



# KIRLOSKAR DIESEL ENGINES

**Engine Model: 4R1040T** 

No. of	Bore x Stroke	Displacement (cc)	Gross Power Output Rating as per ISO3046 at 1500 RPM bhp (kW)		Suitable Power Rating for Generator at 0.8 pf	
Cyls.	(mm)	(35)	Prime	Standby	Prime	Standby
4	105 x 120	4160	83 bhp (61 kW)	91 bhp (67 kW)	62.5 kVA	68.75 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.
- Winner of the frost & Sullivan Voice of Customer Award in the "Best Bang for Buck" category in the Indian Generating sets Market.

### 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	4R1040T	
Number of cylinders	4	
Configuration	Inline	
Туре	Four stroke	
Bore x Stroke (mm)	105 x 120	
Displacement (cc)	4160	
Cooling	Water cooled	
Aspiration	Turbocharged	
Compression Ratio	18:1	
Starting Arrangement	12V Electric	

Fuel System			
Type of fuel filter	Two stage spin on type		
Governor Type	Mechanical		
Class of Governing	ISO 3046 Class A1 & ISO 8528-5, Class G2		
Fuel pump type	Inline		
Fuel pump make	MICO - BOSCH		
Recommended Fuel	Class A2, High speed diesel		
Specific fuel consumption gm/bhp-hr (gm/kW-hr)	150 (204)		
Fuel consumption at 100% load +5% tolerance (lit/hr)	15.33		
Fuel consumption at 75% load +5% tolerance (lit/hr)	11.5		
Fuel consumption readings are based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2)			

Air System		
Air Filter Type	Dry type replaceable element	
Air Volume required for Ventilation (m³/hr)	6288	
Combustion air flow (m³/hr)	187	
Total Air Flow required for ventilation (m³/hr)	7001	
Total Fresh air required (m³/hr)	7500	

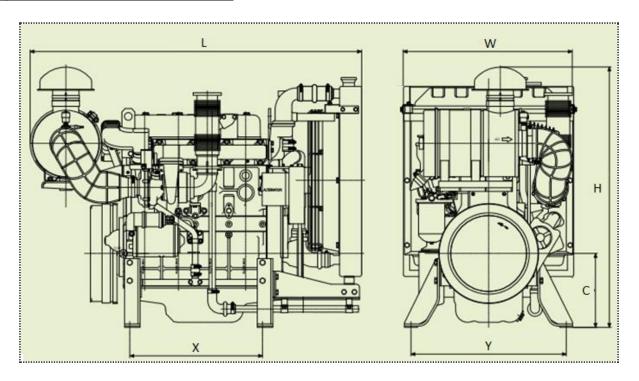
Lubrication System		
Type of lube oil filter	Full flow spin on type	
Oil to be used	Multi grade 15W40	
Oil pump type	Through G-rotor gear pump	
Lub oil sump capacity (lit)	11	
Lube oil consumption	0.3% of fuel consumption	

Cooling System		
Cooling system capacity (lit)	24	
Water pump type	Centrifugal	
Radiator fan load (hp)	3.5	

Electrical System			
Starting Arrangement	12V Electric		
Starter	12V Electric		
Starter Battery Rating	135 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
1426	732	1122	285	513.5	600

Weight Details	
Engine weight without radiator Gross / Net (kg)	570 / 460
Radiator and accessories weight Gross / Net (kg)	77 / 60

Coupling		
Flywheel	Suitable for SAE 11.5" disc	
Housing	SAE3	
Coupling disc	Not supplied	



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