

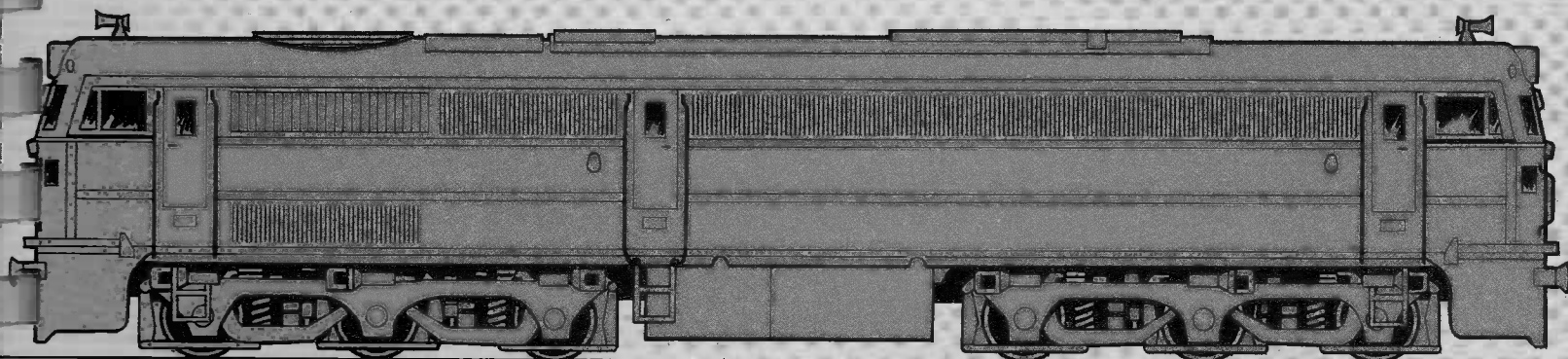
ALCO

ALCO
2180/2030 CV
SERIES C-22 (2150/2000 HP)
DIESEL-ELECTRIC
LOCOMOTIVE

GENERAL SPECIFICATION DL-500-S

**DOUBLE-ENDED STREAMLINED STANDARD EXPORT DIESEL-ELECTRIC LOCOMOTIVE
FOR HIGH SPEED MAINLINE SERVICE WITH 2030 CV NET INPUT TO THE GENERATOR**

ALCO DL-500-S



ALCO 2180/2030 CV SERIES C-22 (2150/2000 HP) DIESEL-ELECTRIC LOCOMOTIVE

WITH 2030 CV NET INPUT TO THE GENERATOR

- A locomotive suitable for high speed passenger or freight duties on lines where Berne International Clearance Diagrams are permissible.
- Axle loads in working order with full supplies from 17,0 metric tons (37,400 lbs.) including steam generator and dynamic braking. From 16,5 metric tons (36,000 lbs.) without steam generator and dynamic braking.
- Equipped with swing bolster, double suspension "World" trucks.

NOTE: Where lower horsepower and single-end are desired, this locomotive can be built to ALCO specification DL-500-C (1980/1830 CV) from 15,5 metric tons (34,200 lbs.) per axle.

DL-500-S General Characteristics

Diesel Engine: ALCO 12-251-C 2180/2030 CV (2150/1950 HP)

Wheel Arrangement: Co-Co

Principal Dimensions:

Height (maximum)—4216 mm (13'10")

Width (maximum)—2997 mm (9'10")

Length (over frame)—17396 mm (57'7/8")

Basic Locomotive Weight: 99 000 Kg. (215,000 lbs.)

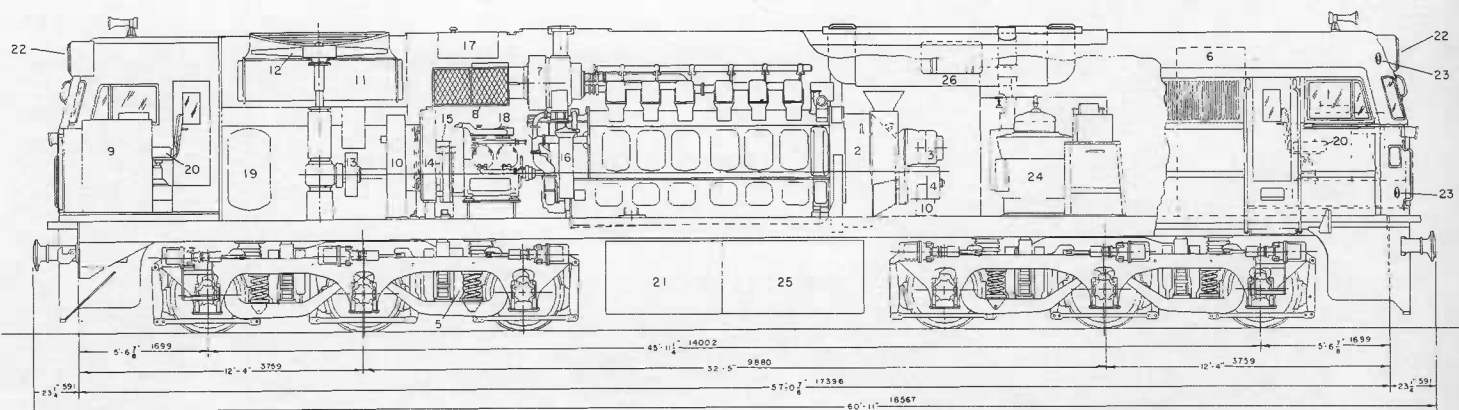
Axle Load: 16 500 Kg. (36,300 lbs.)

Wheel Diameter Basic: 1016 mm (40")

Fluid Supplies Capacity (Fuel and Water):

from 4 545 l. (1,200 U.S. Gallons); (1,000 Imp. Gallons)

Multi-Gauge Traction Motors from meter gauge upwards

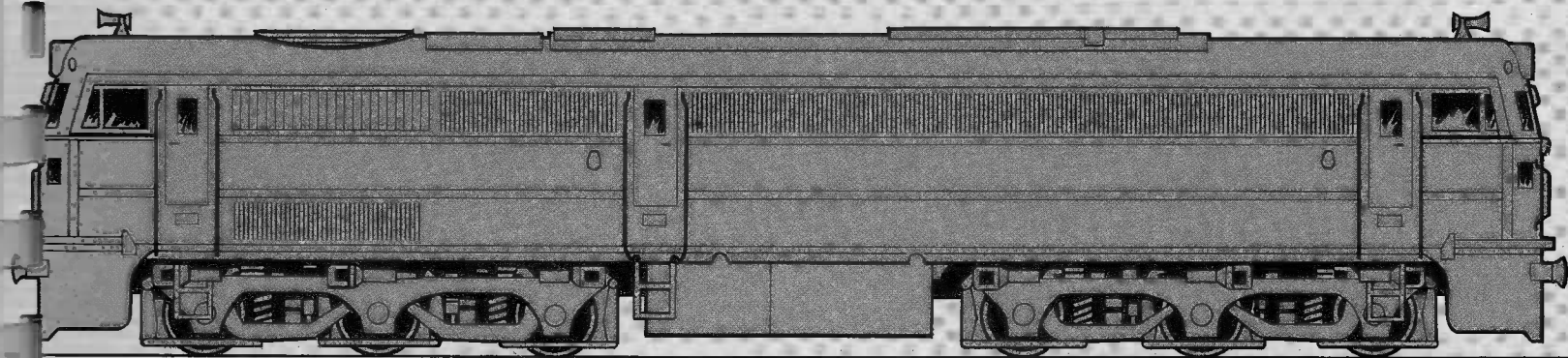


1. Engine
2. Main Generator
3. Exciter
4. Auxiliary Generator
5. Traction Motors
6. Control Compartment
7. Turbosupercharger

8. Turbosupercharger Filters and Silencers
9. Control Stand
10. Traction Motor Blower
11. Radiators
12. Radiator Fan
13. Radiator Fan Clutch

14. Lubricating Oil Cooler
15. Lubricating Oil Filters
16. Lubricating Oil Strainers
17. Engine Water Tank
18. Compressor-Exhauster
19. Main Air Reservoir
20. Cab Seat

21. Fuel Tank
22. Headlight
23. Classification Lights
24. Steam Generator
25. Water Tank
26. Dynamic Brake



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	22,5	14.0
91:20	130	81	18 140	40,000	24,1	15.0
94:17*	80	50	22 000	48,500	19,5	12.1
with 914 mm (36") wheels						
92:19	109	68	21 410	47,200	20,0	12.4
91:20	117	73	20 140	44,400	21,7	13.5
94:17*	96	60	24 490	54,000	16,4	10.2

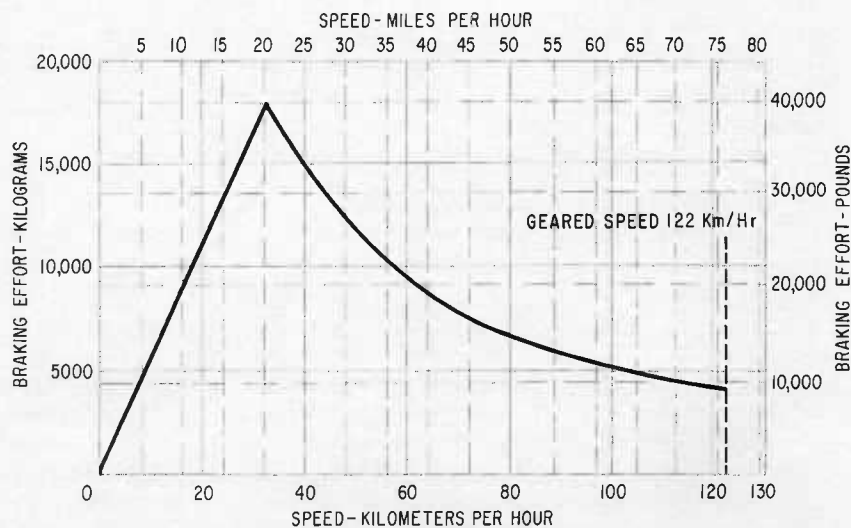
*For special applications
Note: 93:18 data furnished on request.



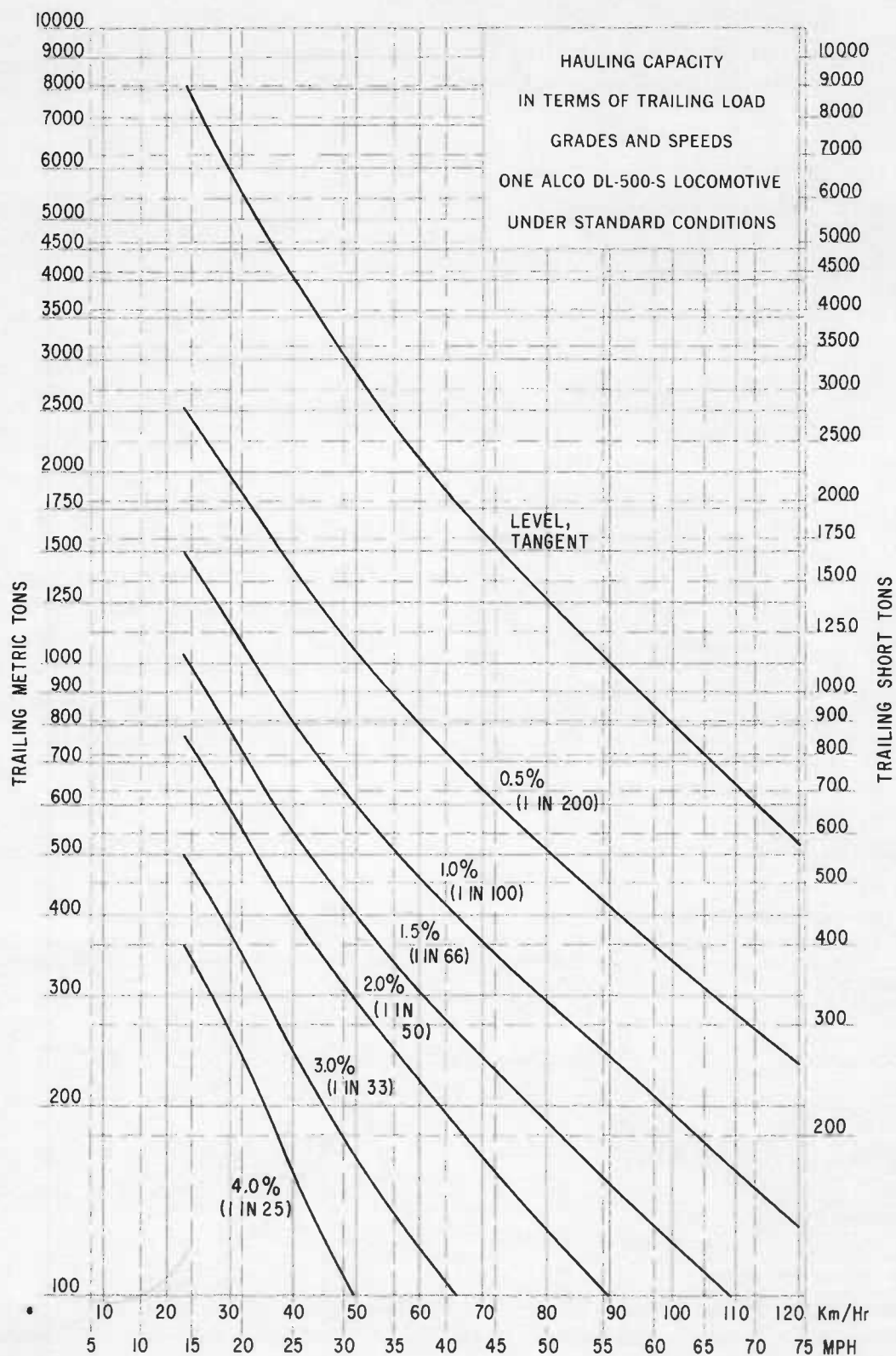
BRAKING EFFORT

GEAR RATIO	PEAK BRAKING EFFORT		SPEED	
	Kg.	Lbs.	Km/h.	MPH
with 1016 mm (40") wheels				
92:19	17 849	39,350	32,5	20.2
91:20	16 780	36,992	37,0	23.0

Note: 93:18 data furnished on request.
Note: 94:17 data furnished on request.
Note: 914 mm (36") wheel diameter data furnished on request.



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