



4000 H.P. DIESEL PASSENGER LOCOMOTIVE . . DESIGNED AND BUILT BY ELECTRO-MOTIVE DIVISION . . GENERAL MOTORS . . LA GRANGE, ILLINOIS, U. S. A.

# 4000 H. P. DIESEL PASSENGER LOCOMOTIVE

*Designed and Built for*

## LOUISVILLE & NASHVILLE RAILROAD

BY ELECTRO-MOTIVE DIVISION • GENERAL MOTORS • LA GRANGE, ILLINOIS

This 4000 horsepower Diesel passenger locomotive consists of two lead units arranged for control from either cab, thus eliminating turn-arounds at terminals. Each unit is capable of independent operation and is equipped with two 12 cylinder, V-type, 2-cycle General Motors Diesel engines with 8½" bore, 10" stroke and a unit fuel injection system. Each engine is directly coupled to a DC generator. Direct current

is fed through control apparatus to traction motors which are geared directly to drive axles. There are two traction motors per truck, two 6-wheel trucks per unit. The 6-wheel trucks are used in this locomotive for smoother operation in the upper high speed range, middle wheels designed to aid in weight distribution only.

### SPECIFICATIONS

#### DIMENSIONS

Overall length over couplers.....	142'-2½"
Maximum width over grab irons.....	10'-6⅞"
Width over body posts.....	9'-10"
Height over all, above rail.....	14'-11"
Wheel diameter.....	36"
Rigid wheel base of trucks.....	14'-1"
Roller bearing journals.....	6½" x 12"
Distance between bolster centers.....	43'-0"
Truck swing designed for 21° curve or 274-foot radius	

#### BASE WEIGHTS (approximate)

Total weight, fully loaded.....	630,000 lbs.
Weight on drivers, fully loaded.....	424,620 lbs.

#### TRACTIVE EFFORT

*(calculated from base weight)*

Maximum tractive effort at rim of driving wheels at 25% adhesion.....	106,155 lbs.
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#### SUPPLIES

Fuel oil.....	2400 gals.
Sand.....	32 cu. ft.
Lubricating oil.....	440 gals.
Engine cooling water.....	627 gals.
Boiler water.....	2100 gals.

