

Air Cooled Diesel Engines

(AIR COOLED SA, DNA & SDA SERIES ENGINES)



Type :	The Diesel Engine is SINGLE/DOUBLE CYLINDER, AIR COOLED vertical, totally enclosed compression ignition, four stroke cycle, cold starting diesel engine tested as per IS 11170-1985.
Combustion :	DIRECT INJECTION combustion system places an open type combustion chamber in a cavity in the top of the Aluminium Alloy Piston in order to minimise power robbing of gas leakage & prevent heat loss resulting for powerful performance, low fuel consumption & easy start.
Rotation :	Standard Rotation is clockwise when looking from the flywheel end. Engine with Reverse Rotation (Anti clockwise/Counter clockwise) can be built against specific requirement.
Lubrication :	Engines internal moving parts are partially lubricated by FORCE FEED LUBRICATION by LUB PUMP & Partially by Splash Lubrication system.
Cooling :	Cold air is forced on to cylinder head/s & cylinder block/s by fan fitted on flywheel through streamlined cowling & thus cooling engine efficiently.
Balancing :	Engine is balanced with two balance weights bolted on crank shaft. Flywheel is balanced for longer life of moving parts.
Drive :	STANDARD power take off is from flywheel side at full speed. Power take-off from gear end at had engine speed can be provided against specific requirement.
Fuel System :	Fuel is supplied to the fuel pump by gravity feed through wire mesh filter in fuel tank & efficient paper element filter in fuel filter.

MODEL:	SA - 50	SA - 65	SA - 80	SA - 100	DNA - 10	SDA - 12	SDA - 14
BORE X STROKE MM. :	85 X 110L	87.5 X 110L	95 X 110L	102 X 110L	102 X 116L	87.5 X 110L	95 X 110L
DISPLACEMENT VOLUME CC:	624	662	780	899	948	1248	1560
RATED OUTPUT :kw/RPM AS PER IS: 11170-1985 :hp/RPM	3.7 / 1500 5 / 1500	4.8 / 1500 6.5 / 1500	5.9 / 1500 8 / 1500	7.35 / 1500 10 / 1500	7.35 / 1500 10 / 1500	8.80 / 1500 12 / 1500	10.3 / 1500 14 / 1500
SPECIFIC FUEL : CONSUMPTION (SFC)	251.00 g/kwh 184.00 g/hph						
TORQUE AT CRANKSHAFT DRIVE kNm . Kgm . RPM	0.0230 (2.39) 1500	0.030 (3.10) 1500	0.037 (3.82) 1500	0.047 (4.78) 1500	0.047 (4.78) 1500	0.056 5.73 1500	0.0675 6.69 1500
COMPRESSION RATIO :	17 : 1						
STARTING SYSTEM :	BY HAND CRANKING AT CAMSHAFT EXTENSION / ELECTRIC START OPTIONAL						
FUEL :	HIGH SPEED DIESEL [HSD]						
LUB OIL :	SAE-30/SAE-40 OR ANY EQUIVALENT GRADE						
LUB OIL : SUMP CAPACITY (Ltr)	3 lts.						6.75 lts.
LUB OIL CONSUMPTION :	APP X 1 TO 1.5% OF SFC						
FOUNDATION BOLT SIZE mm.	292 X 140						292 X 292
CRANKSHAFT CENTRE HEIGHT MM.	203						
GOVERNING :	CLASS B1 AS PER IS : 10000 (PART 7) 1980						
NET WT. KGS :	160	160	180	180	195	270	290
GROSS WT. KGS :	220	220	240	250	255	345	365
WOODEN CASE SIZE MM. :	68 X 72 X 93						94 X 73 X 95