
British Railways Board

Chief Mechanical & Electrical Engineer's Department

Electric Locomotive Diagram Book

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PREFACE

1. It should be noted that this Electric Locomotive Diagram Book completely replaces the previous edition (page size 14" x 6.5/8") which must be destroyed.
2. A complete set of locomotive diagram books consist of the following :-

Diagram Book	Publication No.
a) Main Line Diesel Locomotive	MT/25
b) Electric Locomotive	MT/26
c) Shunting Diesel Locomotive	MT/27

Each separate book contains relevant index sheets to relate the locomotive number to this applicable diagram number.

3. Details of the re-numbering of locomotives in Classes 71, 73, 74, 76, 81, 82, 83, 84, 85 and 86 are given on Sheets 1 - 6 inclusive, immediately preceding Index Sheet C1.
4. This diagram book has been updated, up to and including March 1974.

Date: April 1974

Issued by :- Chief Mechanical & Electrical Engineer
The Railway Technical Centre
DERBY

RE-NUMBERING OF LOCOMOTIVES

CLASS NO. 71		CLASS NO. 73		CLASS NO. 73		CLASS NO. 73	
OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.
		Class 73/0					
E. 5001	71 001	E. 6001	73 001	E. 6023	73 117	E. 6047	73 140
E. 5002	71 002	E. 6002	73 002	E. 6024	73 118	E. 6048	73 141
E. 5003	71 003	E. 6003	73 003	E. 6025	73 119	E. 6049	73 142
E. 5004	71 004	E. 6004	73 004	E. 6026	73 120		
E. 5005	71 005	E. 6005	73 005	E. 6028	73 121		
E. 5006	71 006	E. 6006	73 006	E. 6029	73 122		
E. 5007	71 007	Class 73/1		E. 6030	73 123		
E. 5008	71 008	E. 6007	73 101	E. 6031	73 124		
E. 5009	71 009	E. 6008	73 102	E. 6032	73 125		
E. 5010	71 010	E. 6009	73 103	E. 6033	73 126		
E. 5011	71 011	E. 6010	73 104	E. 6034	73 127		
E. 5012	71 012	E. 6011	73 105	E. 6035	73 128		
E. 5013	71 013	E. 6012	73 106	E. 6036	73 129		
E. 5014	71 014	E. 6013	73 107	E. 6037	73 130		
		E. 6014	73 108	E. 6038	73 131		
		E. 6015	73 109	E. 6039	73 132		
		E. 6016	73 110	E. 6040	73 133		
		E. 6017	73 111	E. 6041	73 134		
		E. 6018	73 112	E. 6042	73 135		
		E. 6019	73 113	E. 6043	73 136		
		E. 6020	73 114	E. 6044	73 137		
		E. 6021	73 115	E. 6045	73 138		
		E. 6022	73 116	E. 6046	73 139		

January 1977
Issue 2

RE-NUMBERING OF LOCOMOTIVES

CLASS NO. 74		CLASS NO. 76		CLASS NO. 76		CLASS NO. 76	
OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.
E.6101	74 001	26001	76 001	26027	76 027	26054	76 054
E.6102	74 002	26002	76 002	26028	76 028	26055	76 055
E.6103	74 003		003	26029	76 029	26056	76 056
E.6104	74 004	26004	76 004	26030	76 030	26057	76 057
E.6105	74 005	26006	76 006	26032	76 032	76 036	76 003
	006	26007	76 007	26033	76 033	76 044	76 031
E.6107	74 007	26008	76 008	26034	76 034	76 018	76 035
E.6108	74 008	26009	76 009		036	76 003	76 036
E.6109	74 009	26010	76 010	26037	76 037	76 050	76 038
E.6110	74 010	26011	76 011		038	76 048	76 039
		26012	76 012		039	76 039	76 048
		26013	76 013	26040	76 040	76 038	76 050
		26014	76 014	26041	76 041		
		26015	76 015	26043	76 043		
		26016	76 016		044		
			016	26046	76 046		
		26020	76 020	26047	76 047		
		26021	76 021		048		
		26022	76 022	26049	76 049		
		26023	76 023		050		
		26024	76 024	26051	76 051		
		26025	76 025	26052	76 052		
		26026	76 026	26053	76 053		

RE-NUMBERING OF LOCOMOTIVES

CLASS NO. 81		CLASS NO. 82		CLASS NO. 83		CLASS NO. 84	
OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.
E. 3001	81 001	E. 3047	82 001	E. 3024	83 001	E. 3036	84 001
E. 3003	81 002	E. 3048	82 002	E. 3025	83 002	E. 3037	84 002
E. 3004	81 003	E. 3049	82 003			E. 3038	84 003
E. 3005	81 004	E. 3050	82 004	E. 3027	83 004	E. 3039	84 004
E. 3006	81 005	E. 3051	82 005	E. 3028	83 005	E. 3040	84 005
E. 3007	81 006	E. 3052	82 006	E. 3029	83 006	E. 3041	84 006
E. 3008	81 007	E. 3053	82 007	E. 3030	83 007	E. 3042	84 007
E. 3010	81 008	E. 3054	82 008	E. 3031	83 008	E. 3043	84 008
E. 3011	81 009			E. 3032	83 009	E. 3044	84 009
E. 3012	81 010			E. 3033	83 010	E. 3045	84 010
E. 3013	81 011			E. 3034	83 011		
E. 3014	81 012			E. 3035	83 012		
E. 3015	81 013			E. 3098	83 013		
E. 3016	81 014			E. 3099	83 014		
E. 3017	81 015			E. 3100	83 015		
E. 3018	81 016						
E. 3020	81 017						
E. 3021	81 018						
E. 3022	81 019						
E. 3023	81 020						
E. 3096	81 021						
E. 3097	81 022						

RE-NUMBERING OF LOCOMOTIVES

CLASS NO. 85		CLASS NO. 85		CLASS NO 86/0		CLASS NO 86/0	
OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.	OLD NO.	NEW NO.
E.3056	85 001	E.3078	85 023	E.3199	86 001	E.3152	86 023
E.3057	85 002	E.3079	85 024	E.3170	86 002	E.3111	86 024
E.3058	85 003	E.3080	85 025	E.3115	86 003	E.3186	86 025
E.3059	85 004	E.3081	85 026	E.3103	86 004	E.3195	86 026
E.3060	85 005	E.3082	85 027	E.3185	86 005	E.3110	86 027
E.3061	85 006	E.3083	85 028	E.3112	86 006	E.3159	86 028
E.3062	85 007	E.3084	85 029	E.3176	86 007	E.3200	86 029
E.3063	85 008	E.3085	85 030	E.3180	86 008	E.3105	86 030
E.3064	85 009	E.3086	85 031	E.3102	86 009	E.3188	86 031
E.3065	85 010	E.3087	85 032	E.3104	86 010	E.3148	86 032
E.3066	85 011	E.3088	85 033	E.3171	86 011	E.3198	86 033
E.3067	85 012	E.3089	85 034	E.3122	86 012	E.3187	86 034
E.3068	85 013	E.3090	85 035	E.3128	86 013	E.3124	86 035
E.3069	85 014	E.3091	85 036	E.3145	86 014	E.3160	86 036
E.3070	85 015	E.3092	85 037	E.3123	86 015	E.3130	86 037
E.3071	85 016	E.3093	85 038	E.3109	86 016	E.3108	86 038
E.3072	85 017	E.3094	85 039	E.3146	86 017	E.3153	86 039
E.3073	85 018	E.3095	85 040	E.3163	86 018		
E.3074	85 019			E.3120	86 019		
E.3075	85 020			E.3114	86 020		
E.3076	85 021			E.3157	86 021		
E.3077	85 022			E.3174	86 022		

RE-NUMBERING OF LOCOMOTIVES

CLASS NO 86/1		CLASS NO 86/2		CLASS NO 86/2		CLASS NO 86/2	
OLD NO	NEW NO	OLD NO	NEW NO	OLD NO	NEW NO	OLD NO	NEW NO
86 201	86 101	E. 3173	86 204	E. 3117	86 227	E. 3183	86 251
86 202	86 102	E. 3129	86 205	E. 3167	86 228	E. 3101	86 252
86 203	86 103	E. 3184	86 206	E. 3119	86 229	86 044	86 253
		E. 3179	86 207	E. 3168	86 230	86 047	86 254
		E. 3141	86 208	E. 3126	86 231	86 042	86 255
		E. 3125	86 209	E. 3113	86 232	86 040	86 256
		E. 3190	86 210	E. 3172	86 233	86 043	86 257
		E. 3147	86 211	E. 3155	86 234	86 046	86 258
		E. 3151	86 212	E. 3194	86 235	86 045	86 259
		E. 3193	86 213	E. 3133	86 236	86 048	86 260
		E. 3106	86 214	E. 3197	86 237	86 041	86 261
		E. 3165	86 215	E. 3116	86 238	CLASS NO 87/1	
		E. 3166	86 216	E. 3169	86 239		
		E. 3177	86 217	E. 3127	86 240	87 036	87 101
		E. 3175	86 218	E. 3121	86 241		
		E. 3196	86 219	E. 3138	86 242		
		E. 3156	86 220	E. 3181	86 243		
		E. 3132	86 221	E. 3178	86 244		
		E. 3131	86 222	E. 3182	86 245		
		E. 3158	86 223	E. 3149	86 246		
		E. 3134	86 224	E. 3192	86 247		
		E. 3164	86 225	E. 3107	86 248		
		E. 3162	86 226	E. 3161	86 249		
				E. 3189	86 250		

February 1975

RE-NUMBERING OF LOCOMOTIVES

Issue 2

SUPERSEDED BY SHEET 12546 (4)

CLASS NO. 86 *

CLASS NO. 86 *

CLASS NO. 86 *

OLD NO.	NEW NO.	CLASS SUB DIVISION	OLD NO.	NEW NO.	CLASS SUB DIVISION	OLD NO.	NEW NO.	CLASS SUB-DIVISION
E.3101	86 252	86/2	E.3121	86 241	86/2	E.3141	86 208	86/2
E.3102	86 009	86/0	E.3122	86 012	86/0	E.3142	86 047	86/0
E.3103	86 004	86/0	E.3123	86 015	86/0	E.3143	86 203	86/2
E.3104	86 010	86/0	E.3124	86 035	86/0	E.3144	86 048	86/0
E.3105	86 030	86/0	E.3125	86 209	86/2	E.3145	86 014	86/0
E.3106	86 214	86/2	E.3126	86 231	86/2	E.3146	86 017	86/0
E.3107	86 248	86/2	E.3127	86 240	86/2	E.3147	86 211	86/2
E.3108	86 038	86/0	E.3128	86 013	86/0	E.3148	86 032	86/0
E.3109	86 016	86/0	E.3129	86 205	86/2	E.3149	86 246	86/2
E.3110	86 027	86/0	E.3130	86 037	86/0	E.3150	86 202	86/2
E.3111	86 024	86/0	E.3131	86 222	86/2	E.3151	86 212	86/2
E.3112	86 006	86/0	E.3132	86 221	86/2	E.3152	86 023	86/0
E.3113	86 232	86/2	E.3133	86 236	86/2	E.3153	86 039	86/0
E.3114	86 020	86/0	E.3134	86 224	86/2	E.3154	86 042	86/0
E.3115	86 003	86/0	E.3135	86 040	86/0	E.3155	86 234	86/2
E.3116	86 238	86/2	E.3136	86 044	86/0	E.3156	86 220	86/2
E.3117	86 227	86/2	E.3137	86 045	86/0	E.3157	86 021	86/0
E.3118	86 041	86/0	E.3138	86 242	86/2	E.3158	86 223	86/2
E.3119	86 229	86/2	E.3139	86 043	86/0	E.3159	86 028	86/0
E.3120	86 019	86/0	E.3140	86 046	86/0	E.3160	86 036	86/0
						E.3161	86 249	86/2
						E.3162	86 226	86/2
						E.3163	86 018	86/0
						E.3164	86 225	86/2
						E.3165	86 215	86/2

* Locomotives designated CLASS 86/0 for Freight operation and CLASS 86/2 for Passenger operation are re-numbered 86 001 to 86 039 and 86 204 to 86 261 respectively. New numbers applied in sequence of completion of modification.

May 1975

RE-NUMBERING OF LOCOMOTIVES

ISSUE 3

CLASS NO. 86 *			CLASS NO. 86 *			CLASS NO 86/1	
OLD NO.	NEW NO.	CLASS SUB-DIVISION	OLD NO.	NEW NO.	CLASS SUB-DIVISION	OLD NO.	NEW NO.
E.3166	86 216	86/2	E.3186	86 025	86/0	86 201	86 101
E.3167	86 228	86/2	E.3187	86 034	86/0	86 202	86 102
E.3168	86 230	86/2	E.3188	86 031	86/0	86 203	86 103
E.3169	86 239	86/2	E.3189	86 250	86/2	CLASS NO 86/2	
E.3170	86 002	86/0	E.3190	86 210	86/2	86 040	86 256
E.3171	86 011	86/0	E.3191	86 201	86/2	86 041	86
E.3172	86 233	86/2	E.3192	86 247	86/2	86 042	86 255
E.3173	86 204	86/2	E.3193	86 213	86/2	86 043	86 257
E.3174	86 022	86/0	E.3194	86 235	86/2	86 044	86 253
E.3175	86 218	86/2	E.3195	86 026	86/0	86 045	86
E.3176	86 007	86/0	E.3196	86 219	86/2	86 046	86 258
E.3177	86 217	86/2	E.3197	86 237	86/2	86 047	86 254
E.3178	86 244	86/2	E.3198	86 033	86/0	86 048	86 261
E.3179	86 207	86/2	E.3199	86 001	86/0	CLASS NO 87/1	
E.3180	86 008	86/0	E.3200	86 029	86/0	87 036	87 101
E.3181	86 243	86/2					
E.3182	86 245	86/2					
E.3183	86 251	86/2					
E.3184	86 206	86/2					
E.3185	86 005	86/0					

* Locomotives designated CLASS 86/0 for Freight operation and CLASS 86/2 for Passenger operation are re-numbered 86 001 to 86 039 and 86 204 to 86 261 respectively. New numbers applied in sequence of completion of modification.

LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	
71 001	71 - aX	73 120	73 - 1aX	76 008	76 - bX	76 035	76 - dA	83 008	83 - aX	85 022	85 - aX	86 024	86 - bX	86 218	86 - 2bX							
71 002	"	73 121	"	76 009	"			83 009	"	85 023	"	86 025	"	86 219	"							
71 003	"	73 122	"	76 010	"	81 001	81 - bX	83 010	"	85 024	"	86 026	"	86 220	"	87 001	87 - Aa					
71 004	"	73 123	"	76 011	"	81 002	"	83 011	"	85 025	"	86 027	"	86 221	"	87 002	"					
71 005	"	73 124	"	76 012	"	81 003	"	83 012	"	85 026	"	86 028	86 - bX	86 222	"	87 003	"					
71 006	"	73 125	"	76 013	"	81 004	"	83 013	"	85 027	"	86 029	"	86 223	"	87 004	"					
71 007	"	73 126	"	76 014	"	81 005	"	83 014	"	85 028	"	86 030	"	86 224	"	87 005	"					
71 008	"	73 127	"	76 015	"	81 006	"	83 015	"	85 029	"	86 031	"	86 225	"	87 006	"					
71 009	"	73 128	"	76 016	"	81 007	"			85 030	"	86 032	"	86 226	"	87 007	"					
71 010	"	73 129	"	76 018	76 - aV	81 008	"			85 031	"	86 033	"	86 227	"	87 008	"					
71 011	"	73 130	"	76 020	"	81 009	"			85 032	"	86 034	"	86 228	"	87 009	"					
71 012	"	73 131	"	76 021	76 - bX	81 010	"	84 001	84 - aX	85 033	"	86 035	"	86 229	"	87 010	"					
71 013	"	73 132	"	76 022	"	81 011	"	84 002	"	85 034	"	86 036	"	86 230	"	87 011	"					
71 014	"	73 133	"	76 023	"	81 012	"	84 003	"	85 035	"	86 037	"	86 231	"	87 012	"					
		73 134	"	76 024	"	81 013	"	84 004	"	85 036	"	86 038	"	86 232	"	87 013	"					
		73 135	"	76 025	"	81 014	"	84 005	"	85 037	"	86 039	"	86 233	"	87 014	"					
		73 136	"	76 026	"	81 015	"	84 006	"	85 038	"			86 234	"	87 015	"					
73 001	73 - aX	73 137	"	76 027	"	81 016	"	84 007	"	85 039	"			86 235	"	87 016	"					
73 002	"	73 138	"	76 028	"	81 017	"	84 008	"	85 040	"			86 236	"	87 017	"					
73 003	"	73 139	"	76 029	"	81 018	81 - bX	84 009	"			86 101	86 - 1aX	86 237	"	87 018	"					
73 004	"	73 140	"	76 030	"	81 019	81 - bX	84 010	"			86 102	"	86 238	"	87 019	"					
73 005	"	73 141	"	76 032	76 - dA	81 020	"					86 103	"	86 239	"	87 020	"					
73 006	"	73 142	"	76 033	"	81 021	"					86 001	86 - bX	86 240	"	87 021	"					
				76 034	"	81 022	"					86 002	"	86 241	"	87 022	"					
				76 036	"			85 001	85 - aX	86 003	"			86 242	"	87 023	"					
				76 037	"			85 002	"	86 004	"			86 243	"	87 024	"					
73 101	73 - 1aX	74 001	74 - aX	76 038	"			85 003	"	86 005	86 - bX			86 244	"	87 025	"					
73 102	"	74 002	"	76 039	76 - dA	82 001	82 - aX	85 004	"	86 006	86 - bX			86 245	"	87 026	"					
73 103	"	74 003	"	76 040	76 - aV	82 002	"	85 005	"	86 007	"			86 246	"	87 027	"					
73 104	"	74 004	"	76 041	"	82 003	"	85 006	"	86 008	"			86 247	"	87 028	"					
73 105	"	74 005	"	76 043	"	82 004	"	85 007	"	86 009	"			86 248	"	87 029	"					
73 106	"			76 044	"	82 005	"	85 008	"	86 010	"	86 204	86 - 2bX	86 249	"	87 030	"					
73 107	"	74 007	"	76 046	"	82 006	"	85 009	"	86 011	"	86 205	"	86 250	"	87 031	"					
73 108	"	74 008	"	76 047	"	82 007	"	85 010	"	86 012	"	86 206	"	86 251	"	87 032	"					
73 109	"	74 009	"	76 048	"	82 008	"	85 011	"	86 013	"	86 207	"	86 252	"	87 033	"					
73 110	"	74 010	"	76 049	"			85 012	"	86 014	"	86 208	"	86 253	"	87 034	"					
73 111	"			76 050	76 - aV			85 013	"	86 015	"	86 209	"	86 254	"	87 035	"					
73 112	"			76 051	76 - aV			85 014	"	86 016	"	86 210	"	86 255	"							
73 113	"			76 052	76 - cV	83 001	83 - aX	85 015	"	86 017	"	86 211	"	86 256	"							
73 114	"	76 001	76 - aV	76 053	76 - aV	83 002	"	85 016	"	86 018	"	86 212	"	86 257	"							
73 115	"	76 002	"	76 054	76 - cV			85 017	"	86 019	"	86 213	"	86 258	"	87 101	87 - 1aA					
73 116	"	76 003	"	76 055	"	83 004	"	85 018	"	86 020	"	86 214	"	86 259	"							
73 117	"	76 004	"	76 056	76 - aV	83 005	"	85 019	"	86 021	"	86 215	"	86 260	"							
73 118	"	76 006	76 - bX	76 057	76 - aV	83 006	"	85 020	"	86 022	"	86 216	"	86 261	"							
73 119	"	76 007	"	76 031	76 - dA	83 007	"	85 021	"	86 023	"	86 217	"									

24 PERS EV 003
JAN 77

DEC.1975

C.I.

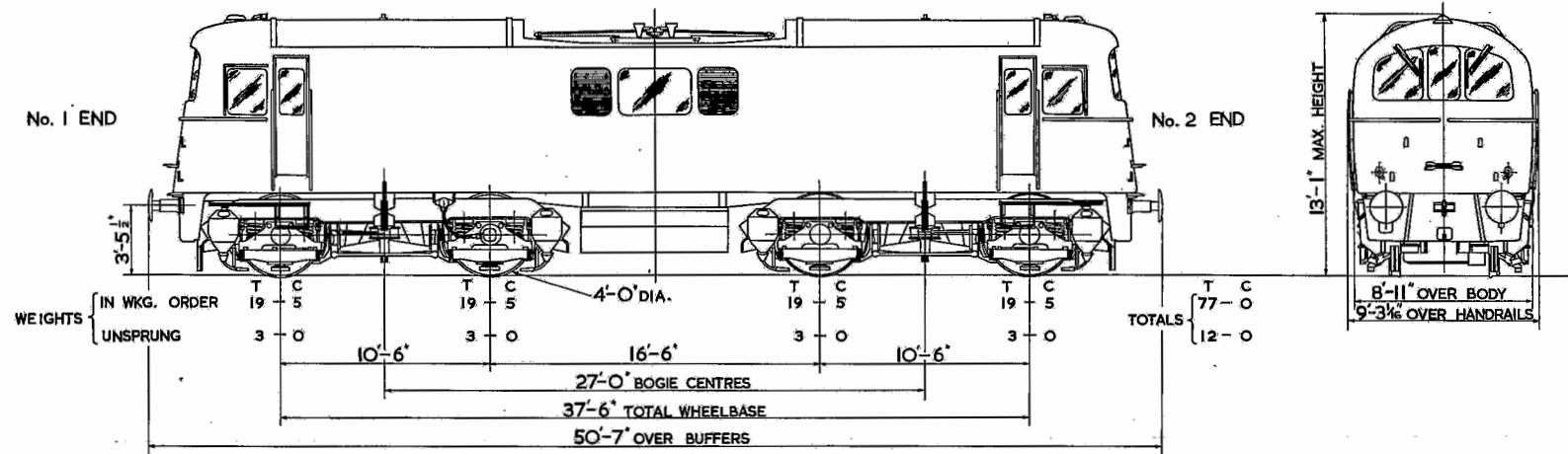
LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER		
71 001	71 - aX	73 120	73 - laX	76 008	76 - bX			83 008	83 - aX	85 022	85 - aX	86 024	86 - bX	86 218	86 - 2bX								
71 002	"	73 121	"	76 009	"			83 009	"	85 023	"	86 025	"	86 219	"								
71 003	"	73 122	"	76 010	"	81 001	81 - bX	83 010	"	85 024	"	86 026	"	86 220	"	87 001	87 - aA						
71 004	"	73 123	"	76 011	"	81 002	"	83 011	"	85 025	"	86 027	"	86 221	"	87 002	"						
71 005	"	73 24	"	76 012	"	81 003	"	83 012	"	85 026	"	86 028	86 - bX	86 222	"	87 003	"						
71 006	"	73 125	"	76 013	"	81 004	"	83 013	"	85 027	"	86 029	"	86 223	"	87 004	"						
71 007	"	73 126	"	76 014	"	81 005	"	83 014	"	85 028	"	86 030	"	86 224	"	87 005	"						
71 008	"	73 127	"	76 015	"	81 006	"	83 015	"	85 029	"	86 031	"	86 225	"	87 006	"						
71 009	"	73 128	"	76 016	"	81 007	"			85 030	"	86 032	"	86 226	"	87 007	"						
71 010	"	73 129	"	76 018	76 - aV	81 008	"			85 031	"	86 033	"	86 227	"	87 008	"						
71 011	"	73 130	"	76 020	"	81 009	"			85 032	"	86 034	"	86 228	"	87 009	"						
71 012	"	73 131	"	76 021	76 - bX	81 010	"	84 001	84 - aX	85 033	"	86 035	"	86 229	"	87 010	"						
71 013	"	73 132	"	76 022	"	81 011	"	84 002	"	85 034	"	86 036	"	86 230	"	87 011	"						
71 014	"	73 133	"	76 023	"	81 012	"	84 003	"	85 035	"	86 037	"	86 231	"	87 012	"						
		73 134	"	76 024	"	81 013	"	84 004	"	85 036	"	86 038	"	86 232	"	87 013	"						
		73 135	"	76 025	"	81 014	"	84 005	"	85 037	"	86 039	"	86 233	"	87 014	"						
		73 136	"	76 026	"	81 015	"	84 006	"	85 038	"			86 234	"	87 015	"						
73 001	73 - aX	73 137	"	76 027	"	81 016	"	84 007	"	85 039	"			86 235	"	87 016	"						
73 002	"	73 138	"	76 028	"	81 017	"	84 008	"	85 040	"			86 236	"	87 017	"						
73 003	"	73 139	"	76 029	"	81 018	81 - bX	84 009	"			86 101	86 - laX	86 237	"	87 018	"						
73 004	"	73 140	"	76 030	"	81 019	81 - bX	84 010	"			86 102	"	86 238	"	87 019	"						
73 005	"	73 141	"	76 032	76 - aV	81 020	"					86 103	"	86 239	"	87 020	"						
73 006	"	73 142	"	76 033	"	81 021	"			86 001	86 - bX			86 240	"	87 021	"						
				76 034	"	81 022	"							86 241	"	87 022	"						
				76 036	"			85 001	85 - aX	86 002	"			86 242	"	87 023	"						
				76 037	"			85 002	"	86 003	"			86 243	"	87 024	"						
73 101	73 - laX	74 001	74 - aX	76 038	"			85 003	"	86 005	86 - bX			86 244	"	87 025	"						
73 102	"	74 002	"	76 039	"	82 001	82 - aX	85 004	"	86 006	86 - bX			86 245	"	87 026	"						
73 103	"	74 003	"	76 040	"	82 002	"	85 005	"	86 007	"			86 246	"	87 027	"						
73 104	"	74 004	"	76 041	"	82 003	"	85 006	"	86 008	"			86 247	"	87 028	"						
73 105	"	74 005	"	76 043	"	82 004	"	85 007	"	86 009	"			86 248	"	87 029	"						
73 106	"	74 006	"	76 044	"	82 005	"	85 008	"	86 010	"	86 204	86 - 2bX	86 249	"	87 030	"						
73 107	"	74 007	"	76 046	"	82 006	"	85 009	"	86 011	"	86 205	"	86 250	"	87 031	"						
73 108	"	74 008	"	76 047	"	82 007	"	85 010	"	86 012	"	86 206	"	86 251	"	87 032	"						
73 109	"	74 009	"	76 048	"	82 008	"	85 011	"	86 013	"	86 207	"	86 252	"	87 033	"						
73 110	"	74 010	"	76 049	"			85 012	"	86 014	"	86 208	"	86 253	"	87 034	"						
73 111	"			76 050	76 - cV			85 013	"	86 015	"	86 209	"	86 254	"	87 035	"						
73 112	"			76 051	76 - aV			85 014	"	86 016	"	86 210	"	86 255	"								
73 113	"			76 052	76 - cV	83 001	83 - aX	85 015	"	86 017	"	86 211	"	86 256	"								
73 114	"	76 001	76 - aV	76 053	"	83 002	"	85 016	"	86 018	"	86 212	"	86 257	"								
73 115	"	76 002	"	76 054	"			85 017	"	86 019	"	86 213	"	86 258	"	87 101	87 - laA						
73 116	"	76 003	"	76 055	"	83 004	"	85 018	"	86 020	"	86 214	"	86 259	"								
73 117	"	76 004	"	76 056	76 - aV	83 005	"	85 019	"	86 021	"	86 215	"	86 260	"								
73 118	"	76 006	76 - bX	76 057	76 - cV	83 006	"	85 020	"	86 022	"	86 216	"	86 261	"								
73 119	"	76 007	"			83 007	"	85 021	"	86 023	"	86 217	"										

APRIL 1974

C.2.

LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	
E 3101	86 - 1aX	E 3196	86 - aX																			
E 3102	"	E 3197	"																			
E 3105	"	E 3198	"																			
E 3107	86 - aX	E 3200	"																			
E 3108	86 - 1aX																					
E 3116	"																					
E 3118	"																					
E 3121	"																					
E 3124	"																					
E 3127	"																					
E 3130	86 - aX																					
E 3131	"																					
E 3132	"																					
E 3133	86 - 1aX																					
E 3134	86 - aX																					
E 3135	"																					
E 3136	86 - 1aX																					
E 3138	"																					
E 3140	"																					
E 3142	"																					
E 3144	86 - aX																					
E 3148	86 - 1aX																					
E 3149	86 - aX																					
E 3153	"																					
E 3156	"																					
E 3158	"																					
E 3160	86 - 1aX																					
E 3161	86 - aX																					
E 3162	"																					
E 3164	"																					
E 3166	"																					
E 3169	86 - 1aX																					
E 3174	"																					
E 3175	86 - aX																					
E 3178	"																					
E 3181	86 - 1aX																					
E 3182	86 - aX																					
E 3183	86 - 1aX																					
E 3186	"																					
E 3187	86 - aX																					
E 3188	86 - 1aX																					
E 3189	86 - aX																					
E 3192	86 - 1aX																					
E 3193	86 - aX																					
E 3194	86 - 1aX																					

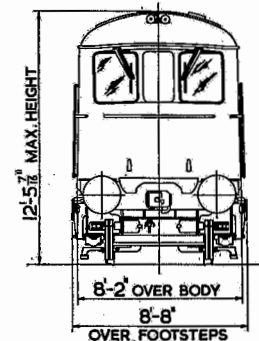
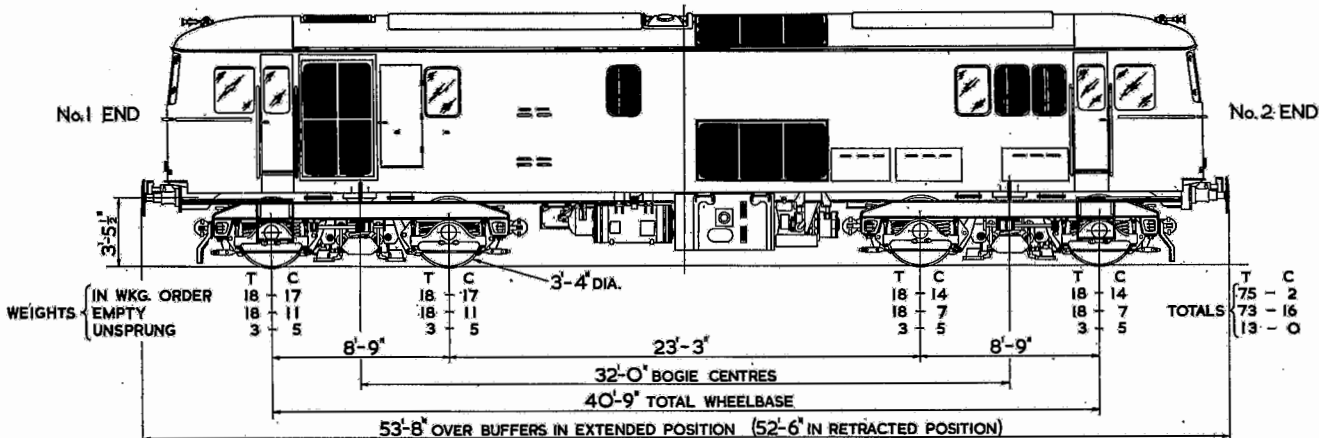
APRIL 1974



SUPPLY SYSTEM	TYPE NOMINAL VOLTAGE	THIRD RAIL OR OVERHEAD IN YDS. ETC. 660-750 VOLTS D.C.	BRAKING	TYPE { FOR LOCO FOR TRAIN	STRAIGHT AIR & AUTOMATIC AIR AUTOMATIC AIR & AIR CONTROLLED VACUUM
TRACTION MOTORS	MAKE & TYPE No. TYPE OF SUSPENSION TYPE OF GEAR DRIVE	ENGLISH ELECTRIC E.E.532 FOUR FULLY SUSPENDED SINGLE REDUCTION	SPEED	BRAKE FORCE { % OF LOCO. WEIGHT IN WORKING ORDER	88%
CONTROL SYSTEM	TYPE	BOOSTER	MINIMUM RADIUS CURVES	MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 1/4 GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE	90 M.P.H. 4 CHAINS 3 CHAINS 11 CHAINS 11 CHAINS
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT (675 VOLTS PER MOTOR) CONT. RATING ON WEAKEST FIELD (675 VOLTS PER MOTOR) MAX. RAIL H.P. ON WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	43000 LB. AT 25% ADHESION 12400 LB. TRACTIVE EFFORT 69.6 M.P.H. 3000 AMPS. TOTAL TRACTION CURRENT 2300 RAIL H.P. 3000 H.P. AT 59.3 M.P.H.	TRAIN HEATING EQUIPMENT	ELECTRIC HEATING CONT. OUTPUT	300 K.W.

**B.R. B-B D.C. ELECTRIC LOCOMOTIVE.
CLASS 71**

71-a X

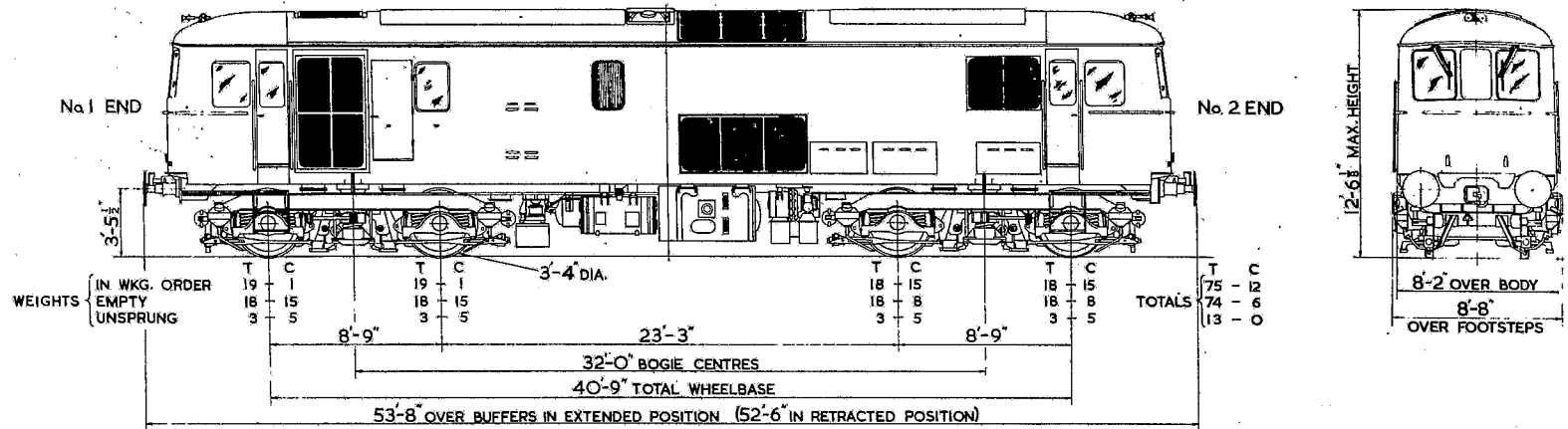


APRIL 1974

	ELECTRIC		DIESEL	
SUPPLY SYSTEM	TYPE	THIRD RAIL	ENGINE	MAKE & TYPE
	NOMINAL VOLTAGE	660-750 VOLTS D.C.		ENGLISH ELECTRIC 4 SRKT
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT (337.5 VOLTS PER MOTOR)	42,000 LB. AT 25% ADHESION	MAIN GENERATOR	No. OF CYLS. & CYCLE
	CONT. RATING ON	9,600 LB. TRACTIVE EFFORT		4 CYLS. 4 STROKE
	WEAKEST FIELD (675 VOLTS PER MOTOR)	55.5 M.P.H.	PERFORMANCE	MAX. 1 HOUR RATED OUTPUT
	MAX. RAIL H.P. ON	1,700 AMPS. TOTAL TRACTION CURRENT		600 H.P. AT 850 R.P.M.
	WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	1,420 RAIL H.P.		MAKE & TYPE
TRAIN HTG. EQUIP	675 VOLTS D.C. SUPPLY	400 AMPS. MAXIMUM		ENGLISH ELECTRIC E.E. 824/3D
TRACTION MOTORS	MAKE & TYPE	ENGLISH ELECTRIC E.E.542 A	TANK CAPACITY	MAX. TRACTIVE EFFORT
	No.	FOUR	TRAIN HTG. EQUIP	34,100 LB. AT 20.3% ADHESION
	TYPE OF SUSPENSION	AXLE		AT 1,500 AMPS. MAIN GENERATOR
	TYPE OF GEAR DRIVE	STRAIGHT SPUR SINGLE REDUCTION	SPEED	CONT. TRACTIVE EFFORT
	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS		16,100 LB. AT 10 M.P.H.
HORIZONTAL WITH 3/4 GAUGE WIDENING	3 1/2 CHAINS	BRAKING	RAIL H.P. AT CONT. RATING	AT 850 AMPS. MAIN GENERATOR
VERTICAL CONVEX	11 CHAINS		MAX. PERMITTED SERVICE SPEED	430 H.P.
VERTICAL CONCAVE	11 CHAINS		TYPE	AVAILABLE BETWEEN 3 & 80 M.P.H.
			FOR LOCO.	340 GALLS.
MINIMUM RADIUS CURVES			FOR TRAIN	ELECTRICAL FROM MAIN GENERATOR
			BRAKE FORCE	% OF LOCO. WEIGHT
				IN WORKING ORDER
				82.7%

B.R. B-B 1600/600 H.P. ELECTRO-DIESEL LOCOMOTIVE CLASS 73/O

73-a X

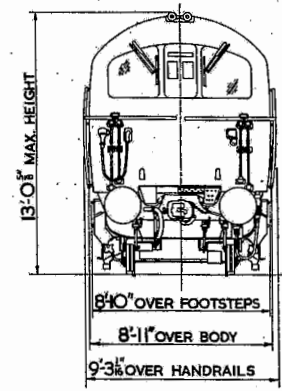
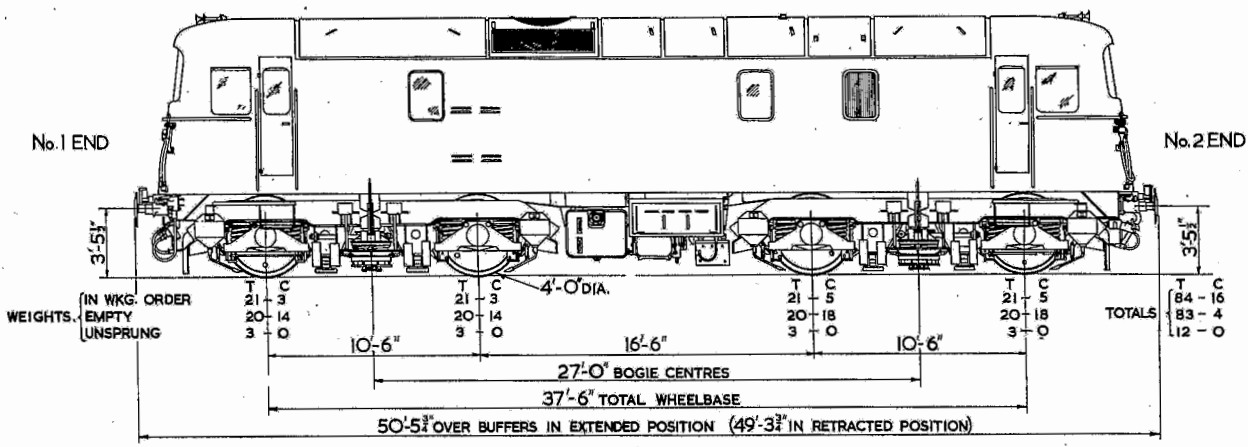


MAY 1975

		ELECTRIC		DIESEL		
SUPPLY SYSTEM	TYPE	THIRD RAIL		ENGINE	MAKE & TYPE	ENGLISH ELECTRIC 4 SRKT
	NOMINAL VOLTAGE	660-750 VOLTS D.C.			No. OF CYLS. & CYCLE	4 CYLS. 4 STROKE
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT	40,000 LB. AT 24% ADHESION		MAIN GENERATOR	MAKE & TYPE	ENGLISH ELECTRIC E.E. 824/5D
	CONT. RATING ON	7800 LB. TRACTIVE EFFORT			MAX. TRACTIVE EFFORT	36,000 LB. AT 21.4% ADHESION
	WEAKEST FIELD (675 VOLTS PER MOTOR)	68 M.P.H.		PERFORMANCE	CONT. TRACTIVE EFFORT	13,600 LB. AT 11.5 M.P.H.
	MAX. RAIL H.P. ON	1700 AMPS. TOTAL TRACTION CURRENT			RAIL H.P. AT CONT. RATING	420 H.P.
	WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	1420 RAIL H.P.			FULL ENGINE OUTPUT	AVAILABLE BETWEEN 3 & 90 M.P.H.
TRAIN HTG. EQUIP.	MAX. RAIL H.P. ON	3,150 H.P. AT 42 M.P.H.		TANK CAPACITY	ENGINE FUEL	310 GALLS.
	WEAKEST MOTOR FIELD (675 VOLTS D.C. SUPPLY)	400 AMPS. MAXIMUM		TRAIN HTG. EQUIP.	NONE	
TRACTION MOTORS	MAKE & TYPE	ENGLISH ELECTRIC E.E.546/1B		SPEED	MAX. PERMITTED SERVICE SPEED	90 M.P.H.
	No.	FOUR			TYPE	FOR LOCO. AIR
MINIMUM RADIUS CURVES	TYPE OF SUSPENSION	AXLE			FOR TRAIN	AIR, VACUUM & E.P.
	TYPE OF GEAR DRIVE	STRAIGHT SPUR SINGLE REDUCTION		BRAKING	BRAKE FORCE	% OF LOCO. WEIGHT IN WORKING ORDER
	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS				85.9%
	HORIZONTAL WITH 3/4" GAUGE WIDENING	3 3/4 CHAINS				
	VERTICAL CONVEX	11 CHAINS				
VERTICAL CONCAVE	11 CHAINS					

B.R. B-B 1600/600 H.P. ELECTRO-DIESEL LOCOMOTIVE CLASS 73/1

73-1a X



MAY 1975

	ELECTRIC		DIESEL	
SUPPLY SYSTEM	TYPE	THIRD RAIL	ENGINE	MAKE AND TYPE
	NOMINAL VOLTAGE	675 VOLTS D.C.		DAVEY PAXMAN 6YJXL
	MAX. TRACTIVE EFFORT	47500 LB. AT 25% ADHESION		6 CYLS. 4 STROKE
		12400 LB. TRACTIVE EFFORT		650 H.P. AT 1500 R.P.M.
PERFORMANCE AT 675 VOLTS	CONT. RATING ON WEAK FIELD	69.6 M.P.H.	MAIN GENERATOR	MAKE AND TYPE
	MAX. RAIL H.P. ON WEAK FIELD	4600 H.P. AT 43 M.P.H.		ENGLISH ELECTRIC EE 843
			PERFORMANCE	MAX. TRACTIVE EFFORT
				40000 LB. AT 2 1/2% ADHESION
TRAIN HTG. EQUIPT.	675 VOLTS D.C. SUPPLY	400 AMPS. MAXIMUM	TANK CAPACITY	CONT. TRACTIVE EFFORT
				18100 LB. AT 6.5 M.P.H.
			TRAIN HEATING EQUIPT.	RAIL H.P. AT CONT. RATING
				315 H.P.
				AVAILABLE BETWEEN 2 & 90 M.P.H.
				ENGINE FUEL
				280 GALLONS
				400 AMPS. MAXIMUM
TRACTION MOTORS	MAKE AND TYPE	ENGLISH ELECTRIC EE532A	SPEED	MAX. PERMITTED SERVICE SPEED
	NUMBER	FOUR		90 M.P.H.
	TYPE OF SUSPENSION	FULLY SUSPENDED		TYPE
	TYPE OF GEAR DRIVE	SINGLE REDUCTION		{ FOR LOCO.
	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS		{ FOR TRAIN
MINIMUM RADIUS CURVES	HORIZONTAL WITH 3/4" GAUGE WIDENING	3 CHAINS	BRAKING	{ % OF LOCO WEIGHT
	VERTICAL CONVEX	11 CHAINS		{ IN WORKING ORDER
	VERTICAL CONCAVE	11 CHAINS		80-3%

B.R. B-B 2500/650 H.P. ELECTRO-DIESEL LOCOMOTIVE CLASS 74

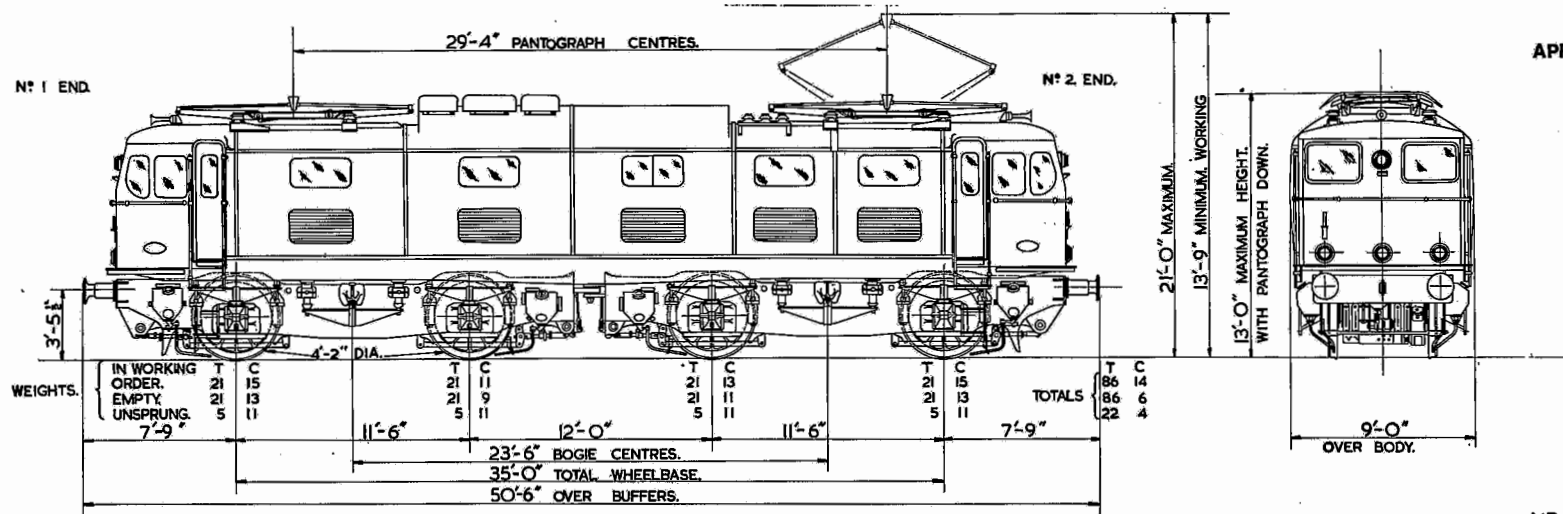
74-a X

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5 F2

APRIL 1974



WEIGHTS.

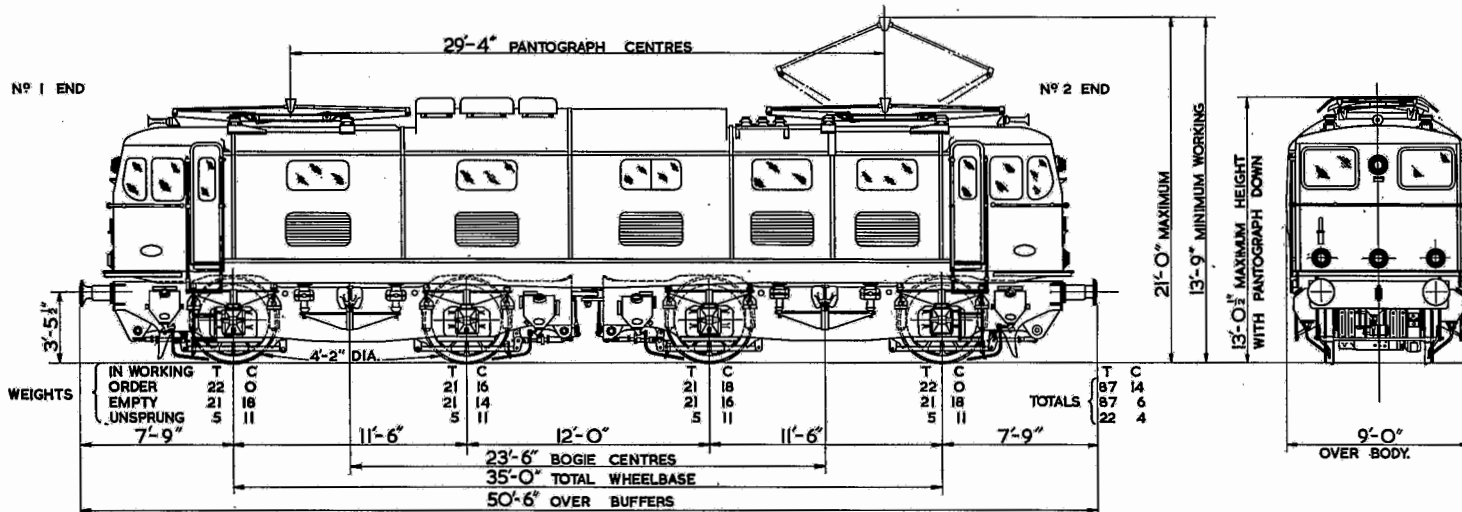
IN WORKING ORDER.	T 21	C 15	T 21	C 11	T 21	C 13	T 21	C 15	TOTALS	T 86	C 14
EMPTY.	21	13	21	9	21	11	21	13	86	6	6
UNSPRUNG.	5	(1)	5	11	5	11	5	11	22	4	4

SUPPLY SYSTEM.	{ TYPE NOMINAL VOLTAGE.	OVERHEAD. 1500.D.C.	BRAKING.	{ TYPE. BRAKE FORCE.	{ FOR LOCO. FOR TRAIN. % OF LOCO WEIGHT IN WORKING ORDER.	AIR ELECTRIC REGENERATIVE, & RHEOSTATIC. VACUUM.
TRACTION MOTORS.	{ MAKE & TYPE. N° TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	M.V. TYPE. 186. FOUR. NOSE SUSPENDED. DIRECT SPUR.	SPEED.	{ MAX. PERMITTED SERVICE SPEED. MIN. RAD CURVE.	{ WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED.	82.6 65 M.P.H. 6 CHAINS.
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT (350 VOLTS PER MOTOR.) CONTINUOUS RATING ON WEAKEST FIELD. (700 VOLTS PER MOTOR.) MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. (700 VOLTS PER MOTOR.)	ELECTRO PNEUMATIC. 45000 LB. AT 23.2% ADHESION 8,800 LB. TRACTIVE EFFORT. 56 MPH. 794 AMPS. TOTAL TRACTION CURRENT. 1300 RAIL H.P. 3300 H.P. AT 27.5 MPH.	CURVE.	{ BOILER MAKE & TYPE STEAMING CAPACITY.		4 CHAINS. NOT FITTED.
PERFORMANCE AT 1400 VOLTS.			TRAIN HEATING EQUIPMENT.	TANK CAPACITY.	BOILER WATER.	

**E.M.I. BR. B+B. D.C. ELECTRIC LOCOMOTIVE.
CLASS 76**

76 - a V

APRIL 1974

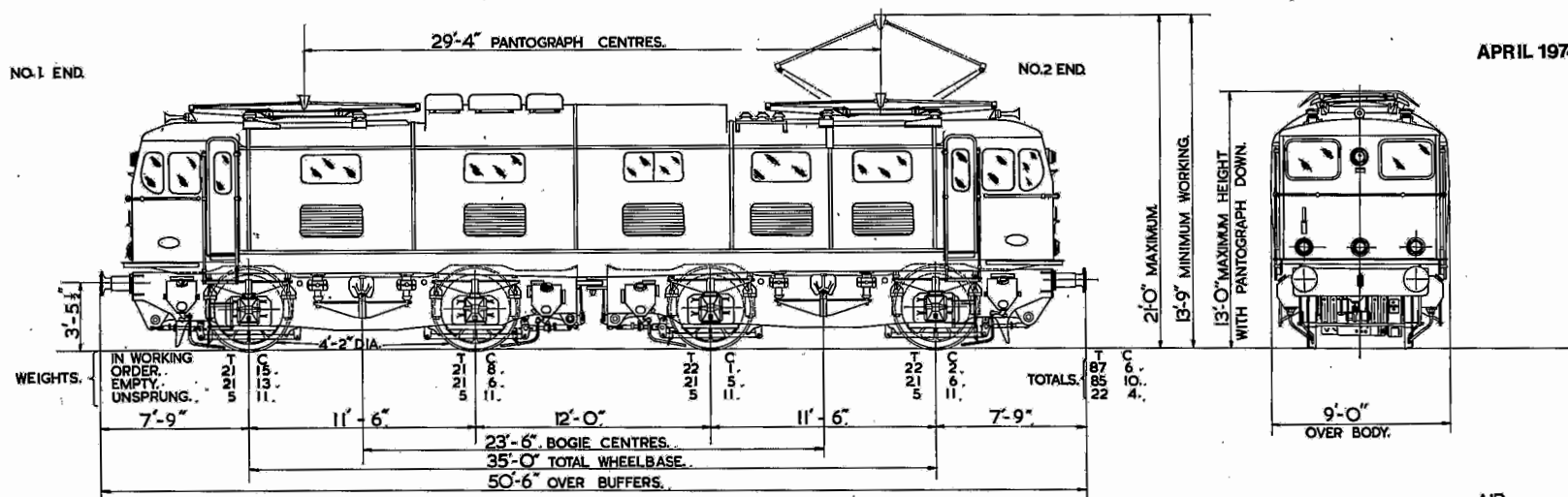


SUPPLY SYSTEM	{ TYPE NOMINAL VOLTAGE	OVERHEAD 1500 D.C.	BRAKING	{ TYPE FOR LOCO FOR TRAIN	STRAIGHT AIR & AUTO. AIR ELECTRIC REGENERATIVE & RHEOSTATIC AUTO AIR & AIR CONT. VAC.
TRACTION MOTORS	{ MAKE & TYPE NO TYPE OF SUSPENSION TYPE OF GEAR DRIVE	M.V. TYPE. 186 FOUR NOSE SUSPENDED DIRECT SPUR	SPEED	{ BRAKE FORCE % OF LOCO WEIGHT IN WORKING ORDER	81.7%
CONTROL SYSTEM	{ TYPE MAX. TRACTIVE EFFORT (350 VOLTS PER MOTOR)	ELECTRO PNEUMATIC 45000 LB. AT 22.9% ADHESION 8,800 LB. TRACTIVE EFFORT	MINIMUM RADIUS CURVES	{ MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/8 INS. GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE	65 M.P.H. 6 CHAINS 5-1 CHAINS 11 CHAINS 11 CHAINS
PERFORMANCE AT 1400 VOLTS	{ CONTINUOUS RATING ON WEAKEST FIELD (700 VOLTS PER MOTOR) MAX. RAIL H.P. ON WEAKEST MOTOR FIELD (700 VOLTS PER MOTOR)	{ 56 M.P.H. 794 AMPS TOTAL TRACTION CURRENT 1300 RAIL H.P. 3300 H.P. AT 27.5 M.P.H.			

**E.M.I. BR.B+B. DC. ELECTRIC LOCOMOTIVE
CLASS 76**

76-b X

APRIL 1974



SUPPLY SYSTEM.

{ TYPE.
{ NOMINAL VOLTAGE.

OVERHEAD.
1500 D.C.

BRAKING.

{ TYPE.
{ FOR LOCO.
{ FOR TRAIN.
{ BRAKE FORCE. { % OF LOCO WEIGHT.
{ IN WORKING ORDER

AIR
ELECTRIC REGENERATIVE
& RHEOSTATIC.
VACUUM.

TRACTION MOTORS.

{ MAKE & TYPE.
{ NO.
{ TYPE OF SUSPENSION.
{ TYPE OF GEAR DRIVE.

M.V. TYPE 186.
FOUR.
NOSE SUSPENDED.

SPEED.

MAX. PERMITTED SERVICE SPEED.
MIN. RAD. CURVE. { WITHOUT GAUGE WIDENING.
{ AT DEAD SLOW SPEED.

82-0.
65 M.P.H.
6 CHAINS.
4 CHAINS.

CONTROL SYSTEM.

TYPE.

ELECTRO PNEUMATIC.

TRAIN HEATING
EQUIPMENT.

{ BOILER MAKE & TYPE.
{ STEAMING CAPACITY.

BASTIAN & ALLEN-ELECTRIC.
1000 LB/HR

PERFORMANCE
AT 1400 VOLTS.

{ MAX. TRACTIVE EFFORT.
{ (350 VOLTS PER MOTOR)
{ CONTINUOUS RATING
{ ON WEAKEST FIELD.
{ (700 VOLTS PER MOTOR).
{ MAX. RAIL H.P. ON
{ WEAKEST MOTOR FIELD.
{ (700 VOLTS PER MOTOR.)

{ 45000 LB. AT 23-0% ADHESION.
{ 8,800 LB. TRACTIVE EFFORT.
{ 56 M.P.H..
{ 794 AMPS. TOTAL TRACTION CURRENT.
{ 1300 RAIL H.P.
{ 330Q.H.R. AT 27.5 MPH.

TANK CAPACITY.

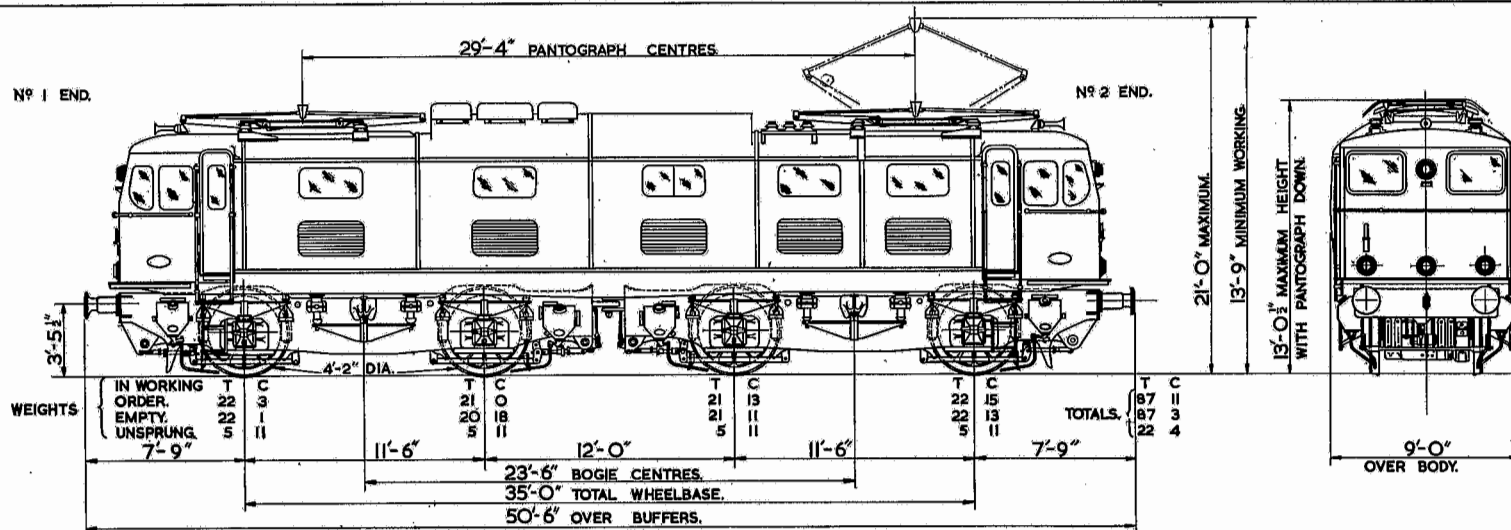
BOILER WATER.

240 GALLS.

E.M.I. BR. B+B D.C. ELECTRIC LOCOMOTIVE.
CLASS 76

76-c V

JANUARY 1977



SUPPLY SYSTEM.

TYPE.
NOMINAL VOLTAGE.
MAKE & TYPE.
Nº
TYPE OF SUSPENSION.
TYPE OF GEAR DRIVE.
TYPE.
MAX. TRACTIVE EFFORT.
(350 VOLTS PER MOTOR)
CONTINUOUS RATING
ON WEAKEST FIELD.
(700 VOLTS PER MOTOR)
MAX. RAIL H.P. ON
WEAKEST MOTOR FIELD.
(700 VOLTS PER MOTOR.)

OVERHEAD.
1500 D.C.
M.V. TYPE. 1B6.
FOUR.
NOSE SUSPENDED
DIRECT SPUR.
ELECTRO PNEUMATIC.
45000 LB. AT 22.9% ADHESION.
8,800 LB. TRACTIVE EFFORT.
56 M.P.H.
794 AMPS TOTAL TRACTION CURRENT.
1300 RAIL H.P.
3300 H.P. AT 27.5 M.P.H.

BRAKING.

TYPE.
BRAKE FORCE.

{ FOR LOCO.
{ FOR TRAIN.
{ % OF LOCO WEIGHT.
{ IN WORKING ORDER. }

AUTO. AIR.
ELECTRIC REGENERATIVE
& RHEOSTATIC,
AIR.

81.8%

SPEED.

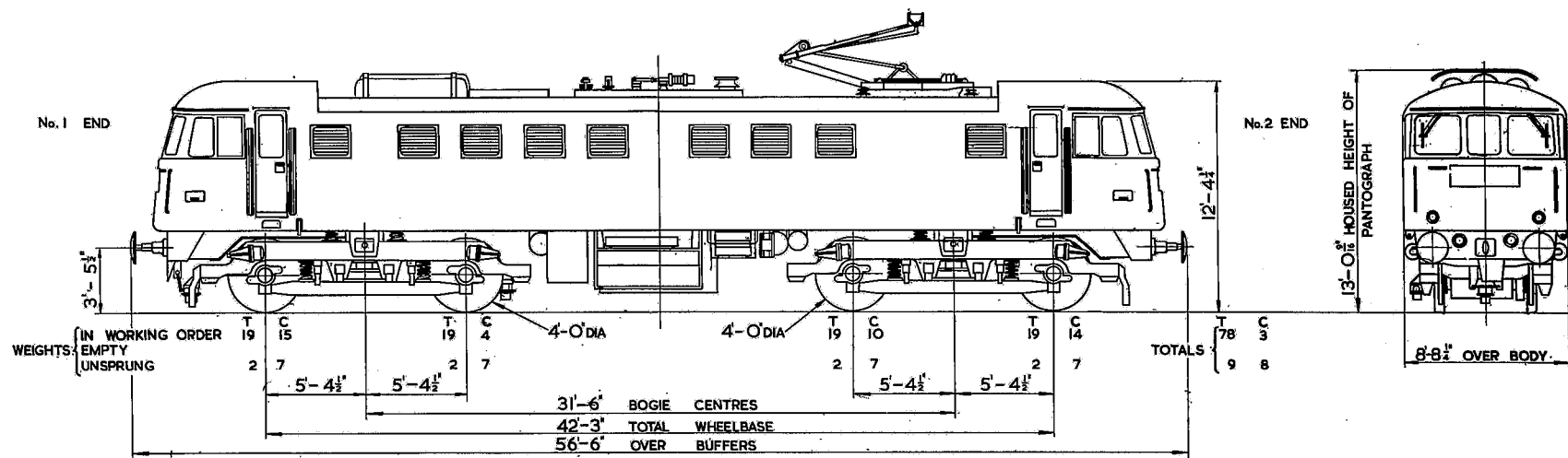
MAX. PERMITTED SERVICE SPEED.
{ HORIZONTAL WITHOUT GAUGE WIDENING.
{ HORIZONTAL WITH 3/4 INS. GAUGE WIDENING.
{ VERTICAL CONVEX.
{ VERTICAL CONCAVE.

65 M.P.H.
6 CHAINS.
5.1 CHAINS.
11 CHAINS.
11 CHAINS.

PERFORMANCE
AT 1400 VOLTS.

E.M.I. BR B+B. DC. ELECTRIC LOCOMOTIVE
CLASS 76

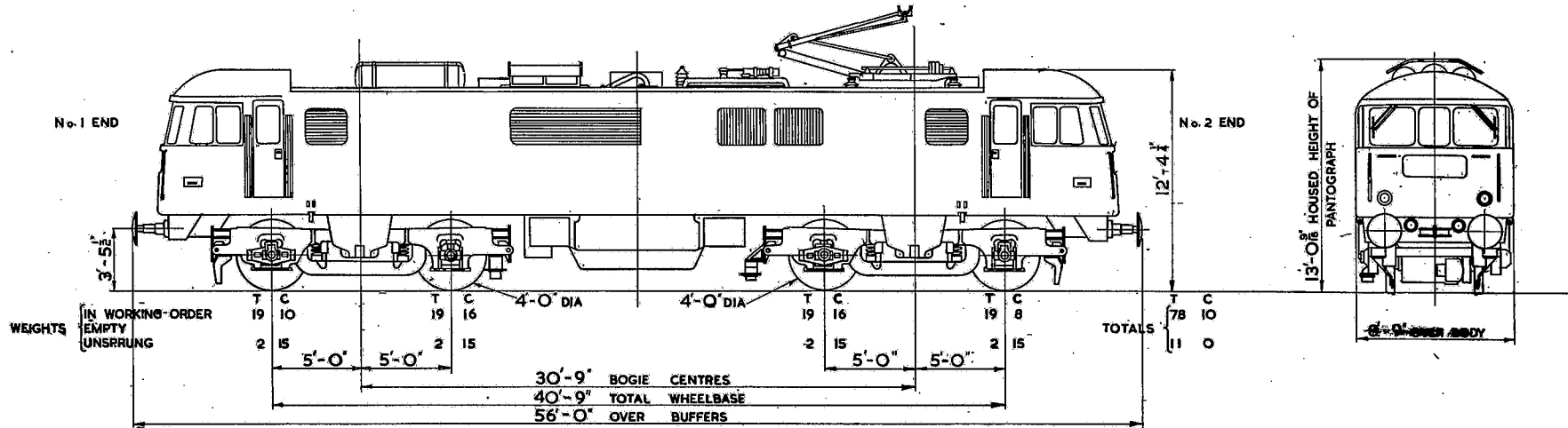
76-dA



SUPPLY SYSTEM.	{ TYPE. OVERHEAD.		BRAKING.	{ TYPE. { FOR LOCO. STRAIGHT AIR & AUTO AIR	
	{ NOMINAL VOLTAGE. 25 K.V. AC			{ FOR TRAIN. AUTO AIR & AIR CONT. W.E.	
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 189 RAILWAY MOTOR.			{ BRAKE FORCE. { % OF LOCO. WEIGHT	87-%
	{ No. FOUR.			{ IN WORKING ORDER.	
	{ TYPE OF SUSPENSION. FULL SUSPENSION IN BOGIE.		SPEED.	{ MAX. PERMITTED SERVICE SPEED.	00 M.P.H.
CONTROL SYSTEM.	{ TYPE OF GEAR DRIVE. ALSTHOM FLEXIBLE, SINGLE REDUCTION			{ HORIZONTAL WITHOUT GAUGE WIDENING.	4 CHAINS.
	{ TYPE. L.T. TAP CHANGING.		MINIMUM RADIUS	{ HORIZONTAL WITH 3/4 IN. GAUGE WIDENING.	3.65 CHAINS.
	{ MAX. TRACTIVE EFFORT. 50,000 LB. AT 28.6% ADHESION.		CURVES.	{ VERTICAL CONVEX.	11 CHAINS.
				{ VERTICAL CONCAVE.	10 CHAINS.
PERFORMANCE	{ CONT. RATING ON { 17,000 LB TRACTIVE EFFORT.		TRAIN HEATING	{ ELECTRICAL.	320 KW. AT 800 VOLTS A.C.
AT 22.5 K.V.	{ WEAKEST FIELD. { 71 M.P.H.		EQUIPMENT.		
	{ MAX. RAIL H.P. ON { 790 AMPS. PERAL MOTOR				
	{ WEAKEST MOTOR FIELD. { 3200 RAIL H.P.				
	{ 4960 H.P. AT 44 M.P.H.				

AL.I.A.EI (B.T.H./B.R.C.W.) B-B AC. ELECTRIC LOCOMOTIVE.
CLASS 81

81-b X

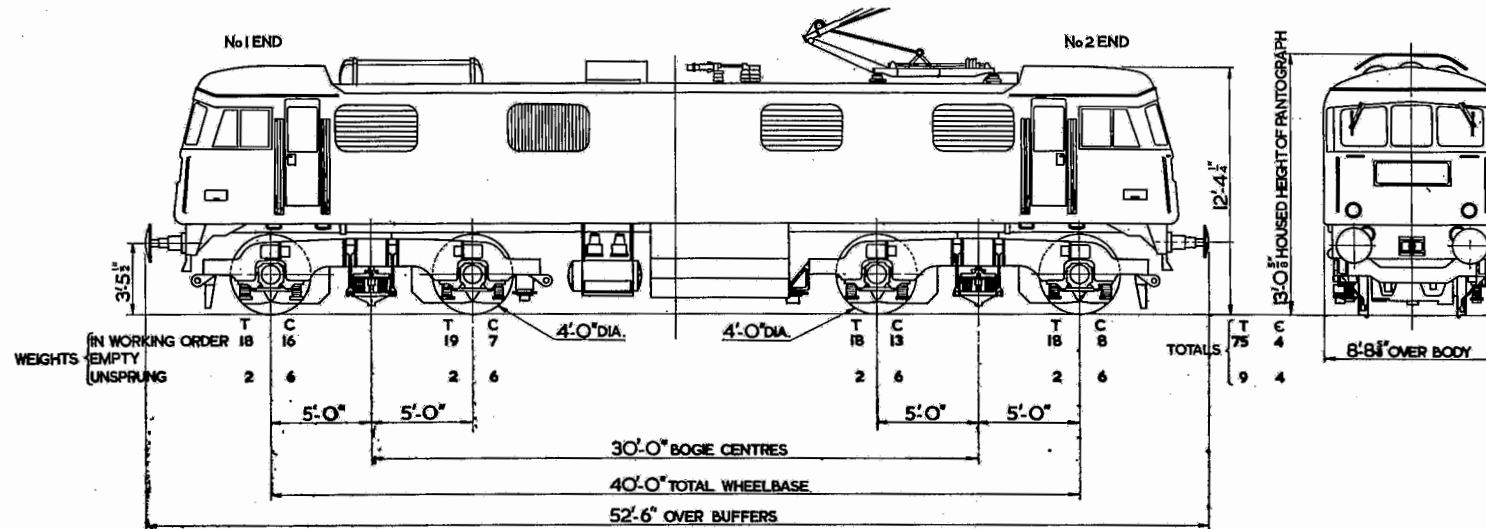


SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD. 25 KV. AC.	BRAKING.	{ TYPE. } FOR LOCO. FOR TRAIN.	STRAIGHT AIR & AUTO AIR AUTO AIR & AIR COIL VAL.
TRACTION MOTORS.	{ MAKE & TYPE. No. TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	AEI TYPE I89 RAILWAY MOTOR. FOUR. FULL SUSPENSION IN BOGIE ALSTHOM FLEXIBLE, SINGLE REDUCTION	SPEED.	{ BRAKE FORCE. } % OF LOCO. WEIGHT { IN WORKING ORDER.	84 %.
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	H.T. TAP CHANGING. 50,000 LB. AT 28.4 % ADHESION.	MINIMUM RADIUS CURVES.	{ MAX. PERMITTED SERVICE SPEED. HORIZONTAL WITHOUT GAUGE WIDENING. HORIZONTAL WITH 1/2 INS. GAUGE WIDENING. VERTICAL CONVEX. VERTICAL CONCAVE.	100 M.P.H. 4 CHAINS. 3.63 CHAINS. 8 CHAINS. 7 CHAINS.
PERFORMANCE.	{ CONT. RATING ON WEAKEST FIELD. MAX. RAIL H.P. ON WEAKEST MOTOR FIELD	{ 17000 L.B. TRACTIVE EFFORT. 73 MPH. 700 AMPS. PER MOTOR. 3300 RAIL H.P. 5500 H.P. AT 47 M.P.H.	TRAIN HEATING EQUIPMENT.	{ ELECTRICAL.	320 KW. AT 800 VOLTS AC.

AL.2 A.E.I. (M V/B.P.) B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 82

82-a X

APRIL 1974

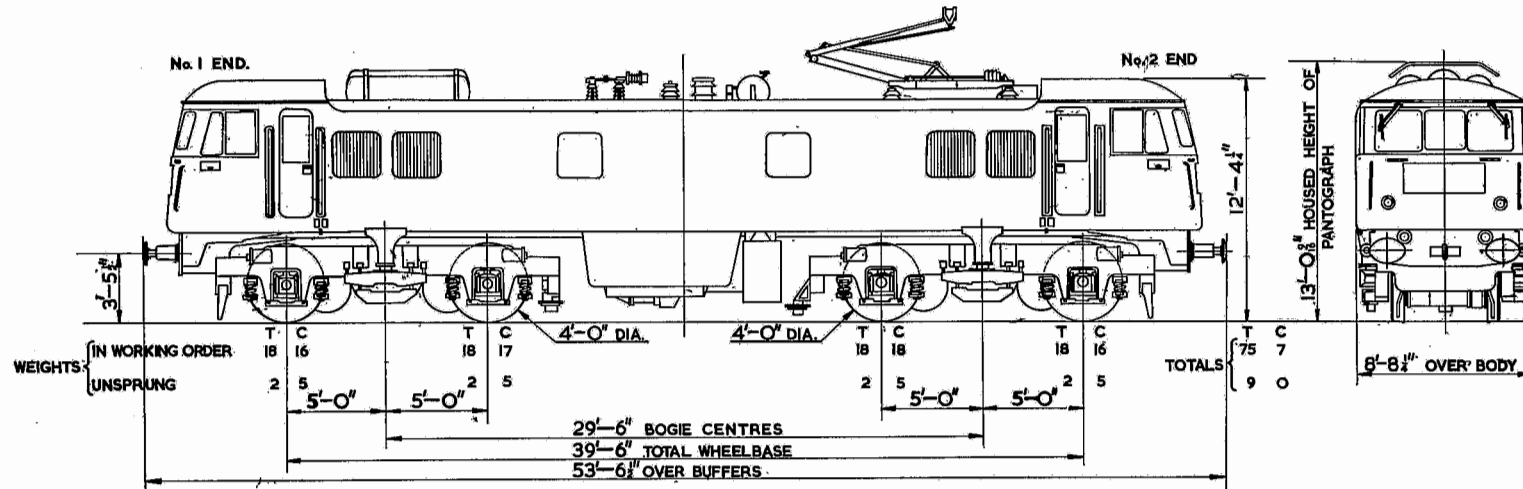


SUPPLY SYSTEM.	{ TYPE. OVERHEAD.		BRAKING.	{ TYPE { FOR LOCO. STRAIGHT AIR & AUTO. AIR.
	{ NOMINAL VOLTAGE. 25 K.V. A.C.			{ FOR TRAIN. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. ENGLISH ELECTRIC E.E. 535 A.			{ BRAKE FORCE. { % OF LOCO. WEIGHT 925%
	{ No. FOUR.			{ IN WORKING ORDER.
	{ TYPE OF SUSPENSION. FULL SUSPENSION IN BOGIE.		SPEED.	{ MAX. PERMITTED SERVICE SPEED. 100 M.P.H.
	{ TYPE OF GEAR DRIVE. S.L.M. FLEXIBLE SINGLE REDUCTION.			{ HORIZONTAL WITHOUT GAUGE WIDENING. 4 CHAINS.
CONTROL SYSTEM.	{ TYPE. L.T. TAP CHANGING.		MINIMUM RADIUS	{ HORIZONTAL WITH 3/4 INS. GAUGE WIDENING. 3-62 CHAINS.
	{ MAX. TRACTIVE EFFORT. 38,000 LB. AT 22-6% ADHESION.		CURVES.	{ VERTICAL CONVEX. 10 CHAINS.
	{ 15260 LB. TRACTIVE EFFORT.			{ VERTICAL CONCAVE. 10 CHAINS.
PERFORMANCE.	{ CONT. RATING ON WEAKEST FIELD. 73 M.P.H.		TRAIN HEATING	{ ELECTRICAL. 320 KW AT 800 VOLTS AC.
	{ 710 AMPS. PER MOTOR.		EQUIPMENT.	
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 4400 H.P. AT 50 M.P.H.			

AL.3 E.E. B-B A.C. ELECTRIC LOCOMOTIVE
CLASS 83

83-a X

APRIL 1974

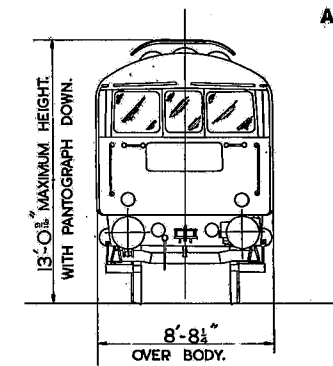
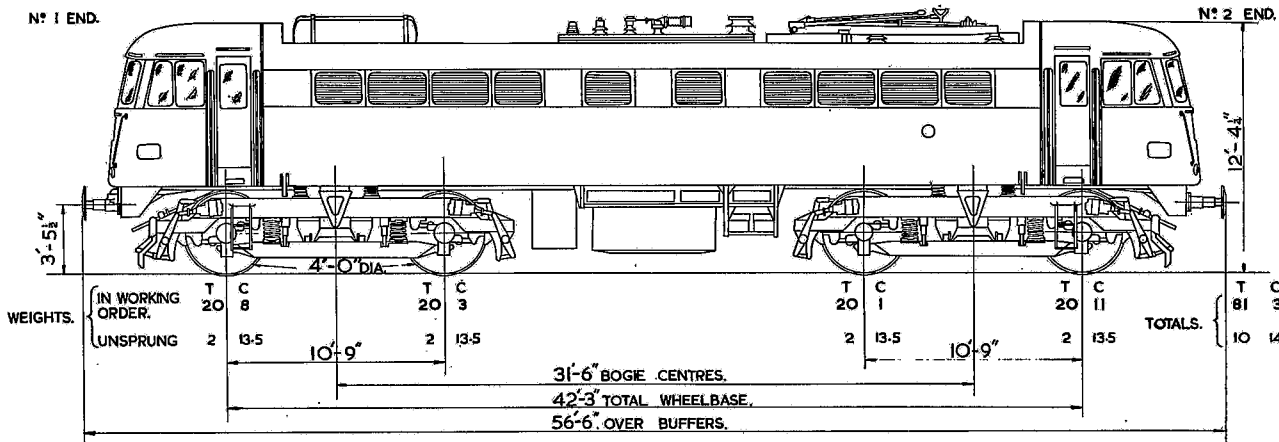


SUPPLY SYSTEM	TYPE OVERHEAD	NOMINAL VOLTAGE 25 K.V. AC.	BRAKING	TYPE { FOR LOCO. FOR TRAIN	STRAIGHT AIR & AUTO. AIR. AUTO. AIR & AIR CONT. VAC.
	MAKE & TYPE. G.E.C. W.T. 501			BRAKE FORCE { % OF LOCO. WEIGHT IN WORKING ORDER	90%
TRACTION MOTORS	No. FOUR		SPEED	MAX. PERMITTED SERVICE SPEED	100 M.P.H.
	TYPE OF SUSPENSION FULL SUSPENSION IN BOGIE			{ HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS
	TYPE OF GEAR-DRIVE BROWN-BOVERI FLEXIBLE SINGLE REDUCTN		MINIMUM RADIUS	{ HORIZONTAL WITH 3/4INS. GAUGE WIDENING	3-6 CHAINS
CONTROL SYSTEM	TYPE H.T. TAP CHANGING		CURVES.	{ VERTICAL CONVEX	11 CHAINS
	MAX. TRACTIVE EFFORT 50000 LB. AT 29% ADHESION			{ VERTICAL CONCAVE	22 CHAINS
	17600 LB. TRACTIVE EFFORT		TRAIN HEATING	{ ELECTRICAL	320KW. AT 800 VOLTS AC.
PERFORMANCE	CONT. RATING ON WEAKEST FIELD 66 MPH.		EQUIPMENT		
AT 22.5 KV.	760 AMPS. PER MOTOR				
	3100 RAIL HP.				
	MAX. RAIL HP ON WEAKEST MOTOR FIELD 4900 H.P. AT 44 MPH.				

**A.L.4 G.E.C. B-B. A.C. ELECTRIC LOCOMOTIVE.
CLASS 84**

84-a X

APRIL 1974

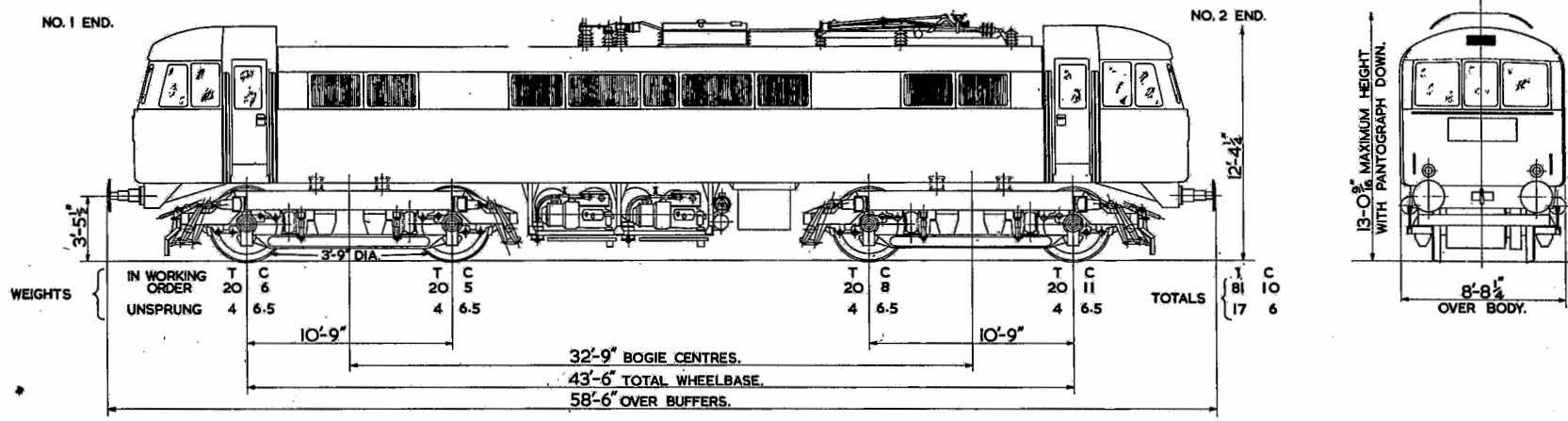


SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD 25KV.A.C.	BRAKING.	{ TYPE. FOR LOCO. FOR TRAIN	STRAIGHT AIR, AUTO. AIR & RHEOSTATIC. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. N° TYPE OF SUSPENSION TYPE OF GEAR DRIVE.	A EI TYPE 189. FOUR. FULL SUSPENSION IN BOGIE. ALSTHOM FLEXIBLE SINGLE REDUCTION.		{ BRAKE FORCE. % OF LOCO WEIGHT IN WORKING ORDER	85.6 %
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	LT. TAP CHANGING. 50000LB. AT 27.5 % ADHESION. 17000LB. TRACTIVE EFFORT	SPEED.	MAX. PERMITTED SERVICE SPEED	100 M.P.H.
PERFORMANCE AT 22.5 KV.	{ CONTINUOUS RATING. ON WEAKEST FIELD.	{ 71.M.P.H. 700 AMPS. PER MOTOR 3200 RAIL HP	MINIMUM RADIUS CURVES.	{ HORIZONTAL WITHOUT GAUGE WIDENING. 6 CHAINS. HORIZONTAL WITH 3/4 GAUGE WIDENING. 5-26 CHAINS. VERTICAL CONVEX. VERTICAL CONCAVE.	10 CHAINS. 10 CHAINS.
	{ MAX. RAIL HP ON WEAKEST. MOTOR FIELD.	{ 5100 HP. AT 45 MPH.	TRAIN HEATING EQUIPMENT. RECTIFIER.	{ ELECTRICAL. TYPE.	320 KW. AT 800 VOLTS A.C. SILICON.

AL 5 B.R. B-B. A.C. ELECTRIC LOCOMOTIVE.
CLASS 85

85-a X

APRIL 1974

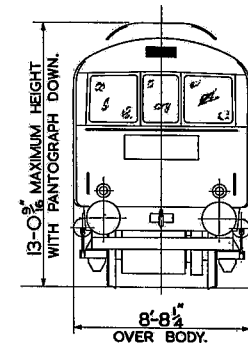
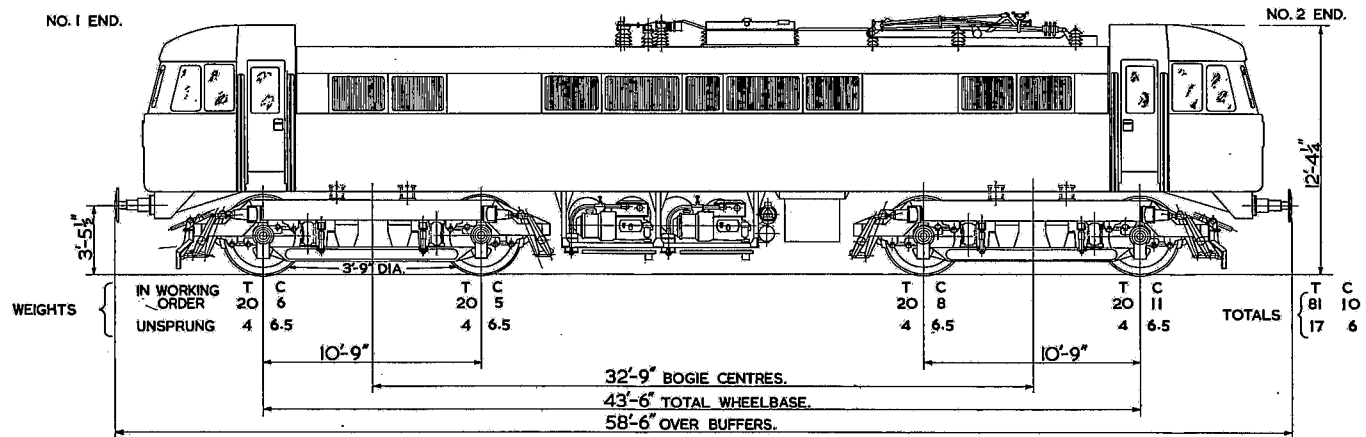


SUPPLY SYSTEM.	{ TYPE. OVERHEAD.	25 KV. A.C.	BRAKING.	{ TYPE. { FOR LOCO. STRAIGHT AIR, AUTO AIR & RHEOSTATIC.
	{ NOMINAL VOLTAGE.			{ FOR TRAIN. AUTO AIR & AIR CONT VAC.
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 282BZ	FOUR.	{ BRAKE FORCE. { % OF LOCO. WEIGHT	81.7 %
	{ NO. FOUR.		{ IN WORKING ORDER.	
	{ TYPE OF SUSPENSION. NOSE.		SPEED. MAX. PERMITTED SERVICE SPEED.	100 M.P.H.
	{ TYPE OF GEAR DRIVE. SINGLE REDUCTION.		{ HORIZONTAL WITHOUT GAUGE WIDENING.	6 CHAINS.
CONTROL SYSTEM.	{ TYPE. H.T. TAP CHANGING.		{ HORIZONTAL WITH 3/4" GAUGE WIDENING.	5.27 CHAINS.
	{ MAX. TRACTIVE EFFORT. 58000LB. AT 31.8% ADHESION.		{ VERTICAL CONVEX.	10 CHAINS.
			{ VERTICAL CONCAVE.	10 CHAINS.
PERFORMANCE AT 22.5 KV.	{ CONTINUOUS RATING ON WEAKEST FIELD. 24000LB. T. E.	62 M.P.H.	TRAIN HEATING EQUIPMENT. { ELECTRIC.	320 KW. AT 800 VOLTS A.C.
	{ 800 AMPS PER MOTOR.		{ RECTIFIER. TYPE.	SILICON.
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 4040 RAIL H.P.	5900HP AT 38MPH. 6100HP AT 39.5 MPH.		

AL6 B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86

86-a X

CANCELLED
25-3-77

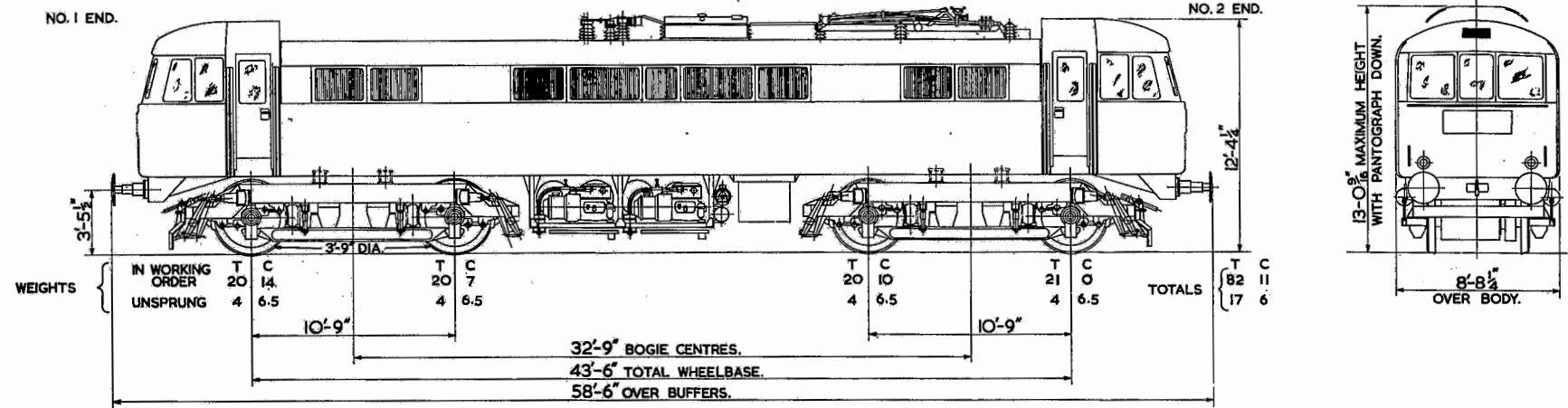


APRIL 1974

SUPPLY SYSTEM.	{ TYPE. OVERHEAD.	25 kv. A.C.	BRAKING.	{ TYPE. { FOR LOCO. STRAIGHT AIR, AUTO. AIR & RHEOSTATIC.
	{ NOMINAL VOLTAGE.			{ FOR TRAIN. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 282AZ.	FOUR.	{ BRAKE FORCE. { % OF LOCO. WEIGHT 81.7 %	
	{ NO. FOUR.		{ IN WORKING ORDER.	
	{ TYPE OF SUSPENSION. NOSE.		SPEED. MAX. PERMITTED SERVICE SPEED. 100 M.P.H.	
	{ TYPE OF GEAR DRIVE. SINGLE REDUCTION.		{ HORIZONTAL WITHOUT GAUGE WIDENING. 6 CHAINS.	
CONTROL SYSTEM.	{ TYPE. H.T. TAP-CHANGING.		{ HORIZONTAL WITH 3/4" GAUGE WIDENING. 5.27 CHAINS.	
	{ MAX. TRACTIVE EFFORT. 58000 LB. AT 31.8 % ADHESION.		{ VERTICAL CONVEX. 10 CHAINS.	
			{ VERTICAL CONCAVE. 10 CHAINS.	
PERFORMANCE AT 22.5 kv.	{ CONTINUOUS RATING 20000 LB. T.E.		TRAIN HEATING EQUIPMENT. { ELECTRIC. 320 kw. AT 800 VOLTS A.C.	
	{ ON WEAKEST FIELD. 67 M.P.H.		RECTIFIER. TYPE. SILICON.	
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 700 AMPS. PER MOTOR. 3600 RAIL H.P.			
	{ 5900 HP AT 38 MPH.			

AL6 B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86/O

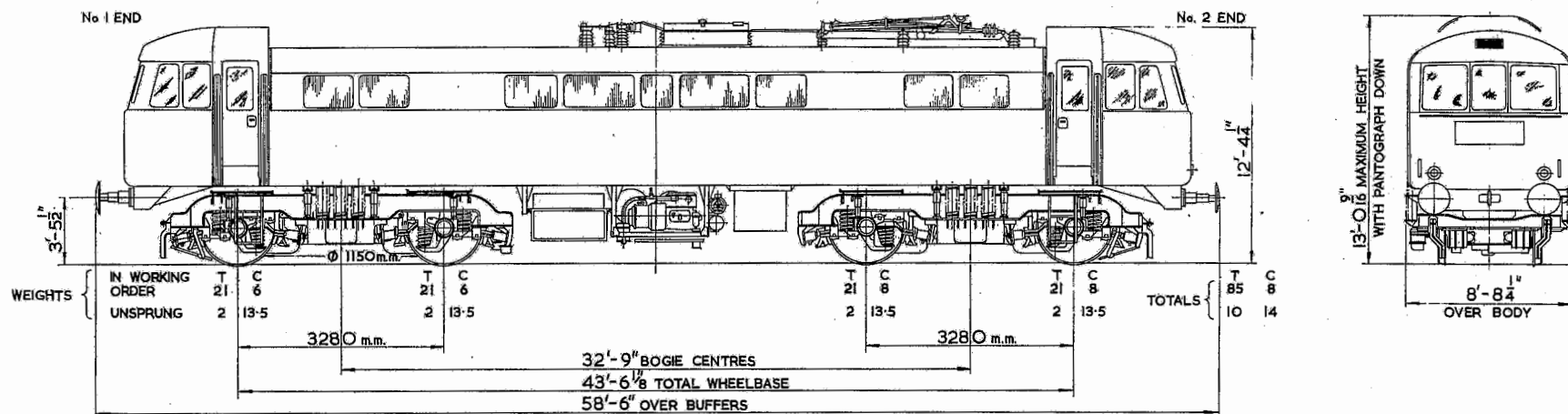
86-b X



SUPPLY SYSTEM.	{ TYPE. OVERHEAD.	25 kv. A.C.	BRAKING.	{ TYPE. FOR LOCO. STRAIGHT AIR, AUTO. AIR & RHEOSTATIC.
	{ NOMINAL VOLTAGE. 25 kv. A.C.			{ FOR TRAIN. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 282AZ.	FOUR.	{ BRAKE FORCE. { % OF LOCO. WEIGHT 807%	
	{ N ^o FOUR.		{ IN WORKING ORDER.	
	{ TYPE OF SUSPENSION. NOSE.		SPEED.	MAX. PERMITTED SERVICE SPEED. 100 M.P.H.
	{ TYPE OF GEAR DRIVE. SINGLE REDUCTION.			6 CHAINS.
CONTROL SYSTEM.	{ TYPE. H.T. TAP CHANGING.		MINIMUM RADIUS { HORIZONTAL WITHOUT GAUGE WIDENING. 6 CHAINS.	
	{ MAX. TRACTIVE EFFORT. 58000 LB. AT 31.4 % ADHESION.		{ HORIZONTAL WITH 3/4 GAUGE WIDENING. 5-27 CHAINS.	
		20000 LB. T.E.	{ VERTICAL CONVEX. 10 CHAINS.	
			{ VERTICAL CONCAVE. 10 CHAINS.	
PERFORMANCE AT 22.5 kv.	{ CONTINUOUS RATING 67 M.P.H.		TRAIN HEATING { ELECTRIC. 320 kw. AT 800 VOLTS A.C.	
	{ ON WEAKEST FIELD. 700 AMPS. PER MOTOR.		RECTIFIER. TYPE. SILICON.	
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 3600 RAIL H.P.			
		5900 HP AT 38 M.P.H.		

AL6 B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86/O

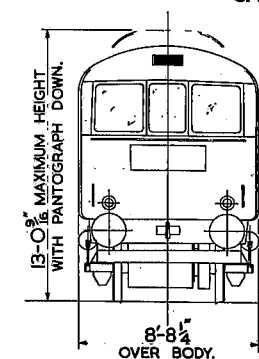
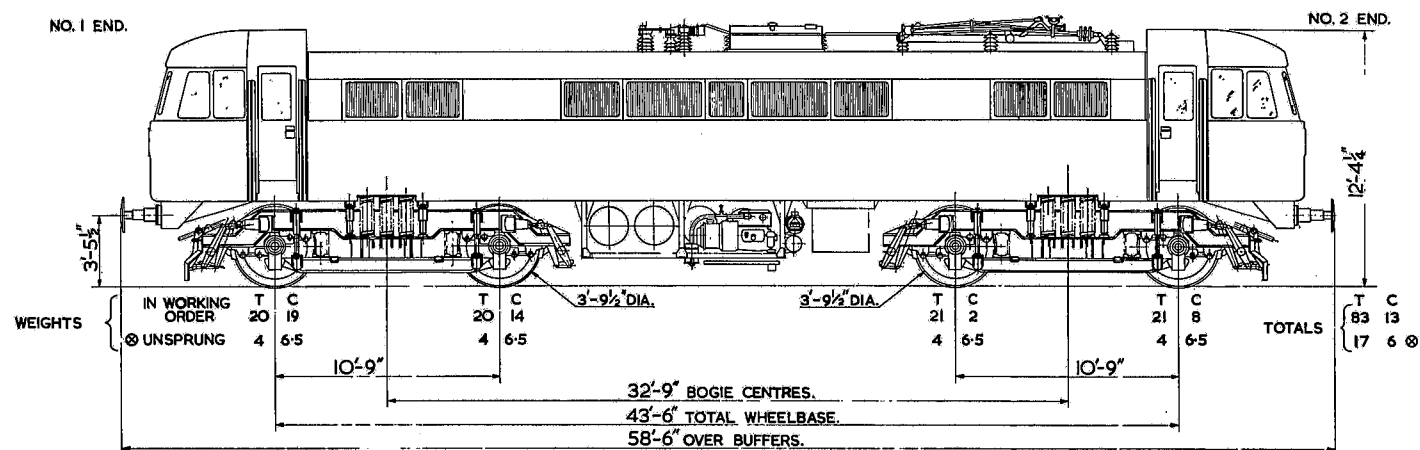
86 - c X



SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD. 25 KV. A.C.	BRAKING.	{ TYPE. BRAKE FORCE.	{ FOR LOCO. FOR TRAIN. % OF LOCO. WEIGHT IN WORKING ORDER.	STRAIGHT AIR, AUTO. AIR & RHEOSTATIC. AUTO. AIR & AIR CONT. VAC. 79.9%.
TRACTION MOTORS.	{ MAKE & TYPE. Nº TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	G.E.C. TYPE G.412 AZ. FOUR. FULLY SUSPENDED. SINGLE REDUCTION.	SPEED.	{ MAX. PERMITTED SERVICE SPEED.	100 M.P.H.	
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	H.T. TAP CHANGING. 58000LB. AT 30.3% ADHESION. 21300 LB. T.E.	MINIMUM RADIUS CURVES.	{ HORIZONTAL WITHOUT GAUGE WIDENING. HORIZONTAL WITH 3/4" GAUGE WIDENING. VERTICAL CONVEX. VERTICAL CONCAVE.	4 CHAINS. 3.7 CHAINS. 10 CHAINS. 10 CHAINS.	
PERFORMANCE AT 25 KV.	{ CONTINUOUS RATING. ON WEAKEST FIELD.	87 M.P.H. 885 AMPS PER MOTOR. 5000 RAIL H.P.	TRAIN HEATING EQUIPMENT. RECTIFIER.	{ ELECTRIC. TYPE.	460 KV A AT 800 VOLTS A.C. SILICON.	

**B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86/1**

86-1a X

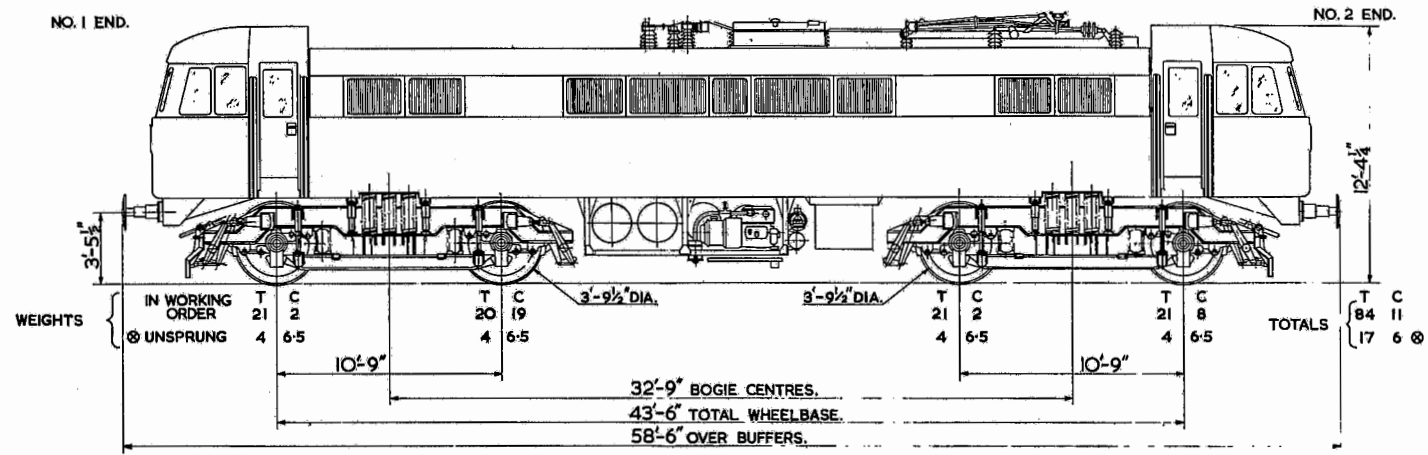


⊗ ⊗ LOCOS. FITTED WITH RESILIENT WHEELS. UNSPRUNG WEIGHTS ARE NOT TO BE USED IN DYNAMIC TRACK FORCE CALCULATIONS.

SUPPLY SYSTEM.	{ TYPE. OVERHEAD.	25 kV. A.C.	BRAKING.	{ TYPE. { FOR LOCO. STRAIGHT AIR, AUTO. AIR & RHEOSTATIC
	{ NOMINAL VOLTAGE.			{ FOR TRAIN. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 282 BZ.	FOUR.	{ BRAKE FORCE. { % OF LOCO. WEIGHT 79.6 %	
	{ NO. FOUR.		{ IN WORKING ORDER.	
	{ TYPE OF SUSPENSION. NOSE.			
	{ TYPE OF GEAR DRIVE. SINGLE REDUCTION.		SPEED. MAX. PERMITTED SERVICE SPEED. 100 M.P.H.	
CONTROL SYSTEM.	{ TYPE. H.T. TAP CHANGING.		{ HORIZONTAL WITHOUT GAUGE WIDENING. 6 CHAINS.	
	{ MAX. TRACTIVE EFFORT. 46500 LB. AT 24.8% ADHESION.		{ HORIZONTAL WITH 3/4" GAUGE WIDENING. 5.27 CHAINS.	
	{ CONTINUOUS RATING ON WEAKEST FIELD. 19200 LB. T.E.		{ VERTICAL CONVEX. 10 CHAINS.	
	{ 77.5 M.P.H.		{ VERTICAL CONCAVE. 10 CHAINS.	
PERFORMANCE AT 22.5 kV.	{ ON WEAKEST FIELD. 800 AMPS. PER MOTOR.		TRAIN HEATING EQUIPMENT. { ELECTRIC 320 kW. AT 800 VOLTS A.C.	
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 4040 RAIL H.P.		RECTIFIER. TYPE. SILICON.	
	{ 6100 H.P. AT 49.5 M.P.H.			

B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86/2.

86-2b X

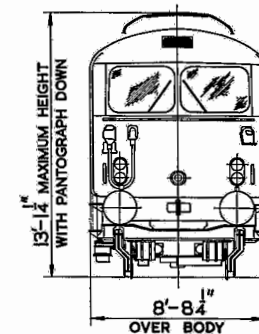
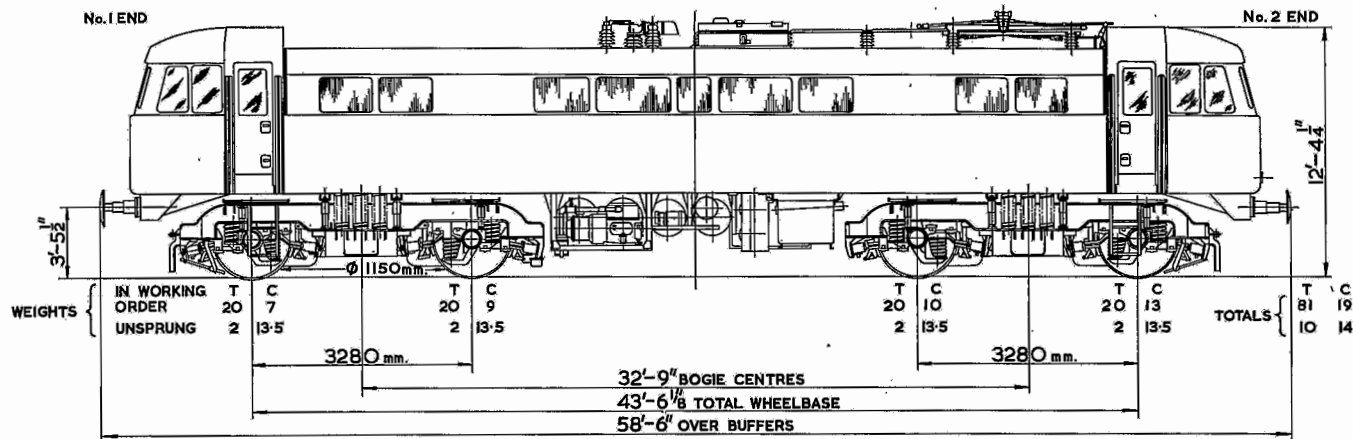


⊗ ⊗ LOCOS. FITTED WITH RESILIENT WHEELS. UNSPRUNG WEIGHTS ARE NOT TO BE USED IN DYNAMIC TRACK FORCE CALCULATIONS.

SUPPLY SYSTEM.	{ TYPE. OVERHEAD. NOMINAL VOLTAGE. 25 kV A.C.	BRAKING.	{ TYPE. FOR LOCO. FOR TRAIN.	STRAIGHT AIR, AUTO. AIR & RHEOSTATIC. AUTO. AIR & AIR CONT. VAC.
TRACTION MOTORS.	{ MAKE & TYPE. A.E.I. TYPE 282 BZ. Nº FOUR. TYPE OF SUSPENSION. NOSE. TYPE OF GEAR DRIVE. SINGLE REDUCTION.	SPEED.	{ BRAKE FORCE. % OF LOCO. WEIGHT IN WORKING ORDER.	78.7%
CONTROL SYSTEM.	{ TYPE. H.T. TAP CHANGING. MAX. TRACTIVE EFFORT. 46500 LB. AT 24.5% ADHESION.	MINIMUM RADIUS CURVES.	{ MAX. PERMITTED SERVICE SPEED. 100 M.P.H. HORIZONTAL WITHOUT GAUGE WIDENING. 6 CHAINS. HORIZONTAL WITH 3/4" GAUGE WIDENING. 5-27 CHAINS. VERTICAL CONVEX. 10 CHAINS. VERTICAL CONCAVE. 10 CHAINS.	
PERFORMANCE AT 22.5 kV.	{ CONTINUOUS RATING ON WEAKEST FIELD. 77.5 M.P.H. 800 AMPS. PER MOTOR. 4040 RAIL H.P. MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. 6100 H.P. AT 49.5 M.P.H.	TRAIN HEATING EQUIPMENT. RECTIFIER.	{ ELECTRIC TYPE.	320 kW. AT 800 VOLTS A.C. SILICON.

**B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86/2.**

86-2c X

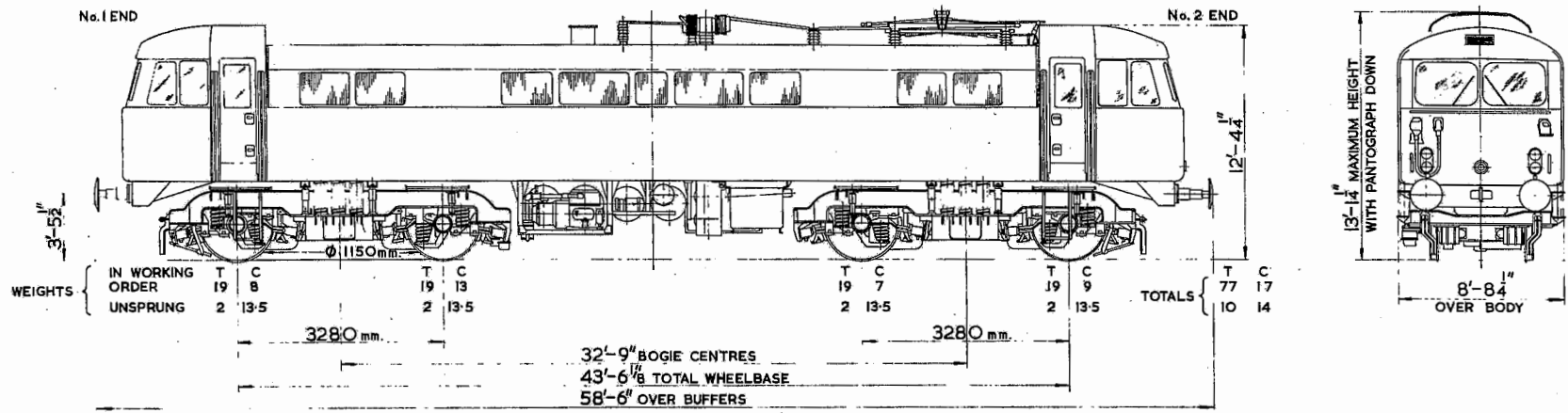


APRIL 1974

SUPPLY SYSTEM	{ TYPE	OVERHEAD	{ TYPE	{ FOR LOCO	AIR & RHEOSTATIC
	{ NOMINAL VOLTAGE	25 KV. A.C.		{ FOR TRAIN	AIR
	{ MAKE & TYPE	G.E.C. TYPE G.412 AZ	BRAKING	{ BRAKE FORCE	{ % OF LOCO. WEIGHT
	{ NO	FOUR		{ IN WORKING ORDER	83.25 %
TRACTION MOTORS	{ TYPE OF SUSPENSION	FULLY SUSPENDED	SPEED	{ MAX. PERMITTED SERVICE SPEED	100 M.P.H.
	{ TYPE OF GEAR DRIVE	SINGLE REDUCTION		{ HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS
CONTROL SYSTEM	{ TYPE	H.T. TAP CHANGING	MINIMUM RADIUS	{ HORIZONTAL WITH 3/4 GAUGE WIDENING	3.7 CHAINS
	{ MAX. TRACTIVE EFFORT	58000 L.B. AT 31.6 % ADHESION	CURVES	{ VERTICAL CONVEX	10 CHAINS
PERFORMANCE	{ CONTINUOUS RATING	21300 L.B. T.E.		{ VERTICAL CONCAVE	10 CHAINS
AT 25 KV.	{ ON WEAKEST FIELD	87 M.P.H.	TRAIN HEATING	{ ELECTRIC	460 KVA AT 800 VOLTS A.C.
		885 AMPS PER MOTOR	EQUIPMENT	{ TYPE	SILICON.
		5000 RAIL H.P.	RECTIFIER		

**B.R. B-B A.C. ELECTRIC LOCOMOTIVE
CLASS 87**

87-aA



SUPPLY SYSTEM	{ TYPE NOMINAL VOLTAGE	OVERHEAD 25 kV. A.C.	BRAKING	{ TYPE BRAKE FORCE	{ FOR LOCO. FOR TRAIN % OF LOCO. WEIGHT IN WORKING ORDER	AIR & RHEOSTATIC AIR 87.63 %
TRACTION MOTORS	{ MAKE & TYPE Nº TYPE OF SUSPENSION TYPE OF GEAR DRIVE	G.E.C. TYPE G.412 BZ FOUR FULLY SUSPENDED SINGLE REDUCTION	SPEED	{ MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/4 GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE		100 M.P.H. 4 CHAINS 3.7 CHAINS 10 CHAINS 10 CHAINS
CONTROL SYSTEM	{ TYPE MAX. TRACTIVE EFFORT	THYRISTOR 58000 LB. AT 33.2% ADHESION	MINIMUM RADIUS CURVES	{ HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/4 GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE		
PERFORMANCE AT 25 KV.	{ CONTINUOUS RATING ON WEAKEST FIELD	{ 21600 LB. T.E. 84 M.P.H. 875 AMPS PER MOTOR 4850 RAIL H.P.	TRAIN HEATING EQUIPMENT	{ ELECTRIC		510 kVA AT 890 VOLTS A.C.
			RECTIFIER	{ TYPE		THYRISTOR

**B.R. B-B A.C. ELECTRIC LOCOMOTIVE
CLASS 87/1**

87-1d A