

ALCO 1980/1830 CV

SERIES C 20 (1950/1800 HP)

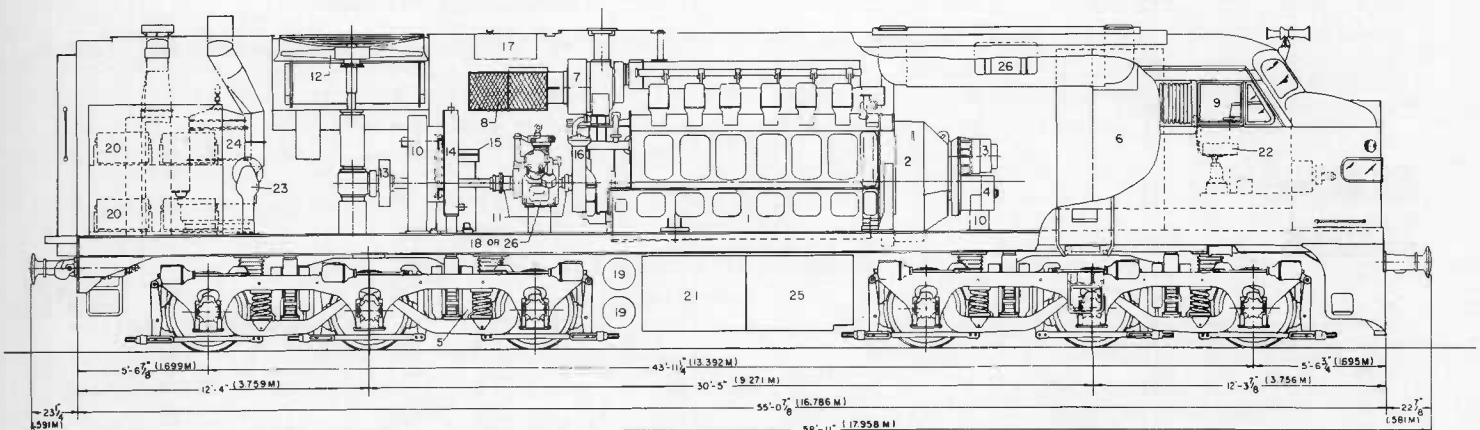
DIESEL-ELECTRIC LOCOMOTIVE

WITH 1830 CV NET INPUT TO THE GENERATOR

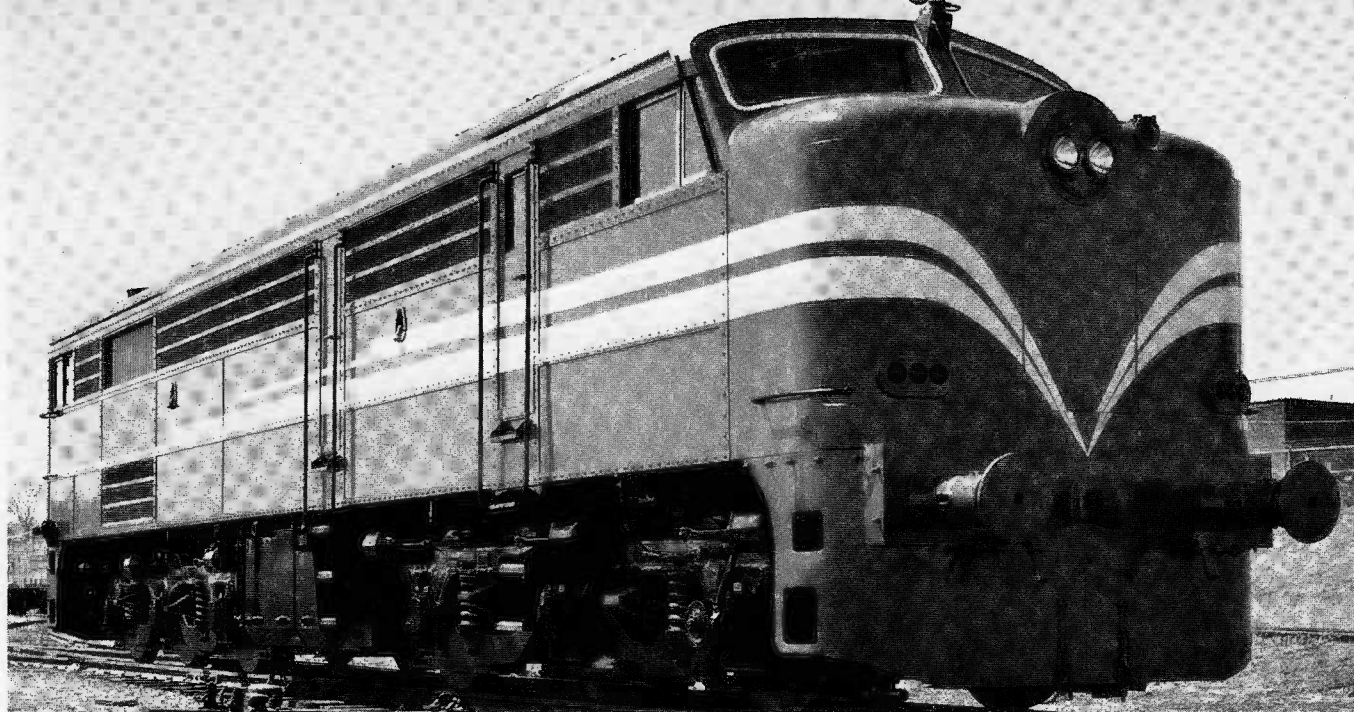
DL-500-C General Characteristics

- A locomotive suitable for high speed passenger or freight duties where Berne International Clearance Diagrams are permissible. Modified from ALCO specification DL-500-S for lower CV needs.
- Axle loads in working order with full supplies from 16,0 metric tons (35,300 lbs.) including steam generator and dynamic braking. From 15,5 metric tons (34,200 lbs.) without steam generator and dynamic braking.
- Equipped with swing bolster, double suspension "World" trucks.

Diesel Engine: ALCO 12-251-C 2180 CV, set at 1980/1830 CV (1950/1800 HP)
Wheel Arrangement: Co-Co
Principal Dimensions:
 Height (maximum)—4007 mm (13' 1¾")
 Width (maximum)—2845 mm (9' 4")
 Length (over frame)—16706 mm (55' ⅞")
Basic Locomotive Weight: 96 000 Kg. (211,500 lbs.)
Axle Load: 16 000 Kg. (35,300 lbs.)
Wheel Diameter Basic: 1016 mm (40")
Fluid Supplies Capacity (Fuel and Water):
 from 3 030 l. (800 U.S. Gallons); (670 Imp. Gallons)
Multi-Gauge Traction Motors from meter gauge upwards



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|------------------------|--|-------------------------------|--------------------------|
| 1. Engine | 8. Turbosupercharger Filters and Silencers | 14. Lubricating Oil Cooler | 21. Fuel Tank |
| 2. Main Generator | 9. Control Stand | 15. Lubricating Oil Filters | 22. Cab Seat |
| 3. Exciter | 10. Traction Motor Blower | 16. Lubricating Oil Strainers | 23. Hand Brake |
| 4. Auxiliary Generator | 11. Flexible Couplings | 17. Engine Water Tank | 24. Steam Generator |
| 5. Traction Motors | 12. Radiator Fan | 18. Air Compressor | 25. Water Tank |
| 6. Control Compartment | 13. Radiator Fan Clutch | 19. Main Air Reservoir | 26. Compressor-Exhauster |
| 7. Turbosupercharger | | 20. Batteries | |



ALCO DC-500-C

TRACTION EFFORT

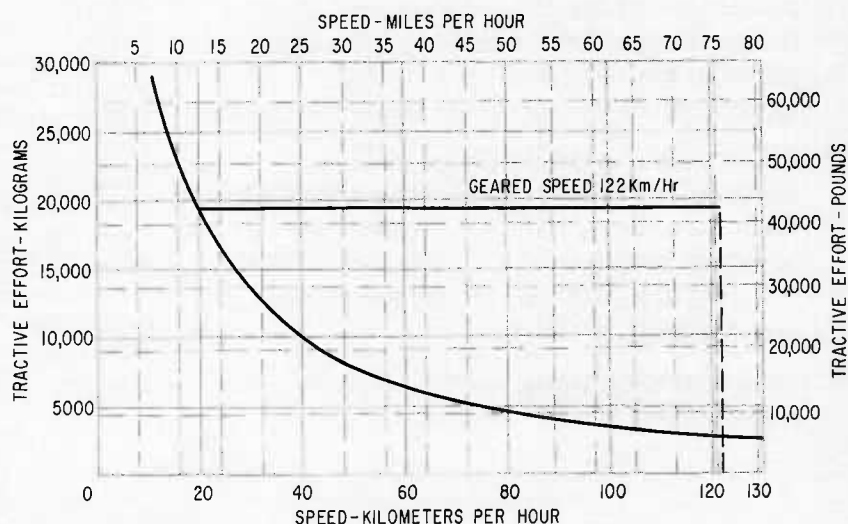
GEAR RATIO	TOP GEARED SPEED		MAXIMUM CONTINUOUS TRACTION EFFORT			
	Km/h.	MPH	Kg.	Lbs.	Km/h.	MPH
with 1016 mm (40") wheels						
92:19	122	76	19 280	42,500	20,1	12.5
91:20	130	81	18 140	40,000	21,7	13.5
94:17*	80	50	22 000	48,500	17,9	11.1
with 914 mm (36") wheels						
92:19	109	68	21 410	47,200	18,3	11.4
91:20	118	73	20 140	44,400	19,6	12.2
94:17*	96	60	24 490	54,000	15,8	9.8

*For special applications
Note: 93:18 data furnished on request.

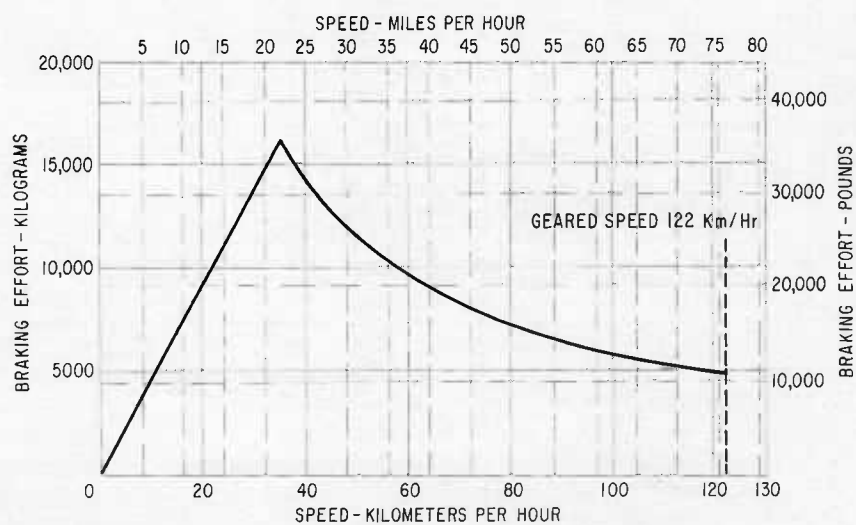
BRAKING EFFORT

GEAR RATIO	PEAK BRAKING EFFORT		SPEED	
	Kg.	Lbs.	Km/h.	MPH
with 1016 mm (40") wheels				
92:19	15 880	35,000	35,1	21.8
91:20	14 923	32,900	36,4	22.6
94:17*	18 140	40,000	33,0	20.5

*For special applications
Note: 93:18 data furnished on request.
Note: 914 mm (36") wheel diameter data furnished on request.

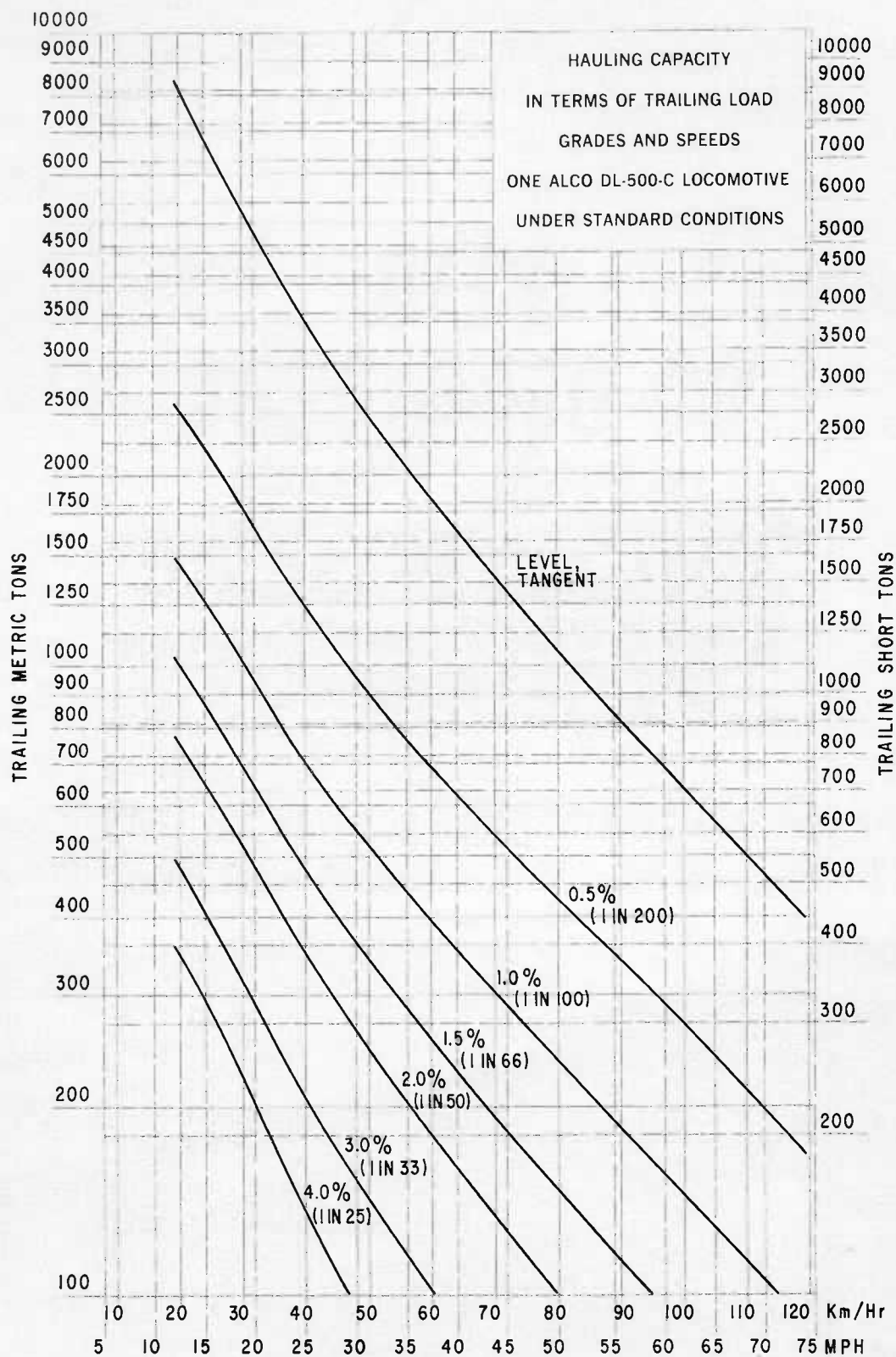


Tractive Effort Characteristics with 1016mm (40") Wheels and Basic 92:19 Gearing.



Braking Effort Characteristics with 1016mm (40") Wheels and Basic 92:19 Gearing.

TONNAGE RATING



NOTE: The hauling capacity shown above is for 4 axle 40 metric ton freight wagons, in good condition, and has been calculated by Davis' formula, for standard conditions: Sea level, 736 mm Hg. (29"), 16° C. intake temperature (60°F.) and fuel of 10 850 Cal./Kg.* (19,500 BTU/lb.) meeting ASTM 2-D specification.

*Higher calorific value

**FOREIGN
ASSOCIATES
AND
LICENSEES**

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Canada: Montreal Locomotive Works, Montreal, Quebec

England: A. E. I. (Associated Electrical Industries), Manchester, England

France: Forges et Chantiers de la Méditerranée, Paris, France

India: Diesel Locomotive Works, Varanasi, U.P., India

Spain: Cia. Euskalduna, Madrid, Spain



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