

MT/26



B.R. Electric Locomotive Diagram Book

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PREFACE

1. It should be noted that this Electric Locomotive Diagram Book completely replaces the earlier (page size 11" x 5 $\frac{3}{4}$ ") edition which must be destroyed.
2. A complete set of locomotive diagram books consist of the following :-

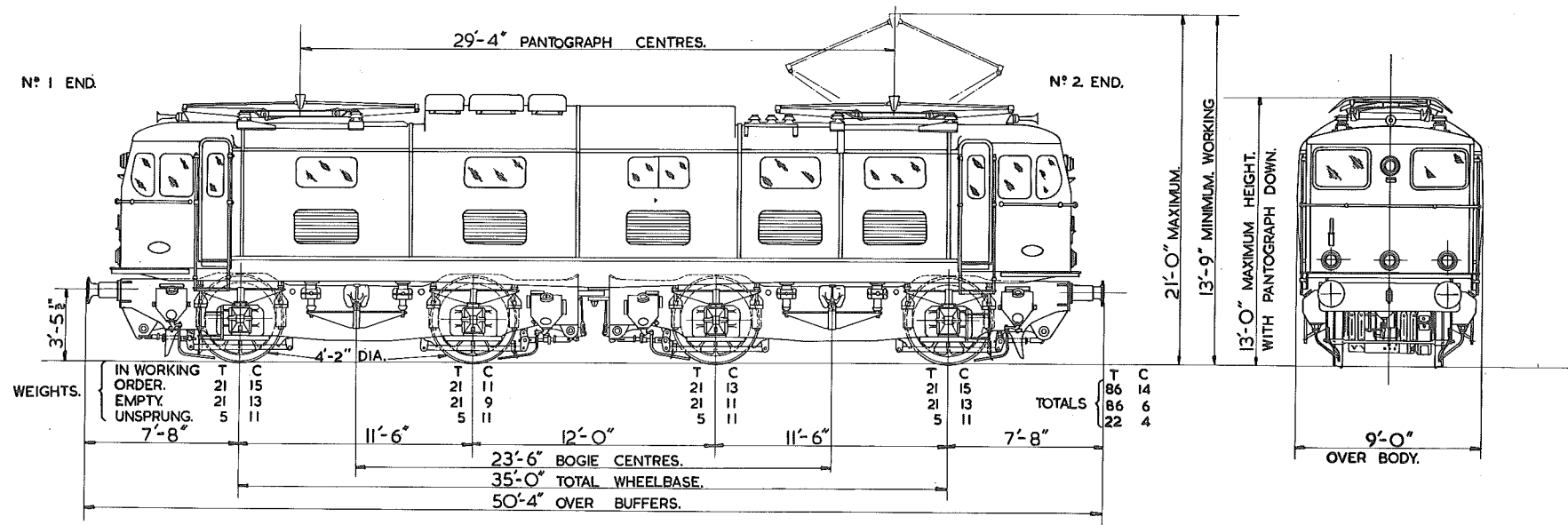
Diagram Book	Publication No.
a) Main Line Diesel Locomotive	MT/25
b) Electric Locomotive	MT/26
c) Shunting Diesel Locomotive	MT/27

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

3. This diagram book has been updated up to and including 30th June 1969.

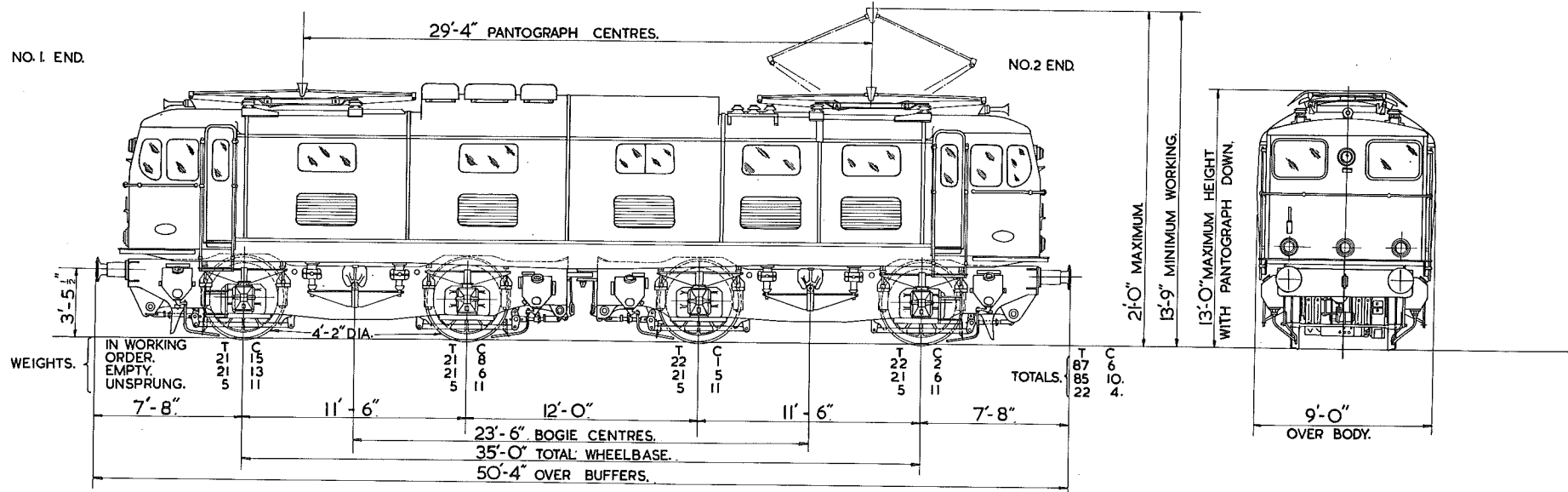
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The Railway Technical Centre
DERBY



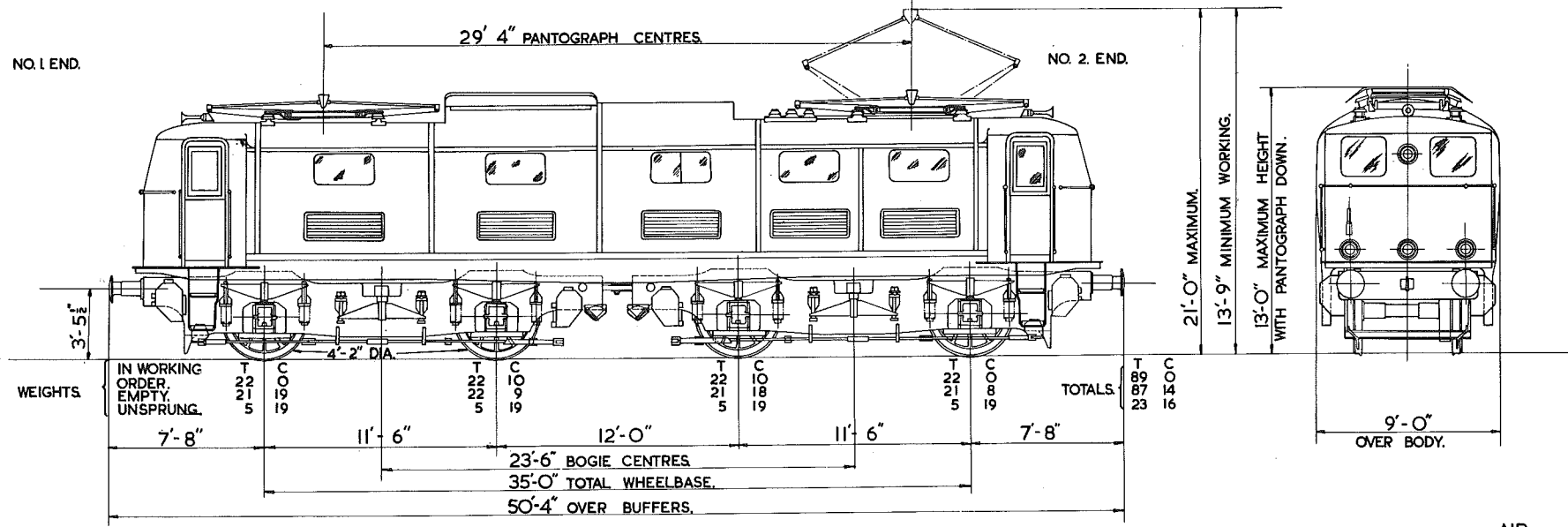
SUPPLY SYSTEM.	{ TYPE NOMINAL VOLTAGE.	OVERHEAD. 1500.D.C.					
TRACTION MOTORS.	{ MAKE & TYPE. N° TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	M.V. TYPE. 186. FOUR. NOSE SUSPENDED. DIRECT SPUR.		BRAKING.	{ TYPE. BRAKE FORCE.	{ FOR LOCO. FOR TRAIN. % OF LOCO WEIGHT IN WORKING ORDER.	AIR, ELECTRIC REGENERATIVE, & RHEOSTATIC. VACUUM. 82-6
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 M.P.H. 794 AMPS. TOTAL TRACTION CURRENT. 1300 RAIL H.P. 3300 H.P. AT 27.5 M.P.H.		SPEED.	MAX. PERMITTED SERVICE SPEED.	65 M.P.H.	
PERFORMANCE AT 1400 VOLTS.				CURVE.	MIN. RAD. CURVE.	{ WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED.	6 CHAINS. 4 CHAINS.
				TRAIN HEATING EQUIPMENT.	BOILER MAKE & TYPE STEAMING CAPACITY.		NOT FITTED.
				TANK CAPACITY.	BOILER WATER.		

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



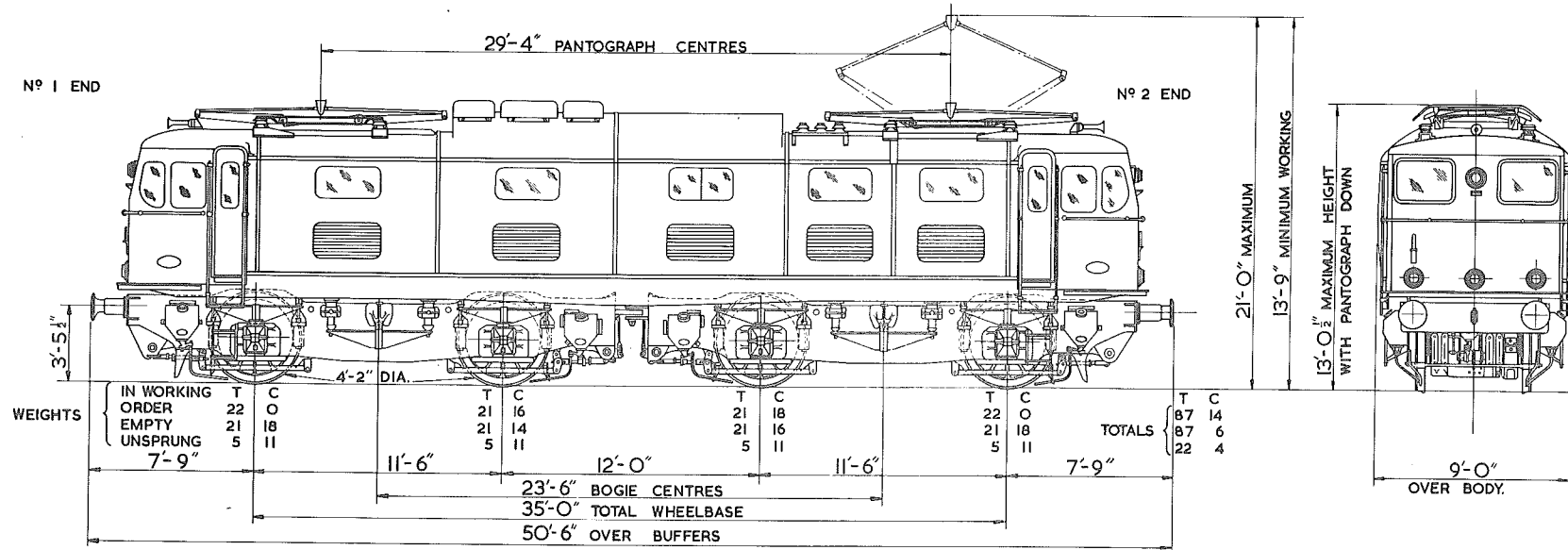
SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD. 1500 D.C.		{ TYPE. FOR LOCO. FOR TRAIN.	AIR ELECTRIC REGENERATIVE & RHEOSTATIC.
TRACTION MOTORS.	{ MAKE & TYPE, Nº TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	M.V. TYPE 186. FOUR. NOSE SUSPENDED. DIRECT SPUR.	BRAKING.	{ BRAKE FORCE. % OF LOCO WEIGHT. IN WORKING ORDER }	VACUUM.
CONTROL SYSTEM.	TYPE.	ELECTRO PNEUMATIC.	SPEED.	MAX. PERMITTED SERVICE SPEED.	82-0.
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. 3300 H.P. AT 27.5 MPH.	CURVE.	MIN. RAD. CURVE. { WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED.	65 M.P.H. 6 CHAINS. 4 CHAINS.
			TRAIN HEATING EQUIPMENT.	{ BOILER MAKE & TYPE STEAMING CAPACITY.	BASTIAN & ALLEN-ELECTRIC. 1000 LB/HR
			TANK CAPACITY.	BOILER WATER	240 GALLS.

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



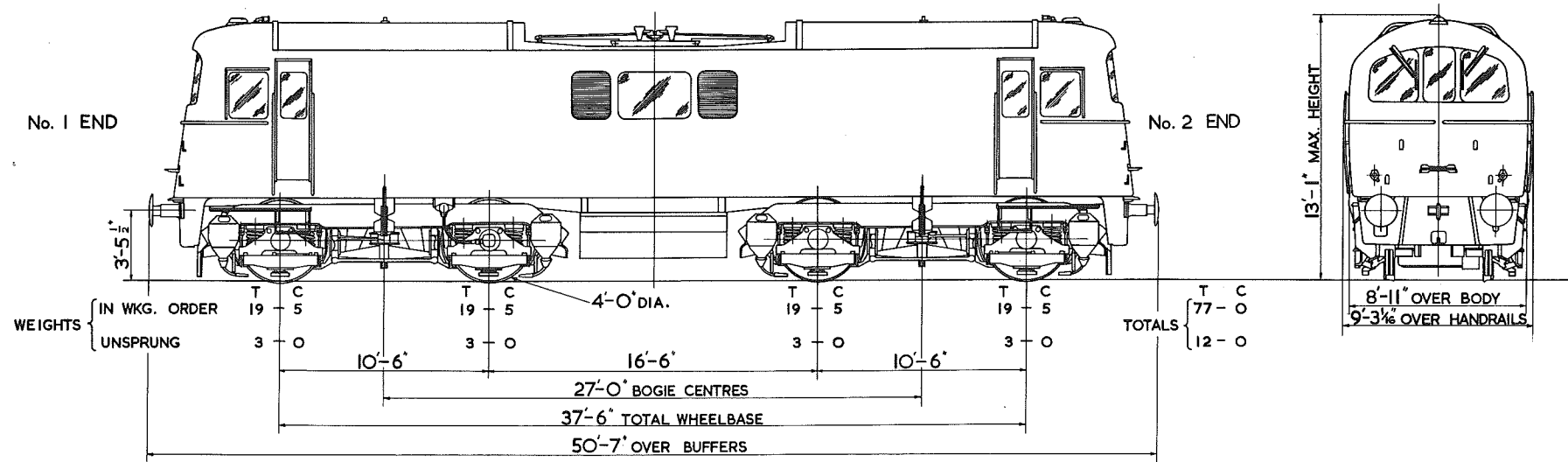
SUPPLY SYSTEM.	{ TYPE. OVERHEAD. NOMINAL VOLTAGE. 1500 D.C.		{ TYPE. FOR LOCO. FOR TRAIN.	AIR. ELECTRO REGENERATIVE VACUUM.
	{ MAKE & TYPE. M.V. TYPE 186. NO. FOUR.	BRAKING.	{ BRAKE FORCE % OF LOCO WEIGHT. IN WORKING ORDER }	89 %.
TRACTION MOTORS.	{ TYPE OF SUSPENSION. NOSE SUSPENDED. TYPE OF GEAR DRIVE. DIRECT SPUR.	SPEED	MAX. PERMITTED SERVICE SPEED.	65 M.P.H.
CONTROL SYSTEM.	{ TYPE. ELECTRO PNEUMATIC. MAX TRACTIVE EFFORT. 45000 LB. AT 22.6% ADHESION. (350 VOLTS PER MOTOR.) 8800 LB. TRACTIVE EFFORT. CONTINUOUS RATING. 56 MPH. ON WEAKEST FIELD. 794 AMPS. TOTAL TRACTION CURRENT. (700 VOLTS PER MOTOR.) 1300 RAIL H.P.	CURVE.	MIN. RAD. CURVE. (WITHOUT GAUGE WIDENING. AT DEAD SLOW SPEED.	6 CHAINS. 4 CHAINS.
PERFORMANCE AT 1400 VOLTS.	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD. (700 VOLTS PER MOTOR.) 3300 H.P. AT 27.5 MPH.	TRAIN HEATING EQUIPMENT.	{ BOILER MAKE & TYPE STEAMING CAPACITY.	BASTIAN & ALLEN-ELECTRIC. 750 LB/HR.
		TANK CAPACITY.	BOILER WATER.	210 GALLS.

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



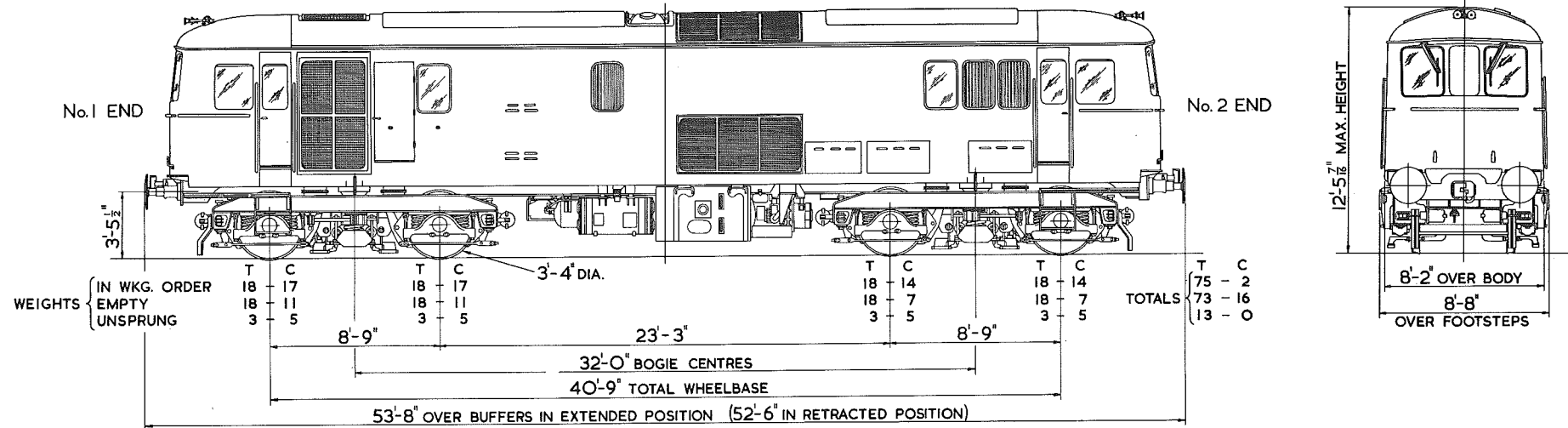
SUPPLY SYSTEM	{ TYPE NOMINAL VOLTAGE	OVERHEAD 1500 D.C.	BRAKING	{ TYPE { FOR LOCO FOR TRAIN BRAKE FORCE { % OF LOCO WEIGHT IN WORKING ORDER	STRAIGHT AIR & AUTO. AIR ELECTRIC REGENERATIVE & RHEOSTATIC AUTO AIR & AIR CONT. VAC.
TRACTION MOTORS	{ MAKE & TYPE Nº TYPE OF SUSPENSION TYPE OF GEAR DRIVE	M.V. TYPE. 186 FOUR NOSE SUSPENDED DIRECT SPUR	SPEED	MAX. PERMITTED SERVICE SPEED	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	{ 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	{ 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



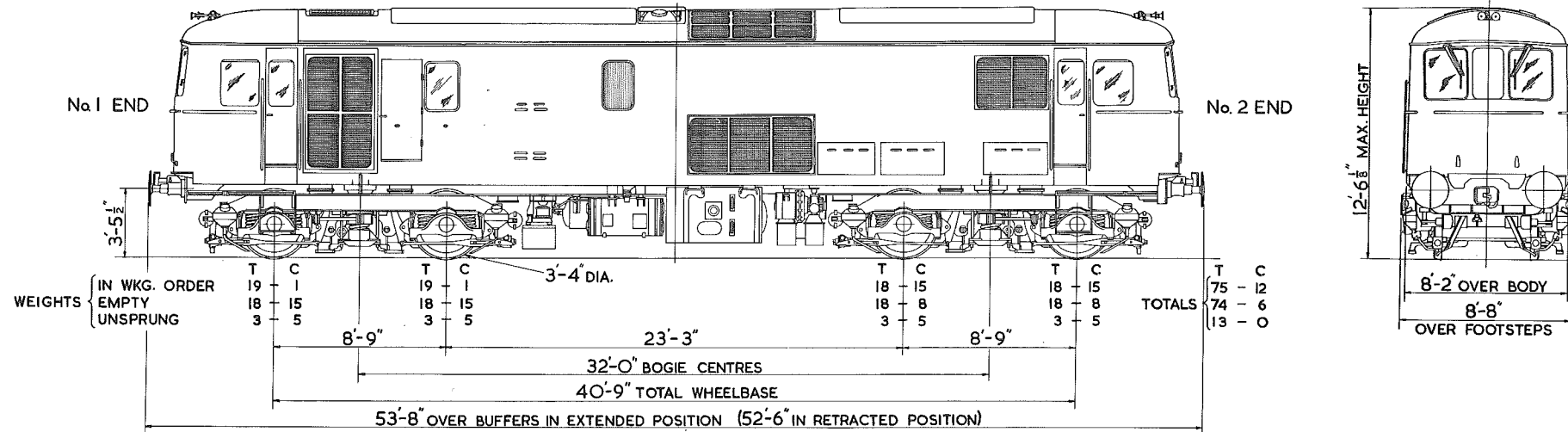
SUPPLY SYSTEM	TYPE	THIRD RAIL OR OVERHEAD IN YDS. ETC.	BRAKING	TYPE	FOR LOCO	STRAIGHT AIR & AUTOMATIC AIR
	NOMINAL VOLTAGE	660-750 VOLTS D.C.		FOR TRAIN		AUTOMATIC AIR & AIR CONTROLLED VACUUM
TRACTION MOTORS	MAKE & TYPE	ENGLISH ELECTRIC E.E.532		BRAKE FORCE	% OF LOCO. WEIGHT	88%
	No.	FOUR		IN WORKING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

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



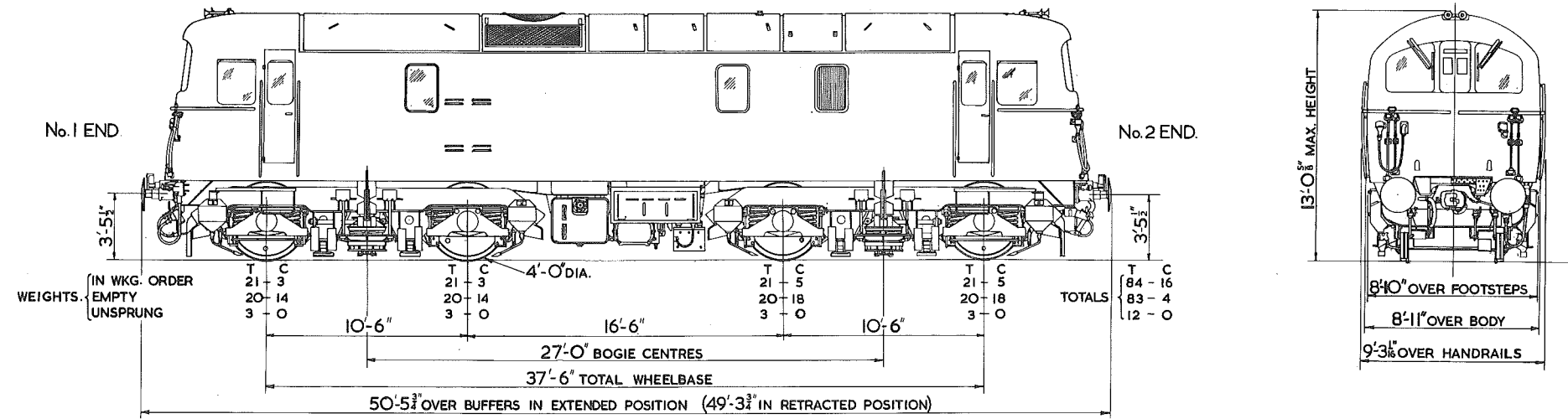
	ELECTRIC		DIESEL	
SUPPLY SYSTEM	TYPE	THIRD RAIL	ENGINE	MAKE & TYPE
	NOMINAL VOLTAGE	660-750 VOLTS D.C.		ENGLISH ELECTRIC 4 SRKT
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT (337.5 VOLTS PER MOTOR)	42,000 LB. AT 25% ADHESION	MAIN GENERATOR	MAKE & TYPE
	CONT. RATING ON	9600 LB. TRACTIVE EFFORT		ENGLISH ELECTRIC E.E. 824/3D
	WEAKEST FIELD (675 VOLTS PER MOTOR)	55.5 M.P.H.	PERFORMANCE	MAX. TRACTIVE EFFORT
	MAX. RAIL H.P. ON	1,700 AMPS. TOTAL TRACTION CURRENT		34,100 LB. AT 20.3% ADHESION
	WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	1,420 RAIL H.P.		AT 1,500 AMPS. MAIN GENERATOR
TRAIN HTG. EQUIP.	675 VOLTS D.C. SUPPLY	2,450 H.P. AT 37 M.P.H.		CONT. TRACTIVE EFFORT
		400 AMPS. MAXIMUM	TANK CAPACITY	16,100 LB. AT 10 M.P.H.
			TRAIN HTG. EQUIP.	AT 850 AMPS. MAIN GENERATOR
TRACTION MOTORS	MAKE & TYPE	ENGLISH ELECTRIC E.E. 542 A		RAIL H.P. AT CONT. RATING
	No.	FOUR		430 H.P.
	TYPE OF SUSPENSION	AXLE	SPEED	FULL ENGINE OUTPUT
	TYPE OF GEAR DRIVE	STRAIGHT SPUR SINGLE REDUCTION		AVAILABLE BETWEEN 3 & 80 M.P.H.
MINIMUM RADIUS CURVES	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS		ENGINE FUEL
	HORIZONTAL WITH 3/4" GAUGE WIDENING	3 1/3 CHAINS	BRAKING	340 GALLS.
	VERTICAL CONVEX	11 CHAINS		PREHEATING
	VERTICAL CONCAVE	11 CHAINS		ELECTRICAL FROM MAIN GENERATOR

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



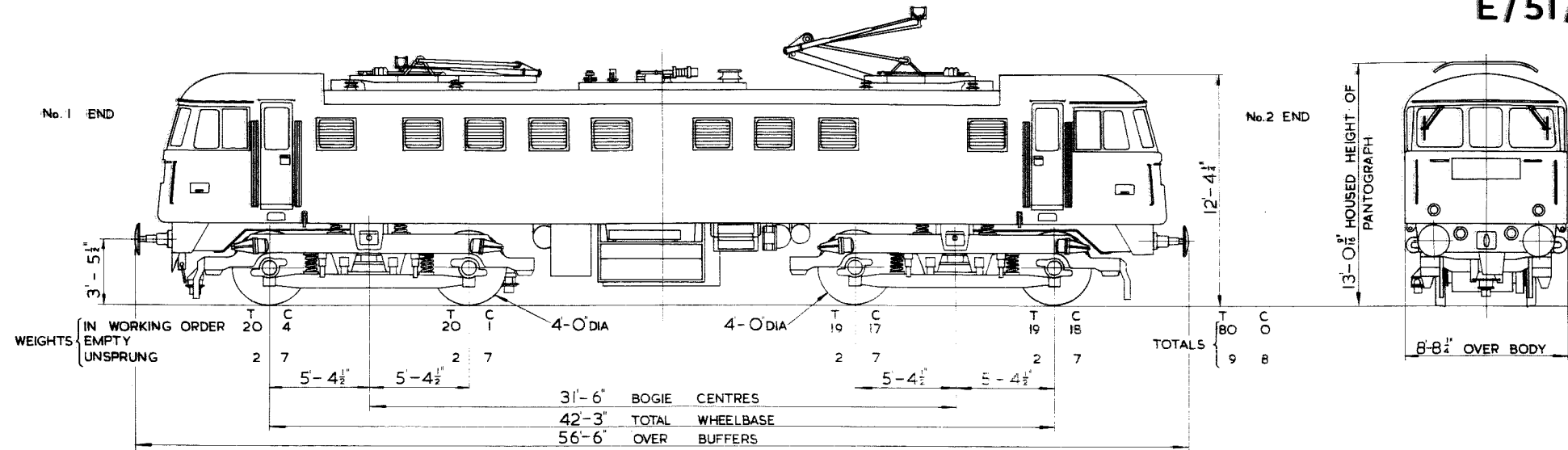
	ELECTRIC		DIESEL		
SUPPLY SYSTEM	TYPE	THIRD RAIL	ENGINE	MAKE & TYPE	ENGLISH ELECTRIC 4 SRKT
	NOMINAL VOLTAGE	660-750 VOLTS D.C.		No. OF CYLS. & CYCLE	4 CYLS. 4 STROKE
				MAX. 1 HOUR RATED OUTPUT	600 H.P. AT 850 R.P.M.
			MAIN GENERATOR	MAKE & TYPE	ENGLISH ELECTRIC E.E. 824/5D
				MAX. TRACTIVE EFFORT	36,000 LB. AT 21.4% ADHESION
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT (337.5 VOLTS PER MOTOR)	40,000 LB. AT 24% ADHESION		CONT. TRACTIVE EFFORT	13,600 LB. AT 11.5 M.P.H.
	CONT. RATING ON	7800 LB. TRACTIVE EFFORT		RAIL H.P. AT CONT. RATING	420 H.P.
	WEAKEST FIELD (675 VOLTS PER MOTOR)	68 M.P.H.		FULL ENGINE OUTPUT	AVAILABLE BETWEEN 3 & 90 M.P.H.
	MAX. RAIL H.P. ON WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	1,700 AMPS. TOTAL TRACTION CURRENT		ENGINE FUEL	340 GALLS.
		1,420 RAIL H.P.			
TRAIN HTG. EQUIP.	MAX. RAIL H.P. ON WEAKEST MOTOR FIELD (675 VOLTS PER MOTOR)	3,150 H.P. AT 42 M.P.H.	TANK CAPACITY		
	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 OF SUSPENSION	AXLE			
	TYPE OF GEAR DRIVE	STRAIGHT SPUR SINGLE REDUCTION	BRAKING	TYPE	{ FOR LOCO. AIR
	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS		{ FOR TRAIN AIR, VACUUM & E.P.	
MINIMUM RADIUS CURVES	HORIZONTAL WITH 3/4 GAUGE WIDENING	3 1/2 CHAINS		BRAKE FORCE	{ % OF LOCO. WEIGHT
	VERTICAL CONVEX	11 CHAINS		{ IN WORKING ORDER 85.9%	
	VERTICAL CONCAVE	11 CHAINS			

B.R. B-B 1600/600 H.P. ELECTRO-DIESEL LOCOMOTIVE CLASS 73/2



	ELECTRIC		DIESEL		
SUPPLY SYSTEM	TYPE	THIRD RAIL	ENGINE	MAKE AND TYPE	
	NOMINAL VOLTAGE	675 VOLTS D.C.		DAVEY PAXMAN 6YJXL	
PERFORMANCE AT 675 VOLTS	MAX. TRACTIVE EFFORT	47500 LB. AT 25% ADHESION		6 CYLS. 4 STROKE	
		12400 LB. TRACTIVE EFFORT		650 H.P. AT 1500 R.P.M.	
	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 AT 675 VOLTS	CONT. TRACTIVE EFFORT	3000 AMPS. TOTAL TRACTION CURRENT	PERFORMANCE	MAX. TRACTIVE EFFORT	
	WEAK FIELD	2300 RAIL H.P.		40000 LB. AT 21.1% ADHESION	
	MAX. RAIL H.P. ON WEAK FIELD	4600 H.P. AT 43 M.P.H.		CONT. TRACTIVE EFFORT	
	WEAK FIELD	4600 H.P. AT 43 M.P.H.		18100 LB. AT 6.5 M.P.H.	
TRAIN HTG. EQUIPT.	675 VOLTS D.C. SUPPLY	400 AMPS. MAXIMUM	TANK CAPACITY	ENGINE FUEL	
				310 GALLONS	
			TRAIN HEATING EQUIPT.	675 VOLTS D.C.	
				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 { FOR LOCO.	
	TYPE OF GEAR DRIVE	SINGLE REDUCTION		{ FOR TRAIN	
MINIMUM RADIUS CURVES	HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS	BRAKING	BRAKE FORCE { % OF LOCO WEIGHT	
	HORIZONTAL WITH 3/8" GAUGE WIDENING	3 CHAINS			{ IN WORKING ORDER
	VERTICAL CONVEX	11 CHAINS			
	VERTICAL CONCAVE	11 CHAINS			

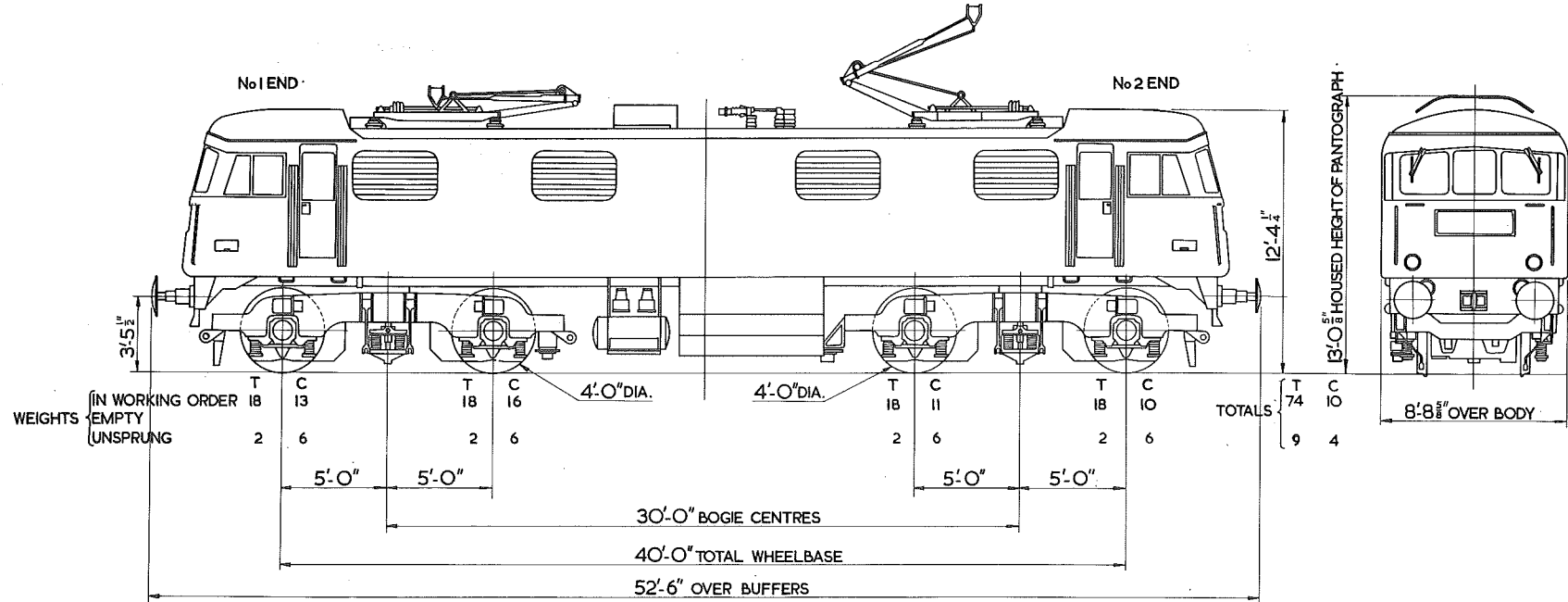
B.R. B-B 2500/650 H.P. ELECTRO-DIESEL LOCOMOTIVE CLASS 74



SUPPLY SYSTEM	{ TYPE OVERHEAD		BRAKING	{ TYPE { FOR LOCO FOR TRAIN	AIR VACUUM
	{ NOMINAL VOLTAGE 25 K.V. A.C.			{ BRAKE FORCE { % OF LOCO WEIGHT IN WORKING ORDER	85%
TRACTION MOTORS	{ MAKE & TYPE A.E.I. TYPE 189 RAILWAY MOTOR		SPEED	{ MAX. PERMITTED SERVICE SPEED	100 M.P.H.
	{ No. FOUR			{ HORIZONTAL WITHOUT GAUGE WIDENING	4 CHAINS
	{ TYPE OF SUSPENSION FULL SUSPENSION IN BOGIE		MINIMUM RADIUS	{ HORIZONTAL WITH 3/4 IN. GAUGE WIDENING	3.65 CHAINS
CONTROL SYSTEM	{ TYPE ALSTHOM FLEXIBLE, SINGLE REDUCTION		CURVES	{ VERTICAL CONVEX	11 CHAINS
	{ TYPE L.T. TAP CHANGING			{ VERTICAL CONCAVE	10 CHAINS
	{ MAX. TRACTIVE EFFORT 50000 LB. AT 28% ADHESION		TRAIN HEATING	{ ELECTRICAL	320 K.W. AT 800 VOLTS A.C.
	{ 17000 LB TRACTIVE EFFORT		EQUIPMENT		
PERFORMANCE	{ CONT. RATING ON 71 M.P.H.				
AT 22.5KV	{ WEAKEST FIELD 700 AMPS. PER MOTOR.				
	{ 3200 RAIL H.P.				
	{ MAX. RAIL H.P. ON 4800 H.P. AT 44 M.P.H.				
	{ WEAKEST MOTOR FIELD				

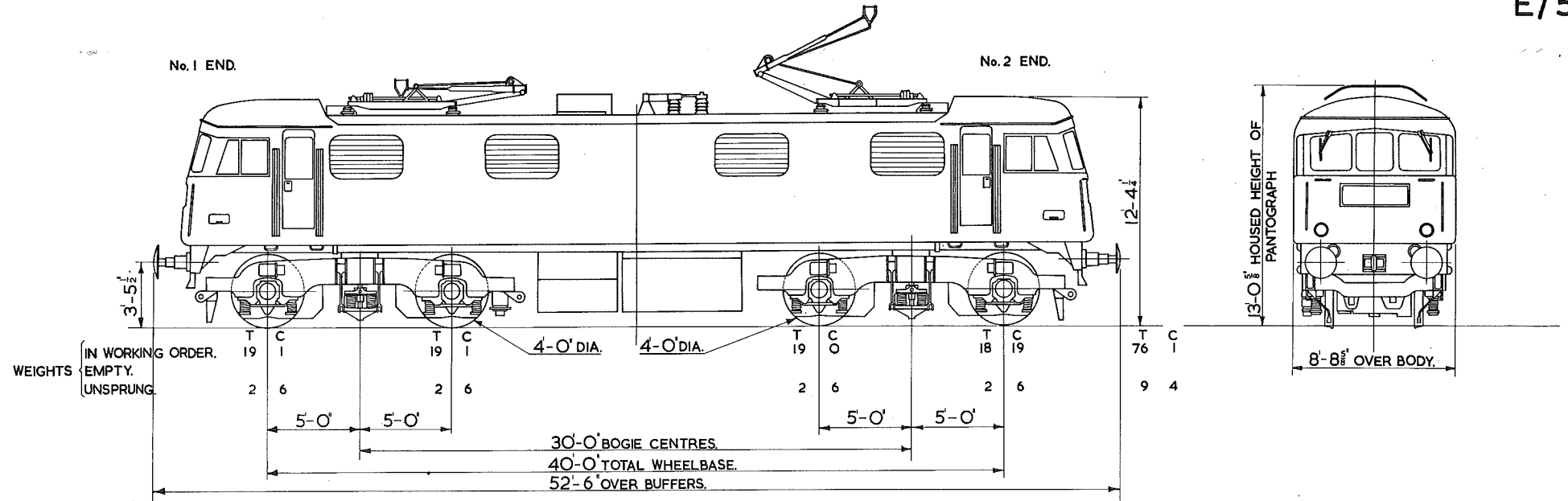
AL.I.AEI (B.T.H./B.R.C.W.) B-B AC. ELECTRIC LOCOMOTIVE.

CLASS 81



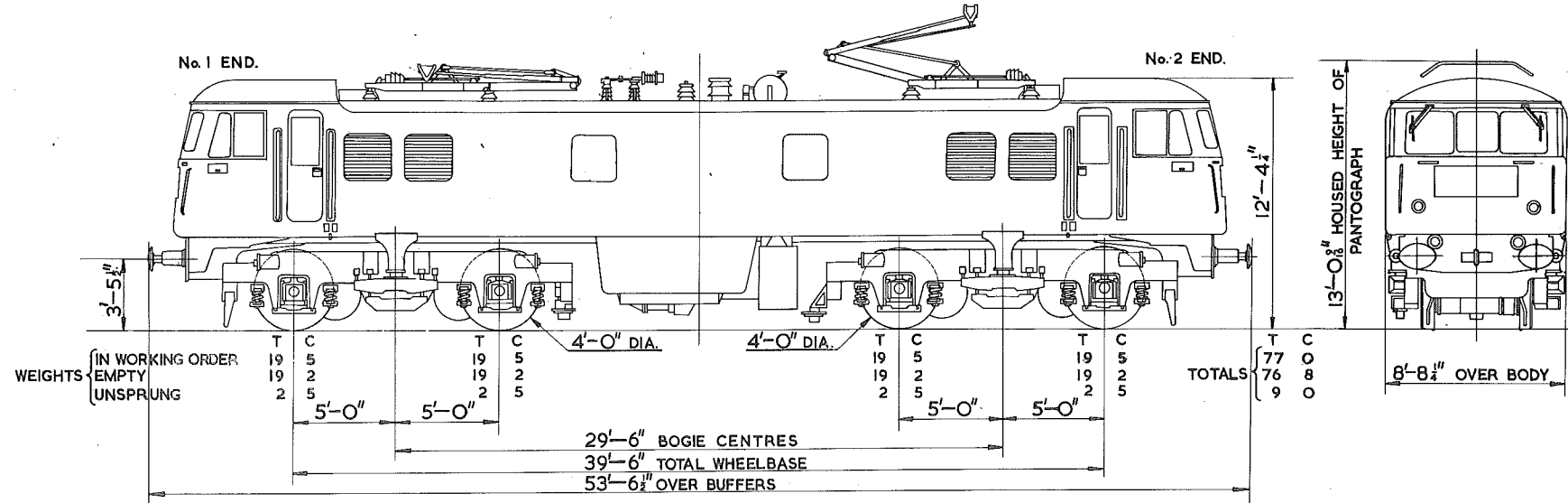
SUPPLY SYSTEM	{ TYPE OVERHEAD NOMINAL VOLTAGE 25 K.V. A.C.	BRAKING	{ TYPE { FOR LOCO. FOR TRAIN	AIR VACUUM
TRACTION MOTORS	{ MAKE & TYPE ENGLISH ELECTRIC E.E. 535 A No. FOUR TYPE OF SUSPENSION FULL SUSPENSION IN BOGIE TYPE OF GEAR DRIVE S.L.M. FLEXIBLE SINGLE REDUCTION	SPEED	{ BRAKE FORCE { % OF LOCO. WEIGHT IN WORKING ORDER	87%
CONTROL SYSTEM	{ TYPE L.T. TAP CHANGING MAX. TRACTIVE EFFORT 38,000 LB. AT 22-8% ADHESION 15260 LB. TRACTIVE EFFORT	MINIMUM RADIUS CURVES	{ MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/4 INS GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE	100 M.P.H. 4 CHAINS 3-62 CHAINS 10 CHAINS 10 CHAINS
PERFORMANCE	{ CONT. RATING ON 73 M.P.H. WEAKEST FIELD 710 AMPS. PER MOTOR. 2950 RAIL H.P. MAX. RAIL H.P. ON 4400 H.P. AT 50 M.P.H. WEAKEST MOTOR FIELD	TRAIN HEATING EQUIPMENT	{ ELECTRICAL	320 KW AT 800 VOLTS AC.

AL.3 E.E. B-B AC. ELECTRIC LOCOMOTIVE CLASS 83



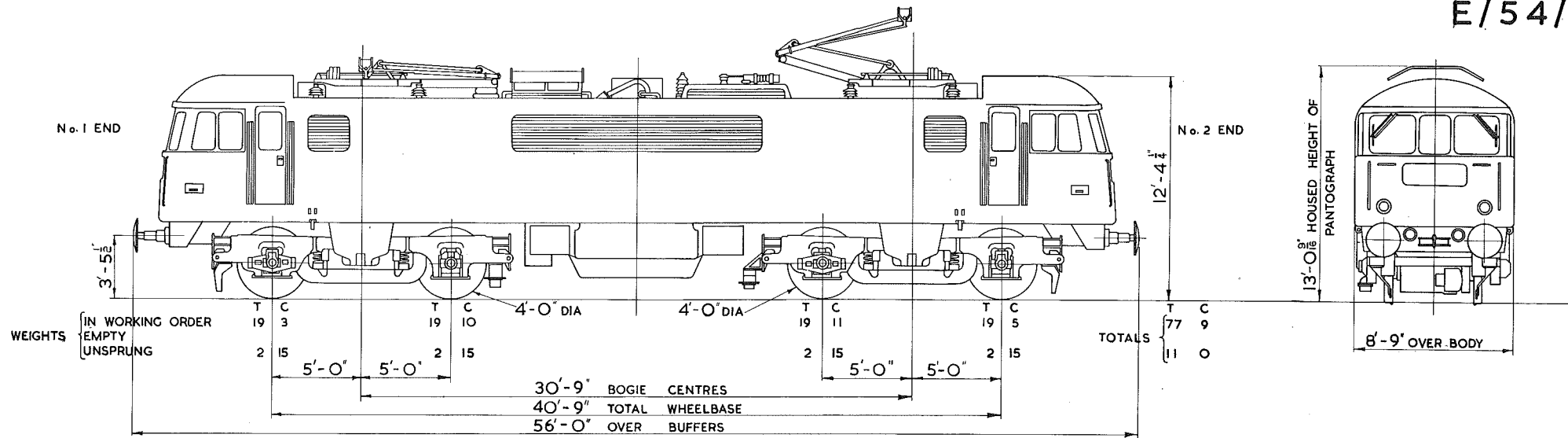
SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD. 25 K.V. A.C.		{ TYPE { FOR LOCO. FOR TRAIN.	AIR & RHEOSTATIC. VACUUM.
TRACTION MOTORS.	{ MAKE & TYPE. No. TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	ENGLISH ELECTRIC E.E. 535 A. FOUR. FULL SUSPENSION IN BOGIE. S.L.M. FLEXIBLE SINGLE REDUCTION.	BRAKING.	{ BRAKE FORCE { % OF LOCO WEIGHT IN WORKING ORDER.	85%.
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	TRANSDUCTOR CONTROL OF TAP CHANGING. 38,000 LB AT 22.3% ADHESION.	SPEED.	{ MAX. PERMITTED SERVICE SPEED. HORIZONTAL WITHOUT GAUGE WIDENING. HORIZONTAL WITH 3/4 INS. GAUGE WIDENING. VERTICAL CONVEX. VERTICAL CONCAVE.	100 M.P.H. 4 CHAINS. 3.62 CHAINS. 10 CHAINS. 10 CHAINS.
PERFORMANCE. AT 22.5K.V.	{ CONT. RATING ON WEAKEST FIELD. MAX. RAIL H.P. ON WEAKEST MOTOR FIELD.	{ 15260 LB TRACTIVE EFFORT. 73 M.P.H. 710 AMPS. PER MOTOR. 2950 RAIL H.P. 4400 HP AT 50 M.P.H.	TRAIN HEATING EQUIPMENT.	{ ELECTRICAL	320 KW. AT 800 VOLTS A.C.

AL 3/1 E.E. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 83



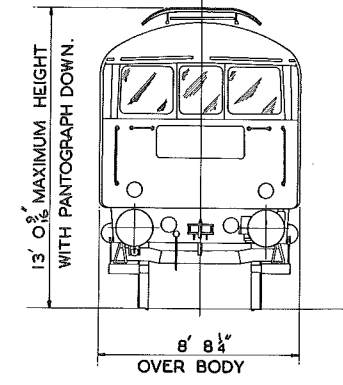
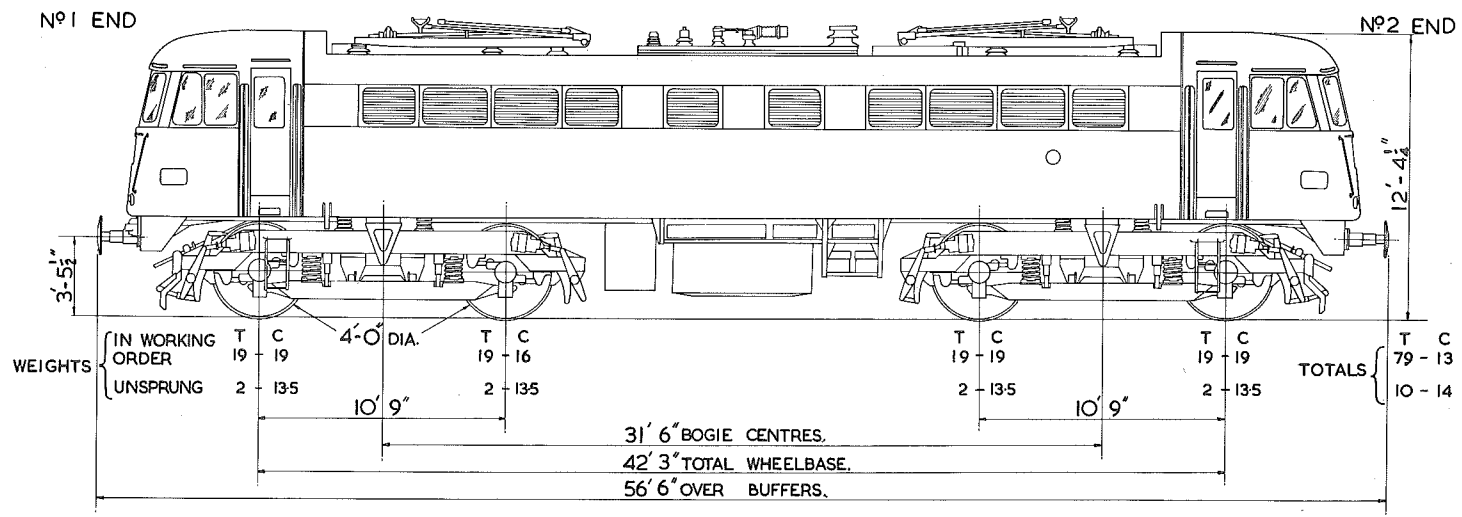
SUPPLY SYSTEM	{ TYPE NOMINAL VOLTAGE	OVERHEAD 25 K.V. AC.	BRAKING	{ TYPE { FOR LOCO. FOR TRAIN	AIR VACUUM
TRACTION MOTORS	{ MAKE & TYPE No. TYPE OF SUSPENSION TYPE OF GEAR DRIVE	G.E.C. WT. 501 FOUR FULL SUSPENSION IN BOGIE BROWN-BOVERI FLEXIBLE. SINGLE REDUCT ^m .	SPEED	{ BRAKE FORCE { % OF LOCO. WEIGHT IN WORKING ORDER	85%
CONTROL SYSTEM	{ TYPE MAX. TRACTIVE EFFORT	H.T. TAP CHANGING 50000 LB. AT 29.2% ADHESION	MINIMUM RADIUS CURVES.	{ MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/4INS. GAUGE WIDENING VERTICAL CONVEX VERTICAL CONCAVE	100 M.P.H. 4 CHAINS 3.6 CHAINS 11 CHAINS 22 CHAINS
PERFORMANCE AT 22.5 KV.	{ CONT. RATING ON WEAKEST FIELD MAX. RAIL H.P. ON WEAKEST MOTOR FIELD	{ 17600 LB. TRACTIVE EFFORT 6.6 M.P.H. 760 AMPS. PER MOTOR. 3100 RAIL HP. 4900 H.P. AT 44.0 MPH.	TRAIN HEATING EQUIPMENT	{ ELECTRICAL	320KW. AT 800 VOLTS AC.

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



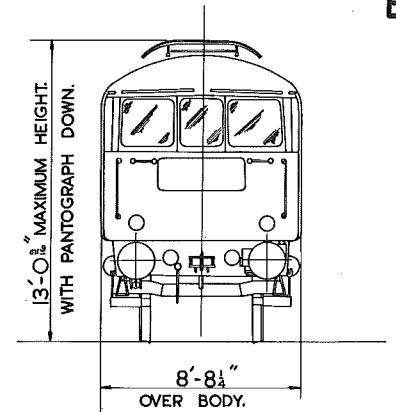
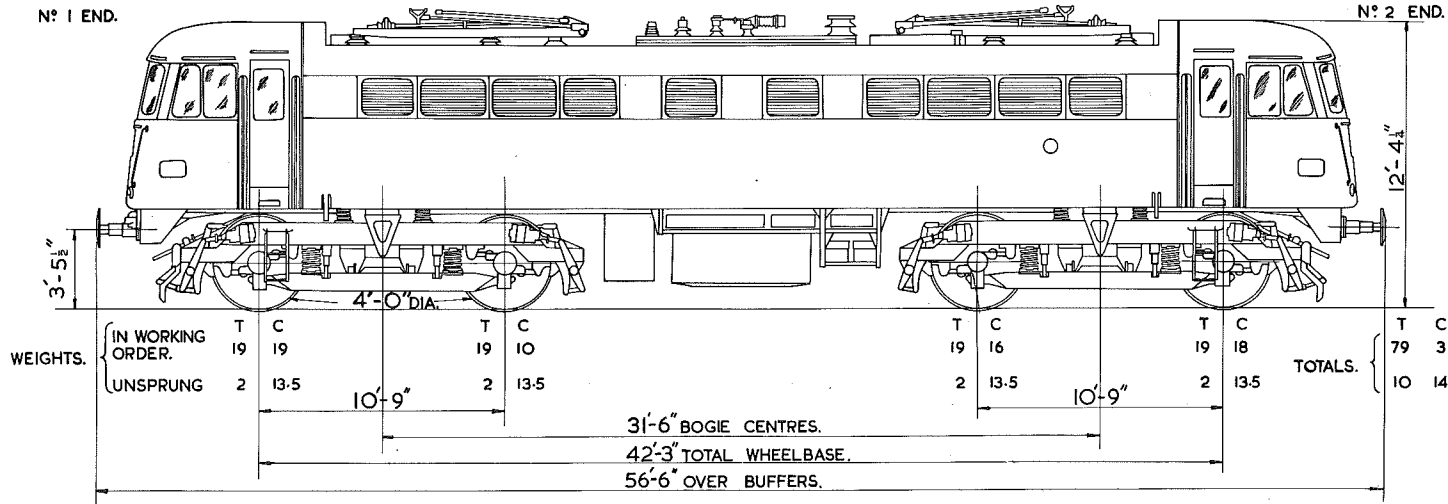
SUPPLY SYSTEM	{ TYPE NOMINAL VOLTAGE	OVERHEAD 25 K.V. A.C.	BRAKING	{ TYPE { FOR LOCO FOR TRAIN	AIR VACUUM
TRACTION MOTORS	{ MAKE & TYPE No. TYPE OF SUSPENSION TYPE OF GEAR DRIVE	AEI. TYPE 189 RAILWAY MOTOR FOUR FULL SUSPENSION IN BOGIE ALSTHOM FLEXIBLE, SINGLE REDUCTION	SPEED	{ BRAKE FORCE { % OF LOCO. WEIGHT IN WORKING ORDER	82%
CONTROL SYSTEM	{ TYPE MAX. TRACTIVE EFFORT	H.T. TAP CHANGING 50,000 LB. AT 28% ADHESION	MINIMUM RADIUS CURVES	{ MAX. PERMITTED SERVICE SPEED HORIZONTAL WITHOUT GAUGE WIDENING HORIZONTAL WITH 3/4 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 LB. TRACTIVE EFFORT 73 M.P.H. 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 AEI. (M V./B.P.) B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 82



SUPPLY SYSTEM	{ TYPE OVERHEAD		{ TYPE FOR LOCO.	AIR & RHEOSTATIC
	{ NOMINAL VOLTAGE 25 kV, AC.		{ FOR TRAIN	VACUUM
	{ MAKE & TYPE A.E.I. TYPE 189.	BRAKING	{ BRAKE FORCE { % OF LOCO. WEIGHT } IN WORKING ORDER	87.2
TRACTION MOTORS	{ Nº FOUR.			
	{ TYPE OF SUSPENSION FULL SUSPENSION IN BOGIE	SPEED	MAX. PERMITTED SERVICE SPEED	100 MPH.
	{ TYPE OF GEAR DRIVE ALSTHOM FLEXIBLE. SINGLE REDUCTION.	CURVE	MIN. RAD. CURVE { WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED	6 CHAINS 4 CHAINS
CONTROL SYSTEM	{ TYPE LT. TAP CHANGING.	TRAIN HEATING EQUIPMENT	{ ELECTRICAL	320 KW AT 800 VOLTS AC.
	{ MAX. TRACTIVE EFFORT 50000 LB. AT 28% ADHESION.	RECTIFIERS.	TYPE GERMANIUM (LOCO. Nºs E 3056-3066) E3068-3085	
PERFORMANCE AT 22.5 kV.	{ CONTINUOUS RATING ON WEAKEST FIELD 17000LB. TRACTIVE EFFORT 71 M.P.H. 700AMPS. PER MOTOR 3200 RAIL HP			
	{ MAX. RAIL H.P. ON WEAKEST MOTOR FIELD 5100 H.P. AT 45 M.P.H.			

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



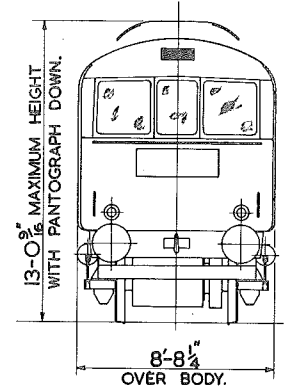
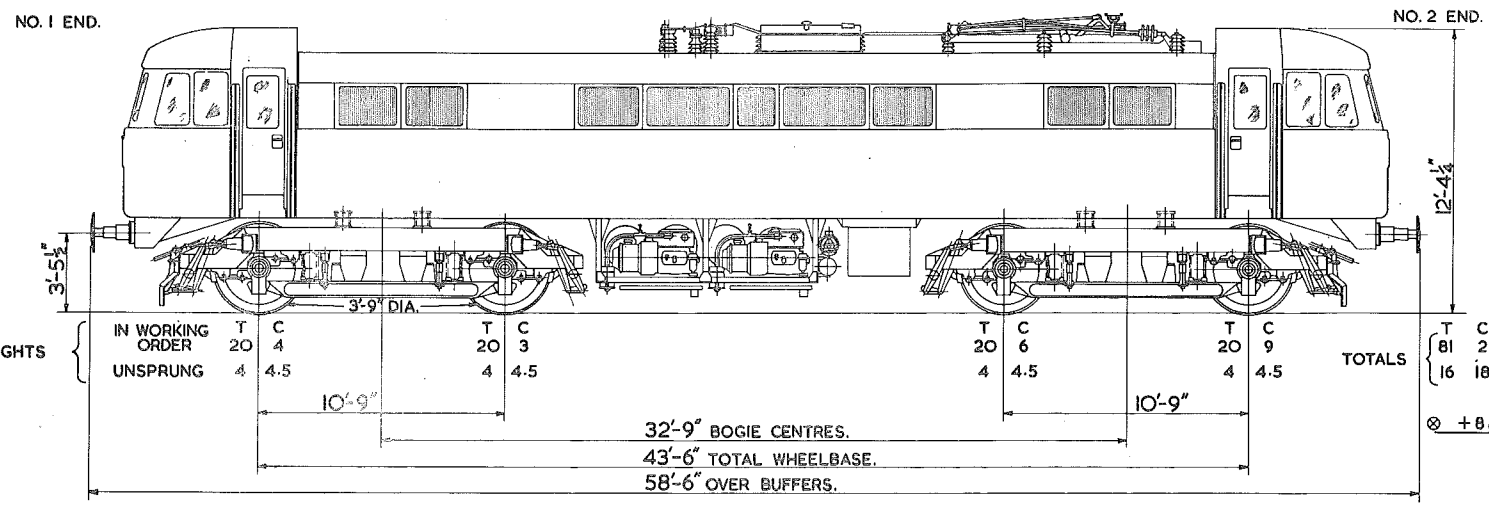
SUPPLY SYSTEM.	{ TYPE. NOMINAL VOLTAGE.	OVERHEAD 25KV. A.C.	BRAKING.	{ TYPE. BRAKE FORCE.	{ FOR LOCO. FOR TRAIN {% OF LOCO WEIGHT IN WORKING ORDER	AIR & RHEOSTATIC. VACUUM. 87.8
TRACTION MOTORS.	{ MAKE & TYPE. Nº TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	AEI TYPE 189. FOUR. FULL SUSPENSION IN BOGIE. ALSTHOM FLEXIBLE SINGLE REDUCTION.	SPEED.	MAX. PERMITTED SERVICE SPEED	100 M.P.H.	
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	L.T. TAP CHANGING. 50,000LB. AT 28% ADHESION. 17,000LB. TRACTIVE EFFORT	CURVE.	MIN. RAD. CURVE	{ WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED.	6 CHAINS. 4 CHAINS.
PERFORMANCE AT 22.5 KV.	{ CONTINUOUS RATING. ON WEAKEST FIELD. MAX. RAIL H.P. ON WEAKEST MOTOR FIELD.	{ 71. M.P.H. 700 AMPS. PER MOTOR 3200 RAIL H.P. 5100 H.P. AT 45 MPH.	TRAIN HEATING EQUIPMENT.	ELECTRICAL		320 KW AT 800 VOLTS AC.
			RECTIFIER.	TYPE.	SILICON	E-3067 (LOCO. Nº 3086-3095)

AL 5/1 B.R. B-B. A.C. ELECTRIC LOCOMOTIVE.
CLASS 85

£140,000

700 tons Max C.T.L. x
1/69 - 1/75. Gradient x E/56/1

(X)



JUNE 1969

⊗ + 8 cwt. i.e. 2 cwt. PER AXLE FOR RESILIENT MOUNTED TRACTION MOTORS

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. VACUUM OR AIR. 82.1	
TRACTION MOTORS.	{ MAKE & TYPE. Nº TYPE OF SUSPENSION. TYPE OF GEAR DRIVE.	AE.I. TYPE 282AZ OR 282BZ. FOUR. NOSE. SINGLE REDUCTION.		SPEED.	MAX. PERMITTED SERVICE SPEED.	100 M.P.H.		
CONTROL SYSTEM.	{ TYPE. MAX. TRACTIVE EFFORT.	H.T. TAP CHANGING. 58000LB. AT 32% ADHESION.		CURVE.	MIN. RAD. CURVE.	{ WITHOUT GAUGE WIDENING AT DEAD SLOW SPEED	6 CHAINS. 4 CHAINS.	
PERFORMANCE AT 22.5 kV.	{ CONTINUOUS RATING ON WEAKEST FIELD. MAX. RAIL H.P. ON WEAKEST MOTOR FIELD.	{ AZ MOTOR. 20000LB. T.E. 67 M.P.H. 700 AMPS PER MOTOR. 3600 RAIL H.P.		{ BZ MOTOR. 24000LB. T.E. 62 M.P.H. 800 AMPS PER MOTOR. 4040 RAIL H.P.		TRAIN HEATING EQUIPMENT.	ELECTRIC.	320KW. AT 800VOLTS AC.
		5900 HP AT 38 M.P.H.		6100 HP AT 39.5 M.P.H.		RECTIFIER.	TYPE. SILICON.	

AL6 B.R. B-B A.C. ELECTRIC LOCOMOTIVE.
CLASS 86 (Not in schedule)

Max 87 (80 tons, 58' 6" over
cylinders)
35 being built,
1300 tons in schedule
500 tons 100 m.p.h.
continuous power 52000hp.