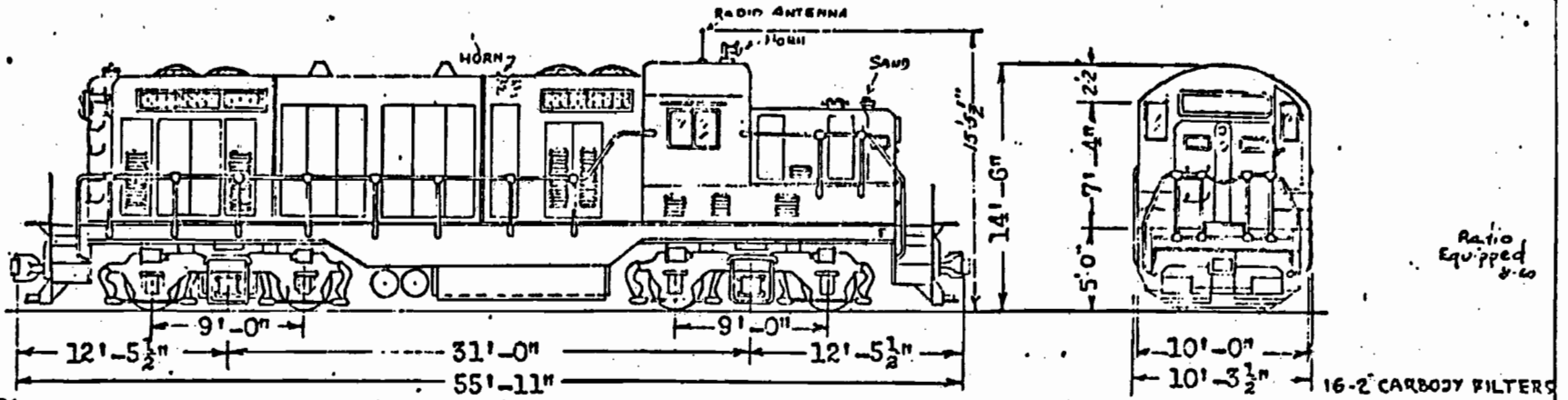
Built April 1950 Electro-Motive Division — Diesel Electric Road Switching Locomotives Nos 20,21,22,23
Built #'s Nos.11228-11231 — Class DS-18



J-18 RELAY VALVE

M U CONNECTIONS - FRONT & BACK OF LOCOMOTIVES

GENERAL DATA	
1. Weight - Working Order	245,000 lbs.
2. Horsepower	1500
3. Ratio of Gears	62-15
4. Maximum Speed (OVER-SPEED SETTING)	65 M.P.H.
ENGINE	
5. Type	Two Cycle - Vee Type No. 567-B General Motors
6. Cylinders - Bore and Stroke	16 - 8½" x 10"
7. Speed - Idling 275 R.P.M.	At Rated H.P. 800 R.P.M.
8. Blowers (Scavenger)	2 E.M.D. Low Pressure
9. Governor	Woodward PG Electro Hydraulic
ELECTRICAL	
10. 1 - EMD Main Generator Model D12,600V,2200 Amp.Cont.DC	
11. 1 - EMD Auxiliary Generator	10 KW, 74 Volts DC
12. 1 - EMD Alternator Model D-14,100 KW,165 Volts,3 PH AC	
13. 4 - EMD Traction Motors Model D-27B,825 Amp.Cont.DC	
14. 4 - Traction Motor Blowers 3PH,149V,5HP,3100 RPM AC	
15. 4 - Water Temp.Cool.Fan Motors 3P,149V,9HP,1550 RPM AC	
16. Cont.Equip.64V,Electro Pneu. Overspeed with Time Delay	
17. Multiple Control Cable	Length 48" Wires 27
18. Batteries	32 Cells, 64 Volts Exide MV25D
19. Lighting Circuit	74 Volts
20. Headlights-2 Pyle-National Twin-Sealed Beam 200W, 30V	
TRACTIVE POWER	
21. Starting @ 25% adhesion	61,250 lbs.
22. 10 M.P.H.	45,000 lbs.
23. 15 M.P.H.	30,000 lbs.
24. 20 M.P.H.	23,000 lbs.
25. 25 M.P.H.	19,000 lbs.
26. 30 M.P.H.	16,000 lbs.
27. (Cont.44,500 Lbs.@12 M.P.H.)	52,400 Lbs. @ 9.0 M.P.H.

CAPACITY	
28. Fuel Oil 1200 Gallons	Lubricating Oil 200 Gallons
29. Cooling Water - 230 Gallons	Sand - 18 cu.ft.
AIR BRAKE	Flat Maintaining and Emergency Brake Valve
30. Schedule	Westinghouse 24 RL
31. Brake Power	87,000 Lbs. @ 30# Cyl. Press.
32. Air Compressor	1 Gardner Denver Type WXO
33. Air Compressor Capacity	225 cu.ft. / Min. @ 800 RPM
34. Reservoir Capacity 2 - 22½" Dia. x 102" - 74150 cu.in.	
35. Feed Valve WAB Co.	D-24-B Relayair Valve WA-24-C
36. Deadman Control-Foot Pedal-Breakintwo Protection Wabco	
37. Handbrake	Peacock 800 RC
MISCELLANEOUS	
38. Fire Extinguishers - 2¾# Ansul in Cab 2 - 30 lb. Ansul	
39. Sanders	Prime "One Line"(Duplex) 8 Trans
40. Horns - 2 Nathan M5	Bell Ringer Vilboo
41. Speed Recorder-Valve Pilot HD,0-60MPH,Speed	BARCO
42. Draft Gear	National Malleable Type M-375 Rubber
43. Coupler	Top Operated Type "E"
TRUCKS	Cobra Shoes V-144
44. Type (LFM)	E.M.D. Type, Cast Steel, Heat Treated
45. Axles-Heat Trt.6½"x12" Journals for Hyatt Roller Brgs.	
46. Wheels	40" Dia. Rolled Steel 4 Prs.
47. Brake Cylinders	8 - 9" x 8" Wabco
48. Side Bearings	Plain Steel Hardened
LIMITING DIMENSIONS	
49. Maximum Length Coupled	55' 11"
50. Maximum Width	10' 3½"
51. Maximum Height	14' 6"
52. Maximum Degree of Curvature	30 Deg. Sampled 21 Deg.