

AURIZON LOCOMOTIVE DATASHEET CLP/CLF CLASS



The seventeen CL class locos were introduced by the then Commonwealth Railways between 1970 and 1972, to work freight and passenger services on the Trans Australian line. They were some of the first 3000 horsepower locos to see service in Australia. In 1992, Morrison Knudsen Australia purchased the class from Australian National Railways for remanufacturing. This process brought the class up to modern standards, with numerous changes throughout the mechanical and electrical systems. At this point, they were converted into two sub-groups, 7 CLF (for Freight) and 10 CLP (for Passenger). The main difference was the fitting of Head End Power to the CLP type for passenger duties. Following the rebuild, they were leased back to AN under a 12 year arrangement. They took up their intended duties as they re-entered service in 1993 and 1994. As a result of the structural problems resulting from the transfer of functions to National Rail Corporation, and growing debt levels, the Commonwealth Government decided to sell AN in 1996, this class ending up with the successful bidder for the freight operations, GWI Australia, in late 1997. Their Australia Southern Railway became part of the larger Australian Railroad Group (ARG) in 2000, following GWI's purchase of Westrail. QR purchased the WA and NSW operations of ARG in 2006, the acquisition also including ARG's Melbourne to Adelaide P&O intermodal service. At this time, five CLF class were working this traffic, and were allocated to QR. Five CLP class were part of ARG's NSW Manildra fleet, also joining QR. The other seven remained with the scaled-down GWA for mostly SA operations. QR's fleet has been concentrated in intermodal use since then, their scope of use expanding to nationwide as QR National's services have. Locomotive power shortages as the services increased often saw the class in front-line use, although the delivery of nine 6020 class in late 2012 enabled the withdrawal of all from mainline use. CLF 4 is currently the only unit operating in a support role, with the majority of the others currently stored near Albury in NSW.

Builder: Clyde Engineering, Granville NSW, 1970-1972
 Number Built : 17
 Running Numbers as Built : CL1-CL17
 Rebuilt at Morrison Knudsen Australia, Whyalla SA, 1992-1993
 Number Currently Owned : 10
 Running Numbers : CLF1-4, CLF7, CLP9-13

Gauge : 1435 mm
 Weight :
 CLF 128.5 tonnes
 CLP 132 tonnes
 Maximum Axleload : 21.42/22.0 tonnes
 Bogie Weight : 25.5 tonnes
 Maximum Speed : 115 km/h
 Wheel arrangement : Co-Co
 Model :
 CLF AT26C-2M
 CLP AT26HC-2M

Engine Type : EMD 16-645E3C, Turbocharged
 Engine Speed : 900/315 rpm (max/min)
 Bore X Stroke : 231 X 254 (mm)
 Main Alternator : AR10A7
 Nominal Voltage : 1200 (DC)
 Companion Alternator : D14
 Nominal Voltage : 215 (DC)
 Aux. Generator : Delco A7159 (18 kW)
 Traction Motor Type and number : EMD D78 (6)
 Gear Ratio : 60:17
 Brake Equipment : Westinghouse 30 ACDW
 Air Compressor : Gardner Denver WBO

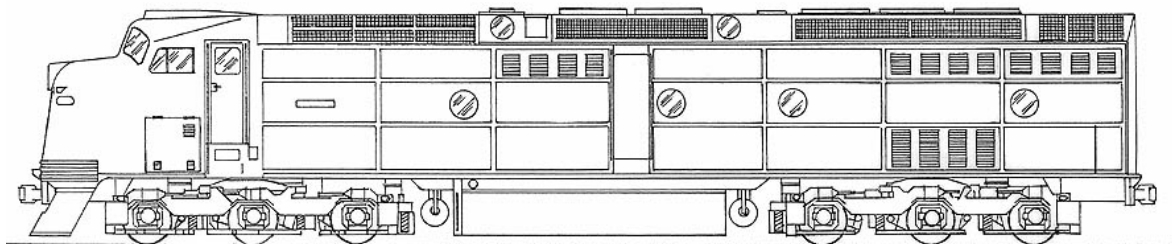
Gross Power : 2460 kW
 Tractive Power : 2237 kW
 Continuous Tractive Effort : 370 kN @ 20 km/h

Length over couplers : 20498 mm
 Length over headstocks : 19634 mm
 Pivot centres : 12497 mm
 Wheel centres : 1905 mm
 Wheel diameter : 1016 mm
 Height : 4242 mm
 Width : 2959 mm

 No. of driving stations : 1
 Dynamic Brakes : Yes (Extended Range)
 Fischer Electronic Vigilance System
 Event Recorder : Fischer
 Wheelslip System :
 MK-LOC
 ZTR Nexsys II (mostly)
 Q-Tron QES-III (CLF 2 only)
 Toilet : Yes
 Air Conditioner : Yes

Fuel capacity : 9600 litres
 Sand capacity : 0.34 cubic metres
 Lube Oil capacity : 870 litres
 Cooling Water capacity : 1115 litres

CLP units have two decommissioned HEP units :
 Cummins 140 DFGB-5170A 140 kW 375 KVA



Sources : ARG Datasheet, ROA Network Vol.31 No.1, K.McDonald Diagram (CLP)