

KIRLOSKAR DIESEL ENGINES

Engine Model : 4K1080TA

No. of	Bore x Stroke	Displacement	Gross Power Output Rating as per ISO3046 at 1500 RPM bhp (kW)		Suitable Power Rating for Generator at 0.8 pf	
Cyls.	(mm)	(cc)	Prime	Standby (ESP)	Prime	Standby (ESP)
4	105 x 125	4330	156 bhp (114.8 kW)	171.6 bhp (126.3 kW)	100 kVA	110 kVA

Features -

- Designed for heavy duty applications
- Extremely reliable
- All service points like dipstick, lube oil filling, lube oil filter, fuel pump, injectors are on one side which is the cooler side. This adds to operator comfort.
- Lower operating cost
- Easy maintenance higher uptime
- Superior design standards that minimize power deration even at high ambient temperatures.

Ratings Definition:

Standby Ratings: These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528-3)

Prime Rating: These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercial purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Continuous Rating: These ratings are applicable for supplying power continuously to a constant load upto the full output rating for unlimited hours. No sustained overload capability is available for this rating.



Engine Technical Data :

Physical Data		
Engine Make	Kirloskar	
Engine Model	4K1080TA	
Number of cylinders	4	
Configuration	Inline	
Туре	Four stroke	
Bore x Stroke (mm)	105 x 125	
Displacement (L)	4.33	
Cooling	Liquid cooled	
Aspiration	Turbocharged	
Compression Ratio	15.5 : 1	
Starting Arrangement	12V Electric	

Fuel System			
Type of fuel filter	Two stage spin on type		
Governor Type	Electronic		
Class of Governing	ISO 3046 Class A1 & ISO 8528-5, Class G2		
Fuel pump type	Rotary		
Fuel pump make	Stanadyne		
Recommended Fuel	Class A2, High speed diesel		
Fuel consumption at 100% load +5% tolerance (lit/hr)	24		
Fuel consumption at 75% load +5% tolerance (lit/hr)	19		
Fuel consumption readings are based on diesel fuel with a speci gravity of 0.85 and confirming to BS 2869, Class A2)			

Air System		
Air Filter Type	Dry type replaceable element	
Air Volume required for combustion (kg/hr)	670	
Exhaust gas flow (kg/hr)	700	
Total Air Flow required for ventilation (kg/hr)	ТВА	
Total Fresh air required (m³/hr)	ТВА	

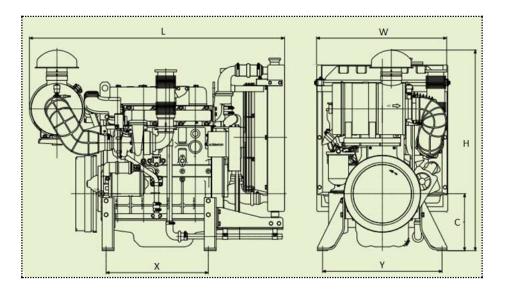
Cooling System				
Cooling system capacity including radiator (lit)	49			
Water pump type	Centrifugal			
Radiator fan load (hp)	6.5			

Lubrication System			
Type of lube oil filter	Full flow spin on type		
Oil to be used	SAE 15W40 API : CI4		
Oil pump type	Through G-rotor gear pump		
Lub oil sump capacity (lit)	18		
Lube oil consumption	0.3% of fuel consumption		

Electrical System			
Starting Arrangement	12V Electric		
Starter	12V Electric		
Starter Battery Rating	150 Amp-hr		
Battery charging alternator	Engine mounted 12V battery charger		
Battery charger amps	35		



Engine Dimensional Details :



Dimensions in mm					
L	W	Н	С	Х	Y
1531	971 1104 Please refer to engine GA drawing				

Weight Details			Coupling	
Engine weight without radiator	670/ 585	Flywheel	Suitable for SAE 11.5" disc	
Gross / Net (kg)	010,000	Housing adaptor	SAE2	
Radiator and accessories weight Gross / Net (kg)	77 / 60	Coupling disc	Not supplied	

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