

6000 H.P. DIESEL LOCOMOTIVE . . DESIGNED AND BUILT BY ELECTRO-MOTIVE DIVISION . . GENERAL MOTORS . . LA GRANGE, ILLINOIS, U. S. A.

# 6000 H. P. DIESEL LOCOMOTIVE

## Designed and Built for

### KANSAS CITY SOUTHERN RAILWAY

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

This General Motors model F3 Diesel locomotive consists of four units, each equipped with one 16-cylinder, V-type, 2-cycle GM Diesel engine having a bore of  $8\frac{1}{2}$ ", stroke 10" and a unit fuel injection system. The engines are rated a full 1500 horse-power for propulsion at 800 RPM, providing a total of 6000 horsepower for the locomotive. Each engine is directly coupled to a DC-AC generator. Alternating current powers auxiliary equipment. Direct current is fed through control apparatus to the sixteen traction motors—two per truck—geared directly to

the driving axles. There are two four-wheel trucks per unit. Among the special features of this locomotive is the dynamic brake which utilizes the traction motors for braking action. Electric power is generated in the traction motors and dissipated from resistance grids located in the roof of each unit. In many cases, this brake will control the speed of the train down long, mountainous grades without the application of ordinary air brakes. This locomotive represents the finest motive power offered for service in which heavy grades are involved.

#### SPECIFICATIONS

### DIMENSIONS (per unit)

Overall length over couplers, lead unit	.50'-8"
Overall length over couplers, booster unit	
Maximum width over grab irons	.10'-7"
Maximum height above rail	
Distance between truck centers	.30'-0"
Truck rigid wheel base	
Wheel diameter	40"

### SUPPLIES (per unit)

JOIT LILS (PET OIIII)	
Fuel oil	1200 gals.
Sand Lubricating oil	16 cu. ft.
Cooling water, lead unit	230 gals.
Cooling water, booster unit	215 gals.

#### WEIGHTS /--- ....

WEIGHTS (per unit)	
Total weight, fully loaded, approximately230,000	lbs.
Car body and equipment	lbs.
Trucks (2)	
Maximum tractive effort at rim of wheel at	
25% adhesion per unit	lbs

