

DIESEL LOCO PARAMETERS

MAIN PARAMETERS	WDM2	WDM3A	WDM3D	WDG3A	WDG4	WDP4	WDS6	DEMU (DPC)
Length over buffer	15850	15862	17350	17850mm	19964 mm	19964 mm	15290mm	-
Length overall	17120	17132	18632	19132 mm	21244 mm	21244 mm	16572mm	-
Wt of Loco in Working order (T)	112.8	112.8	117	123	126	117	126	74.8
Wheel Dia (mm)	1092	1092	1092	1092	1092	1092	1092	952
Adhesion Factor (%)	27	27	33	30.8	41	>41	27	-
Max axle load (T)	18.8	18.8	19.5	20.5	21	19.5	21	18.7
Starting Tractive effort (Maximum)	30.4T	30.4T	38.6T	37.8T	55T	55 T	34T	15.2T
Wheel Arrgt.	CO-CO	CO-CO	CO-CO	CO-CO	CO-CO	CO-CO	CO-CO	GO-GO
Speed (Max.)	120 Km/hr	120 Km/hr	120	100 Km/hr	100	160	62.5	100
Arrgt of cylinder	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	Inline Vertical 6 cyl	60 deg. V type, 16 cyl
Make and type	251B(uptated)	DLW251B(uptated)	251C(uptated)	251C(uptated)	710G3B	710G3B	251D	Cummins KTA50L
HP (Std. UIC condition)	2600 HP	3100HP	3300	3100 HP	4000 HP	4000 HP	1400 HP	1400 HP
Input to Traction	2250HP at site	2749HP at site	2900-3000 HP at site	2750 HP at site	3781 HP at site	3781 HP at site	1300 HP at site	1370 HP at site
Working on	4 Stroke diesel engine	4 Stroke diesel engine	4 Stroke diesel engine	4 Stroke diesel engine	2 Stroke diesel engine	2 Stroke diesel engine	4 Stroke diesel engine	4 Stroke diesel engine
RPM (Rated)	1000	1050	1050	1050	900	900	1100	1800
RPM (idle)	400	400	350	350	200	200	400	700
Bore and stroke in mm	228.6 x 266.7	228.6 x 266.7	228.6 x 266.7	228.6 x 266.7	230.19 x279.4	230.19 x279.4	228.6x266.7	159x159

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Compression ratio	12.50:1	12.5:1	11.75:1	11.75:1	16:01	16:01	12.5:1	13.8:1
Turbocharger	Make=Alco Type= 720A	GE7S1716/ ABB VTC304- VG15/NAPIER NA295IR	High capacity turbo charger of ABB TPR- 61,GE SD,HS 5800 NGT	High capacity turbo charger of ABB TPR- 61,GE SD,HS 5800 NGT	EMD Model'G'	EMD Model'G'	--	Type – Cummins
Turbo Wt	--	GE-828kg ABB - 850kg NAPIER-	HS- 370 -390 kg ABB- 446 GE- 650	HS- 370 -390 kg ABB- 446 GE- 650	953 kg.	953 kg.	--	-
Mean Piston speed m/sec	8.89	9.33	9.33	9.33	8.38	8.38	9.78	9.5
BMEP (kg/cm sq)	13.6	15.041	15.041	15.041	11.23	11.23	16.35	12.58
Fuel tank	Detachable 5000 lit.	5000 lit	Detachable 5000 lit	Detachable 6000 lit.	Detachable 6000 lit.	Detachable 4000 lit.	5000 lit	3000 lit
L O sump capacity	910 lit.	1270 lit	1025 lit	1025 lit.	950 lit	950	530 lit	151 lit
Water Pump capacity	2457 l/m at 1000 rpm	2457l/m AT 1050rpm	2457 l/m at 1050 rpm	2457 l/m at 1050 rpm	3785 l/m at 900 rpm	3785 l/m at 900 rpm	1360 l/m at 1100 rpm	40 lpm @ 1500 rpm
Water tank capacity	1210 lit.	1210 lt	1210 lit.	1210 lit.				153Ltrs
Water Pump type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Mannesman Rexroth AZFO 28/QR
Fan Drive	Eddy current clutch	Eddy current clutch	Eddy current clutch	Eddy current clutch	Ac motor	Ac motor	Eddy current clutch	Hydrostatics
Gear ratio	65 :18	65 :18	65 :18	74:18	90 :17	77 :17	65:18 / 74:18	20:91

MAIN PARAMETERS	WDM2	WDM3A	WDM3D	WDG3A	WDG4	WDP4	WDS6	DEMU (DPC)
Brakes (Loco)	Dual, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, hand. dynamic brake fully blended with automatic Brakes	Dual, hand	Air, hand
Brakes (Train)	Dual	Air Brake	Air Brake	Pure air brake system	Pure air brake system	Pure air brake system	Dual	Air
Brakes (system)	WABCO,28 LV-1	PANEL MOUNTED IRAB1	panel mounted IRAB-1	panel mounted IRAB-1	KNORR/NYB CCB equipment	KNORR/NYB CCB equipment	WABCO,28 LV-1	Twin pipe air brake
Compressor	6CD4UC(expressor)	KPC/ELGI KCW-523/623/LG3CDB	LG3CDB	LG3CDB	3CD Gardner Denver	3CD Gardner Denver	6CD4UC(expressor)	TRC-2507
Fuel Injection	Direct	Direct	Direct	Direct	Unit Injector	Unit Injector	Jerk Direct	Cummins PT sys
Transmission	DC-DC	AC-DC	AC-DC	AC-DC	AC-AC	AC-AC	DC-DC	AC-DC
Traction motor (No. per loco)	6	6	6	6	six (3 in parallel per bogie)	four (2 in parallel per bogie)	6	4
Traction motor	GE752	BHEL TM4906AZ / 4907BZ	TM5002	TM4907	Siemens ITB 2624	Siemens ITB 2624	BHEL 165	TM4303AZ