	
35A230	0.35	7.60	548	431	19	221	>5
35A250		7.60	549	429	20	217	>5
35A270		7.65	537	412	21	212	>10
35A300		7.65	516	378	26	197	>11
35A360		7.65	497	350	29	186	>15
35A440		7.70	444	289	32	162	>15
35A550		7.75	400	234	36	133	>15
50A250	0.50	7.60	550	432	19	227	>4
50A270		7.60	555	435	20	220	>4
50A290		7.60	538	405	20	211	>5
50A310		7.65	538	405	24	207	>12
50A350		7.65	516	376	26	197	>14
50A400		7.65	454	302	32	170	>15
50A470		7.70	407	241	37	137	>15
50A600		7.75	407	253	37	133	>15
50A700		7.80	382	247	38	120	>15
50A800		7.80	397	266	38	126	>15
50A1000		7.85	366	241	40	113	>15
50A1300		7.85	352	239	41	108	>15
65A470	0.65	7.65	450	298	32	171	>15
65A600		7.75	408	248	37	138	>15
65A700		7.75	402	241	38	133	>15
65A800		7.80	387	251	39	124	>15
65A1000		7.80	391	257	39	124	>15
65A1300		7.85	357	231	41	110	>15

Available Size			
Thickness:	0.35mm	0.50mm	0.65mm
Width:	900mm-1290mm		
Inner Dia.	508mm		
Outer Dia.	700-1550mm		

Size and Shape Tolerance						
Width (mm)	Thick (mm)	Tolerance (mm)				
		Thickness	Camberness	Width	Linear Measure	Shear Burr
<=150	0.35	(+/-)0.04	<=0.02	(+) 0.3-0	<=1.0	<=0.05
	0.5	(+/-)0.04	<=0.03			
	0.65	(+/-)0.05	<=0.03			
>150-500	0.35	(+/-)0.04	<=0.02	(+) 0.5-0		
	0.5	(+/-)0.04	<=0.03			
	0.65	(+/-)0.05	<=0.03			
>500-1000	0.35	(+/-)0.04	<=0.02	(+) 1.5-0		
	0.5	(+/-)0.04	<=0.03			
	0.65	(+/-)0.05	<=0.04			
>1000	0.35	(+/-)0.04	<=0.03	(+) 1.5-0		
	0.5	(+/-)0.04	<=0.04			
	0.65	(+/-)0.05	<=0.04			

Surface Insulation Coating
We provide Type A, H and D of Coatings. Users may select a qualified coating type from them in accordance with interlamination resistance, sheet punching ability, from resistance, heat resistance and other characteristics.
Coating A: Coating A is a semi-organic thin coating with excellent sheet-punching ability, corrosion resistance, from Resistance and high lamination resistance. It has extraordinarily excellent weld ability and is suitable for medium and Small size electric motors and motors for household appliances. It is equivalent to the coat A1of KSC and coating T4 of Wuhan Steel
Coating H: Coating H is a semi-organic thick coating with excellent sheet-punching ability, corrosion resistance, freon resistance and high lamination resistance. It has extraordinarily excellent weldability and is suitable for medium and small size electric motors and motors for household appliances which requires higher sheet punching ability It is equivalent to A1 of KSC and T4 of Wuhan Steel
Coating D: Coating D is an inorganic coating with excellent weldability and heat resistance. It is suitable for medium and small size electrical motors and especially fit in the application of stress-relief annealing at a high temperature. It is equivalent to coating C4 of AISI and the coating of T3 of Wuhan Steel
Unless there are specific descriptions, the surface insulation coatings designed for steel grade are all coating A